

Click on the Document Title to go to that section of the document

Table of Contents

Document Number	Rev.	Document Title	Page Number
A269-000-WB-MR-3314-1160-RFQ	A	ENQUIRY DOCUMENT	2
A269-000-WB-MR-3314	A	GATE, GLOBE & CHECK VALVES MR 3314	105
6-44-0052	6	Technical notes for valves.	112
6-81-0001	2	Standard specification for Positive Material Identification (PMI) at Supplier's Works	132
6-81-0004	5	ITP for valves	140
6-78-0001	0	Specification for Quality Mgt. System Requirements from Bidders	147
6-78-0003	0	Specification for Documentation Requirement from Suppliers	156
A269-000-16-43-ATR-3314	0	ADDITIONAL TECHNICAL REQUIREMENTS FOR MR 3314	168
A269-6-44-0052-A2	0	MISCELLANEOUS	170
A269-6-44-0006-3314	1	VMS FOR MR 3314	173


**इंजीनियर्स
इंडिया लिमिटेड**
 (आरत सरकार का उपकरण)

**ENGINEERS
INDIA LIMITED**

(A Govt. of India Undertaking)

EI Bhawan Annex, Bhikaji Cama Place, RK Puram, New Delhi – 110 066, INDIA

Phone No : 0091-11-26102121, 26101419 ; Fax No : 0091-11-26191714, 26167664

REQUEST FOR QUOTATION (RFQ)

RFQ No.: RS/ A269-000-WB-MR-3314/1160

Date: 16.07.2014

To, M/s	Client :BHARAT PETROLEUM CORPN. LIMITED Project: CDU-4 PROJECT MR No.: A269-000-WB-MR-3314 REV. A Item: VALVES-GATE, GLOBE, CHECK (FORGED & CAST) Due Date & Time: 07.08.2014 ; Up to 1200 Hrs. (IST)
UNPRICED BID OPENING:	At 1400 Hours (IST) on 07.08.2014 (at Business Centre, E. I. Bhawan, Annex Bhikaji Cama Place, R.K. Puram, New Delhi – 110066, India).
PRE-BID QUERIES	Last date for submission of Pre Bid Queries will be 31.07.2014.
PRICED BID OPENING:	TIME & VENUE SHALL BE INTIMATED LATER.
POST BID MEETING:	Shall be conducted within 10 days from the date of opening of un-priced bids, if required.

GENTLEMEN,

Online Bids are requested under competitive bidding on e-procurement basis for the subject item in complete accordance with the documents attached.

1. Online Bids are requested for the captioned item in complete accordance with enquiry documents /attachments.
2. Bidders can download the complete enquiry document from the web address <http://tenders.eil.co.in> or <https://eprocure.gov.in/eprocure/app>.
3. E-Bids are required to be submitted only through Central Public Procurement Portal (CPPP) of Government of India, on or before the bid submission date and time. Bidders are required to register themselves at <https://eprocure.gov.in/eprocure/app>. No registration fee would be charged from the bidders.
4. Bidders are required to upload the bid along with all supporting documents & priced part on the e-tendering website (<https://eprocure.gov.in/eprocure/app>) only.
5. Bidders to refer attached Annexure-1 for E-Tendering methodology. Various links such as "Help for Contractor", "Information about DSC", "FAQ", "Resources Required", "Bidders Manual Kit" etc. are available on home page of <https://eprocure.gov.in/eprocure/app> facilitating vendors to participate in the bidding process. Bidder are advised to download & utilize the available information/documents under these links for activities like Registration in CPPP, obtaining User ID & Password, uploading & submission of e-bids etc. Bidders are advised in their own interest to carefully go through Instructions for E-tendering and other related document available against various help links so as to ensure that bids are uploaded in E-tendering website well before the closing date and time of bid submission.

6. *NIC Portal mandates that the bidders are to be registered on the portal before any enquiry can be issued to them. In order to expedite issue of enquiries, the enquiry is being issued through EIL Tender Portal and also being published on Central Public Procurement Portal. The enquiry shall be issued to the bidders on the NIC e-Procurement Portal as soon as their registration is completed in the NIC Portal (<https://eprocure.gov.in/eprocure/app>).*
7. *All those vendors who have still not registered on the NIC Portal are required to register on the same (immediately after issue of enquiry on EIL portal but not later than Seven days before the bid due date) for facilitating issue of enquiry to them on the NIC Portal failing which it will not be possible for them to upload their bids. Pursuant to registration, the vendors are also required to login in EIL tender portal and update NIC's registration details and inform the undersigned regarding the same for the subject enquiry.*

In any case, the enquiry shall be issued on NIC portal to NIC registered vendors about Four days before the bid due date. Therefore, all those bidders who have not complied with the above registration requirements will not be issued this enquiry on NIC portal and will not be eligible to bid. Request for extension in due date of submission of bids due to non registration or delayed registration in NIC portal shall not be entertained.

8. *The bid has to be necessarily submitted on the NIC Portal and only those bidders who are issued the enquiry through NIC Portal will be eligible to submit their bids. In case a bidder does not register on the NIC Portal and as a consequence, cannot be issued the enquiry through NIC Portal, it shall be deemed that he is not interested in bidding against this enquiry and no further correspondence will be entertained.*
9. *In future, EIL shall be issuing all enquiries through NIC Portal alone and bidders who do not register with NIC Portal may not be able to submit their bids. Therefore, it is in the interest of the bidders that they register on the NIC Portal at the earliest.*
10. *The vendor registration on NIC Portal is a very user friendly process. However, in case of any doubt, the vendor may contact the undersigned.*
11. *In the event of failure in bidder's connectivity with EIL/CPNP website during the last few hours on account of problem on bidders account, they are likely to miss the deadline for bid submission. Due date extension request due to this reason will not be entertained. In view of the same, bidders are advised to upload their bid in advance.*
12. ***Bidders to upload the Un-price and Price part of their bids strictly in the Un-price & Priced folders respectively in the e-tender portal. Non Compliance to the same shall lead to rejection of their offer.***
In case any of the price details forming part of evaluation are furnished in the unpriced offer, then it shall lead to rejection of their bid.
13. *Commercial requirements are specified in the attached General Purchase Conditions, Special Purchase Conditions, Instructions to Bidders, Terms & Conditions for Site Work (applicable if MR calls for Scope of Site Work), Terms & Conditions for Supervision of Erection, Testing & Commissioning (applicable if MR calls for supervision) , Agreed Terms & Conditions (ATC) questionnaire etc. The ATC should be duly filled in, signed & stamped, scanned and uploaded with your bid.*

14. Bidders are advised to submit quotations based strictly on the specifications, terms & conditions contained in the RFQ documents and not to stipulate any deviation.
15. Addendum / corrigendum to the RFQ documents if issued must be signed and submitted along with the bid.
16. The order, if any, will be issued by our above-mentioned client.
17. Please submit your Acknowledgement against the RFQ on EIL's website <http://tenders.eil.co.in\newtenders> within the due date & time, with reasons(s) of not participating in the RFQ in case of regret/negative acknowledgment.
18. As Purchaser intends to contract directly with suppliers of the goods for which bids are invited, the bids should be prepared by the suppliers and submitted directly. Purchaser reserves the right to reject offers made by intermediaries.

19. Delivery Period :-

i) For Indian Vendor:

Within **03 (Three)** Months on FOT Despatch Point Basis from the date of LOI. Date of Lorry receipt (LR) shall be considered as the date of delivery.

ii) For Foreign Vendor:

Within **02 (Two)** Month on FOB International Sea Port of Exit Basis from the date of LOI. Date of clean Bill of Lading shall be considered as the date of delivery.

20. The offer should be valid for 04 (Four) months from final bid due date.

21. **Indian bidders are requested to indicate details of taxes & duties and freight charges as per the enclosed "Annexure-E to Agreed Terms & Conditions" along with un-priced offer. Foreign bidders are requested to indicate freight charges in Agreed Terms & Conditions- Foreign Bidders. In case bidder furnishes Freight charges either in figures or in words in the unprice folder then it will result in rejection of their bid in line with clause no 12 of RFQ covering letter.**
22. Online Bids/ Offer through CPP Portal only shall be accepted. Bids/ Offer through Email or fax/ Telex/Telegraphic or Bids received in open condition shall not be accepted.
23. The bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser/Consultant shall in no case be responsible or liable for these costs regardless of the conduct or outcome of the bidding process.
24. Canvassing in any form by the Bidder or by any other agency on their behalf may lead to disqualification of their bid.
25. E-bids received online shall be opened at EIL office on due date and time as specified above. Bids shall be opened in presence of representatives of bidders who choose to attend the same. Such representative shall submit Bid Acknowledgement Number generated by the Portal/System after successfully Bid Submission online. Time and Date of opening of Price Bids of technically and commercially acceptable bidders shall be notified to the qualified and acceptable bidders at a later date. However, bidder can also view unpriced / priced Bid Opening online in their office/remote end itself. The bidder's representatives, who are present, shall sign a register evidencing their attendance.
26. Bidders to note that price changes against Technical / commercial clarifications, in line with terms & conditions of enquiry documents are not allowed. In case any bidder gives revised prices / price implications against such clarifications, their bid shall be liable for rejection.

27. Payment Terms:

- i) For Indian Vendor:** shall be as per clause No. 15.1.1, 15.1.7 & 15.1.8 of Special Purchase Conditions (SPC).
- ii) For Foreign Vendor:** shall be as per clause No. 15.2.1 & 15.2.5 & 15.2.6 of Special Purchase Conditions (SPC).

28. Bidders are requested to quote as per their capability registered in EIL.

29. Owner shall follow the Public procurement Policy on Procurement of goods and services from Micro and Small Enterprises (MSEs) order 2012 as per attached Annexure-2 to this RFQ document.

Accordingly, the quantities against the items may be splitted, as applicable, to enable the splitting of item in terms of 20% and 80% between the MSEs and non-MSEs respectively. In that case, the quoted prices against various items shall remain valid in case of splitting of quantities of the items as above.

30. EIL reserves the right to use in-house information for assessment of bidder's capability for consideration of bid.

31. EMD & Bid Document Fee is not applicable for this RFQ.

32. **The bidders should respond to this enquiry either by submitting their bids or by explaining the reason for non-submission of the offer. In case there is no response either way continuously, the bidder shall be liable for suitable action including review of their enlistment with EIL for that particular item.**

33. In case any bidder is found to be involved in cartel formation, his bid will not be considered for evaluation / placement of order. Such bidder will also be debarred from bidding in future.

34. **Bidders are mandatorily required to enter their name in the each page of excel file / pdf file of Price Schedule provided in the e-tender portal for submission of price bid.**

35. We reserve the right to make any changes in the terms and conditions of purchase and to reject any or all the bids.

36. **Net Worth**

Net worth of the bidder should be positive as per the audited financial results for the immediate preceding financial year.

The offer of the bidder whose net worth is "Negative" in the immediate preceding financial year shall not be considered for further evaluation.

Networth means paid up share capital, Share Application Money pending allotment" and reserves# less accumulated losses and deferred expenditure to the extent not written off.

Reserves to be considered for the purpose of networth shall be all reserves created out of the profits and securities premium account but shall not include reserves created out of revaluation of assets, write back of depreciation and amalgamation.

*Share Application Money pending allotment will be considered only in respect of share to be allotted.

Accordingly, the definition of Networth shall be as follows:

Paid up share capital	XXXX
Add : Share Application Money pending allotment	XXX
Add : Reserves (As defined Above)	XXXX
Less : Accumulated Losses	XX
Less : Deferred Revenue Expenditure to the extent not written off	<u>XX</u> <u>XXXX</u>
Networth	

Please submit copy of your **complete Annual Financial Statement** including Auditor' Report and Schedule of Reserve & Surplus, Balance Sheet & Profit/Loss account and including all notes and schedules forming part of Audited Annual reports for the immediate preceding financial year for determination of net-worth of the Bidder.

"In place of complete Annual Financial Documents required for the assessment of the Net Worth, the

bidder can provide a certificate from any Practicing Chartered Accountant or their Statutory Auditor in case of Foreign Bidders and from Statutory Auditors in case of Indigenous Bidders that their Net Worth is positive as per the last audited financial statement and formula given in the RFQ Document”.

37. Multiple / Alternative Bids

A bidder (i.e., the bidding entity) shall, on no account submit more than one bid either directly (as a single bidder or as a member of consortium) or indirectly (as a sub-contractor) failing which following actions shall be initiated :

- (i) All bids submitted by such bidder (say 'A') directly & indirectly, shall stand rejected and EMD, if any, in case of direct bid submitted by bidder 'A' shall be forfeited.
- (ii) If another bidder (say 'B') has proposed bidder 'A' as a sub-contractor then bidder 'B's bid shall also be rejected. However, in case the bidder 'B' has also proposed an alternative sub-contractor who is other than the bidder 'A', then bidder 'B's bid shall be evaluated with the proposed alternative sub-contractor only. Hence, every bidder shall ensure in his own interest that his proposed sub-contractor is not submitting alternative / multiple bids.

- 38. Where any portion of Instructions to Bidders, Special Purchase Conditions and General Purchase Conditions is repugnant or at variance with any provisions of RFQ Cover Letter, RFQ Cover Letter shall be deemed to over-ride the provision(s) of Instructions to Bidders, Special Purchase Conditions and General Purchase Conditions only to the extent applicable.
- 39. In the event of award, Bidder to intimate both the BPCL as well as EIL well in advance for all stage-wise inspections, wherever applicable. Contact Person at BPCL for prior intimation for inspection call shall be

Mr. C.Ravindran
DGM Projects,
Admin Building, BPCL,
Mumbai.
Tel. No.: 022-25533341

E-mail: ravindranc@bharatpetroleum.in

- 40. If any of quoted rates/prices/charges are repeated in the bid, then higher of them shall be considered for evaluation and lower for ordering.
- 41. Bidder to note that Clause no.: 42 of Instructions to Bidder (ITB) of RFQ is not applicable and hence stands deleted.
- 42. Bidder to comply Annexure- D as attached.
- 43. Indian Bidders to comply Annexure- F (Check List for Lorry/ Truck Entry inside Refinery Gate) as attached

44 PRE-BID QUERIES

- 44.1 Last date for submission of Pre bid queries will be as mentioned in the RFQ.
- 44.2 The bidders are requested to submit any questions by courier/fax/e-mail in the enclosed Form-H to reach EIL as per date indicated in RFQ.
- 44.3 Pre-bid queries received after last date of submission of pre bid queries as mentioned in the RFQ shall not be entertained.**
- 44.4 Any modification of the Bidding Document / RFQ, which may become necessary as a result of the pre-bid discussion, shall be intimated to all bidders through the issue of an Addendum/Amendment.

45 Contact Persons for this RFQ are:

Mr. P.K.Khurana, DGM (C&P), email: pk.khurana@eil.co.in or

Mr. R.Somnath, AGM (C&P), Extn. No. 3068 & email: r.somnath@eil.co.in or

Mr. Vinod Kumar, Sr. Engineer (C&P), Extn. No. 8263 & email: yinod.kr@eil.co.in

***Please specify Ref. No. (RS/ A269-000-WB-MR-3314/1160) in all Correspondence.**

THIS IS NOT AN ORDER

Very truly yours,
For & On Behalf of BPCL

**(R SOMNATH)
AGM(C&P)
ENGINEERS INDIA LIMITED**

Enclosure: As per List Attached

LIST OF ENCLOSURES

DOCUMENT

- A) Request For Quotation (RFQ)
- B) Other Commercial documents:
 - i) Price Schedule Format
 - ii) Annexure-1 : E-Tendering Methodology
 - iii) Annexure-2: PROVISIONS FOR MICRO AND SMALL ENTERPRISES UNDER (PPP), 2012
 - iv) Agreed Terms & Conditions (For Indian Bidders) including Annexure- E (Details of Taxes & Duties and Freight charges)
 - v) Agreed Terms & Conditions (For Foreign Bidders)
 - vi) Instruction to Bidder (ITB)
 - vii) Special Purchase Conditions (SPC)
 - viii) General Purchase Conditions
 - ix) Annexure- D.
 - x) Annexure- F (Check List for Lorry/ Truck Entry inside Refinery Gate
 - xi) Form-H (Format For Pre Bid Queries)
 - xii) Integrity Pact
- C) Technical document:

Material Requisition (MR) No. : **A269-000-WB-MR-3314 REV. A**

PREAMBLE TO PRICE SCHEDULE

RFQ NO.RS/A269-000-WB-MR-3314/1160

ITEM:VALVES-GATE, GLOBE, CHECK (FORGED & CAST)

NAME OF BIDDER: M/S

OFFER REFERENCE NO.

- 1 Scope of supply including testing, inspection, documentation etc. shall be strictly as per Material Requisition and other documents which are part of RFQ.
- 2 Indian Bidders shall quote prices on FOT despatch Point basis inclusive of Packing & Forwarding and Foreign Bidders shall quote prices on FOB International Seaport of exit basis inclusive of Packing & Forwarding.
- 3 **Indian Bidders must quote Freight charges in percentage only (Not in Figures & Not in Words) in the space provided in the format for "Details of Taxes & Duties" i.e. Annexure - E to Agreed Terms & Conditions in the unpriced offer. In case bidder furnishes Freight charges either in figures or in words in the unpriced folder then it will result in rejection of their bid in line with clause no 12 of RFQ covering letter.**
- 4 Indian Bidders shall furnish built-in CIF value if any, against each quoted item, giving details of description of goods, qty, merit rate of custom duty etc. included in the quoted prices in attached Format-"CIF/CD"
- 5 **Foreign Bidders must quote Ocean Freight charges in percentage only (Not in Figures & Not in Words) in the space provided in Agreed Terms & conditions in the unpriced folder. In case bidder furnishes Ocean Freight charges either in figures or in words in the unpriced folder then it will result in rejection of their bid in line with clause no 12 of RFQ covering letter.**
- 6 Bidder to clearly indicate 'Quoted' / " Not Quoted" against each item in the price column in the unpriced Price Schedule. Bidders to submit Price Part of above Price Schedule in their Priced Bid and Unpriced Part with the Unpriced Bid.
- 7 Bidder shall furnish prices/details as above, in accordance with Instructions To Bidders/ Request for Quotation.
- 8 All the Columns of quoted items in the Price Schedule must be filled with required information, as applicable.
- 9 Bidder must quote the price in enclosed Price Schedule formats only in the e-tendering portal. The formats shall not be changed and/or retyped. For any deviation to the formats, offer may be rejected.
- 10 Quoted prices are firm and fixed till complete execution of the entire order and no variation on any account is allowed.
- 11 Bidder to confirm that he has noted the contents of the Preamble to the Price Schedule, Price Schedule, RFQ, Material Requisition etc and quoted his prices accordingly without any deviation.
- 12 For Indian Bidders, Third Party Inspection Charges by (Lloyds/BV/DNV/TUV/CEIL) towards the import content in the country of origin shall be included in the quoted price for main item.
- 13 For Foreign Bidders, Third Party Inspection Charges by (Lloyds/BV/DNV/TUV/CEIL) shall be included in the quoted price for main item.
- 14 Bidder to include all inspection & tests charges as required for equipment as per specifications, data sheets and codes referred to in specification and data sheets enclosed in Material Requisition.

Notes: Bidders are mandatorily required to enter their name in the each page of excel file / pdf file of Price Schedule provided in the e-tender portal for submission of Unpriced & price bid.

PRICE SCHEDULE				
RFQ NO.RS/A269-000-WB-MR-3314/1160				
ITEM:VALVES-GATE, GLOBE, CHECK (FORGED & CAST)				
NAME OF BIDDER: M/S				
OFFER REFERENCE NO.				
(Currency _____)				
Sr. Nos.	Item Code	Item Description	Qty (Nos.)	Unit Price
1	51001ZZZ004ZZZZZZ	VLV.GATE, SHEET 51001, 0.5 INCH	172.00	
2	51001ZZZ005ZZZZZZ	VLV.GATE, SHEET 51001, 0.75 INCH	272.00	
3	51001ZZZ006ZZZZZZ	VLV.GATE, SHEET 51001, 1.0 INCH	64.00	
4	51002ZZZ104ZZZZZZ	VLV.GATE, SHEET 51002, IBR, 0.5 INCH	262.00	
5	51002ZZZ105ZZZZZZ	VLV.GATE, SHEET 51002, IBR, 0.75 INCH	105.00	
6	51002ZZZ108ZZZZZZ	VLV.GATE, SHEET 51002, IBR, 1.5 INCH	4.00	
7	51007ZZZ005ZZZZZZ	VLV.GATE, SHEET 51007, 0.75 INCH	4.00	
8	51011ZZZ204ZZZZZZ	VLV.GATE, SHEET 51011, NACE, 0.5 INCH	16.00	
9	51013ZZZ004ZZZZZZ	VLV.GATE, SHEET 51013, 0.5 INCH	101.00	
10	51013ZZZ0061ZZZZZ	VLV.GATE, SHEET 51013, 1.0 INCH, LOCK OPEN	3.00	
11	51013ZZZ0081ZZZZZ	VLV.GATE, SHEET 51013, 1.5 INCH, LOCK OPEN	3.00	
12	51036ZZZ004ZZZZZZ	VLV.GATE, SHEET 51036, 0.5 INCH	238.00	
13	51036ZZZ005ZZZZZZ	VLV.GATE, SHEET 51036, 0.75 INCH	38.00	
14	51036ZZZ006ZZZZZZ	VLV.GATE, SHEET 51036, 1.0 INCH	3.00	
15	51045ZZZ004ZZZZZZ	VLV.GATE, SHEET 51045, 0.5 INCH	13.00	
16	51045ZZZ005ZZZZZZ	VLV.GATE, SHEET 51045, 0.75 INCH	26.00	
17	51066ZZZ004ZZZZZZ	VLV.GATE, SHEET 51066, 0.5 INCH	10.00	
18	51066ZZZ0051ZZZZZ	VLV.GATE, SHEET 51066, 0.75 INCH, LOCK OPEN	3.00	
19	51066ZZZ006ZZZZZZ	VLV.GATE, SHEET 51066, 1.0 INCH	3.00	
20	51080ZZZ004ZZZZZZ	VLV.GATE, SHEET 51080, 0.5 INCH	16.00	
21	51080ZZZ005ZZZZZZ	VLV.GATE, SHEET 51080, 0.75 INCH	14.00	
22	51080ZZZ008ZZZZZZ	VLV.GATE, SHEET 51080, 1.5 INCH	3.00	
23	51093ZZZ004ZZZZZZ	VLV.GATE, SHEET 51093, 0.5 INCH	26.00	

PRICE SCHEDULE				
RFQ NO.RS/A269-000-WB-MR-3314/1160				
ITEM:VALVES-GATE, GLOBE, CHECK (FORGED & CAST)				
NAME OF BIDDER: M/S				
OFFER REFERENCE NO.				
(Currency _____)				
Sr. Nos.	Item Code	Item Description	Qty (Nos.)	Unit Price
24	51093ZZZ005ZZZZZZ	VLV.GATE, SHEET 51093, 0.75 INCH	3.00	
25	51096ZZZ005ZZZZZZ	VLV.GATE, SHEET 51096, 0.75 INCH	4.00	
26	51098ZZZ004ZZZZZZ	VLV.GATE, SHEET 51098, 0.5 INCH	9.00	
27	51301ZZZ0111ZZZZZZ	VLV.GATE, SHEET 51301, 3.0 INCH, LOCK OPEN	5.00	
28	51301ZZZ0161ZZZZZZ	VLV.GATE, SHEET 51301, 8.0 INCH, LOCK OPEN	2.00	
29	51302ZZZ1161ZZZZZZ	VLV.GATE, SHEET 51302, IBR, 8.0 INCH, LOCK OPEN	2.00	
30	51307ZZZ009ZZZZZZ	VLV.GATE, SHEET 51307, 2.0 INCH	4.00	
31	51307ZZZ016ZZZZZZ	VLV.GATE, SHEET 51307, 8.0 INCH	1.00	
32	51307ZZZ024ZZZZZZ	VLV.GATE, SHEET 51307, 24.0 INCH	3.00	
33	51366ZZZ009ZZZZZZ	VLV.GATE, SHEET 51366, 2.0 INCH	1.00	
34	51384ZZZ015ZZZZZZ	VLV.GATE, SHEET 51384, 6.0 INCH	3.00	
35	51396ZZZ009ZZZZZZ	VLV.GATE, SHEET 51396, 2.0 INCH	3.00	
36	51401ZZZ017ZZZZZZ	VLV.GATE, SHEET 51401, 10.0 INCH	2.00	
37	51402ZZZ109ZZZZZZ	VLV.GATE, SHEET 51402, IBR, 2.0 INCH	13.00	
38	51402ZZZ111ZZZZZZ	VLV.GATE, SHEET 51402, IBR, 3.0 INCH	3.00	
39	51402ZZZ117ZZZZZZ	VLV.GATE, SHEET 51402, IBR, 10.0 INCH	5.00	
40	51413ZZZ009ZZZZZZ	VLV.GATE, SHEET 51413, 2.0 INCH	3.00	
41	51496ZZZ013ZZZZZZ	VLV.GATE, SHEET 51496, 4.0 INCH	14.00	
42	51501ZZZ009ZZZZZZ	VLV.GATE, SHEET 51501, 2.0 INCH	8.00	
43	51502ZZZ109ZZZZZZ	VLV.GATE, SHEET 51502, IBR, 2.0 INCH	1.00	
44	51502ZZZ111ZZZZZZ	VLV.GATE, SHEET 51502, IBR, 3.0 INCH	2.00	
45	52001ZZZ006ZZZZZZ	VLV.GLOBE, SHEET 52001, 1.0 INCH	26.00	
46	52001ZZZ008ZZZZZZ	VLV.GLOBE, SHEET 52001, 1.5 INCH	7.00	

PRICE SCHEDULE				
RFQ NO.RS/A269-000-WB-MR-3314/1160				
ITEM:VALVES-GATE, GLOBE, CHECK (FORGED & CAST)				
NAME OF BIDDER: M/S				
OFFER REFERENCE NO.				
(Currency _____)				
Sr. Nos.	Item Code	Item Description	Qty (Nos.)	Unit Price
47	52002ZZZ108ZZZZZZ	VLV.GLOBE, SHEET 52002, IBR, 1.5 INCH	15.00	
48	52080ZZZ004ZZZZZZ	VLV.GLOBE, SHEET 52080, 0.5 INCH	3.00	
49	52311ZZZ209ZZZZZZ	VLV.GLOBE, SHEET 52311, NACE, 2.0 INCH	2.00	
50	52313ZZZ009ZZZZZZ	VLV.GLOBE, SHEET 52313, 2.0 INCH	2.00	
51	52366ZZZ015ZZZZZZ	VLV.GLOBE, SHEET 52366, 6.0 INCH	1.00	
52	52384ZZZ018ZZZZZZ	VLV.GLOBE, SHEET 52384, 12.0 INCH	1.00	
53	52384ZZZ020ZZZZZZ	VLV.GLOBE, SHEET 52384, 16.0 INCH	1.00	
54	52401ZZZ011ZZZZZZ	VLV.GLOBE, SHEET 52401, 3.0 INCH	3.00	
55	52401ZZZ018ZZZZZZ	VLV.GLOBE, SHEET 52401, 12.0 INCH	1.00	
56	52402ZZZ111ZZZZZZ	VLV.GLOBE, SHEET 52402, IBR, 3.0 INCH	1.00	
57	52402ZZZ113ZZZZZZ	VLV.GLOBE, SHEET 52402, IBR, 4.0 INCH	1.00	
58	52402ZZZ117ZZZZZZ	VLV.GLOBE, SHEET 52402, IBR, 10.0 INCH	1.00	
59	52413ZZZ009ZZZZZZ	VLV.GLOBE, SHEET 52413, 2.0 INCH	3.00	
60	53001ZZZ005ZZZZZZ	VLV.CHECK, SHEET 53001, 0.75 INCH	13.00	
61	53001ZZZ006ZZZZZZ	VLV.CHECK, SHEET 53001, 1.0 INCH	4.00	
62	53013ZZZ006ZZZZZZ	VLV.CHECK, SHEET 53013, 1.0 INCH	4.00	
63	53413ZZZ009ZZZZZZ	VLV.CHECK, SHEET 53413, 2.0 INCH	4.00	
64	53501ZZZ017ZZZZZZ	VLV.CHECK, SHEET 53501, 10.0 INCH	1.00	

Note-1: Bidders to upload the Un-price and Price part of their bids strictly in the Un-price & Priced folders respectively in the e-tender portal. Non Compliance to the same shall lead to rejection of their offer. In case any of the price details forming part of evaluation are furnished in the unpriced offer, then it shall lead to rejection of their bid.

Annexure-D

Bidder's authorized representative(s), shall attend the pre bid meeting on the prescribed day at the given venue. During the pre bid meeting, all the technical and commercial issues shall be discussed and concluded to ensure that the bid received subsequent to pre bid meeting shall be without any deviations to terms and conditions. Hence, bidders shall treat the pre bid meeting as utmost important and depute competent & senior person capable of taking on the spot decision to sort out all the technical and commercial issues.

However, in case any bidder does not attend the pre bid meeting, it shall be understood that the bidder has a clear understanding of the scope & terms & conditions of the bidding document and does not have any comments/ deviations to the requirements of the bidding document.

In order to ensure fruitful discussions during pre bid meeting, the bidder is requested to submit any queries/clarification/information pertaining to Bidding document in writing delivered by hand or by fax/ e-mail as per format enclosed in the Bidding Document so as to reach two days prior to Pre-bid meeting. These queries shall be replied during pre-bid meeting. The editable soft copies of the queries shall also be e-mailed to enable EIL to prepare replies to the queries against each query in the same format expeditiously.

The bidders are required to participate in the pre-bid meeting with the following essential documents, so that the same can reviewed & discussed during the meeting to avoid any techno-commercial clarifications/ discussions post bid:

- a) Latest annual report including Profit & loss account
- b) Solvency certificate from bank
- c) Concurrent Commitments
- d) Details of work experience meeting the BQC
- e) Technical details, documents, design, filled datasheets as per MR
- f) Any other relevant document/ details

Record notes of meeting, including the questions raised and the responses given will be furnished as expeditiously as possible to all the bidders and shall also be uploaded on the website. After pre-bid meeting, no further queries will be entertained from the bidders.

Any modification to the Bidding Document, which may become necessary as a result of the pre-bid discussions shall be intimated to all bidders through the issue of an Addendum/Amendment.

Based on the pre-bid discussions, a no-deviation form/techno-commercial compliance shall be signed and submitted by the bidders as part of their offer. After pre-bid meeting, no deviation shall be accepted and if any deviation is found in the bid of any bidder, the offer shall be liable to be rejected without raising any technical/ commercial queries.

Technical/ Commercial queries shall not be issued once the bid have been opened. However, wherever CQ/ TQ are unavoidable, the same shall be raised only once and the cut-off date given for CQ/ TQ replies shall be adhered to. Offers shall be evaluated based on the information available upto cut-off date for CQ/ TQ replies.

Extension in bid due date shall not generally be granted.

PROVISIONS FOR MICRO AND SMALL ENTERPRISES UNDER (PPP), 2012

- i) Purchase Preference shall be as per clause no.33 of GPC.
- ii) The quoted prices against various items shall remain valid in case of splitting of quantities of the items as above.
- iii) In case bidder is a micro or Small Enterprise under the Micro, Small and Medium Enterprises Development Act, 2006, the bidder shall submit the following:
 - a) Documentary evidence that the bidder is a Micro or Small Enterprises registered with District Industries Centers or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or Directorate of Handicrafts and Handloom or any other body specified by Ministry of Micro, Small and Medium Enterprises.
 - b) If the MSE is owned by SC/ST Entrepreneurs, the bidder shall furnish appropriate documentary evidence in this regard.
- c) **The above documents submitted by the bidder shall be duly certified by the Statutory Auditor of the bidder or a practicing Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/firm) where audited accounts are not mandatory as per law (or) duly notarized by any Notary Public in the bidder's country. In case of notarization, bidder shall also submit an Affidavit as per format provided in the Bidding Document signed by the authorized signatory of the bidder.**
- iv) If the bidder does not provide the above confirmation or appropriate document or any evidence at the time of bid submission, then it will be presumed that they do not qualify for any preference admissible in the Public Procurement Policy (PPP), 2012.
- v) Being NSIC registrant, bidder shall not be exempted from submission of Contract Performance Bank Guarantee (CPBG), as per Govt. guidelines published through Public Procurement Policy (PPP), 2012. Any other provisions / exemptions available based on bidder being NSIC registrant indicated elsewhere in the RFQ documents, shall stands replaced / modified to the extent of above provisions.
- vi) Shifting of items in case of low value orders to minimize the order management cost, if applicable, shall be carried out as per provision in RFQ documents. However, the same shall not be resorted to, where MSE is the recommended bidder even if the items are being shifted to another MSE bidder.
- vii) In case an item can't be split equally among all the MSE bidders, who have accepted to take order for partial qty as above, preference shall be given to MSE whose evaluated prices are near to L1 bidder prices.
- viii) The Purchase preference to Micro and Small Enterprises shall not be applicable for the following cases since the division of corresponding quantity (as admissible / applicable from time to time under the existing Government Policy), shall not be possible :
 - (a) MR Items are on Lumpsum Basis.
 - (b) MR Items are on Group-wise / Block-wise Basis.

(c) MR Items whose quantities are such that the division of corresponding quantity (as per Government Policy), shall not be possible.

NAME OF BIDDER : _____

OFFER REFERENCE : _____ DATED _____

RFQ NO. : _____

ITEM : _____

Preference to MSEs :

In case the bidder is a Micro or Small Enterprise under the Micro, Small & Medium Enterprises Development Act, 2006, the bidder shall submit the following:

- Documentary evidence that the bidder is a Micro or Small Enterprises.
- If the MSEs are owned by SC/ST Entrepreneurs, the bidder shall furnish appropriate documentary evidence in this regard.
- The above documents submitted by the bidder shall be duly certified by the statutory Auditor of the bidder or a practicing Chartered Accountant (not being an employee or a Director or not having any interest in the bidder's company/ firm) where audited accounts are not mandatory as per law (or) **duly notarized by any Notary Public in the bidder's country. In case of notarization, bidder shall also submit an Affidavit as per format provided in the Bidding Document signed by the authorized signatory of the bidder.**

If the bidder does not provide the above confirmation or appropriate document or any evidence, then it will be presumed that they do not qualify for any preference admissible in the Public Procurement Policy (PPP), 2012.

PLEASE TICK YES / NO / FURNISHED AGAINST THE BELOW MENTIONED POINTS:

a) The bidder is a Micro or Small Enterprise under the Micro, Small & Medium Enterprises Development Act, 2006.	YES <input type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> FURNISHED
b) Documentary evidence required as per RFQ to avail preference To MSEs.	YES <input type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> FURNISHED
c) The MSEs is owned by SC/ST Entrepreneurs.	YES <input type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> FURNISHED
d) Supporting documentary evidence with respect to MSEs is owned by SC/ST Entrepreneurs as per RFQ to avail preference to MSEs owned by SC/ST.	YES <input type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> FURNISHED
e) In case the above documents are submitted duly notarized, Affidavit as per the format attached with RFQ is submitted.	YES <input type="checkbox"/> NO <input type="checkbox"/> <input type="checkbox"/> FURNISHED

BIDDER'S SIGNATURE & DATE : _____ WITH SEAL/STAMP

AFFIDAVIT

AFFIDAVIT OF , S/o D/o , resident of
 EMPLOYED AS WITH
 HAVING OFFICE AT PIN.....

I, the above named deponent do hereby solemnly affirm and state as under :-

1. That I am the authorized representative and signatory of M/s.....
2. That the document (s) submitted, as mentioned hereunder, by M/s..... alongwith the Bid Document submitted under covering letter no.... dated..... towards Tender No..... for..... (Project) has/have been submitted under my knowledge.

Sr. No.	Document Reference no. & date	Document subject	Issuing Authority

3. That the document(s) submitted, as mentioned above, by M/s..... alongwith the Bid Document for meeting the Bid Qualification Criteria thereunder, vide covering letter no.... dated..... , towards Tender No..... for..... are authentic, genuine, copies of their originals and have been issued by the issuing authority mentioned above and no part of the document(s) is false, forged or fabricated.
4. That no part of this affidavit is false and that this affidavit and the above declaration in respect of genuineness of the documents has been made having full knowledge of (i) the provisions of the Indian Penal Code in respect of offences including, but not limited to those pertaining to criminal breach of trust, cheating and fraud and (ii) provisions of bidding conditions which entitle the Owner/EIL to initiate action in the event of such declaration turning out to be a misrepresentation or false representation.
5. I depose accordingly.

DEPONENT**VERIFICATION**

I,the deponent above named do hereby verify that the factual contents of this affidavit are true and correct. No part of it is false and nothing material has been concealed there from .

Verified aton this.....day of.....20...

DEPONENT

NOTE : ABOVE FORMAT OF AFFIDAVIT SHALL BE ON APPROPRIATE VALUE OF NON-JUDICIAL STAMP PAPER & DULY NOTARIZED BY PUBLIC NOTARY .

BHARAT PETROLEUM CORPORATION LTD
CDU-4 Project
(JOB NO. A269)
AGREED TERMS & CONDITIONS (ATC)
(FOR INDIAN BIDDERS)

Vendor Name: M/s _____
RFQ No. : _____
Vendor's Offer Ref No. : _____
Tel. No. _____ Mob. No. _____ Fax No. _____
Contact Person: _____ E-mail _____

1. ALL CORRESPONDENCE MUST BE IN **ENGLISH** LANGUAGE ONLY.
2. DULY SIGNED & STAMPED COPIES OF THIS "QUESTIONNAIRE", WITH ALL THE CLAUSES DULY CONFIRMED/ PRECISELY REPLIED TO BY THE VENDOR, SHALL BE ENCLOSED.
3. ALL COMMERCIAL TERMS ARE GIVEN/CONFIRMED IN THE QUESTIONNAIRE ITSELF AND NOT ELSEWHERE IN THE QUOTATION. IN CASE OF CONTRADICTION, THE SAME GIVEN HEREIN SHALL PREVAIL.
4. FAILURE ON THE PART OF VENDOR IN SUBMITTING THIS DULY FILLED-UP "QUESTIONNAIRE WITH UNPRICED BID AND/OR UPLOADING / SUBMITTING INCOMPLETE REPLIES MAY LEAD TO REJECTION OF VENDOR'S QUOTATION".
5. YOUR OFFER SHALL BE IN TOTAL COMPLIANCE WITH RFQ DOCUMENTS CONTAINING COMMERCIAL AND TECHNICAL SPECIFICATIONS INCLUDING GENERAL / TECHNICAL NOTES AND SCOPE OF SUPPLY INCLUDING DOCUMENTATION AS PER MATERIAL REQUISITION (MR) AND SUBSEQUENT TECHNICAL/COMMERCIAL AMENDMENT AND TECHNICAL/COMMERCIAL CORRIGENDUM, IF ANY.

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
1. i)	Quoted supply prices are on FOT despatch point basis inclusive of Packing & Forwarding.	<i>Confirmed</i>
ii)	Specify Despatch Point	-----
iii) a)	Confirm firm transportation charges exclusive of Service Tax and Ed Cess, upto project site, has been quoted separately by you in Price Schedule.	<i>a. Confirmed , Quoted in Price Schedule</i>
b)	Percentage of Service Tax as applicable extra on Freight	<i>b. Refer Annexure E</i>
c)	Statutory Variation on Service Tax on Transportation Charges shall be paid by the owner against documentary evidence within completion period.	<i>c. Confirmed</i>
iv)	Transit Insurance shall be taken care by the client & charges of the same shall be borne by client.	<i>Confirmed</i>
v)	Bidder shall indicate applicable rate of octroi/ Entry Tax. Any statutory variations on the same shall be borne by Purchaser.	<i>Refer Annexure E</i>
2. a.)	Excise Duty applicable extra in percentage.	<i>a. Refer Annexure E</i>
b.)	Excise Tariff sub heading no.	<i>b. -----</i>
c.)	Any variations in ED at the time of supplies for any reasons including variation due to turn-over shall be borne by the seller. Only statutory variations shall be borne by Purchaser.	<i>c. Confirmed</i>
d.)	If Excise Duty is not applicable at present due to any reason, the same shall be borne by vendor if it becomes applicable later.	<i>d. Confirmed</i>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
2.1 a.	<p>Confirm Excise Duty will not be applicable on transportation charges.</p> <p>b. If Excise Duty is not applicable on transportation charges presently, and if it becomes applicable at the time of delivery due to any reasons other than statutory, the same will be borne by the Vendor. Confirm acceptance.</p>	<p>a. <i>Confirmed</i></p> <p>b. <i>Confirmed</i></p>
3. a.	<p>Central Sales Tax applicable extra in percentage against Form 'C'</p> <p>b. VAT applicable extra:</p> <p>c. If CST / VAT is not applicable at present due to any reason, the same shall be borne by vendor if it becomes applicable later.</p> <p>d. Confirm CST/ VAT will not be applicable on transportation charges.</p> <p>e. If CST / VAT is not applicable on transportation charges presently, and if it becomes applicable at the time of delivery due to any reasons other than statutory, the same will be borne by the Vendor. Confirm acceptance.</p>	<p>a. <i>Refer Annexure E</i></p> <p>b. <i>Refer Annexure E</i></p> <p>c. <i>Confirmed</i></p> <p>d. <i>Confirmed</i></p> <p>e. <i>Confirmed</i></p>
4.	Any new or additional taxes/ duties and any increase in the existing taxes/duties imposed after contractual completion period shall be to Vendor's account whereas any corresponding decrease in the existing taxes/ duties shall be passed on to the Owner.	<i>Confirmed</i>
5	<p>Spares Parts:</p> <p>Confirm item wise unit price (FOT Despatch Point) of following spare parts as required in Material Requisition (MR) have been included indicating itemised quantity.</p> <p>i) Mandatory Spares are included quoted as per MR.</p> <p>ii) Commissioning spares as specified in MR are included in the quoted Price.</p> <p>iii) Special Tools & Tackles as specified in the MR are included in the quoted prices.</p> <p>iv) Confirm spares wherever required as per MR have been included in the quoted price and list of spares is also furnished.</p> <p>v) Confirm validity of recommended spares (If applicable as per MR) for 2 years operation and maintenance will be 12 months over and above the validity of offer.</p>	<p><i>Confirmed</i></p> <p><i>Confirmed (if Applicable as per MR)</i></p>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
6.	<p>Site Work:</p> <p>For Site Work, if in the scope of the Bidder as per MR, please confirm the following:</p> <ul style="list-style-type: none"> a. Confirm that quoted site work prices are exclusive of Service Tax & inclusive of all other applicable taxes & duties including VAT on Work Contract Tax. b. Percentage of Service Tax as applicable extra on Site Work. c. No variation in VAT on Work Contracts on any account (Including statutory variation) shall be paid by the owner. d. Statutory Variation on Service Tax on Site work shall be paid by the owner against documentary evidence within completion period. e. If Service tax is not applicable at present on site work due to any reason, the same shall be borne by vendor if it becomes applicable later. 	<ul style="list-style-type: none"> a. <i>Confirmed</i> b. Refer Annexure E c. <i>Confirmed</i> d. <i>Confirmed</i> e. <i>Confirmed</i>
7	<p>Supervision / Training Charges:</p> <p>a. Charges for Supervision / Training, if in the scope of the Bidder as per MR have been indicated by bidder separately in the Price Schedule.</p> <p>b. Percentage of Service Tax as applicable extra on Supervision / Training</p> <p>c. Per-diem rate for supervision has been quoted in accordance with the Terms & Conditions for Supervision enclosed with the RFQ Documents.</p> <p>d. Where erection/testing/ commissioning supervision, commissioning assistance is required as per RFQ Documents / Material requisition, penalty for non mobilization/delay in mobilization as per order shall be applicable. The penalty shall generally be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.</p> <p>e. Bidders shall also provide additional BG of an amount equal to the per diem charges for the number of days considered for evaluation, over and above 10% PBG to cover compensation for delay in mobilizing the erection/ commissioning personnel. This BG will be released to the bidder upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with last 10% supply payment and shall be initially valid up to six months which shall be extended based on the request by BPCL.</p>	<ul style="list-style-type: none"> a. <i>Confirmed, Quoted in Price Schedule</i> b. Refer Annexure E c. <i>Confirmed</i> d. <i>Noted & Confirmed</i> e. <i>Noted & Confirmed</i>
8.	Confirm documentation charges as per MR are included in quoted prices.	<i>Confirmed</i>
9.	<p>Price Reduction for delay in completion/ delivery:</p> <ul style="list-style-type: none"> a) Confirm acceptance of price reduction schedule for delay in deliveries / completion as specified in SPC/ RFQ Cover sheet. Liquidated damages or penalty are not acceptable. b) In case of delay, vendor will reduce the invoice amount by applicable reduction. 	<ul style="list-style-type: none"> a. <i>Confirmed</i> b. <i>Confirmed</i>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
10.	Delivery/ Completion Period: Please confirm completion period as specified in the RFQ document	<i>Confirmed</i>
11.	Payment Term: Confirm acceptance of "Terms and Mode of Payment" as per respective clause given in RFQ covering letter & SPC.	<i>Confirmed</i>
12.	Part Order: a. Confirmed acceptance to Part Order (As per MR / RFQ Requirement). b. The quantities against a particular item will not be split. Any charges quoted extra as lumpsum shall be applicable prorata on value basis in the event of part order.	<i>a. Confirmed.</i> <i>b. Confirmed</i>
13.	Repeat Order: Confirm Acceptance to Repeat Order as per RFQ Covering Letter / SPC.	<i>Confirmed</i>
14.	Performance Bank Guarantee: a) In the event of award of order, submission of Performance Bank Guarantee for 10% of total contract value valid till full guarantee period plus 90 (ninety) days. b) The Performance Bank Guarantee shall be strictly as per enclosed proforma and shall be from any Indian Scheduled Bank or branch of an International Bank situated in India and registered with Reserve Bank of India as scheduled foreign Bank.	<i>a. Confirmed</i> <i>b. Confirmed</i>
15.	Guarantee / Warranty Confirm acceptance to Guarantee / Warranty clause as mentioned in the RFQ Covering Letter / GPC.	<i>Confirmed</i>
16.	Firmness of prices: Confirm quoted prices shall remain firm and fixed till complete execution of order. Price Variation shall not be considered on any account.	<i>Confirmed</i>
17.	Testing and Inspection charges: a. Goods supplied are subject to stage wise and final inspection as specified in MR by EIL and no extra charges shall be payable by owner towards the same. Travel, Living and Personnel expenses of EIL's Representative shall be borne by Owner. b. Quoted prices are: i) Inclusive of all testing and inspection charges (if applicable) as per MR. ii) Inclusive of all IBR/IGC/NACE charges (if applicable) as required in the Material Requisition. iii) Inclusive of all statutory certification charges PESO/CCOE etc. (if applicable) as required in the Material Requisition c. Is your shop approved by IBR/CCE authority, if yes, indicate validity. i. IBR ii. CCE d. It is the responsibility of supplier to get the entire imported	<i>a. Confirmed</i> <i>b. Confirmed</i> <i>i) Confirmed</i> <i>ii) Confirmed</i> <i>c. IBR Approved</i> <i>d. Confirmed</i>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
	materials and the built in imported contents inspected by (Third Party Inspection Agency) TPIA (i.e. Lloyds/BV/DNV/TUV/CEIL) in the country of origin and the quoted prices are inclusive of charges towards the same.	
18.	<p>Import Content:</p> <p>If your offer is based on certain imported raw materials required for equipments/ materials offered, please specify the following :</p> <ul style="list-style-type: none"> a. Confirm that quoted prices are based on Merit rate of Customs duty, CVD, Educational Cess and SAD as applicable. b. Indicate rate of Import Duties considered and included in the quoted prices. c. Indicate brief description/ specification with itemised CIF value and country of origin of imported material. d. Indicate classification with tariff no. under which Vendor intends to import. e. Confirm prices shall be firm on account of variation in foreign exchange rate. f. Owner shall not provide any import license. g. Quoted prices are after considering the benefit of CENVAT on CVD including Edu. Cess. In case material is shipped directly port quoted prices are excluding CENVAT benefit. h. In case material is directly dispatched from port, CVD amount shall be reimbursed subject to submission of bill of entry documents along with CVD invoice. i. Any upward variation due to change in Customs Duty classifications shall be absorbed by the vendor. However, any reduction in customs duty due to change in classification shall be passed on to Owner. 	<p>a. <i>Confirmed</i></p> <p>b. Refer Price Schedule</p> <p>c. Refer Price Schedule</p> <p>d. Refer Price Schedule</p> <p>e. <i>Confirmed</i></p> <p>f. <i>Noted</i></p> <p>g. <i>Confirmed</i></p> <p>h. <i>Confirmed</i></p> <p>i. <i>Confirmed</i></p>
j. k. l. m.	<ul style="list-style-type: none"> j. Statutory variations, if any, in the rate of Import Duties upto 2/3rd contractual delivery period shall be to Owner's account. k. Any increase in price due to increase in the rate of Import Duties, due to any reasons, whatsoever, beyond the 2/3 rd contractual delivery period, shall be to vendor's account. However, any decrease in Import Duties rate at the time of actual clearance of imported materials shall be passed on to Owner. l. The CIF Value(s) indicated by the vendor shall be deemed to be the maximum value(s) for the purpose of payment of variation in custom duty and/or other statutory variations, if any, thereon. m. Variation in price due to Customs duty rate will be dealt separately after receipt of material at site, against documentary evidence. 	<p>j. <i>Confirmed</i></p> <p>k. <i>Confirmed</i></p> <p>l. <i>Confirmed</i></p> <p>m. <i>Confirmed</i></p>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
19. a)	Confirm your offer is in total compliance with RFQ Document containing technical specifications including General / Technical notes, scope of supply including documentation as per Material Requisition (MR) and subsequent amendment and corrigendum, if any.	Confirmed
b)	Confirm your offer is in total compliance with RFQ documentation containing commercial terms and conditions as per the following documents, without any deviation: <ul style="list-style-type: none"> i) Instruction to Bidders (ITB) ii) Special Purchase Condition (SPC) iii) General Purchase Conditions (GPC) iv) Terms & Conditions of Site work / HSE v) Integrity Pact. vi) Compliance to E-Tendering Instructions vii) Addendum / Corrigendum / Amendments, if any viii) RFQ Covering Letter ix) Terms & Condition of Supervision 	Confirmed Confirmed Confirmed Confirmed Confirmed (if Applicable as per MR) Confirmed Confirmed Confirmed Confirmed Confirmed (if Applicable as per MR) Noted
c)	Any deviation to Terms & Conditions shall lead to rejection of offer, except deviations for which loading is defined in the RFQ Documents	Noted
d)	Any deviation to Terms & Conditions shall lead to rejection of offer, except deviations for which loading is defined in the RFQ Documents	Noted
20.	Whether any of the Directors of Bidder is a relative of any Director of Owner/EIL or the Bidder is a firm in which any Director of Owner/EIL or his relative is a Partner or the Bidder is a private company in which any director of Owner/EIL is a member or Director.	Confirmed No relation
21.	Please confirm you have not been banned or delisted by any Government or Quasi Government agencies or PSUs. If you have been banned, then this fact must be clearly stated. This does not necessarily be cause for disqualification. However if this declaration is not furnished the bid shall be rejected as non-responsive.	Not Banned
22.	Please confirm you have uploaded the following in the E-Tendering Portal:	
22.1	UNPRICED OFFER- without any Deviations & ATC in respective Un-priced Folder.	Confirmed
22.2	PRICED FOLDER-Duly filled Price Schedule	Confirmed
23	Please confirm that you have quoted strictly for items based on your registration/approval with EIL as on date of issue of RFQ.	Confirmed
24	Any claim arising out of order shall be sent to Owner in writing with a copy to EIL within 3 months from the date of last despatch. In case the claim is received after 3 months, the same shall not be entertained by Consultant/ Owner.	Confirmed
25	Printed terms and conditions, if any, appearing in quotation,	Confirmed

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION
	shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned elsewhere in the offer, the confirmation given/confirmed herein above shall prevail.	
26	Confirm that Net worth of the bidder' company is positive as per the immediate preceding year's audited financial results & Immediate preceding year's audited annual financial results submitted along with unpriced bid.	<i>Confirmed</i>
27	Bidder to confirm the Validity of Bid as per RFQ covering letter.	<i>Confirmed</i>

VENDOR'S NAME:

SIGNATURE & SEAL:

ANNEXURE-E TO AGREED TERMS & CONDITIONS

Details of Taxes & Duties and Freight (FOR INDIAN BIDDERS)

RFQ NO.RS/A269-000-WB-MR-3314/1160

ITEM:VALVES-GATE, GLOBE, CHECK (FORGED & CAST)

BIDDER NAME:		
S. No.	Description of Taxes & duties	Present Rate of Taxes & Duties & Freight in Percentage
(1)	(2)	(3)
1	Excise Duty + Edu. Cess	----- %
2	Maharashtra VAT without Form 'D'	----- %
3	CST Against Form 'C'	----- %
4	Freight Charges upto FOT Site	----- %
5	Service Tax on Freight	----- %
6	Octroi	----- %
Note:	1) In case of any exemption / relaxation, if any, on taxes & duties, copy of relevant notification is to be furnished with confirmation that such exemption will be applicable upto delivery (as per present notification)	
	2) Input tax Credit available to purchaser at present is 4.253% in case MVAT is 5% and 10.631% in case MVAT is 12.5%. This will supercede the provisions of input tax credit mentioned elsewhere in the bid document.	
NOTE:	Bidders to upload the Un-price and Price part of their bids strictly in the Un-price & Priced folders respectively in the e-tender portal. Non Compliance to the same shall lead to rejection of their offer. In case any of the price details forming part of evaluation are furnished in the unpriced offer, then it shall lead to rejection of their bid.	

**M/s BHARAT PETROLEUM CORPORATION LTD, MAHUL,
MUMBAI**
(JOB NO. A269)
AGREED TERMS & CONDITIONS (ATC)
(FOR FOREIGN BIDDERS)

Vendor Name: M/s _____

RFQ No. : _____

Vendor's Offer Ref No. : _____

Tel. No. _____ Mob. No. _____ Fax No. _____

Contact Person: _____ E-mail: _____

1. ALL CORRESPONDENCE MUST BE IN **ENGLISH** LANGUAGE ONLY.
2. DULY SIGNED & STAMPED COPIES OF THIS "QUESTIONNAIRE", WITH ALL THE CLAUSES DULY CONFIRMED/ PRECISELY REPLIED TO BY THE VENDOR, SHALL BE ENCLOSED.
3. ALL COMMERCIAL TERMS ARE GIVEN/CONFIRMED IN THE QUESTIONNAIRE ITSELF AND NOT ELSEWHERE IN THE QUOTATION. IN CASE OF CONTRADICTION, THE SAME GIVEN HEREIN SHALL PREVAIL.
4. FAILURE ON THE PART OF VENDOR IN SUBMITTING THIS DULY FILLED-UP "QUESTIONNAIRE WITH UNPRICED BID AND/OR UPLOADING / SUBMITTING INCOMPLETE REPLIES MAY LEAD TO REJECTION OF VENDOR'S QUOTATION".
5. YOUR OFFER SHALL BE IN TOTAL COMPLIANCE WITH RFQ DOCUMENTS CONTAINING COMMERCIAL AND TECHNICAL SPECIFICATIONS INCLUDING GENERAL / TECHNICAL NOTES AND SCOPE OF SUPPLY INCLUDING DOCUMENTATION AS PER MATERIAL REQUISITION (MR) AND SUBSEQUENT TECHNICAL/COMMERCIAL AMENDMENT AND CORRIGENDUM, IF ANY.

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
1.	<p>a) Confirm that the offer contains firm prices on F.O.B. International Seaport of Exit Basis</p> <p>b) Indicate International Seaport of Exit</p> <p>c) Confirm that ocean freight charges upto port of entry, India (Mumbai) has been quoted separately by you in the price schedule.</p> <p>d) In case you have not indicated the ocean freight charges separately in the price schedule please quote the same in terms of Percentage of the quoted FOB Price.</p> <p>e) In case ocean freight charges are repeated anywhere in the bid/Price Schedule/ATC, then higher shall be considered for evaluation and in case of ordering on CFR basis, then & lower shall be considered .</p>	<i>Confirmed , Quoted in Price Schedule</i> ----- <i>Confirmed , Quoted in Price Schedule</i> ----- <i>Confirmed</i>
2	<p>Marine Insurance: Price quoted must exclude Marine insurance charges from FOB International Port of Exit, as same shall be arranged by the Owner. However all marine insurance charges for inland transit upto FOB International Port of Exit must be included by you in your prices.</p>	<i>Confirmed</i>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
3	Owner reserves the option to place order either on FOB or CFR basis.	Confirmed
4	<p>Delivery / Completion Period:</p> <p>a) Delivery / Completion period shall be as mentioned in the RFQ document on FOB International Port of Exit basis.</p> <p>b) Confirm delivery period shall be reckoned from the date of Fax of Acceptance.</p> <p>c) Confirm date of clean Bill of Lading shall be considered as date of delivery. (In case order is placed on FOB port of Exit basis or on CFR basis)</p>	Confirmed Confirmed Confirmed
5	<p>Taxes & Duties:</p> <p>a. All taxes, duties and levies of any kind payable upto FOB International Port of Exit shall be borne by Bidder.</p> <p>b. Export permit/licence if required shall be vendor's responsibility & any expenditure towards same will be borne by Bidder.</p>	Confirmed Confirmed
6	<p>Supervision / Training Charges:</p> <p>a. Charges for Supervision / Training, if in the scope of the Bidder as per MR have been indicated by bidder separately in the Price Schedule.</p> <p>b. Per-diem rate for supervision has been quoted in accordance with the Terms & Conditions for Supervision enclosed with the RFQ Documents.</p> <p>c. Bidder to indicate Permanent Account Number (PAN) to avoid any additional Tax deduction at source as per the prevailing Indian Income tax Acts Rule.</p> <p>d. Where erection/testing/commissioning supervision, commissioning assistance is required as per RFQ Documents / Material requisition, penalty for non mobilization/delay in mobilization as per order shall be applicable. The penalty shall generally be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.</p> <p>e. Bidders shall also provide additional BG of an amount equal to the per diem charges for the number of days considered for evaluation, over and above 10% PBG to cover compensation for delay in mobilizing the erection/ commissioning personnel. This BG will be released to the bidder upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with last 10% supply payment and shall be initially valid up to six months which shall be extended based on the request by BPCL.</p>	Confirmed, Quoted in Price Schedule Confirmed ----- Noted & Confirmed Noted & Confirmed
7	Confirm validity of recommended spares (If applicable as per MR) for 2 years operation and maintenance will be 12 months over and above the validity of offer.	Confirmed(if Applicable)

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
8	Manufacturer's name and address	-----
9	<p>Inspection Charges: Goods supplied are subject to stage wise and final inspection as specified in MR by TPI agency i.e. Lloyds/BV/DNV/TUV/CEIL in the country of origin and charges of the same shall be included in quoted prices and it is supplier's responsibility to arrange for the same. No additional charges shall be paid by owner towards the same.</p> <p>b. Quoted prices are:</p> <ul style="list-style-type: none"> i) Inclusive of all testing and inspection charges (if applicable) as per MR. ii) Inclusive of all IBR/IGC/NACE charges (if applicable) as required in the Material Requisition. iii) Inclusive of all statutory certification charges PESO/CCOE etc. (if applicable) as required in the Material Requisition. <p>C Is your shop approved by IBR/CCE authority, if yes, indicate validity. i. IBR ii. CCE</p>	<p>Confirmed</p> <p>Confirmed</p> <p>Confirmed</p> <p>Confirmed</p> <p>IBR Approved</p>
10	Country of Origin: Country of origin from where the goods have been offered.	-----
11	Currency of Quote: Furnish the currency of quote. Change in currency once quoted will not be allowed.	-----
12	<p>Spares Parts:</p> <p>a) Confirm item wise unit price (FOB Port of Exit basis) of following spare parts as required in Material Requisition (MR) have been quoted indicating itemised quantity.</p> <ul style="list-style-type: none"> i) Mandatory Spares are quoted as per MR. ii) Commissioning spares as specified in MR are included in the quoted Price. iii) Special Tools & Tackles as specified in the MR are included in the quoted prices. iv) Confirm spares wherever required as per MR have been included in the quoted price and list of spares is also furnished. <p>b) Recommended spare parts for two years operation & maintenance are quoted separately. Also itemwise Ocean freight charges upto port of entry, Mumbai (India) for the spares has been quoted.</p>	<p>Confirmed</p> <p>Confirmed (if Applicable as per MR)</p>
13	Confirm documentation charges as per MR are inclusive in your quoted prices.	Confirmed
14	Confirm customer references list for the item/model quoted by you, is given in offer.	Confirmed
15	Indicate shipping weight (net and gross) and volume of the consignment.	-----

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
16	<p>Performance Bank Guarantee: Confirm goods to be supplied by you shall be guaranteed for performance as per the General Conditions of Contract & Special Purchase Condition (SPC) and valid till full guarantee period plus 3 (Three) Months.</p>	Confirmed
b.	<p>i) The Performance Bank Guarantee shall be strictly as per proforma enclosed with the GPC document and shall be from any Indian Scheduled Bank or any reputed International Bank and shall be submitted within 15 days from date of FOA.</p> <p>ii) However, if Performance Bank Guarantee are furnished other than the Nationalised Indian Bank, the banks where BGs are furnished, must be Commercial Bank having net worth in excess of Rs. 100 crore or USD 22 Millions and any declaration to this effect will be furnished by such Commercial Bank either in the bank guarantee itself or separately on a letter head.</p>	Confirmed Confirmed
17.	<p>Guarantee / Warranty Confirm acceptance to Guarantee / Warranty clause as mentioned in the General Purchase Conditions.</p>	Confirmed
18.	<p>Firmness of prices: Confirm quoted prices shall remain firm and fixed till complete execution of order. Price Variation shall not be considered on any account.</p>	Confirmed
19.	<p>Part Order:</p> <p>a) Confirm acceptance to part order (As per MR / RFQ Requirement).</p> <p>b) The Quantities against a particular item will not be split. However, in case of part order confirm all lumpsum charges quoted extra if any viz. Documentation, testing, packing, crating, handling, FOB, IBR etc., can be considered prorate on value basis.</p>	Confirmed Confirmed
20	<p>Repeat Order: Confirm Acceptance to Repeat Order as per RFQ Covering Letter/SPC/Material Requisition.</p>	Confirmed
21	<p>Price Reduction on delay in delivery:</p> <p>a) Confirm acceptance of price reduction schedule for delay in deliveries specified in RFQ Covering Letter, General Purchase Conditions (GPC)/SPC enclosed with the RFQ Document. Liquidated damages or penalty are not acceptable.</p> <p>b) In case of delay, vendor will reduce the invoice amount by applicable reduction.</p>	Confirmed Confirmed
22	<p>Payment Term: Confirm acceptance of payment terms as per "Payment Terms and Mode of Payment" specified in Special Purchase Conditions and RFQ covering letter.</p>	Confirmed

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
23	<p>a) Letter of Credit shall be opened after receipt of unconditional order acknowledgement along with 10% performance bank guarantee valid till expiry of Material/Equipment Guarantee period as per General Purchase Conditions and Special Purchase Conditions plus 6 (Six) months claim period.</p> <p>b) Letter of Credit shall be opened through a Govt. of India Nationalised/ Scheduled Bank and hence need not be confirmed.</p> <p style="text-align: center;">OR</p> <p>c) However, if you still insist for confirmed L/C, confirmation charges shall be borne by you. Please confirm.</p>	<p>Confirmed</p> <p>Confirmed L/C not required</p> <p>Noted</p>
24	All Bank charges and stamp duties payable outside India in connection with payments to be made under Purchase Order for the item, if placed, shall be borne by you. All bank charges and stamp duties payable in India shall be borne by the Purchaser.	<p>Confirmed</p>
25	Please indicate name and address of your Bankers for L/C opening, telephone/E-mail address.	<p>-----</p>
26 a)	Confirm your offer is in total compliance with RFQ Document containing technical specifications including General / Technical notes, scope of supply including documentation as per Material Requisition (MR) and subsequent amendment and corrigendum, if any, without any deviation.	<p>Confirmed</p>
	b) Confirm your offer is in total compliance with RFQ documents containing commercial terms and conditions as per the following documents, without any deviation:	<p>Confirmed</p>
	<p>i) Instructions to Bidder (ITB)</p> <p>ii) Special Purchase Conditions</p> <p>iii) General Purchase Conditions</p> <p>vi) Terms & Conditions for supervision</p> <p>v) Terms & Conditions for site work & HSE</p> <p>vi) Integrity Pact</p> <p>vii) Compliance to E-Tendering Instructions</p> <p>viii) Addendum / Corrigendum / Amendments, if any</p> <p>ix) RFQ Covering Letter</p>	<p>Confirmed</p> <p>Confirmed</p> <p>Confirmed</p> <p>Confirmed (if Applicable as per MR)</p> <p>Confirmed (if Applicable as per MR)</p> <p>Confirmed</p> <p>Confirmed</p> <p>Confirmed</p> <p>Confirmed</p>
c)	Any deviation to Terms & Conditions shall lead to rejection of offer, except deviations for which loading is defined in the RFQ Documents.	<p>Confirmed</p> <p>Noted</p>
	Direct offer without the intermediary of an Indian Agent will only be considered.	<p>Noted & Confirmed.</p>

SL. NO.	DESCRIPTION	VENDOR'S CONFIRMATION WITH DETAILS
28	Please confirm you have not been banned or delisted by any Government or Quasi Government agencies or PSUs. If you have been banned, then this fact must be clearly stated. This does not necessarily be cause for disqualification. However if this declaration is not furnished the bid shall be rejected as non-responsive.	Not Banned
29	Please confirm you have uploaded the following in respective folder in the E-Tendering Portal:	Confirmed
29.1	UNPRICED OFFER- without any Deviations & ATC in Un-priced Folder	Confirmed
29.2	PRICED FOLDER-Duly filled Price Schedule	Confirmed
30	Any claim arising out of order shall be sent to Owner in writing with a copy to EIL within 3 months from the date of last despatch. In case the claim is received after 3 months, the same shall not be entertained by consultant / Owner.	Confirmed
31	Printed terms and conditions, if any, appearing in quotation, shall not be applicable in the event of order. In case of contradiction between the confirmations given above and terms & conditions mentioned elsewhere in the offer, the confirmation given/confirmed herein above shall prevail.	Confirmed
32	Confirm that Net worth of the bidder' company is positive as per the immediate preceding year's audited financial results & Immediate preceding year's audited annual financial results submitted along with un-priced bid.	Confirmed
33	Bidder to confirm the Validity of Bid as per RFQ covering letter.	Confirmed

VENDOR'S NAME :

SIGNATURE & SEAL:

FORM-H**BIDDER'S QUERIES**

SL. NO.	BIDDING DOCUMENT			SUBJECT	BIDDER'S QUERY	OWNER'S REPLY
	PART / VOL.	PAGE NO.	CLAUSE NO.			

NOTE :

1. Bidder's Queries may be sent by fax to fax numbers 011-26191714, 26167664 and also by e-mail to vinod.kr@eil.co.in / r.somnath@eil.co.in
2. Technical & Commercial queries, if any, must be submitted separately in editable format as per this format.

SIGNATURE OF BIDDER : _____**NAME OF BIDDER** : _____**COMPANY SEAL** : _____

Annexure-F

EIL JOB NO./NAME:

PO NO. & DETAILS:

VENDOR NAME:

TRANSPORTER NAME:

VEHICLE NO.:

SR. NO.	CHECK/ CONTROL POINTS	Tick Mark (✓)	Details
1	Driver has valid photo ID proof & valid License	Yes / No	Name: Photo ID proof: Licence No.
2	Cleaner is present & has valid ID proof	Yes / No	Name: Photo ID proof:
3	Driver is carrying all valid Lorry/truck registration papers with PUC details (in original).	Yes / No	
4	Stepney / spare wheel is available in Lorry/truck.	Yes / No	
5	Flame arrestor is available in Lorry / truck.	Yes / No	
6	Both driver & cleaner have helmet & safety shoes.	Yes / No	

Any remarks:

Notes:

- 1) In absence of any of the above requirements in the vehicle, vehicle will not be permitted entry in refinery gate & the vendor will be solely responsible for delay, if any, due to the same.
- 2) The filled format to be handed over to EIL warehouse person upon reporting at the BPCL refinery gate.

Date:

Time:

Name & Signature of vendor/transporter

Bharat Petroleum Corporation Limited

General Purchase Conditions

The following conditions shall be applicable for all procurement unless specifically mentioned in the Special Purchase Conditions.

INDEX

1. DEFINITIONS
2. REFERENCE FOR DOCUMENTATION
3. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER
4. LANGUAGE OF BID
5. PRICE
6. TAXES AND DUTIES
7. INSPECTION
8. SHIPPING
9. INDIAN AGENT COMMISSION
10. ORDER AWARD / EVALUATION CRITERIA
11. CONFIRMATION OF ORDER
12. PAYMENT TERMS
13. GUARANTEE/WARRANTY
14. PERFORMANCE BANK GUARANTEE
15. PACKING & MARKING
16. DELIVERY
17. UNLOADING AND STACKING
18. TRANSIT INSURANCE
19. VALIDITY OF OFFER
20. DELIVERY DATES AND PRICE REDUCTION SCHEDULE
21. RISK PURCHASE CLAUSE
22. FORCE MAJEURE CLAUSE
23. ARBITRATION CLAUSE
24. INTEGRITY PACT (IP)
25. RECOVERY OF SUMS DUE
26. CONFIDENTIALITY OF TECHNICAL INFORMATION
27. PATENTS & ROYALTIES
28. LIABILITY CLAUSE
29. COMPLIANCE OF REGULATIONS
30. REJECTION, REMOVAL OF REJECTED GOODS AND REPLACEMENT
31. NON-WAIVER
32. NEW & UNUSED MATERIAL
33. PURCHASE PREFERENCE CLAUSE
34. CANCELLATION
35. ANTI -COMPETITIVE AGREEMENTS/ABUSE OF DOMINANT POSITION
36. ASSIGNMENT
37. GOVERNING LAW
38. AMENDMENT
39. SPECIAL PURCHASE CONDITIONS
40. NOTICES

Bharat Petroleum Corporation Limited

General Purchase Conditions

1. DEFINITIONS :

The following expressions used in these terms and conditions and in the purchase order shall have the meaning indicated against each of these:

- 1.1. **OWNER:** Owner means Bharat Petroleum Corporation Limited (a Government of India enterprise), a Company incorporated in India having its registered office at Bharat Bhavan, 4 & 6 Currimbhoy Road, Ballard Estate, Mumbai 400038 and shall include its successors and assigns (hereafter called BPCL as a short form).
- 1.2. **VENDOR:** Vendor means the person, firm or the Company / Corporation to whom this Request for quotation (RFQ)/purchase order is issued and shall include its successors and assigns.
- 1.3. **INSPECTOR:** Person/agency deputed by BPCL for carrying out inspection, checking/testing of items ordered and for certifying the items conforming to the purchase order specifications..
- 1.4. **GOODS / MATERIALS:** means any of the articles, materials, machinery, equipments, supplies, drawing, data and other property and all services including but not limited to design, delivery, installation, inspection, testing and commissioning specified or required to complete the order.
- 1.5. **SITE / LOCATION:** means any Site where BHARAT PETROLEUM CORPORATION LTD. desires to receive materials any where in India as mentioned in RFQ.
- 1.6. **“RATE CONTRACT”** means the agreement for supply of goods/ materials between Owner and Vendor, for a fixed period of time (i.e till validity of Rate Contract, with no commitment of contractual quantity) on mutually agreed terms and conditions. The actual supply of goods/ materials shall take place only on issue of separate purchase orders for required quantity as and when required by Owner.
- 1.7. **“FIRM PROCUREMENT”** means the agreement between the parties for mutually agreed terms and conditions with commitment of Quantity Ordered.

2. REFERENCE FOR DOCUMENTATION :

- 2.1. The number and date of Collective Request for Quotation (CRFQ) must appear on all correspondence before finalization of Rate Contract / Purchase Order.

- 2.2. After finalization of Contract / Purchase Order: The number and date of Rate Contract / Purchase Order must appear on all correspondence, drawings, invoices, dispatch advices, (including shipping documents if applicable) packing list and on any documents or papers connected with this order.
- 2.3. In the case of imports, the relevant particulars of the import Licence shall be duly indicated in the invoice and shipping documents as well as on the packages or consignments.

3. RIGHT OF OWNER TO ACCEPT OR REJECT TENDER :

The right to accept the tender will rest with the Owner.

4. LANGUAGE:

The Bid and all supporting documentation and all correspondence whatsoever exchanged by Vendor and Owner, shall be in English language only.

5. Price :

Unless otherwise agreed to the terms of the RFQ, price shall be :

Firm and no escalation will be entertained on any ground, except on the ground of statutory levies applicable on the tendered items.

6. TAXES AND DUTIES :

All vendors shall have VAT / CST/GST/Service tax registration in the concerned State and vendor shall quote their TIN number in the quotation.

6.1. EXCISE DUTY :

- 6.1.1. Excise duty extra as applicable at the time of delivery within scheduled delivery period will be payable by BPCL against documentary evidence. Vendor shall mention in their offer, the percentage of excise duty applicable at present. Any upward variation in excise duty rates, beyond the contractual delivery period, shall be to vendor's account.
- 6.1.2. In case Excise Duty is not applicable at present : Excise duty due to change in turn over is not payable. If applicable in future, the same will be borne by vendor.
- 6.1.3. Owner shall take CENVAT Credit on the material supplied for both excise duty and cess component and accordingly Excise duty / Cess should be quoted separately wherever applicable.

Vendor shall ask the transporter of the goods to hand over the copy of excise invoice (transporter's copy) at the time of delivery of goods at owner's site.

6.2. SALES TAX / VAT/GST :

- 6.2.1. Sales Tax as applicable at the time of delivery within scheduled delivery period will be payable by BPCL. Vendor shall give details of local sales tax and/or central sales tax currently applicable in their offer. The rates applicable for "CST without form C", "CST with form C" and "VAT" shall be clearly indicated.
- 6.2.2. Input VAT Credit may be claimed by BPCL, wherever applicable. Vendor shall submit the TAX invoice.

6.3 Service tax :

All vendors shall have service tax registration wherever applicable. BPCL may also claim CENVAT Credit on service tax. The vendor should quote service tax separately, if applicable. Vendor shall submit the TAX invoice. Vendor is required to furnish serially numbered and signed invoice / bill / challan containing the following details:

- a) Name, address and registration number of the service provider
- b) Name and address of person receiving taxable service
- c) Description, classification and value of taxable service provided
- d) Service Tax Payable

6.4 FREIGHT AND OCTROI :

- 6.4.1 Freight: Firm freight charges to be quoted as indicated in the Tender documents. Freight shall be payable after receipt of the Material(s) at the site, unless otherwise specified.
- 6.4.2 Octroi and entry taxes, if any, shall be invoiced separately and shall be re-imbursed by BPCL at actuals after receipt of the Material(s) at the Site against the submission of original documentary evidence for proof of payment of the related octroi and entry taxes, as the case may be.

6.5. NEW STATUTORY LEVIES :

All new statutory levies leviable on sale of finished goods to owner , if applicable are payable extra by BPCL against documentary proof, within the contractual delivery period.

6.6 Variation in Taxes/Duties

Any increase/decrease in all the above mentioned statutory levies on the date of delivery during the scheduled delivery period on finished materials will be on BPCL's account. Any upward variation in statutory levies after contractual delivery date shall be to vendor's account.

7. INSPECTION :

- 7.1. Materials shall be inspected by BPCL approved third party inspection agency if applicable before dispatch of materials. However, arranging and providing inspection

facilities is entirely vendor's responsibility and in no way shall affect the delivery schedule.

- 7.2. Scope of Inspection shall be as per RFQ. Our registered third party inspection agencies are SGS/GLISPL/IRS/DNV/LRIS/EIL/TATA Projects/PDIL/ULIPL/RITES LTD/ITSIPL as amended time to time unless otherwise specified in the Special Purchase Conditions.
- 7.3. Unless otherwise specified, the inspection shall be carried out as per the relevant standards/scope of inspection provided alongwith the Tender Enquiry/Purchase Order.
- 7.4. BPCL may, at its own expense, have its representative(s) witness any test or inspection. In order to enable BPCL's representative(s) to witness the tests/inspections. BPCL will advise the Vendor in advance whether it intends to have its representative(s) be present at any of the inspections.
- 7.5. Even if the inspection and tests are fully carried out, the Vendor shall not be absolved from its responsibilities to ensure that the Material(s), raw materials, components and other inputs are supplied strictly to conform and comply with all the requirements of the Contract at all stages, whether during manufacture and fabrication, or at the time of Delivery as on arrival at site and after its erection or start up or consumption, and during the defect liability period. The inspections and tests are merely intended to prima-facie satisfy BPCL that the Material(s) and the parts and components comply with the requirements of the Contract. The Vendor's responsibility shall also not be anywise reduced or discharged because BPCL or BPCL's representative(s) or Inspector(s) shall have examined, commented on the Vendor's drawings or specifications or shall have witnessed the tests or required any chemical or physical or other tests or shall have stamped or approved or certified any Material(s).
- 7.6. Although material approved by the Inspector(s), if on testing and inspection after receipt of the Material(s) at the location, any Material(s) are found not to be in strict conformity with the contractual requirements or specifications, BPCL shall have the right to reject the same and hold the Vendor liable for non-performance of the Contract.

8. SHIPPING :

8.1 SEA SHIPMENT :

All shipment of materials shall be made by first class direct vessels, through the chartering wing, Ministry of Surface Transport as per procedure detailed hereunder. The Foreign Supplier shall arrange with Vessels Owners or Forwarding Agents for proper storage of the entire Cargo intended for the project in a specific manner so as to facilitate and to avoid any over carriage at the port of discharge. All shipment shall be under deck unless carriage on deck is unavoidable.

The bills of lading should be made out in favour of 'Bharat Petroleum Corporation Ltd.. or order'.

All columns in the body of the Bill of Lading namely marks and nos., material description, weight particulars etc., should be uniform and accurate and such statements should be uniform in all the shipping documents. The freight particulars should mention

the basis of freight tonnage, heavy lift charges, if any, surcharge, discount etc. clearly and separately. The net total freight payable shall be shown at the bottom.

SHIPPING DOCUMENTS :

All documents viz. Bill of Lading, invoices, packing list, freight memos, country of origin certificates, test certificate, drawings and catalogues should be in English language.

In addition of the bill of lading which should be obtained in three stamped original plus as many copies as required, invoices, packing list, freight memos,(if the freight particulars are not shown in the bills of lading), country of origin certificate, test / composition certificate, shall be made out against each shipment in as many number of copies as shown below.

The bill of lading, invoice and packing list specifically shall show uniformly the mark and numbers, contents case wise, country of origin, consignees name, port of destination and all other particulars as indicated under clause 2. The invoice shall show the unit rates and net total F.O.B. prices. Items packed separately should also be invoiced and the value shown accordingly. Packing list must show apart from other particulars actual contents in each case, net and gross weights and dimensions, and the total number of packages. All documents should be duly signed by the Vendor's authorised representatives.

In the case of FOB orders, Shipping arrangements shall be made by the Chartering Wing Of the Ministry of Surface Transport, New Delhi through their respective forwarding agents. The names and addresses of forwarding agents shall be as per Special Purchase Conditions. Supplier shall furnish to the respective agents the full details of consignments such as outside dimension, weights (both gross and net) No of packages, technical description and drawings, name of supplier, ports of loading, etc. 6 weeks notice shall be given by the supplier to enable the concerned agency to arrange shipping space.

The bill of lading shall indicate the following :

Shipper : Goverment of India

Consignee : Bharat Petroleum Corporation Ltd.

In case of supplies from USA, Export Licences, if any required from the American Authorities shall be Obtained by the U.S. Suppliers. If need be assistance for obtaining such export licences would be available from India Supply Mission at Washington.

8.2 AIRSHIPMENT :

In case of Airshipment, the materials shall be shipped through freight consolidator (approved by us). The airway bill shall be made out in favour of BHARAT PETROLEUM CORPORATION LTD.

TRANSMISSION OF SHIPPING DOCUMENTS :

Foreign Supplier shall obtain the shipping documents in seven complete sets including three original stamped copies of the Bill of Lading as quickly as possible after the shipment is made, and airmail as shown below so that they are received at least three weeks before the Vessel's arrival. Foreign Supplier shall be fully responsible for any delay and / or demurrage in clearance of the consignment at the port due to delay in transmittal of the shipping documents.

If in terms of letter or otherwise, the complete original set of documents are required to be sent to BPCL through Bank the distribution indicated below will confine to copies of documents only minus originals.

Documents	BPCL (Mumbai)
Bill of Lading	4 (including 1 original)
Invoice	4
Packing List	4
Freight Memo	4
Country of Origin Certificate	4
Third party inspection certificate	4
Drawing	4
Catalogue	4
Invoice of Third Party	4
for inspection charges whenever applicable.	

9. INDIAN AGENT COMMISSION :

Any offer through Indian agents will be considered only after authorization mentioning them as Indian agents, is received from Vendor. Indian agents commission if applicable will be payable only in Indian currency. Indian agents should be registered with Directorate General of Supplies and Disposals, Government of India and agency commission will be payable only after registration with DGS&D, New Delhi.

10. ORDER AWARD / EVALUATION CRITERIA :

Unless otherwise specified, Order award criteria will be on lowest quote landed price basis. Landed price will be summation of Basic Price, Packing & Forwarding Charges, Excise Duty, Sales Tax, Freight, Inspection, Octroi, Supervision of Installation & Commissioning and other taxes & levies, loading etc, if any, reduced by cenvat/vat credit as applicable.

11. CONFIRMATION OF ORDER :

The vendor shall acknowledge the receipt of the purchase order within 10 days of mailing the same. The vendor shall sign, stamp the acknowledgement copy of the purchase order and return the same to BPCL.

12. PAYMENT TERMS :

12.1. Unless otherwise specified, 100% payment shall be made within 30 days from date of receipt and acceptance of materials at Site against submission of Performance Bank Guarantee (PBG) for 10% of basic order value if PBG is applicable for the tender.

12.2. In the case of imports, payment will be made on submission of original documents directly to Owner (Telegraphic Transfer-TT) or through Bank (Cash against documents-CAD) or through irrevocable Letter of Credit.

12.3. Unless otherwise mentioned, the specified documents (All documents listed below (one original and two copies)) should be submitted to originator of P.O. (the name and contact details of whom are given in PO) and payments for despatches will be made by the originator of Purchase Order :

- a) Invoice
- b) Excise invoice
- c) The Lorry Receipt of the consignment
- d) Packing list for the consignment
- e) Third Party Inspector's Certificate covering the invoiced Material(s)/ Release Note, wherever applicable
- f) Manufacturers Test/Composition Certificate, wherever applicable
- g) Drawing(s)/Catalogue(s) covering the Material(s) , wherever applicable
- h) Guarantee/Warranty Certificate(s), wherever applicable.
- i) Original Receipt for Octroi/other statutory levies as applicable.
- j) Performance Bank Guarantee as applicable.

13. GUARANTEE/WARRANTY :

13.1. Materials shall be guaranteed against manufacturing defects, materials, workmanship and design for a period of 12 months from the date of commissioning or 18 months from the date of dispatch whichever is earlier. Warranty for replacement of material / accessories should be provided free of charges at our premises. The above guarantee/warranty will be without prejudice to the certificate of inspection or material receipt note issued by us in respect of the materials.

13.2. All the materials including components and sub contracted items should be guaranteed by the vendor within the warranty period mentioned above. In the event of any defect in the material, the vendor will replace / repair the material at BPCL's concerned location at vendor's risk and cost on due notice.

13.3. In case, vendor does not replace / repair the material on due notice, rejected material will be sent to the vendor on "Freight to pay" basis for free replacement. Material after rectification of defects shall be dispatched by the vendor on "Freight Paid" basis. Alternatively, BPCL reserves the right to have the material repaired / replaced at the locations concerned, at the vendor's risk, cost and responsibility.

13.4. The Vendor shall provide similar warranty on the parts, components, fittings, accessories etc. so repaired and / or replaced.

14. PERFORMANCE BANK GUARANTEE :

14.1. Vendor will have to provide Performance Bank Guarantee for 10% of the basic value of purchase order unless otherwise specified. This bank guarantee shall be valid (shall remain in force) for guarantee period (as mentioned in the guarantee clause), with an

invocation period of six months thereafter. In the case of Indigenous vendors, the Performance Bank Guarantee shall be given on a non-judicial stamp paper of appropriate value (currently Rs 100). PBG format is as per Annexure I.

In case, PBG is not provided by the Vendor, 10% of the basic value shall be retained in lieu of PBG, till the expiry of guarantee and claim period.

In the case of imports, the Supplier shall furnish the Performance Bank Guarantee (as per Annexure I) through the following :

- a) Branches of Indian scheduled banks operating in their Country.
- b) Foreign bank operating in their Country which is counter guaranteed by branches of Indian scheduled banks operating in their Country/India.
- c) Indian branches of foreign banks.
- d) Foreign bank operating in their Country counter guaranteed by their Indian branch

However, in respect of c) and d) above, the Indian branch of foreign banks should be recognized as scheduled bank by Reserve Bank of India.

14.2. If Vendor wants to submit the PBG at Contract level to avoid multiple number of PBG (i.e. PBG issued against every purchase/call off order) then the validity of PBG will be calculated as mentioned below :

14.2.1. Validity of PBG = Rate Contract Issue Date (Start Date of Rate Contract) + Rate Contract Period (validity of Rate Contract) + Contractual Delivery Period of material + Contractual Guarantee period + 6 month (for invocation / Claim).

15. PACKING & MARKING :

15.1 PACKING :

15.1.1 Packing shall withstand the hazards normally encountered with the means of transport for the goods of this purchase order including loading and unloading operation both by crane and by pushing off.

In the case of imports, all equipments / materials shall be suitably packed in weather proof, seaworthy packing for ocean transport under tropical conditions and for rail or road or other appropriate transport in India. The packing shall be strong and efficient enough to ensure safe preservance upto the final point of destination.

Raw/Solid wood packaging material of imported items has to be appropriately treated & marked as per International Standard of Phytosanitary Measures (ISPM-15") for material originating from the contracting countries to the International Plant Protection Convention or the members of Food & Agriculture Organization. Material from non-contracting parties would have to be accompanied by a phytosanitary certificate of the treatment endorsed. The Custom Officer at Indian Port shall not release the material without appropriate compliance of the above provisions w.e.f. 01.11.2004.

15.1.2 The packing specification incorporated herein are supplementary to the internal and external packing methods and standards as per current general rules of J.R.A. Good Tariff

Part-I. All packaging shall be done in such a manner as to reduce volume as much as possible.

- 15.1.3 Fragile articles should be packed with special packing materials depending on the type of Materials and the packing shall bear the words "HANDLE WITH CARE GLASS FRAGILE, DON'T ROLL THIS END UP. THIS END DOWN," to be indicated by arrow.
- 15.1.4 Chemicals in powder form, catalyst, refractories and like materials etc. shall be packed in drums, cans and tins only. However, Catalyst may be supplied in Jumbo bags.
- 15.1.5 The hazardous materials shall be packed in accordance with the applicable rules, regulations and tariff of all cognizant Government Authorities and other Governing bodies. It shall be the responsibility of the seller of hazardous materials to designate the material as hazardous and to identify each material by its proper commodity name and its hazardous material class code.
- 15.1.6 All package requiring handling by crane should have sufficient space at appropriate place to put sling of suitable dia (strength). Iron/Steel angle should be provided at the place where sling marking are made to avoid damage to package/ equipment while lifting.
- 15.1.7 Item shipped in bundles must be securely tied with steel wire or strapping. Steel reinforcing rods, bars, pipes, structural members etc. shall be bundled in uniform lengths and the weight shall be within the breaking strength of the securing wire or strapping.

In the case of imports, for bundles the shipping marks shall be embossed on metal or similar tag and wired securely on each end.

- 15.1.8 All delicate surface on equipment/materials should be carefully protected and printed with protective paint/compound and wrapped to prevent rusting and damage.
- 15.1.9 All mechanical and electrical equipment and other heavy articles shall be securely fastened to the case bottom and shall be blocked and braced to avoid any displacement/shifting during transit.
- 15.1.10 Attachments and spare parts of equipment and all small pieces shall be packed separately in wooden cases with adequate protection inside the case and wherever possible should be sent along with the main equipment. Each item shall be suitably tagged with identification of main equipment, item denomination and reference number of respective assembly drawing. Each item of steel structure and furnaces shall be identified with two erection markings with minimum lettering height of 15mm. Such markings will be followed by the collection numbers in indelible ink/paint. A copy of the packing list shall accompany the materials in each package.

- 15.1.11 All protrusions shall be suitably protected by providing a cover comprising of tightly bolted wooden disc on the flanges. All nozzles, holes and openings and also all delicate surfaces shall be carefully protected against damage and bad weather. All manufactured surfaces shall be painted with rust proof paint.

In the case of imports, for bulk uniform material when packed in several cases, progressive serial numbers shall be indicated on each case.

15.1.12 Wherever required, equipment/materials instruments shall be enveloped in polythene bags containing silicagel or similar dehydrating compound.

15.1.13 Pipes shall be packed as under:

- a. Upto 50mm NB in wooden cases/crates.
- b. Above 50mm NB and upto 100mm NB in bundles and should be strapped at minimum three places.
- c. Above 100mm NB in loose.

15.1.14 Pipes and tubes of stainless steel, copper etc. shall be packed in wooden cases irrespective of their sizes.

15.1.15 Pipes with threaded or flanged ends shall be protected with suitable caps covers, before packing.

In the case of imports, all pipes and sheets shall be marked with strips bearing progressive no.

15.1.16 Detailed packing list in waterproof envelope shall be inserted in the package together with equipment/materials. One copy of the detailed packing list shall be fastened outside of the package in waterproof envelope and covered by metal cover.

15.1.17 The supplier shall be held liable for all damages or breakages to the goods due to the defective or insufficient packing as well as for corrosion due to insufficient protection.

15.1.18 Packaged equipment or materials showing damage defects or shortages resulting from improper packaging materials or packing procedures or having concealed damages or shortages, at the time of unpacking shall be to the supplier's account.

All packages which require special handling and transport should have their Centres of Gravity and the points at which they may be slung or gripped clearly indicated and marked "ATTENTION SPECIAL LOAD HANDLE WITH CARE" both in English/Hindi Languages.

In the case of imports, a distinct colour splash in say red black around each package crate / bundle shall be given for identification.

15.1.19 Along with the packed material, supplier should attach material list, manuals/instructions and also the Inspection certificate/release note, wherever applicable.

15.2. MARKING :

The following details to be written on the side face of packing:

- a) Purchase Order Number
- b) Vendor Name

- c) Batch no with Manufacturing date
- d) Procedure (in brief) for handling
- e) Date of dispatch etc.

15.3 Imported items :

On three sides of the packages, the following marks shall appear, clearly visible, with indelible paint and on Vendor's care and expenses.

BHARAT PETROLEUM CORPORATION LIMITED
(With detailed address as given in Special Purchase Conditions)

From :

To : Bharat Petroleum Corp.Ltd.

(With detailed address as given in Special Purchase Conditions)

Order no. Rev. no.

Item 1:

Equipment Nomenclature :

Net weight : Kgs.

Gross weight : Kgs.

Case No. of Total cases :

Dimensions :

Import Licence No.

NOTE :

Marking shall be bold - minimum letter height 5 cm. For every order and every shipment, packages must be marked with serial progressive numbering.

Top heavy containers shall be so marked either Top Heavy or Heavy Ends.

When packing material is clean and light coloured, a dark black stencil paint shall be acceptable. However, where packaging material is soiled or dark, a coat of flat zinc white paint shall be applied and allowed to dry before applying the specific markings.

In case of large equipments like vessels, heat exchangers, etc. the envelope containing the documents shall be fastened inside a shell connection, with an identifying arrow sign "documents" using indelible paint.

16. DELIVERY :

- 16.1. Unless otherwise mentioned, Vendor is requested to quote their best delivery schedule from the date of receipt of Purchase order.
- 16.2. Time being the essence of this contract, the delivery mentioned in the purchase order shall be strictly adhered to and no variation shall be permitted except with prior authorization in writing from the Owner. Goods should be delivered, securely packed and in good order and condition, at the place of delivery and within the time specified in the purchase order for their delivery.
- 16.3. The contractual delivery period is inclusive of all the lead time for engineering / procurement of raw material, the manufacturing, inspection / testing, packing, transportation or any other activity whatsoever required to be accomplished for effecting the delivery at the required delivery point.
- 16.4. Unless otherwise specified, Material(s) shall not be despatched without prior inspection and/or testing and Release Order/Material(s) Acceptance Certificate issued by the Inspector(s).
- 16.5. BPCL shall have the right to advise any change in despatch point or destination in respect of any Material(s). Any extra expenditure incurred by the Vendor on this account supported by satisfactory documentary evidence, will be reimbursed to the Vendor by BPCL.

17. UNLOADING AND STACKING :

Unloading and stacking will be arranged by BPCL. The Vendor shall send BPCL information of the proposed consignment well in advance by telegram/fax/e-mail/courier to enable BPCL to take necessary action.

18. TRANSIT INSURANCE :

Unless otherwise mentioned,

- 18.1. Transit Insurance shall be covered by BPCL against its Mega Package Policy.
- 18.2. In the case of imports, insurance against all marine and transit risk shall be covered under the Owner's marine policy. However, the Vendor shall ensure that in effecting shipments clear bill of lading are obtained and the carrier's responsibility is fully retained on the Carriers so that the consignee's interests are fully secured and are in no way jeopardized.
- 18.2. The Vendor shall send BPCL information of the proposed consignment well in advance by telegram/fax/e-mail/courier to enable BPCL to take necessary action for the transit insurance of the consignment. Any failure by the Vendor to do so shall place the consignment at the Vendor's risk.
- 18.3. In the case of imports, as soon as any shipment is made, the Foreign Supplier shall send advance information by way of Telex message to Bharat Petroleum Corporation Ltd., (with detailed address as given in Special Purchase Conditions) giving particulars of the

shipments, vessels name, port of shipment, bill of lading number and date, total FOB and freight value.

19 VALIDITY OF OFFER:

The rates quoted against this tender shall be valid for a period of 90 Days from the date of opening of the tender unless otherwise specified in the Special Purchase Conditions.

20. DELIVERY DATES AND PRICE REDUCTION SCHEDULE :

- 20.1. The time and date of Delivery of Material(s) as stipulated in the Contract shall be adhered to on the clear understanding that the Price(s) of the Material(s) has/have been fixed with reference to the said Delivery date(s).
- 20.2. If any delay is anticipated by the Vendor in the delivery of the Material(s) or any of them beyond the stipulated date(s) of Delivery, the Vendor shall forthwith inform BPCL in writing of such anticipated delay and of the steps being taken by the Vendor to remove or reduce the anticipated delay, and shall promptly keep BPCL informed of all subsequent developments.
- 20.3. The delivery period quoted must be realistic & specific. The inability of successful Vendors to execute orders in accordance with the agreed delivery schedule will entitle BPCL, at its options, to :
 - 20.3.1. Accept delayed delivery at prices reduced by a sum equivalent to half percent (0.5%) of the basic value of any goods not delivered for every week of delay or part thereof, limited to a maximum of 5% of the total basic order value. LR date will be considered as delivery completion date for calculation of price reduction in the case of ex works contract. Date of receipt of materials at owners premises shall be considered for calculation of price reduction for F.O.R destination contract.

In the case of imports, the contractual delivery date shall be considered from the date of Letter of Credit (L/C) or the date of L/C amendment because of Buyer's fault plus one week (to take care of transit time for receipt of L/c) plus the delivery schedule as indicated by the vendors.

In case of the shipment taking place on "Cash against documents", the contractual delivery shall be taken from the date of purchase order plus one week (to take care of transit time for receipt of order) plus delivery period.

Further the date of B/L or House airway bill shall be considered to find out the delay with respect to contractual delivery date. In case of FOB shipments if the vessel is not available then the intimation by vendors regarding readiness of the goods for the shipment shall be considered for calculating the delay if any. So vendor shall inform the readiness of material for shipment on FOB (Free on Board)basis / FCA (Free on Carrier) basis.

- 20.3.2. Cancel the order in part or full and purchase such cancelled quantities from elsewhere on account at the risk and cost of the vendor, without prejudice to its right under 20.3.1 above in respect of goods delivered.

21. RISK PURCHASE CLAUSE :

BPCL reserves the right to curtail or cancel the order either in full or part thereof if the vendor fails to comply with the delivery schedule and other terms & conditions of the order. BPCL also reserves the right to procure the same or similar materials/equipment through other sources at vendor's entire risk, cost and consequences. Further, the vendor agrees that in case of procurement by the owner from other sources the differential amount paid by the owner shall be on account of the vendor together with any interest and other costs accrued thereon for such procurement.

22. FORCE MAJEURE CLAUSE :

(A) Definition: The term “**Force Majeure**” means any event or circumstance or combination of events or circumstances that affects the performance by the vendor of its obligations pursuant to the terms of this Agreement (including by preventing, hindering or delaying such performance), but only if and to the extent that such events and circumstances are not within the vendor’s reasonable control and were not reasonably foreseeable and the effects of which the vendor could not have prevented or overcome by acting as a Reasonable and Prudent person or, by the exercise of reasonable skill and care. Force Majeure events and circumstances shall in any event include the following events and circumstances to the extent they or their consequences satisfy the requirements set forth above in this Clause:

- (i) the effect of any element or other act of God, including any storm, flood, drought, lightning, earthquake, tidal wave, tsunami, cyclone or other natural disaster;
- (ii) fire, accident, loss or breakage of facilities or equipment, structural collapse or explosion;
- (iii) epidemic, plague or quarantine;
- (iv) air crash, shipwreck, or train wreck;
- (v) acts of war (whether declared or undeclared), sabotage, terrorism or act of public enemy (including the acts of any independent unit or individual engaged in activities in furtherance of a programme of irregular warfare), acts of belligerence of foreign enemies (whether declared or undeclared), blockades, embargoes, civil disturbance, revolution, rebellion or insurrection, exercise of military or usurped power, or any attempt at usurpation of power;
- (vi) radioactive contamination or ionizing radiation;

(B) Notice and Reporting:

- (i) The Vendor shall as soon as reasonably practicable after the date of commencement of the event of Force Majeure, but in any event no later than two (7) days after such commencement date, notify

the BPCL in writing of such event of Force Majeure and provide the following information:

- (a) reasonably full particulars of the event or circumstance of Force Majeure and the extent to which any obligation will be prevented or delayed;
- (b) such date of commencement and an estimate of the period of time required to enable the vendor to resume full performance of its obligations; and
- (c) all relevant information relating to the Force Majeure and full details of the measures the vendor is taking to overcome or circumvent such Force Majeure.

(ii) The Vendor shall, throughout the period during which it is prevented from performing, or delayed in the performance of, its obligations under this Agreement, upon request, give or procure access to examine the scene of the Force Majeure including such information, facilities and sites as the other Party may reasonably request in connection with such event. Access to any facilities or sites shall be at the risk and cost of the Party requesting such information and access.

(C) Mitigation Responsibility:

- (i) The Vendor shall use all reasonable endeavours, acting as a Reasonable and Prudent Person, to circumvent or overcome any event or circumstance of Force Majeure as expeditiously as possible, and relief under this Clause shall cease to be available to the Vendor claiming Force Majeure if it fails to use such reasonable endeavours during or following any such event of Force Majeure.
- (ii) The Vendor shall have the burden of proving that the circumstances constitute valid grounds of Force Majeure under this Clause and that it has exercised reasonable diligence efforts to remedy the cause of any alleged Force Majeure.
- (iii) The Vendor shall notify BPCL when the Force Majeure has terminated or abated to an extent which permits resumption of performance to occur and shall resume performance as expeditiously as possible after such termination or abatement.

(D) Consequences of Force Majeure. Provided that the Vendor has complied and continues to comply with the obligations of this Clause and subject to the further provisions:

- (i) the obligations of the Parties under this Agreement to the extent

performance thereof is prevented or impeded by the event of Force Majeure shall be suspended and the Parties shall not be liable for the non-performance thereof for the duration of the period of Force Majeure; and

- (ii) the time period(s) for the performance of the obligations of the Parties under this Agreement to the extent performance thereof is prevented or impeded by the event of Force Majeure shall be extended for the duration of the relevant period of Force Majeure except as provided herein.

(E) Force Majeure Events Exceeding 60 Days

- (i) If an event or series of events (alone or in combination) of Force Majeure occur, and continue for a period in excess of 60 consecutive days, then BPCL shall have the right to terminate this agreement, whereupon the Parties shall meet to mitigate the impediments caused by the Force Majeure event.

23. ARBITRATION CLAUSE :

- 23.1 Any dispute or difference of any nature whatsoever, any claim, cross-claim, counter-claim or set off of BPCL/Vendor against omission or on account of any of the parties hereto arising out of or in relation to this Contract shall be referred to the Sole Arbitration of Director(Marketing) / Director (HR) / Director (R) of BPCL as the case may be or to some officer of BPCL who may be nominated by them.
- 23.2. In the event the Arbitrator being unable or refusing to act for any reason whatsoever, the said Directors of BPCL shall designate another person to act as an Arbitrator in accordance with the terms of the said Contract/Agreement. The Arbitrator newly appointed shall be entitled to proceed with the reference from the point at which it was left by his predecessor.
- 23.3. It is known to the parties herein that the Arbitrator appointed hereunder is an employee of the Corporation and may be Share holder of the Corporation.
- 23.4. The award of the Arbitrator so appointed shall be final, conclusive and binding on all the parties to the contract and the law applicable to arbitration proceedings will be the Arbitration and Conciliation Act, 1996 or any other enactment in replacement thereof.
- 23.5. The language of the proceedings will be in English and the place of proceedings will be Mumbai.
- 23.6. The parties hereby agree that the Courts in the city of Mumbai alone shall have jurisdiction to entertain any application or other proceedings in respect of anything arising under this Agreement and any Award or Awards made by the Sole Arbitrator

hereunder shall be filed, if required, in the concerned Courts in the City of Mumbai alone.
(legal)

24. INTEGRITY PACT (IP) :

Vendors are requested to sign & return our pre-signed IP document , if applicable. This document is essential & binding. Vendor's failure to return the IP document duly signed along with Bid Document may result in the bid not being considered for further evaluation.

25. RECOVERY OF SUMS DUE :

Whenever, any claim against vendor for payment of a sum of money arises out of or under the contract, the owner shall be entitled to recover such sums from any sum then due or when at any time thereafter may become due from the vendor under this or any other contract with the owner and should this sum be not sufficient to cover the recoverable amount of claim(s), the vendor shall pay to BPCL on demand the balance remaining due.

26. CONFIDENTIALITY OF TECHNICAL INFORMATION :

Drawing, specifications and details shall be the property of the BPCL and shall be returned by the Vendor on demand. The Vendor shall not make use of drawing and specifications for any purpose at any time save and except for the purpose of BPCL. The Vendor shall not disclose the technical information furnished to or organized by the Vendor under or by virtue of or as a result of the implementation of the Purchase Order to any person, firm or body or corporate authority and shall make all endeavors to ensure that the technical information is kept CONFIDENTIAL. The technical information imparted and supplied to the vendor by BPCL shall at all time remain the absolute property of BPCL. Imparting of any confidential information by the Vendor will be breach of contract.

27. PATENTS & ROYALTIES :

The vendor shall fully indemnify BPCL and users of materials specified herein/supplied at all times, against any action, claim or demand, costs and expenses, arising from or incurred by reasons of any infringement or alleged infringement of any patent, registered design, trademark or name, copy right or any other protected rights in respect of any materials supplied or any arrangement, system or method of using, fixing or working used by the vendor. In the event of any claim or demand being made or action sought against BPCL in respect of any of the aforesaid matter, the vendor shall be notified thereof immediately and the vendor shall at his/its own expense with (if necessary) the assistance of BPCL (whose all expense shall be reimbursed by the vendor) conduct all negotiations for the settlement of the same and/or litigation which may arise thereof.

28. LIABILITY CLAUSE :

In case where it is necessary for employees or representatives of the Vendor to go upon the premises of owner, vendor agrees to assume the responsibility for the proper conduct of such employees/representatives while on said premises and to comply with all applicable Workmen's Compensation Law and other applicable Government Regulations and Ordinances and all plant rules and regulations particularly in regard to safety precautions and fire hazards. If this order requires vendor to furnish labour at site, such vendor's workmen or employees shall under no circumstances be deemed to be in owner's employment and vendor shall hold himself responsible for any claim or claims which they or their heirs, dependent or personal representatives, may have or make, for damages or compensation for anything done or committed to be done, in the course of carrying out the work covered by the purchase order, whether arising at owner's premises or elsewhere and agrees to indemnify the owner against any such claims, if made against the owner and all costs of proceedings, suit or actions which owner may incur or sustain in respect of the same.

29. COMPLIANCE OF REGULATIONS :

Vendor warrants that all goods/Materials covered by this order have been produced, sold, dispatched, delivered and furnished in strict compliance with all applicable laws, regulations, labour agreement, working condition and technical codes and statutory requirements as applicable from time to time. The vendor shall ensure compliance with the above and shall indemnify owner against any actions, damages, costs and expenses of any failure to comply as aforesaid.

30. REJECTION, REMOVAL OF REJECTED GOODS AND REPLACEMENT:

In case the testing and inspection at any stage by inspectors reveal that the equipment, materials and workmanship do not comply with specification and requirements, the same shall be removed by the vendor at his/its own expense and risk, within the time allowed by the owner. The owner shall be at liberty to dispose off such rejected goods in such manner as he may think appropriate. In the event the vendor fails to remove the rejected goods within the period as aforesaid, all expenses incurred by the owner for such disposal shall be to the account of the vendor. The freight paid by the owner, if any, on the inward journey of the rejected materials shall be reimbursed by the vendor to the owner before the rejected materials are removed by the vendor. The vendor will have to proceed with the replacement of the equipment or part of equipment without claiming any extra payment if so required by the owner. The time taken for replacement in such event will not be added to the contractual delivery period.

31. NON-WAIVER :

Failure of the Owner to insist upon any of the terms or conditions incorporated in the Purchase Order or failure or delay to exercise any rights or remedies herein, or by law or failure to properly notify Vendor in the event of breach, or the acceptance of or payment of any goods hereunder or approval of design shall not release the Vendor and shall not be deemed a waiver of any right of the Owner to insist upon the strict performance thereof or of any of its or their rights or remedies as to any such goods regardless of when such goods are shipped, received or accepted nor shall any purported oral modification or revision of the order by BPCL act as waiver of the terms hereof. Any waiver to be effective must be in writing. Any lone incident of waiver of any condition of this

agreement by BPCL shall not be considered as a continuous waiver or waiver for other condition by BPCL.

32. NEW & UNUSED MATERIAL :

All the material supplied by the vendor shall be branded new, unused and of recent manufacture.

33. PURCHASE PREFERENCE CLAUSE :

Owner reserves its right to allow Public Sector Enterprises (Central/State), purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a PSE shall be decided based on the price quoted by PSE as compared to L1 Vendor at the time of evaluation of the price bid.

Owner reserves its right to allow Micro and Small Enterprises (MSEs) and MSEs owned by Scheduled Caste (SC) or the Scheduled tribe (ST) entrepreneurs, purchase preference as admissible/applicable from time to time under the existing Govt. policy. Purchase preference to a MSE and a MSE owned by SC/ST entrepreneurs shall be decided based on the price quoted by the said MSEs as compared to L1 Vendor at the time of evaluation of the price bid.

34. CANCELLATION :

- 34.1. BPCL reserves the right to cancel the contract/purchase order or any part thereof through a written notice to the vendor if.
 - 34.1.1. The vendor fails to comply with the terms of this purchase order/contract.
 - 34.1.2. The vendor becomes bankrupt or goes into liquidation.
 - 34.1.3. The vendor fails to deliver the goods on time and/or replace the rejected goods promptly.
 - 34.1.4. The vendor makes a general assignment for the benefit of creditors.
 - 34.1.5. A receiver is appointed for any of the property owned by the vendor.
- 34.2. Upon receipt of the said cancellation notice, the vendor shall discontinue all work on the purchase order matters connected with it. BPCL in that event will be entitled to procure the requirement in the open market and recover excess payment over the vendor's agreed price if any, from the vendor and also reserving to itself the right to forfeit the security deposit if any, made by the vendor against the contract. The vendor is aware that the said goods are required by BPCL for the ultimate purpose of materials production and that non-delivery may cause loss of production and consequently loss of profit to the BPCL. In this event of BPCL exercising the option to claim damages for non-delivery other than by way of difference between the market price and the contract price, the vendor shall pay to BPCL, fair compensation to be agreed upon between BPCL and the vendor. The

provision of this clause shall not prejudice the right of BPCL from invoking the provisions of price reduction clause mentioned in 20.3.1 as aforesaid.

35. ANTI –COMPETITIVE AGREEMENTS/ABUSE OF DOMINANT POSITION :

The Competition Act, 2002 as amended by the Competition (Amendment) Act, 2007 (the Act), prohibits anti- competitive practices and aims at fostering competition and at protecting Indian markets against anti- competitive practices by enterprises. The Act prohibits anti- competitive agreements, abuse of dominant position by enterprises, and regulates combinations (consisting of acquisition, acquiring of control and M&A) wherever such agreements, abuse or combination causes, or is likely to cause, appreciable adverse effect on competition in markets in India. BPCL reserves the right to approach the Competition Commission established under the Act of Parliament and file information relating to anti-competitive agreements and abuse of dominant position. If such a situation arises, then Vendors are bound by the decision of the Competitive Commission and also subject to penalty and other provisions of the Competition Act.

36. ASSIGNMENT

The Vendor can / does not have any right to assign his rights and obligations under these general purchase conditions without the prior written approval of BPCL.

37. GOVERNING LAW

These General Purchase Conditions shall be governed by the Laws of India.

38. AMENDMENT

Any amendment to these General Purchase Conditions can be made only in writing and with the mutual consent of the parties to these conditions.

39. SPECIAL PURCHASE CONDITIONS

In case of a conflict between the clauses, terms and conditions of General Purchase Conditions and Special Purchase condition, the clauses, terms and conditions of Special Purchase Condition will have an overriding effect over General Purchase Conditions and the same shall be applicable.

40. NOTICES

Any notices to be given hereunder by a Party to the other shall be in English and delivered by hand or sent by courier or facsimile to the other Party at the address or facsimile number stated below or such other address or number as may be notified by the relevant Party from time to time:

BPCL

Vendor

Please sign & return all the pages of GPC as a token of your acceptance of all the terms & conditions as mentioned above.

Annexure I

PERFORMANCE BANK GUARANTEE
(On Non-judicial paper for appropriate value)

To,
Bharat Petroleum Corporation Limited

Dear Sir,

In consideration of the Bharat Petroleum Corporation Limited, (hereinafter called 'the Company' which expression shall include its successors and assigns) having awarded to M/s. (Name) (Constitution)..... (address)(hereinafter referred to as "The vendor" which expression shall wherever the subject or context so permits include its successors and assigns) a supply contract in terms interalia, of the Company's Purchase order No..... dated and the General and Special Purchase Conditions of the Company and upon the condition of vendor's furnishing security for the performance of the vendor's obligations and/or discharge of the vendor's liability under and / or in connection with the said supply contract upto a sum of Rs.(in figures).....Rs(in words).....only amounting to 10% (ten percent)of the total contract value.

We, (Name).....(constitution)(hereinafter called "the Bank" which expression shall include its successors and assigns) hereby jointly and severally undertake and guarantee to pay to the Company in ----(Currency) forthwith on demand in writing and without protest or demur of any and all moneys any wise payable by the Vendor to the Company under in respect of or in connection with the said supply contract inclusive of all the Company's losses and expenses and other moneys anywise payable in respect to the above as specified in any notice of demand made by the Company to the Bank with reference to this Guarantee upto an aggregate limit of Rs(in figures).....Rs(in words).....only.

AND the Bank hereby agrees with the Company that

- i. This Guarantee/undertaking shall be a continuing guarantee and shall remain valid and irrevocable for all claims of the Company and liabilities of the vendor arising upto and until midnight of

This date shall be 6 months from the last date of guarantee period.

ii This Guarantee / Undertaking shall be in addition to any other guarantee or security of whatsoever that the Company may now or at any time otherwise have in relation to the vendor's obligation/liabilities under and /or connection with the said supply contract, and the Company shall have full authority to take recourse to or reinforce this security in preference to the other security(ies) at its sole discretion, and no failure on the part of the Company in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its liability hereunder.

ii. The Company shall be at liability without reference to the Bank and without effecting the full liability of the Bank hereunder to take any other security in respect of the vendor's obligations and /or liabilities under or in connection with the said supply contract and to vary the terms vis a vis the vendor of the said supply contract or to grant time and / or indulgence to the vendor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement all or any of the obligations of the vendor under the said supply contract and / or the remedies of the Company under any other security(ies) now or hereafter held by the Company and no such dealing(s), variation(s), reduction(s), increase(s) or the indulgence(s) or arrangement(s) with the vendor or release or forbearance whatsoever shall have the effect of releasing the Bank from its full liability to the Company hereunder or of prejudicing rights of the Company against the Bank.

iv. This Guarantee /Undertaking shall not be determined by the liquidation or winding up ordissolution or change of constitution or insolvency of the vendor but shall in all respects and for all purposes be binding and operative until payment of all moneys payable to the Company in terms hereof.

v. The Bank hereby waives all rights at any time inconsistent with the terms of the Guarantee / Undertaking and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the vendor (whether or not pending before any Arbitrator, officer, Tribunal or Court) or any denial of liability by the vendor or any other order of communication whatsoever by the vendor stopping or preventing or purporting to stop or prevent any payment by the Bank to the Company in terms hereof.

vi. The amount stated in any notice of demand addressed by the Company to the Guarantor as liable to be paid to the Company by the vendor or as suffered or incurred by the Company on account of any losses or damages of costs, charges and or expenses shall as between the Bank and the Company be conclusive of the amount so liable to be paid to the Company or suffered or incurred by the Company, as the case may be and payable by the Guarantor to Company in terms hereof.

Yours faithfully,

(Signature)

NAME & DESIGNATION

NAME OF THE BANK

NOTES:

(To be executed on plain paper and applicable for all tenders of value above Rs. 1 crore)

INTEGRITY PACT

Between

Bharat Petroleum Corporation Limited (BPCL) hereinafter referred to as "The Principal",

And

.....hereinafter referred to as "The Bidder/Contractor/Supplier"

Preamble

The Principal intends to award, under laid down organization procedures, contract/s forThe Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s, Contractor/s and Supplier/s.

In order to achieve these goals, the Principal cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI). Following TI's national and international experience, the Principal will appoint an Independent External Monitor who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 - Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- a) No employee of the Principal, personally or through family members, will in connection with the tender, or the execution of the contract, demand, take a promise for or accept, for himself/herself or third person, any material or immaterial benefit which he/she is not legally entitled to.
- b) The Principal will, during the tender process, treat all Bidders with equity and reason. The Principal will, in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential / additional information through which the Bidder could obtain an advantage in relation to the tender process or the contract execution.

- c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 - Commitments of the Bidder / Contractor/Supplier

- (1) The Bidder / Contractor/Supplier commits itself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a) The Bidder / Contractor/Supplier will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person, any material or immaterial benefit which he/she is not legally entitled to, in order to obtain in exchange, any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder / Contractor/Supplier will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
 - c) The Bidder / Contractor/Supplier will not commit any offence under the relevant Anti-Corruption Laws of India; further the Bidder / Contractor/Supplier will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder / Contractor/Supplier will, when presenting his bid, disclose any and all payments he has made, is committed to, or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder / Contractor/Supplier will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- (1) If the Bidder/Contractor/Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder / Contractor/Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (2) A transgression is considered to have occurred if the Principal after due consideration of the available evidences, concludes that no reasonable doubt is possible.
- (3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- (4) If the Bidder / Contractor/Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely.

Section 4 - Compensation for Damages

- (1) If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover from the Bidder liquidated damages equivalent to Earnest Money Deposit/Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor/Supplier liquidated damages equivalent to Security Deposit / Performance Bank Guarantee.

(3) The Bidder agrees and undertakes to pay the said amounts without protest or demur subject only to condition that if the Bidder / Contractor/Supplier can prove and establish that the exclusion of the Bidder from the tender process or the termination of the contract after the contract award has caused no damage or less damage than the amount of the liquidated damages, the Bidder / Contractor/Supplier shall compensate the Principal only to the extent of the damage in the amount proved.

Section 5 - Previous Transgression

- (1) The Bidder declares that no previous transgression occurred in the last 3 years with any other Company in any country conforming to the TI approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 - Equal treatment of all Bidders / Contractors /Suppliers/ Subcontractors

- (1) The Bidder/Contractor/Supplier undertakes to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors/Suppliers and Subcontractors.
- (3) The Principal will disqualify from the tender process all Bidders who do not sign this Pact or violate its provisions.

Section 7 – Punitive Action against violating Bidders / Contractors / Suppliers/Subcontractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Supplier or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor, Supplier or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 - Independent External Monitors

- (1) The Principal has appointed competent and credible Independent External Monitors for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal.
- (3) The Bidder/Contractor/Supplier accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Bidder/Contractor/Supplier. The Bidder/Contractor/Supplier will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to this project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder/Contractor/Supplier/Subcontractor with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor/Supplier. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or heal the violation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendation. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action. However, the Independent External Monitor shall give an opportunity to the Bidder/Contractor/Supplier to present its case before making its recommendations to the Principal.
- (6) The Monitor will submit a written report to the Chairperson of the Board of the Principal within 8 to 10 weeks from the date of reference or intimation to him by the 'Principal' and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) If the Monitor has reported to the Chairperson of the Board a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India, and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- (8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This Pact begins when both parties have legally signed it. It expires for the Contractor/Supplier 12 months after the last payment under the respective contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairperson of the Principal.

Section 10 - Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Mumbai. The Arbitration clause provided in the main tender document / contract shall not be applicable for any issue / dispute arising under Integrity Pact.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Bidder/Contractor/Supplier is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

.....
For the Principal

Place

Date

.....
For the Bidder/Contractor/
Supplier

Witness 1 :
(Signature/Name/Address)

Witness 2 :
(Signature/Name/Address)

**CDU-4 PROJECT
OF
M/s BHARAT PETROLEUM
CORPORATION LTD, MAHUL MUMBAI**

INSTRUCTIONS TO BIDDERS (ITB)

INDEX

1.	SCOPE OF BID	3
2.	ELIGIBLE BIDDERS	3
3.	ONE BID PER BIDDER	3
4.	COST OF BIDDING DOCUMENTS	3
5.	SITE VISIT	3
6.	CONTENTS OF BIDDING DOCUMENT	4
7.	CLARIFICATION ON BIDDING DOCUMENTS	4
8.	AMENDMENT OF BIDDING DOCUMENTS	4
9.	LANGUAGE OF BID	5
10.	DOCUMENTS COMPRISING THE BID	5
11.	BID PRICES	6
12.	BID CURRENCY	8
13.	BID VALIDITY	8
14.	OFFER WITHOUT ANY DEVIATION	8
15.	AGENTS/CONSULTANTS/REPRESENTATIVES/RETAINERS/ASSOCIATES	8
16.	SUBMISSION OF BIDS	8
17.	DEADLINE FOR SUBMISSION OF BID	8
18.	LATE BIDS / UNSOLICITED BIDS / BID SUBMISSION AT OTHER PLACE	8
19.	MODIFICATION AND WITHDRAWAL OF BIDS	9
20.	UN-PRICED BID OPENING	9
21.	PROCESS TO BE CONFIDENTIAL	9
22.	CONTACTING THE OWNER/ OWNER REPRESENTATIVE	9
23.	EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS	9
24.	COMMERCIAL EVALUATION	10
25.	PRICE CHANGES / IMPLICATIONS AFTER OPENING OF TECHNICAL BIDS	11
26.	PRICE BID OPENING	11
27.	ARITHMETIC CORRECTIONS	11
28.	CONVERSION TO SINGLE CURRENCY	12
29.	BID REJECTION CRITERIA	12
30.	LOADING CRITERIA AND PRICE EVALUATION & COMPARISON	12
31.	EVALUATION CRITERIA FOR COMPARISON OF BIDS	15
32.	OTHER CRITICAL POINTS FOR EVALUATION OF OFFER ARE AS UNDER	17
33.	PRICE CHANGES / IMPLICATIONS AFTER OPENING OF PRICE BIDS	18
34.	AWARD OF CONTRACT	18
35.	QUANTITY VARIATION	18
36.	OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY BID	18
37.	NOTIFICATION OF AWARD	18
38.	FRAUDULENT PRACTICES	18
39.	WAIVER OR TRANSFER OF THE AGREEMENT	19
40.	CARTEL FORMATION	19
41.	INTEGRITY PACT	19
42.	T&C FOR FOREIGN SUPPLIERS (TO WHOM RFQ ISSUED) OPERATED THROUGH THEIR INDIAN SUBSIDIARIES	20
43.	INFORMATION TO BE FURNISHED BY FOREIGN SUPPLIERS/ CONTRACTORS / CONSULTANTS	21

GENERAL:

1. SCOPE OF BID

- 1.1.** EIL hereinafter "the consultant" on behalf of The Purchaser/Owner/BPCL as defined in the Special Purchase Conditions, hereinafter "the Owner" wishes to receive bids as described in the Bidding documents herein after shall also mean RFQ documents.
- 1.2.** SCOPE OF BID: The scope of work shall be as defined in the MR included in the RFQ.
- 1.3.** The successful bidder will be expected to complete the Scope of Bid within the period stated in Bidding document.
- 1.4.** Throughout this BIDDING documents, the term "bid" and "tender" and their derivatives ("bidder/ tenderer", "Bid/tendered/tender", "bidding/tendering", etc.) are synonymous, and day means calendar day. Singular also means plural.

2. ELIGIBLE BIDDERS

2.1 Documents Establishing Bidder's Qualification.

- 2.1.1** Pursuant to qualification criteria specified in Material Requisition (as applicable), the bidder shall furnish all necessary supporting documentary evidence to establish the bidders claim of meeting qualification criteria.
- 2.1.2** The bidder shall furnish, as part of his bid, documents establishing the bidder's eligibility to bid and his qualifications to perform the contract if his bid is accepted.
- 2.1.3** The documentary evidence of the bidder's qualifications to perform the contract if their bid are accepted, shall establish to the OWNER'S/CONSULTANT'S satisfaction that, the bidder has the financial, technical and productions capacity necessary to perform the contract.
- 2.1.4** A bidder shall not be affiliated with a firm or entity:
 - (i) that has provided consulting services related to the work to the EMPLOYER during the preparatory stages of the works or of the project of which the works form a part, or
 - (ii) that has been hired by the Employer as engineer/consultant for the contract.

- 2.2** The bidder shall not be under a declaration of ineligibility by EMPLOYER for corrupt or fraudulent practices as defined at clause no.38 of ITB

3. ONE BID PER BIDDER

- 3.1** A Bidder shall submit only one bid in the same bidding process. A Bidder who submits or participates in more than one bid will cause all the proposals in which the bidder has participated to be disqualified.
- 3.2** Alternative price bids are not acceptable.

4. COST OF BIDDING DOCUMENTS

- 4.1** The bidder shall bear all costs associated with the preparation and submission of the bid, and OWNER (BPCL)/ CONSULTANT (EIL), will in no case be responsible or liable for this cost, regardless of the conduct or outcome of the bidding process.

5. SITE VISIT

- 5.1.** The Bharat Petroleum Corporation Limited is located in Mahul District of Maharashtra State.
- 5.2.** The bidder is advised to visit and examine the site or / locations of warehouse and its surroundings and obtain for itself, at its own responsibility, all the information that may be

necessary for preparing the bid and entering into the Contract. The cost of visiting the site shall be at the bidder's own expense.

5.3. The bidder or any of its personnel or agents will be granted permission by the Owner to enter upon its premises and land for the purpose of such visits, but only upon the express condition that the bidder, its personnel, and agents will indemnify the Owner and its personnel and agents from and against all liabilities in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

5.4. Bidder may contact the following for site visit purposes :

Mr.M.Sankar
Chief Project Manager,
Admin Building, BPCL,
Mumbai.
Mobile no. 098-3397-9391
Tel. No.: 022-25533320

BIDDING DOCUMENT. CLARIFICATION AND AMENDMENT

6. CONTENTS OF BIDDING DOCUMENT

6.1 The Bidding Document has been hosted on EIL Website, other websites mentioned in the RFQ covering letter and also in <https://eprocure.gov.in/eprocure/app>.

6.2 The bidder is expected to examine BIDDING document, bidding guidelines receipt from EIL or available on EIL website, all instructions, formats, terms, specifications and drawings etc., enclosed in the BIDDING documents. The invitation for bid (BIDDING) together with all its attachment thereto, shall be considered to be read, understood and accepted by the bidder. Failure to furnish all information required by the BIDDING documents or submission of a bid not substantially responsive to the BIDDING documents in every respect will be at bidder's risk and may result in the rejection of the Bid.

7. CLARIFICATION ON BIDDING DOCUMENTS

7.1 A prospective bidder requiring any information or clarification of the BIDDING documents, may notify the Consultant in writing by e-mail/fax/post at Consultant's mailing address indicated in the BIDDING document (Asst. General Manager (C&P), Engineers India Ltd., EI Annexe, 4th Floor, Bhikaji Cama Place, New Delhi - 110066, India. Fax No. 0091 11 26167664 / 26191714). All question/ queries should be referred to EIL at least **3 (three)** days prior to date of pre-bid meeting. Reply to Pre-Bid Queries shall be hosted on <http://tenders.eil.co.in> & <https://eprocure.gov.in/eprocure/app>.

8. AMENDMENT OF BIDDING DOCUMENTS

8.1 At any time prior to the deadline for submission of bids, the Owner/Consultant may, for any reason, whether on its own requirement or in response to a clarification requested by prospective bidders, modify the BIDDING documents by issuing addenda.

8.2 Any addendum thus issued shall be part of the BIDDING documents. The addendum will be hosted on the EIL's website <http://tenders.eil.co.in> & <https://eprocure.gov.in/eprocure/app>. All the bidders have raised the queries in pre-bid meeting, shall be informed by e-mail/Fax/Courier about the addendum for their reference. Bidders have to take into consideration of all the addendum(s) / corrigendum (s) / clarifications issued/ web hosted, before submitting the bid.

8.3 The Owner/Consultant may, at its discretion, extend the date of submission of Bids in order to allow the bidders a reasonable time to furnish their most competitive bid taking into account the amendments issued.

PREPARATION OF BIDS

9. LANGUAGE OF BID

9.1. The Bid prepared by the bidder, all correspondence/drawings and documents relating to the bid exchanged by the bidder with the Owner/Consultant shall be in English Language as per clause no.4 of GPC. In case any printed literature furnished by the bidder may be written in another language so long as accompanied by an English translation, in which case, for the purpose of interpretation of the bid, the English translation shall govern.

9.2. In the event of submission of any document/ certificate by the Bidder in a language other than English, the English translation of the same duly authenticated by Chamber of Commerce of Bidder's country shall be submitted by the Bidder. Metric measurement system shall be applied.

10. DOCUMENTS COMPRISING THE BID

No Physical Bids / Offers shall be permitted. The offers/bids submitted online through Central Public Procurement Portal (CPPP) of Government of India (<http://eprocure.gov.in/eprocure/app>) shall only be considered for evaluation and ordering. Bidders are required to upload the Bid/offer along with all supporting documents including Priced bid on the E-Tendering website (<http://eprocure.gov.in/eprocure/app>) only. However, bidder are required to submit the following documents in original as per the manner prescribed in the RFQ at the time of bid submission in sealed envelope titled "Original Documents for respective RFQ.No "and shall be send to **Mr.R.Somnath, AGM (C&P), Engineers India Limited, Bhikaji Cama Place, R.K Puram, Ring Road, New Delhi-110066 on or before the Bid submission Due Date**. However, bidders are required to upload the scanned copies of all relevant documents on E-tendering website along with the e-bid.

1. Bid Document Fee as applicable as per clause no.10.1 below
2. EMB/Bid Security as applicable as per clause no.10.1 below
3. Integrity Pact
4. Notarized Annual Audited Financial Results as per RFQ
5. Documentation against Bidder Qualification Criteria (Technical & Commercial)-if applicable

Bidder shall ensure to submit above document as applicable on or before Bid Due Date. **10.1.**

10.1 BID DOCUMENT FEE AND EARNEST MONEY DEPOSIT/BID SECURITY:

Bidder shall furnish, as part of its Bid, EMD for an amount as indicated in the NIT/NIB/ IFB. If the Bidder is unable to submit Bid Document Fee & EMD in original within the due date & time, then bidder shall submit the original Bid Document Fee & EMD within 7 days from the date of unpriced bid opening, provided copy of the same have been uploaded on E-Tendering Website.

In case the bidder fails to submit the same in original within 7 days, then their bid shall be rejected, irrespective of their status/ ranking in tender and notwithstanding the fact that a copy of Bid Document Fee & EMD was earlier uploaded by the bidder. OWNER shall not pay any interest on EMD furnished.

The EMD/Bid Security shall be in favour of Bharat Petroleum Corporation Limited payable at Mumbai in the form of crossed demand draft or non-revocable Bank Guarantee in the prescribed pro-forma. The Bank Guarantees for submission of EMD/Bid Security shall be obtained from any Scheduled Commercial Bank (other than co-operative Bank) in India or any Indian Branch of Foreign Bank as per the format provided along with the RFQ.

The bank guarantee for submission of EMD shall be valid 2 (Two) months more than bid validity.

EMD/Bid securities of unsuccessful bidders will be returned upon award of Contract. However, EMD of the successful Bidder will be returned upon the Bidder's executing the Contract, and furnishing the PBG.

The EMD may be forfeited:

- if a Bidder withdraws its bid during the period of Bid Validity or does any breach of tendering terms and conditions, or
- If a bidder modifies his bid on his own.
- in case of a successful Bidder, if the Bidder fails, within the specified period:
 - (a) to submit the order acceptance.
 - (b) to furnish the PBG.

11. BID PRICES

11.1. Prices shall be furnished strictly in the appropriate **Price Schedule format(s)** enclosed with the bid document. Quoted prices shall be net of discount, if any. Conditional discounts, if offered by a bidder, shall not be considered for evaluation.

11.2. Price quoted by the bidder, shall remain firm & fixed until completion of the contract and will not be subject to any variation, except statutory variation except statutory variation in taxes, duties & levies pursuant to relevant provisions in Special Purchase Conditions.

11.3. The bidder shall quote the price for item in the Price Schedule after careful analysis of cost involved for the performance of complete work considering all parts of the RFQ Documents. In case, any activity though specifically not covered but is required to complete the work as per scope of work, scope of supply, specifications, standards, drawings, GPC, SPC or any other part of RFQ Document, the prices quoted shall be deemed to be inclusive of cost incurred for such activity.

11.4. Domestic bidder to consider Merit rate of custom duty for their import content. Bidder shall ascertain the applicable merit rate of customs duty and shall be solely responsible towards applicability and correctness of such rates. The evaluation and ordering shall be carried out based on the merit rates of customs duty considered by the bidder. The bidder(s) must indicate quantity, CIF value & rate of custom duty considered in the Price Schedule.

If bidder has considered Customs Duty for import contents other than the Merit Rate of Customs Duty in their offer, then statutory variation on the Customs Duty will be payable extra on the Merit Rate of Custom Duty or the rate of Custom Duty considered by the bidder, whichever is lower.

11.5. Owner will issue concessional form 'C' for CST only. No concessional form 'D' shall be issued for VAT.

11.6. Indian Bidders shall indicate the following in their offer:

11.6.1 FOT despatch Point price of item including packing & forwarding, (such price to include fabrication /manufacturing of item, all costs as well as duties and taxes paid or payable on components and raw materials incorporated or to be incorporated in the goods, inspection testing etc.) but excluding applicable taxes and duties on finished goods.

- 11.6.2 Supply price shall be exclusive of Excise Duty (including Cess) and CST (with concessional form) or VAT (without concessional form) which will be applicable on the finished goods.
- 11.6.3 Item wise Transportation Charges upto respective project site exclusive of Service Tax and Ed Cess thereon. Transit Insurance & Road permit shall be arranged by Owner. If a supplier does not quote freight charges, his offer shall be loaded with maximum freight charges as quoted by the other bidders.
- 11.6.4 Site work Prices, if applicable as per MR for the scope of work mentioned in MR / RFQ Documents, exclusive of Service Tax & inclusive of VAT on Work Contracts. All necessary taxes & duties and registration, if required for carrying out the site activities shall be done by the bidder and cost towards the same shall be included in quoted site work prices.
- 11.6.5 Per-diem Supervision Charges shall be exclusive of Service tax, if applicable as per MR.
- 11.6.6 Bidder shall indicate the following separately.
- 11.6.7 CIF value of import for raw material and components incorporated or to be incorporated in the goods and included in quoted price. The bidder shall provide description of such material, quantity, rate, value etc.
- 11.6.8 Merit rate of Import Duties (rate) considered on above CIF value of import for raw material and components and included in the quoted prices.
- 11.6.9 In case a bidder does not furnish built-in CIF value and confirmed that quoted prices are firm and fixed, in that case bidder will not be entitled to claim any variation in the Import Duties even if bidder has quoted their prices considering Import Duties.

11.7. Foreign Bidders shall indicate the following in their offer:

- 11.7.1 Bidders shall submit their prices on FOB -International Port of Exit basis and also quote for Ocean Freight charges upto the port of entry- Mumbai (India) as detailed out in the price schedule.
- 11.7.2 The request for separate FOB Price and Ocean Freight is merely to facilitate the comparison of bids and will not in any way limit Owner's right to order on different terms.
- 11.7.3 In case of award, initially the purchase order (PO) shall be placed on FOB basis and Owner reserves the right to convert the same to CFR basis within 45 days, from the date of placement of order based on shipping details of consignment (complete in all respect) indicated in the bid. Therefore, the quoted Ocean Freight Charges should be valid for additional 45 days from the date of Order. In case bidder is unable to provide the complete shipping/consignment details in his bid, these 45 days shall be considered from the date of receipt of all required shipping details of consignment for converting order from FOB to CFR.
- 11.7.4 FOB Prices quoted shall be inclusive of all applicable taxes, packing & forwarding etc. applicable upto FOB - International Port of Exit.
- 11.7.5 Site work Prices, if applicable as per MR for the scope of work mentioned in MR / RFQ Documents exclusive of cenvatable Service Tax & inclusive of VAT on Work Contracts. All necessary taxes & duties registration, if required for carrying out the site activities shall be done by the bidder and cost towards the same shall be included in quoted site work prices.
- 11.7.6 Perdiem Supervision Charges, if applicable as per MR, shall be exclusive of cenvatable Service Tax.
- 11.7.7 In case any of the foreign bidders receipt against the order are subject to tax deduction at source in India, his quoted prices must be gross of Indian income tax and bidder shall furnish all requisite information stipulated elsewhere in ITB of RFQ document.

12. BID CURRENCY

12.1 Bidding currency shall be Indian Rupees for Indian bidders and US Dollars / EUROS / Indian Rupees for foreign bidders in accordance with RBI guidelines.

12.2 A bidder expecting to incur a portion of his expenditure in the performance of Order in more than one currency (limited to maximum two currencies) (In case foreign bidder supply some minor components of supply from their Indian subsidiary/Branch Office) and wishing to be paid accordingly shall indicate the same in the bid. In such a case, the bid shall be expressed in different currencies with the respective amounts in each currency together making up the total price.

12.3 Currency once quoted will not be allowed to be changed. Owner/EIL shall not be compensating for any exchange rate fluctuation.

13. BID VALIDITY

13.1 The bid shall remain valid for acceptance for period mentioned in RFQ from the final bid due date. Owner/EIL shall reject a bid valid for a shorter period being non-responsive.

13.2 In exceptional circumstances, prior to expiry of the original bid validity period, the Owner/EIL may request that the bidder extend the period of validity for a specified additional period. The requests and the responses thereto shall be made in writing (by fax/post/e-mail).

14. OFFER WITHOUT ANY DEVIATION

Owner/EIL will appreciate submission of offer based on the terms and conditions in the enclosed SPC, GPC, ITB, Scope of Work, and Technical Specification etc. to avoid wastage of time and money in seeking clarifications on technical/ commercial aspect of the offer. Bids having any deviation to the RFQ Terms & Conditions shall lead to rejection of offer, except deviations for which loading is defined in Clause No. 31 below.

15. AGENTS/CONSULTANTS/REPRESENTATIVES/RETAINERS/ASSOCIATES

BPCL would prefer to deal directly with the manufacturers/ principals abroad without involving any Indian agent. Agents/consultants/representatives/retainers/associates bids found at any stage of evaluation i.e. from un-priced bid opening till priced bid opening shall be liable for rejection.

16. SUBMISSION OF BIDS

16.1 No Physical bids / offers shall be permitted. The offers submitted through Central Public Procurement Portal (CPPP) of Government of India shall only be considered for evaluation & ordering. Bidders are required to upload the bid along with all supporting documents including priced bid on the e-tendering website (<http://eprocure.gov.in/eprocure/app>) only.

17. DEADLINE FOR SUBMISSION OF BID

17.1 The E-Bids must be submitted on or before the last date and time mentioned in the RFQ.

17.2 The Owner / EIL may, in exceptional circumstances and at its discretion, on giving reasonable notice to all prospective bidders who have purchased the bid document extend the deadline for the submission of e-bids in which case all rights and obligations of the Owner /EIL and bidders, previously subject to the original deadline will thereafter be subject to deadline as extended.

18. LATE BIDS / UNSOLICITED BIDS / BID SUBMISSION AT OTHER PLACE

18.1 No bid will be received after the deadline of submission of bid.

18.2 Unsolicited bids or bids being submitted to address other than one specifically stipulated in the bid documents will not be considered for opening / evaluation / award.

19. MODIFICATION AND WITHDRAWAL OF BIDS

- 19.1 The Bidder may modify or withdraw its Bid after the Bid's submission but prior to the due date prescribed for submission of Bids by selecting the detaching option available in the e-tender portal (Refer Annexure-I to ITB for more details).
- 19.2 No bid shall be modified subsequent to the deadline for submission of bids.
- 19.3 No bid shall be allowed to be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidder. Withdrawal of a bid during this interval shall result in the forfeiture of bidder's EMD/Bid security.
- 19.4 There are two specific features in CPPP viz, "Withdraw" and "Re-Submission". Bidders should not use the feature "withdraw" unless they have decided to withdraw their bids. It is to be noted that once "withdraw" feature is used they will not be allowed to re-submit their bid against this RFQ. In case a Bidder desires to change his bid for any reason before bid due date, Bidder shall use "Re-Submission" feature.

20. UN-PRICED BID OPENING

- 20.1 The un-priced Bids shall be opened online through e-tender portal, at the specified date and time given in the RFQ document or extended otherwise. The Bidders who have submitted their Bid will be able to view online the name & status of all the Bidders at their respective windows, after un-priced Bid opening by Buyer.
- 20.2 Only those bidders, whose bids meet the qualification criteria and are technically and commercially acceptable, will be informed the date, time and venue for price bid opening.

E-BID OPENING AND EVALUATION

21. PROCESS TO BE CONFIDENTIAL

Information relating to the examination, clarifications, evaluation and comparison of bids, and recommendations for the award of Order shall not be disclosed to bidders or any other person officially concerned with such process.

22. CONTACTING THE OWNER/ OWNER REPRESENTATIVE

- 22.1 From the time of the bid opening to the time of the award, if any bidder wishes to contact the Owner for any matter relating to the bid, it should be done in writing.
- 22.2 Any effort by a bidder to influence the Owner/EIL in any manner in respect of bid evaluation or award will result in the rejection of that bid.

23. EXAMINATION OF BIDS AND DETERMINATION OF RESPONSIVENESS

- 23.1 The Owner/EIL will examine the bids to determine whether they are complete, whether any computational errors have been made, whether the documents have been properly signed, and whether the bids are generally in order.
- 23.2 Prior to the detailed evaluation, the Owner/EIL will determine whether each bid is of acceptable quality, is generally complete and is responsive to the RFQ Documents. For the purposes of this determination, a responsive bid is one that conforms to all the terms, conditions and specifications of the RFQ Documents without deviations, objections, conditionality or reservations.
- 23.3 Bidder shall not be allowed to submit any Price Implication or Revised Price after submission of Bid, unless there is change in the stipulations of the RFQ Document and such changes are incorporated through an Amendment. In case Exceptions and Deviations submitted by Bidder along with Bid are not considered as acceptable and no Amendment is issued, then in such a case the Bidders would be required to withdraw such Exceptions/Deviations in favour of stipulations of the RFQ document and Bidders would not be eligible for submission of Price Implication/Revised Price, failing which such Bid(s) shall be considered as non responsive and rejected.

23.4 The Owner/EIL determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. If a bid is not responsive, it will be rejected by the Owner/EIL, and may not subsequently be made responsive by the bidder by correction of the nonconformity.

24. COMMERCIAL EVALUATION

24.1 Bidders are required to quote firm prices as per the Price Schedule format for submitting prices and show all taxes, duties and levies, cess etc. separately. Bids shall be evaluated on the basis of landed cost at site considering eligible CENVAT/input tax credits as applicable. The present rate of input tax credit available to owner on MVAT is 100% (One Hundred Percent) of applicable MVAT. Applicable taxes and duties shall be indicated in the un-priced copy of price format.

24.2 BPCL may claim Cenvat /input tax credit on customs duty (CVD/ Additional CVD) / service tax / VAT / Excise Duty and education cess as per the relevant statutes in force and the credit on account of the same shall be considered for evaluation. The bidders shall furnish the present rate of excise/customs duty, CVD, Service Tax, Education cess and VAT / CST as applicable and is payable against proper invoice as per statutes. The bidders should quote taxes and duties separately (In rates as well as in values).

24.3 Service Tax applicable on freight is not cenvatable to BPCL, Hence CENVAT / Set-off Benefit towards service tax on freight, shall not be considered during evaluation.

24.4 Any Statutory variation in taxes and duties, within the contractual delivery date, shall be on owner's account, against submission of documentary evidence. However, in case of delay in delivery beyond the contractual date, for reasons attributable to seller, any increase in these rates shall be borne by seller, whereas any decrease shall be passed on to the owner. BPCL shall take CENVAT benefit as applicable. VAT on Works Contract, if applicable, shall be included in the quoted prices and no variation including statutory variations shall be payable by BPCL on VAT on Works Contract.

24.5 Further, in case of delay in delivery, due to reasons attributable to seller, any new or additional taxes, duties or levies imposed after the contractual delivery date shall be on seller's account.

24.6 For the purpose of applicability of statutory variations on taxes and duties (including imposition of any new taxes/duties/levies, etc.) under above terms, each staggered delivery of lots (due in a specific month as per delivery schedule for bulk items) shall be considered as delivery date for the respective lot(s).

24.7 Foreign vendors shall include third party inspection charges of Third Party Inspection agency (i.e. Lloyds/BV/DNV/TUV/CEIL) in the country of origin. In the case of foreign party sourcing items from India the inspection shall be by EIL, no additional charges shall be payable to seller on account of the same. However there shall be no change in third party inspection charges in case of any change in sourcing from sub-vendors subject to the condition that in the case of sourcing is shifted from abroad to India after placing the order, discount @ 1.25% of FOT Despatch point price of the part sourced from India shall be passed on to BPCL.

24.8 Inspection of Indigenous items shall be done by EIL. In the case Indian party sourcing materials from abroad, the bidder shall arrange inspection through Third Party Inspection agency (i.e. Lloyds/BV/DNV/TUV/CEIL) in the country of origin & charges of the same shall be included in quoted prices.

24.9 Concessional rate of Custom Duty:

24.9.1 The bidder must ascertain and confirm along with supporting documents in the bid, if any Customs Duty exemption / waiver is applicable to the products being supplied by him under

any multi-lateral / bi-lateral trade agreement between India and bidder's country.

24.9.2 The bidder shall be liable to provide all documentation to ensure availment of the exemption / waiver. In case the bidder defaults on this due to any reason, whatsoever, he shall be liable to bear the incremental Customs Duty applicable, if any.

24.9.3 Any Customs Duty applicability on account of any change in the bi-lateral / multi-lateral agreement shall be to bidder's account.

24.9.4 Documentation to be furnished for availing the exemption / waiver of Customs Duty shall be specifically listed in the Letter of Credit also as the pre-requisite for release of payment against shipping documents and this documentation shall necessarily form a part of shipping documents.

24.10 Purchase Preferences as applicable shall be considered as per clause no.33 of GPC.

24.11 In case bidder intend not to quote for certain item/tags/groups as applicable, then the bidder shall mention "Not Quoted (NQ)" in respective cells of price schedule. Wherever cell is found blank in the price schedule, then it shall be treated as "Not Quoted (NQ)" and evaluation of bids shall be carried out accordingly.

25. PRICE CHANGES / IMPLICATIONS AFTER OPENING OF TECHNICAL BIDS

25.1 In the event of any suo-moto increase in price sought by a vendor subsequent to the bid due date and which is not as a result of any change in scope of supply or terms and conditions, the bid of such a vendor shall be rejected for the items in which such suo-moto increase is made.

25.2 In the event of any suo-moto decrease in price sought by a vendor subsequent to the bid due date and which is not as a result of any change in scope of supply or terms and conditions, the reduction in price shall not be considered for evaluation however the same shall be considered for ordering in case the bidder happens to be lowest.

26. PRICE BID OPENING

26.1 The Owner/EIL shall inform the time, date and venue for price bid opening to all such bidders who qualify pursuant to bid evaluation. Bidders may be required to attend price bid opening at a short notice of 24 hours.

26.2 The Owner/EIL will open price bids of all bidders notified to attend price bid opening in presence of authorised bidders' representatives present at the time of priced bid opening. The bidder's representatives who are present shall sign bid-opening register evidencing their attendance.

26.3 The bidder's name, prices, and such other details as the Owner/EIL, at its discretion, may consider appropriate will be announced and recorded at the time of bid opening.

27. ARITHMETIC CORRECTIONS

If there is correction/wrong entry or a difference between the values entered in figures and in words, the following procedure shall be adopted for evaluation:

- i) When there is a difference between the rate in figures and in words for an item, the rate which corresponds to the amount worked out by the Bidder for the item based on the notional quantity specified, shall be taken as correct.
- ii) When the rate quoted by the Bidder in figures and words tallies but the amount is incorrect, the rate quoted by the Bidder shall be taken as correct
- iii) When it is not possible to ascertain the correct rate as detailed above, the rate quoted

for the item in words shall be adopted as the quoted rate.

- iv) If the total amount written against an item does not correspond to the rate written in figures and if the rate in words is not written by the bidder, then the higher of the rates, i.e. higher of the rate worked out by dividing the amount by the notional quantity and the rate quoted shall be considered for evaluation. In the event that such a bid is determined as the lowest bid, the lower of the rates shall be considered for ordering.
- v) Any uncalled for lump sum/ percentage or adhoc reduction/ increase in prices, offered by the Bidders after opening of the prices, shall not be considered. However, if reduction is from the recommended Bidder, such reduction shall be taken into account for arriving at the contract value.
- vi) If prices etc. are not filled up in the PRICED BID and are not as per the requirements of the Bidding Document, the same shall be omitted from evaluation.

28. CONVERSION TO SINGLE CURRENCY

Foreign vendors' bids shall be compared on equivalent Indian Rupees basis considering RBI reference rate of foreign exchange published on the day of opening of the Price Bids.

29. BID REJECTION CRITERIA

The bidders shall adhere to the following provisions of the Bidding Document without taking any deviations, failing which the Bid shall be considered to be non-responsive and may be rejected.

- i) Defects liability period/ Guarantee Period.
- ii) Delivery schedule/ Time Period of Completion
- iii) Bids with Price Variation Clause (PVC) without variation formula and ceiling.
- iv) Insufficient validity period.
- v) Advance payment
- vi) Non submission of EMD as applicable
- vii) Non submission of Integrity Pact
- viii) Any other rejection point specified elsewhere in the RFQ Documents.

30. LOADING CRITERIA AND PRICE EVALUATION & COMPARISON

Loading Criteria for Deviations

Bidders are requested to submit the offer in line with RFQ documents terms and conditions. Any deviation to RFQ terms & conditions shall lead to bidder's offer liable for rejection except for following loading provisions:

30.1 Basis of Loading

The Foreign Bids shall be loaded on FOB Port of Exit prices and the Indian Bids shall be loaded on FOT Despatch Point prices.

30.2 Payment Terms

- a) Any differential payment terms offered by an Indian supplier as against the terms specified in the RFQ/ GPC shall be loaded at 15% (simple interest) for the applicable period as under:

Drawing approval	80% of the delivery period
Sub-ordering of raw materials	75% of the delivery period
Receipt of raw material at vendor's works	50% of the delivery period

- b) Advance along with FOA/ PO will not be allowed. If a supplier insists for advance

payment along with FOA/PO, his offer shall be rejected.

- c) Indian bidders to note that payment against dispatch documents through bank and payment against submission of dispatch documents directly to BPCL, both are not acceptable.

30.3 Performance Bank Guarantee (PBG)

- i. Performance Bank Guarantee shall be required in all cases of supplies of all values. In case a supplier offers to give a PBG for less than 10% of order value, or for a lesser period than what is provided in GPC, loading shall be done for the differential amount and/ or the differential period. For differential period/ amount loading, the following example will amplify the methodology (if GPC specifies 10% PBG for 18 months + 3 months claim period = Total 21 months)

For differential period:

Period offered by Bidder	Loading
10% for 21 months	- No loading-10% x
10% for 18 months	$3/21 = 1.43\%$ -10% x
10% for 12 months	$9/21 = 4.29\%$ -10% x
10% for 6 months	$15/21 = 7.14\%$

For differential Amount:

Other than 10%: To be loaded by percentage by which PBG is short of 10%.

- ii. In case, bidder does not agree to submit the PBG, 10% payment shall be deducted and withheld till the guarantee period.
- iii. In case, bidder does not agree to submit the PBG or agree for deduction as per 30.3.N. above, the offer shall be liable for rejection.

30.4 Delayed Deliveries (considering GPC clause of 0.5% un-delivered order value (UDOV) ~ 5% total order value (TOV))

In case a Supplier does not accept the delayed delivery clause and/or takes any deviation (indicates penalty clause/Liquidated Damages in place of Price Reduction Clause) or takes exception to the percentage rate mentioned in GPC, the offer of such supplier(s) shall be loaded as under:

0.5% UDOV to 5%TOV	:	No loading
0.5% UDOV to 5% UDOV	:	5%
0.5% UDOV to less than 5% TOV	:	Differential between the Offered % and 5%
Any other deviation/Liquidated Damages /penalty or non acceptance of price reduction schedule	:	5%

30.5 Price variation :

Suppliers must quote firm & fixed prices unless price variation is specified in the RFQ. Where price variation is permitted as per RFQ, the loading there to shall be as follows:

a)	Firm Price	No loading
b)	In case of Price Variation formula with ceiling	Loading by ceiling percentage offered

c)	No ceiling on the formula specified (This loading shall be done only after putting efforts with Supplier to indicate ceiling and obtaining BPCL's approval)	1.5 times the maximum ceiling specified by other Suppliers. In case all other Suppliers have quoted firm prices then @ 1.25% for every month of quoted delivery period to be taken as ceiling.
d)	No formula and no ceiling specified by Supplier (This shall be resorted to only after putting efforts with Supplier and obtaining BPCL's approval)	Offer may be rejected.
Note: in case of 'd', offer shall be rejected if two other technically acceptable offers are available otherwise loading shall be done as per 'c'.		

30.6 Indian Freight charges:

- i) Indian Suppliers shall be asked to quote firm freight charges upto destination by road transport for all cases.
- ii) If a supplier does not quote freight charges, his offer shall be loaded with maximum freight charges as quoted by the other bidders.

30.7 Indian taxes / duties :

In case a supplier states that taxes/duties are not applicable at present and will be charged as applicable at the time of delivery, then his bid shall be loaded by the maximum rate of taxes/duties applicable.

- i) Foreign Exchange Rate Variation/Custom Duty Variation For Indian Bidders (On Built-in Import Content):
 - ii) The prices shall be firm and fixed on account of FE variation.
 - customs duty rate up to 2/3rd of delivery period for which the following methodology shall be
 - iii) Prices shall remain firm and fixed without any escalation except for statutory variation in customs followed:
 - iv) Indigenous bidders shall be required to quote their prices including customs duty (Merit rate) towards their built in import content. CIF content in Indian Rupees shall also be furnished by Bidders along with the merit rate of customs duty considered.
 - v) The statutory variation in customs duty shall be subject to the following guidelines and the supplier shall be asked to confirm the following in their bid:
 - (a) Maximum CIF value of import content shall be furnished in the bid.
 - (b) The material to be imported covering the above CIF value to be indicated in the bid.
 - (c) Any increase in price due to increase in customs duty rate beyond two-third of the quoted delivery period will be to supplier's account. However, any decrease in price due to decrease in customs duty rate at the time of actual clearance of imported materials shall be passed on to BPCL.

Variation in price due to customs duty rate will be dealt with separately after receipt of materials at site against documentary evidence.

31. EVALUATION CRITERIA FOR COMPARISON OF BIDS

31.1 Where only Indian Bids are under comparison

- Bids shall be evaluated on the basis of net effective price i.e. landed cost at Site including third party inspection charges (if applicable) by EIL minus CENVAT / Set off benefit available to BPCL.
- Commercial loading shall be done on FOT dispatch Point price.
- If a supplier does not quote freight charges, his offer shall be loaded with maximum freight charges as quoted by the other bidders.
- Taxes/Duties:
- The taxes & duties will be cost loaded as applicable. However, if a vendor states that the sales tax/Excise Duty is not applicable at present or quotes lesser percentage and will be charged as applicable at the time of delivery, then such vendor's price will be loaded by the highest rate as indicated by the remaining vendors.

31.2 Where only Foreign Bids are under comparison

- Bids shall be evaluated on CFR basis including third party inspection charges (i.e. Lloyds/ BV/DNV/TUV/CEIL) in the country of origin and ocean freight as quoted by the bidder. In case of pipes wherever the supplier has not indicated stowage charges, the FOB price shall be loaded @ 10% of the bidder's quoted ocean freight. The seller shall not be allowed to change port of shipment after quoting unless the bidder absorbs any additional cost on account of the change.
- If a supplier does not ocean quote freight charges, his offer shall be loaded with maximum ocean freight charges as quoted by the other bidders.
- Comparison shall be done on equivalent Indian Rupees basis considering RBI reference rate of foreign exchange on the day of opening of price bids.
- Commercial loading shall be done on FOB price

31.3 Where Indian as well as Foreign Bids are under comparison

31.3.1 Domestic Bidders:

Bids shall be evaluated on the basis of net effective price i.e. landed cost at Site including third party inspection charges (if applicable) by third party inspection agency as nominated by BPCL minus CENVAT / Set off benefit available to BPCL. Further, wherever Indian bidders are subject to EIL inspection, instead of third party inspection charges, notional inspection charges @1.25% of FOT Despatch point price for EIL inspection shall be considered

31.3.2 **Foreign Bidders:**

Bids shall be evaluated on the basis of landed cost at Site including the charges of inspection by third party inspection agency, all duties, taxes and transportation charges as under less Cenvatable CVD/SAD etc., Cenvatable service tax (if applicable):

Sr. No.	Head	Basis
1	F.O.B. Price	As quoted by the bidder (including stowage charges in case of pipes*) and Third Party Inspection charges * Stowage charges, if not included in the quoted FOB Price, the same shall be loaded @ 10% of freight quoted by the bidder.
2	Add Ocean freight:	Firm freight as quoted by bidders
3	Add Marine insurance	@ 1 % of FOB price
4	Add Customs Duty	Prevailing rate on (CIF value plus Landing Charges @ 1% of CIF Value)
5	Add Port handling charges	@ 2% of CIF value.
6	Add Octroi	Prevailing rate as applicable on assessable value
7	Add Inland freight charges from Port of Entry in India to project site(s)	1% of landed cost, i.e., S. No. 1 to 5
8	Add L/c Charges	@ 1 % of FOB Price
9	Commercial Loadings, If any.	On FOB value
10	Less Cenvatable Duties	
11	FOT SITE PRICE	Sum(1 to 9)-less (10)

Further, wherever offer of Foreign Bidders includes supplies sourced within India, such supplies shall subject to EIL inspection (if required as MR), instead of third party charges. In that case notional inspection charges for EIL inspection @1.25% of FOT Despatch point price quoted by Bidder for Indigenous supplies shall be considered.

31.4 Cost of Mandatory (Insurance) spares if identified in the Material Requisition, commissioning spares and special tools and tackles will be included for price evaluation of bids, but costs of Spares for two years normal operation and maintenance shall be excluded.

31.5 Cost of loading towards Technical Parameters (Utilities etc.) wherever applicable shall be carried out.

31.6 CENVAT / Set off benefit available to BPCL shall be considered during price evaluation. BPCL shall claim CENVAT benefits on excise duty, CVD/SAD, Service tax as well as the cess applicable and accordingly excise duty / CVD /SAD/Cess and these shall be considered and necessary credit shall be given for evaluation and comparison of bids.

Wherever site works, AMC, training etc. are required as per MR/RFQ; the same shall be considered for evaluation.

31.7 Spares: As per the evaluation criteria mentioned in SPC / ITB/MR on case to case basis.

31.8 EIL Inspection / Third Party Inspection:

31.9 EIL shall provide all requisite inspection services for all indigenous equipment / bulk material procured for the project as part of EPCM services at no additional cost.

For imported items, the bidders quoted price shall include third party inspection charges, which will be considered for evaluation of prices and included in the order value at the time of award of order.

31.10 Other Conditions Related To The Bid Evaluation:

- i. Offer evaluation and ordering basis as overall lowest basis in group MRS and in individual item wise MRs on lowest basis as mentioned in Price schedule / Material Requisition
- ii. Bid should be complete covering the individual item wise scope of supply indicated in the Bid documents,
- iii. OWNER reserves the right to split the quantities / items of the PO as required among the bidders,
- iv. OWNER also reserves the right to consolidate the quantities of PO where it is commercially prudent to place single order. In the case of shifting of order as above , the following shall govern :
 - a) In order to avoid splitting of order on number of bidders, particularly when order value is small, shifting shall be resorted to so that time and effort on ordering, expediting, inspection etc. is saved in dealing with extra suppliers. For the purpose of shifting, cost of order management per order is considered as Rs. 1,00,000/-.
 - b) Based on lowest evaluated item wise prices the shifting shall be carried out provided the following conditions are met:
 - Shifting shall be done only if shifting cost of each order is upto Rs.1,00,000/-.
 - Shifting shall not be resorted to if the value of the order is more than 25% of the total order value of the recommendation. However, this ceiling will not be applicable where total order value of recommendation is upto Rs. 4.0 Lakh.
 - In case the order value on L1 bidder is more than Rs 2,00,000/- then shifting shall not be resorted.
 - With above shifting the selected bidder for award will be deemed to be L1 bidder.
 - Excise duty, Central Sales Tax, VAT, Service Tax shall not be included in the quoted prices and shall be payable extra at actuals. Works contract tax shall be included in the quoted prices and no variation including statutory variations shall be payable by BPCL on WCT. BPCL shall claim eligible credit on CENVAT/service tax/VAT quoted by the Vendor and therefore eligible portion of CENVAT/service tax/VAT shall be considered for price comparison. Vendor shall be required to furnish proper invoices issued in accordance with relevant rules for enabling BPCL to avail CENVAT benefits. Further, the amount of excise duty, service tax, Central sales Tax, VAT shall only be payable against submission of CENVATABLE / VATABLE invoices subject to maximum amount quoted in the offer and in case of non-submission, will not be paid.

32. OTHER CRITICAL POINTS FOR EVALUATION OF OFFER ARE AS UNDER

The prices quoted in the price bid is to be considered for evaluation and no cognizance will be given to the supplementary/supporting document attached to the price bid, break-up of prices, etc.

33. PRICE CHANGES / IMPLICATIONS AFTER OPENING OF PRICE BIDS

- 33.1 After opening of price bid, if the party increases the price, though within the validity period and even though the offer remains lowest, the bid should be rejected. Such bidders shall be debarred for future enquiries for such action of bidders as a penal measure.
- 33.2 Suo-moto Price reduction after price bid opening are to be ignored for evaluation. However, if the same party happens to be the lowest based on original price bids, the benefit of such reduction may be availed of.
- 33.3 Any correspondence, including price changes, if any, received from the vendors after price bid opening shall be sent to BPCL in as received condition, along with EIL's recommendation, if any.

34. AWARD OF CONTRACT

AWARD OF WORK.

The Owner/EIL will award the order to the successful bidder (s) whose bid has been determined to be substantially responsive, and/or have been determined as a lowest bid on least cost basis to Owner and is determined to be qualified to satisfactorily perform the Order.

35. QUANTITY VARIATION

- 35.1 The Owner/EIL reserves the right to vary the quantity of goods specified in MR, at the time of award without any change in quoted unit price or other terms and conditions.
- 35.2 Owner/EIL reserves the right to delete the requirement of any one or more items of MR without assigning any reason.

36. OWNER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY BID

The Owner/EIL reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of the order without thereby incurring any liability to the affected bidder or bidders or any obligations to inform the affected bidder or bidders of the ground for Owner/EIL's action.

37. NOTIFICATION OF AWARD

- 37.1 Prior to the expiration of period of bid validity Owner /EIL will notify the successful bidder in writing by fax/e-mail to be confirmed in writing, that his bid has been accepted. The notification of award / Fax of Acceptance will constitute the formation of the Order.
- 37.2 The Delivery Schedule shall commence from the date of notification of award / Fax of Acceptance (FOA).
- 37.3 Award of Contract/Order will be by issuing Fax of Acceptance (FOA) of your bid. FOA will contain price, delivery and other salient terms of bid and RFQ Document.

Bidder will be required to confirm receipt of the same by returning "Copy of the FOA" duly signed and stamped by the bidder as a token of acknowledgement to Owner and EIL. On receipt of acknowledgement without any deviation / condition, detail Purchase Order / Contract will be issued in quadruplicate. Three copies of the same without any condition / deviation will be returned duly signed and stamped by the bidder as a token of acknowledgement to Owner and EIL.

38. FRAUDULENT PRACTICES

- 38.1 The OWNER requires that Bidders/Vendors/Contractors observe the highest standard of ethics during the award/execution of Contract. "Fraudulent Practice" means a misrepresentation of facts in order to influence the award of a Contract to the detriment of

the OWNER, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the OWNER of the benefits of free and open competition.

38.2 The OWNER will reject a bid for award if it determines that the bidder recommended for award has engaged in fraudulent practices in competing for the Contract in question.

Bidder is required to furnish the complete and correct information/ documents required for evaluation of their bids, if the information/ documents forming basis of evaluation is found to be false/ forged, the same shall be considered adequate ground for rejection of bids and forfeiture of Earnest Money Deposit.

38.3 In case, the information/ document furnished by the Bidder/vendor/Contractor forming basis of evaluation of his bid is found to be false/ forged after the award of the contract, OWNER shall have full right to terminate the contract and get the remaining job executed at the risk & cost of such Bidder/Vendor/ Contractor without any prejudice to other rights available to OWNER under the contract such as forfeiture of CPBG/Security Deposit, withholding of payment etc.

38.4 In case, this issue of submission of false document comes to the notice after execution of work, OWNER shall have full right to forfeit any amount due to the Bidder/Vendor/Contractor along with forfeiture of CPBG/Security Deposit furnished by the Bidder/Vendor/Contractor.

38.5 Further, such Bidder/Vendor/ Contractor shall be put on Blacklist/ Holiday/Negative List of OWNER debarring them from future business with OWNER and EIL for a time period, as per the prevailing policy of OWNER and EIL.

39. WAIVER OR TRANSFER OF THE AGREEMENT

39.1 The successful bidder shall not waive the Agreement or transfer it to third parties, whether in part or in whole, nor waive any interest that is included in the Agreement without the prior written permission of the Owner.

40. CARTEL FORMATION

40.1 In case any bidder is found to be involved in cartel formation, his bid will not be considered for evaluation /placement of order. Such bidder will also be debarred from bidding in future.

41. INTEGRITY PACT

Integrity Pact shall be applicable for all RFQ of estimated value more than 1 crore. In such condition following shall be follow:

- a) Proforma of Integrity Pact (IP) attached shall be returned by the Bidder/s along with the bid documents, duly signed by the same signatory who is authorized to sign the bid documents. All the pages of the Integrity Pact shall be duly signed. Bidder's failure to return the IP duly signed along with the bid documents (as instruction mentioned above) shall result in the bid not being considered for further evaluation.
- b) If the Bidder has been disqualified from the bidding process prior to the award of the contract in accordance with the provisions of the Integrity Pact, BPCL shall be entitled to demand and recover from Bidder Liquidated Damages amount by forfeiting the EMD/Bid Security as per provisions of the Integrity Pact.
- c) If the contract has been terminated according to the provisions of the Integrity Pact, or if BPCL is entitled to terminate the contract according to the provisions of the Integrity Pact, BPCL shall be entitled to demand and recover from Contractor Liquidated Damages amount by forfeiting the Security Deposit/Performance Bank Guarantee as per provisions of the Integrity Pact.

d) Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitor, mentioned below:

T.S.KRISHNAMURTHY	Flat NO.9, Gokul Tower Next to Mookambika Complex No.7, C P Ramaswamy Road Alwarpet Chennai-600 018	044-24993077 044-24993079 Mobile- 9444999555
SHRI JANKI BALLABH	Flat No. 605, Varsova Vainayak CO-OP. HSG. SOC. HSG Plot No. 8, Near Versova Telephone Exchange, Versova, Andheri (West), Mumbai - 400 053	022 - 2635 3456 (RES) Mobile 9833363066

42. T&C FOR FOREIGN SUPPLIERS (TO WHOM RFQ ISSUED) OPERATED THROUGH THEIR INDIAN SUBSIDIARIES

Methodology in case bid is submitted through subsidiary/ parent/ another subsidiary of manufacturer's parent company

Where ever a limited enquiry is issued to a foreign company, being approved the OEM(the manufacturer) and enlisted with EIL, but the OEM requests to bid through abider which may be his subsidiary or his parent or another subsidiary of his parent, following methodology shall be followed:

1. Bidder may be Indian or foreign.
2. A company shall be considered as subsidiary of its parent if any one of the following criteria is being met:

The parent company:

- i) Controls the composition of the board of directors of the subsidiary,
- ii) Controls more than half of the voting right of the subsidiary.
- iii) Owns more than half of the paid-up equity of the subsidiary. For the purpose of definition of subsidiary, if a company A is a subsidiary of company B which is, in turn, a subsidiary of company C then company A will be considered to be a subsidiary of company B as well as C.
3. Bidder may or may not be a manufacturer of the offered products.
4. Bidder may or may not be enlisted with EIL.
5. In case bidder proposes to ship the material from a warehouse/works which may or may not be enlisted with EIL, the same shall be considered acceptable subject to following conditions.
 - a) All items to be sourced (duly inspected under TPI) from OEM except minor outsourced accessories and the methodology for their assembly by Bidder will be spelt out in the offer by bidder.
 - b) EIL/ Third Party Inspection (by any of the agencies mentioned in the RFQ) shall be conducted before dispatch of the items from OEM works.
 - c) OEM shall issue an authorization by the authorized signatory to the Bidder towards the above arrangement.

- d) OEM shall furnish a backup corporate guarantee duly signed by the authorized signatory towards the performance of the equipment & accessories.
- e) In case engineering work is undertaken by bidder, responsibility matrix will be submitted, duly signed by OEM.
- f) In the event of an award, the FOA/ PO shall be placed on the Bidder and shall specify the OEM works as well as the final dispatch point.

43. INFORMATION TO BE FURNISHED BY FOREIGN SUPPLIERS/ CONTRACTORS / CONSULTANTS

1. It is mandatory for the foreign supplier/contractor/consultant to furnish the following information in case his receipts are subject to tax deduction at source in India:
 - i) PAN No. as per the Indian Income Tax requirements failing which the Supplier/Contractor/Consultant shall be responsible for any additional tax deduction at source as per the provisions of the Indian Income Tax Act/Rules and the same shall be deducted from the payment made to supplier/contractor/consultant.
 - ii) Tax Residency Certificate (TRC) containing prescribed particulars as per the enclosed Appendix-A from the Government of foreign country in order to claim the benefits of DTAA as per the Indian Income Tax requirements failing which the relief under DTAA will not be available and consequently the higher rate of withholding tax @25% will be applicable and deducted from the payment made to supplier/contractor/consultant (i.e., non-resident taxpayer). The TRC shall be duly verified by the Government of the country of which the assess claims to be a resident for the purposes of tax.
 - iii) In addition to TRC, bidder in order to claim the benefits of DTAA shall also submit additional information in form no. 10F (enclosed as Appendix-B). Form 10F has to be signed & verified by the assesee himself.

If some information is already contained in TRC, the bidder shall not be required to provide that information in Form no. 10F but even then Form no. 10F is required to be provided by the bidder. However, the bidder may write Not Applicable in the relevant column in case that information is already contained in TRC.

The above shall be furnished before release of any payment or within one month of the release of Order, whichever is earlier failing submission of the above information, any additional tax liability on purchaser, will be deducted from the payment due to the bidder.

TRC obtained by the Non-resident from Government of foreign country shall contain the following particulars:

- (i) Name of the assessee;
- (ii) Status (individual, company, firm etc.) of the assessee;
- (iii) Nationality (in case of individual);
- (iv) Country or specified territory of incorporation or registration (in case of others);
- (v) Assessee's tax identification number in the country or specified territory of residence or in case no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory;
- (vi) Residential status for the purposes of tax;
- (vii) Period for which the certificate is applicable; and
- (viii) Address of the applicant for the period for which the certificate is applicable;

"FORM NO. 10B

[See sub-rule (1) of rule 21AB]

Information to be provided under sub-section (5) of section 90 or sub-section (5) of section 90A of the Income-tax Act, 1961

I..... *son/daughter of Shri..... in the capacity of
 (designation) do provide the following information, relevant to the previous year.....
 *in my case/in the case of..... for the purposes of sub-section (5) of * section 90/section 90A:—

Sl.No.	Nature of information	:	Details#
(i)	Status (individual; company, firm etc.) of the assessee	:	
(ii)	Permanent Account Number (PAN) of the assessee if allotted	:	
(iii)	Nationality (in the case of an individual) or Country or specified territory of incorporation or registration (in the case of others)	:	
(iv)	Assessee's tax identification number in the country or specified territory of residence and if there is no such number, then, a unique number on the basis of which the person is identified by the Government of the country or the specified territory of which the assessee claims to be a resident	:	
(v)	Period for which the residential status as mentioned in the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A is applicable	:	
(vi)	Address of the assessee in the country or territory outside India during the period for which the certificate, mentioned in (v) above, is applicable	:	

2. I have obtained a certificate to in sub-section (4) of section 90 or sub-section (4) of section 90A from the Government of (name of country or specified territory outside India)

Signature:

Name:

Address:

Permanent Account Number:

Verification

I..... do hereby declare that to the best of my knowledge and belief what is stated above is correct complete and is truly stated.

Verified today the day of

.....
Signature of the person providing the information

Place:

Notes :

1. *Delete whichever is not applicable.

2. #Write N.A. if the relevant information forms part of the certificate referred to in sub-section (4) of section 90 or sub-section (4) of section 90A.

INDEX

1. DEFINITIONS
2. SUPPLIER'S SCOPE
3. DELIVERY SCHEDULE / COMPLETION PERIOD
4. DISPATCH INSTRUCTION
5. PACKING, MARKING AND SHIPMENT
6. INSURANCE
7. INSPECTION
8. INDEPENDENT SUPPLIER
9. TAXES & DUTIES
10. RECOVERY OF CUSTOM DUTY, EXCISE DUTY AND SALES TAX
11. REJECTION OF MATERIAL
12. LIMITATION OF LIABILITY
13. PURCHASER'S RIGHTS AND REMEDIES
14. PERFORMANCE BANK GUARANTEE
15. PAYMENT TERMS
16. DEDUCTION OF SOURCE
17. PAYING AUTHORITY
18. ORIGIN OF GOODS
19. QUALITY ASSURANCE / QUALITY CONTROL
20. FRAUDULENT PRACTICES
21. STATUTORY APPROVALS
22. PRICE REDUCTION SCHEDULE
23. FINANCIAL DETERRENT FOR VIOLATION OF HSE
24. LIEN
25. SETTLEMENT OF DISPUTE BETWEEN GOVT. DEPT./ PUBLIC SECTOR UNDERTAKINGS
26. POST ORDER CORRESPONDENCE
27. INDEPENDENT EXTERNAL MONITORS
28. PART ORDER/REPEAT ORDER
29. BID VAILIDTY

ANNEXURE-I: FINANCIAL DETERRENT FOR VIOLATION OF HSE

SPECIAL PURCHASE CONDITIONS (SPC)

1. DEFINITIONS AND INTERPRETATIONS

1.1. In addition to meaning ascribed to certain capitalised terms in "General Purchase Conditions (GPC)", following initial capitalised terms shall have the meaning as ascribed to such term hereunder. In case any term defined hereunder is also defined in "GPC", the meaning ascribed to such term hereunder shall prevail:

1.1.1. Definitions

RFQ Documents shall mean documents issued to the bidder

Effective Date shall mean the date on which Supplier's obligations will commence and that will be date of Fax of Acceptance (FOA).

The "Consultant" means the consulting engineers Nominated/appointed by the Owner for this Project/Job.

1.2. Interpretations

1.2.1. Where any portion of the GPC is repugnant to or at variance with any provisions of the SPC then, unless a different intention appears, the provisions of the SPC shall be deemed to govern the provisions of the GPC and SPC provisions shall prevail to the extent of such repugnancy, or variations exist.

1.2.2. In RFQ Documents unless otherwise stated specifically, the singular shall include the plural and vice versa wherever the context so requires.

1.2.3. Notwithstanding the sub-division of the RFQ Documents into separate sections and volumes every part of each shall be deemed to be supplementary to and complementary of every other part and shall be read with and into the Agreement so far as it may be practicable to do so.

1.2.4. All headings, subtitles and marginal notes to the clauses of the GPC, SPC or to the Specifications or to any other part of RFQ Document are solely for the purpose of giving a concise indication and not a summary of the contents thereof, and they shall never be deemed to be part thereof or be used in the interpretation or construction thereof.

1.2.5. The terms fully capitalized and/or initial capitalized shall be interchangeable and shall have the meaning as assigned to fully capitalized term or initial capitalised term.

1.2.6. Except the obligation of payment to Seller, Consultant may discharge all other Purchaser's obligations. In BIDDING documents at all such places where obligations are confined to Purchaser alone such provision to read as 'Purchaser/Consultant's' obligation to the extent the context so means/ requires.

2. SUPPLIER'S SCOPE

Supplier's scope shall include but not limited to (a) manufacturing of Items as per Material Requisition technical specifications; (b) preparation of Quality Assurance / Quality control programme; (c) obtaining Consultant's approval; (d) Inspection by Purchaser's/Consultant/Agency Designated by Purchaser and obtaining Inspection Release Note; (e) obtaining despatch clearance; (f) Packing; and (g) Loading on truck/trailer for Indian Bidder / loading on ship at FOB port of exit including storing as applicable for foreign bidder and transportation upto site as applicable for Indian Bidder.

3. DELIVERY SCHEDULE / COMPLETION PERIOD

3.1. All goods under the scope of the Supplier shall be delivered as per delivery schedule / completion period specified in Request for Quotation (RFQ) and no variation shall be permitted.

3.2. Failing to meet the delivery schedule / completion period will be subject to Price Reduction and/or other remedies available to the Purchaser in RFQ Documents.

3.3. Price Reduction Schedule (PRS) shall be applicable as per Clause. No. 22 of SPC

3.4. Where erection/testing/commissioning supervision, commissioning assistance is required as per RFQ Documents / Material requisition, penalty for non mobilization/delay in mobilization as per order shall

be applicable. The penalty shall generally be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.

- 3.5 The delivery schedule / completion period shall be reckoned from the date of Fax of Acceptance.
- 3.6 For Indian Bidder date of LR/GR shall be considered as date of delivery or date of receipt of material at site shall be the date of delivery as specified in RFQ/FOA/PO. For Foreign Bidder date of clean bill of Lading shall be considered as date of Delivery.

4. DESPATCH INSTRUCTIONS

- 4.1 Supplier shall obtain despatch clearance from the purchaser prior to despatch.
- 4.2 Following despatch documents are required to be submitted by the Supplier immediately after shipment is made.

- Commercial Invoice
- Dispatch instructions/ clearance by Purchaser/Consultant.
- Inspection Release Note by Third Party Inspection Agency / Purchaser / Consultant.
- LR/ GR / Clean Bill of Lading.
- Packing List
- Test Certificates (NDT reports, MTC, etc. as per MR)
- Certificate of Measurement and Weight
- List of documents as specified in Vendor Data Requirement in Material Requisition & counter signed & stamped by TPIA /EIL.

In addition to above documents in case of Foreign Bidder following documents are also required to be submitted

- ETA Mumbai Seaport
- Documents pertaining to ocean freight (In case of CFR Contract)
- Country of origin certificate

5. PACKING, MARKING AND SHIPMENT

- 5.1 The following clause is added to Clause no.8 and 15 of GPC :

"The Supplier wherever applicable shall after proper painting, pack and crate all goods for sea/road/rail transportation in such a manner so as to protect it from damage and deterioration. The Supplier shall be held responsible for all damages due to improper packing. The Supplier shall ensure sizing or packing of all oversized consignments in such a way that availability of carrier and/or road/rail route is properly taken into consideration"

6. INSURANCE

- 6.1 Where only supply is involved, Transit insurance shall be excluded from the supplier's scope and, the same shall be arranged by the owner.

For purchases involving site work, the comprehensive insurance (transit cum storage, erection, till handing over of equipment) shall be in the scope of Owner. However the inspection of the items for its completeness after receipt and opening of the boxes shall be vendor's responsibility

- 6.2 For purchases involving supply and site work then two separate orders shall be issued (i.e. One order indicating supply, transportation and another order indicating site work). In case of Indian arm of a foreign bidder to do site work, separate order may be issued in case requested by bidder.

7. INSPECTION

- 7.1 Inspection of Indigenous items shall be done by EIL. In the case Indian party sourcing materials from abroad, the bidder shall arrange inspection through Third Party Inspection agency (i.e. Lloyds/BV/DNV/TUV/CEIL) in the country of origin & charges of the same shall be included in quoted prices.
- 7.2 Foreign vendors shall include third party inspection charges of Third Party Inspection agency (i.e. Lloyds/BV/DNV/TUV/CEIL) in the country of origin. In the case of foreign party sourcing items from

India the inspection shall be by EIL, no additional charges shall be payable to seller on account of the same. However there shall be no change in third party inspection charges in case of any change in sourcing from sub-vendors subject to the condition that in the case of sourcing is shifted from abroad to India after placing the order, discount @ 1.25% of FOT Despatch point price of the part sourced from India shall be passed on to BPCL.

7.3. The Third Party Inspection (TPI) Agencies mentioned in clause no.7.2 of GPC or any wherein the RFQ shall stand modified with the TPI Agencies indicated at above clause no.7.1 and 7.2.

8. INDEPENDENT SUPPLIER

It is expressly understood and agreed that Supplier is an independent party and that neither the Supplier/ its personnel are servants, agents or employees of Purchaser/ Consultant nor the Supplier has any kind of interest in other Suppliers.

9. TAXES & DUITES

9.1. EXCISE DUTY (Applicable only for Indian Bidders):

Quoted Price should be exclusive of Excise Duty including Ed Cess applicable on Finished Goods. Applicable rate of Excise Duty including Ed Cess should be indicated by the bidder in Price Schedule / Annexure-1 to Agreed Terms and Conditions. Statutory variation in Excise Duty including Ed Cess on finished goods within the contractual delivery period shall be to Owner's account against submission of the documentary evidence. However, any increase in the rate of Excise Duty including Ed Cess beyond the contractual completion period shall be to bidder's account. Any decrease in the rate of Excise Duty including Ed Cess shall be passed on to the Owner.

Supplier shall provide CENVAT documents for claiming cenvat benefit towards Excise Duty. In case purchaser is unable to avail CENVAT benefit based on the documents furnished by the seller, then such amount of Excise Duty shall not be reimbursed.

9.2. CENTRAL SALES TAX (CST) / VAT (Applicable only for Indian Bidders):

Quoted Price should be exclusive of CST (with concessional form) or VAT (without concessional form) applicable on the finished goods. Applicable rate should be indicated by the bidder in Price Schedule / Annexure-1 to Agreed Terms and Conditions. Statutory variation in CST / VAT on finished goods within the contractual delivery period shall be to Owner's account against submission of the documentary evidence. However, any increase in the rate of CST/ VAT beyond the contractual completion period shall be to bidder's account. Any decrease in the rate of CST/ VAT including Ed Cess shall be passed on to the Owner. The present rate of input tax credit available to owner on MVAT is 100% of applicable rate.

Supplier shall provide necessary documents for claiming input tax credit on MVAT. In case purchaser is unable to avail input tax credit on MVAT based on the documents furnished by the seller, then such amount of MVAT shall not be reimbursed which was considered for evaluation. The remaining portion of Non Cenvatable MVAT shall be reimbursed against documentary evidence.

Owner will issue C-Form to the bidders & no concessional form 'D' shall be issued for VAT.

9.3. CUSTOM DUTY, CVD & SAD (Applicable only for Indian Bidder):

Quoted Price shall be inclusive of Import Duties (Custom Duty, CVD & SAD) on the import content if any in the supply. Bidder to indicate CIF value of the import content and applicable merit rate of Import Duties on the import content in the Price Schedule / Annexure-1 to Agreed Terms and Condition. Statutory variation on Import Duties within the 2/3rd of contractual delivery period shall be to Owner's account against submission of the documentary evidence and shall be given as per CIF value and applicable merit rate of import duties indicated by the bidder in their offer. Any increase in the rate of Import Duties on CIF value beyond the 2/3rd of contractual completion period shall be to bidder's account. Any decrease in the rate of Import Duties on CIF shall be passed on to the Owner.

In case of Merit rate of Custom Duty, BPCL shall not issue Project Authority Certificate (PAC) / Import License to the Suppliers.

9.4. SERVICE TAX:

9.4.1. TRANSPORTATION CHARGES (Applicable only for Indian Bidders):

Quoted Transportation charges shall be exclusive of applicable Service Tax including Ed Cess. Applicable rate of Service Tax including Ed Cess should be indicated by the bidder in Price Schedule / Annexure-1 to Agreed Terms and Conditions. Statutory variation in Service Tax including Ed Cess on transportation within the contractual delivery period shall be to Owner's account against submission of the documentary evidence. However, any increase in the rate of Service Tax including Ed Cess beyond the contractual completion period shall be to bidder's account. Any decrease in the rate of Service Tax including Ed Cess shall be passed on to the Owner.

9.4.2. SUPERVISION / TRAINING CHARGES:

Quoted Supervision / Training Charges shall be exclusive of applicable Service Tax including Ed Cess. Indian Bidder to indicate applicable rate of Service Tax including Ed Cess on Supervision / Training Charges in Price Schedule. Statutory variation in Service Tax on Supervision / Training Charges within the contractual delivery period shall be to Owner's account against submission of the documentary evidence. However, any increase in the rate of Service Tax beyond the contractual completion period shall be to bidder's account. Any decrease in the rate of Service Tax including Ed Cess shall be passed on to the Owner.

For Foreign Bidder Service Tax on Supervision / Training Charges shall be paid by the Owner directly.

9.4.3. SITE WORK:

Quoted Site Work Prices shall be exclusive of applicable Service Tax. Bidder to indicate applicable rate of Service Tax including Ed Cess on Site Work Charges in Price Schedule. Statutory variation in Service Tax on Site Work Charges within the contractual delivery period shall be to Owner's account against submission of the documentary evidence. However, any increase in the rate of Service Tax beyond the contractual completion period shall be to bidder's account. Any decrease in the rate of Service Tax including Ed Cess shall be passed on to the Owner.

Bidder to quote their rates exclusive of Service tax at full rate.

Supplier shall provide CENVAT documents for claiming Cenvat benefit towards Service Tax. In case purchaser is unable to avail CENVAT benefit based on the documents furnished by the seller, then such amount of service tax shall not be reimbursed

9.5. VAT ON WORK CONTRACTS:

Quoted Site Work Prices shall be inclusive of applicable VAT on Work Contracts. No variation on any account (including Statutory) on VAT on Work Contracts applicable on Site Work Prices shall be paid by the Owner.

VAT on Work Contracts as applicable shall be deducted at source and TDS certificate shall be issued to the Bidder.

As per provision of Maharashtra VAT, it is mandatory that the bidder has to be a registered dealer under the Act before getting payment for his works contract. The contractor has to produce an authenticated copy of the certificate of registration under MVAT Act or furnish an undertaking for getting so registered.

9.6. OCTROI / ENTRY TAX:

9.6.1. For Supply items: Entry Tax / Octroi on supply component shall be reimbursed by purchaser against documentary evidence.

For Work Contract at Site: Entry Tax / Octroi on material brought by the Seller to site for execution of work at site shall be borne by the Seller and quoted prices should be inclusive of such Entry Tax / Octroi. No variation on any account (including Statutory) on such entry tax shall be paid by the Owner.

Bidders who have quoted octroi less than the applicable rates at the time of bidding, than the octroi charges will be paid as per their quoted percentage. During the invoicing, if they claim more than their quote, same will not be paid. It may also be noted that materials are required on door delivery basis, hence vendor shall pay freight and octroi charges and same will be reimbursed by BPCL on submission of original documents maximum to their quoted rates. Bid evaluation shall be done based on their quoted rates only.

9.7. ADDITIONAL TAXES & DUTIES (Applicable for Indian Bidder)

Within the contractual delivery period, if any new taxes and/or duties come into force the same will be reimbursed to bidder against documentary evidence. However any new or additional taxes/ duties imposed after contractual delivery shall be to Vendor's account.

- 9.8. In case of Foreign Bidder quoted FOB Prices shall be inclusive of all charges inclusive of all applicable taxes & duties, applicable upto FOB Port of Exit.
- 9.9. All necessary taxes & duties registration, if required for carrying out the site activities shall be done by the bidder and cost towards the same shall be included in quoted prices.
- 9.10. Any Statutory variation in taxes and duties, within the contractual delivery date, shall be on owner's account, against submission of documentary evidence. However, in case of delay in delivery beyond the contractual date, for reasons attributable to seller, any increase in these rates shall be borne by seller, whereas any decrease shall be passed on to the owner. BPCL shall take CENVAT benefit as applicable. Works Contract Tax, if applicable, shall be included in the quoted prices and no variation including statutory variations shall be payable by BPCL on WCT.
- 9.11. Further, in case of delay in delivery, due to reasons attributable to seller, any new or additional taxes, duties or levies imposed after the contractual delivery date shall be on seller's account.
- 9.12. For the purpose of applicability of statutory variations on taxes and duties (including imposition of any new taxes/duties/levies, etc.) under above terms, each staggered delivery of lots (due in a specific month as per delivery schedule for bulk items) shall be considered as delivery date for the respective lot(s).
- 9.13. Bidder to note that any additional implication (positive implication) due to error in considering the applicable rates of taxes & duties in the bid shall be borne by bidder only.
- 9.14. The bidder shall also comply with the clause no.6 of GPC.

10. RECOVERY OF CUSTOM DUTY, EXCISE DUTY AND SALES TAX

In case of Indian Bidders, if the Statutory Variation entitles the employer to recover the amount (irrespective of contractual delivery) such amount will be recovered from any bill of the Supplier immediately on enforcement of such variation under intimation to the Supplier.

11. REJECTION OF MATERIAL

Any materials/goods covered under scope of supply, which during the process of inspection by appointed third party, at any stage of manufacture/fabrication and subsequent stages as defined in Material Requisition , prior to despatch is found not conforming to the requirements/specifications of the Purchase Requisition/Order, shall be liable for immediate rejection.

Supplier shall be responsible and liable for immediate replacement of such material with acceptable material or rectify the defective material upto the satisfaction inspection agency at no extra cost or impact on the delivery schedule to PURCHASER.

12. LIMITATION OF LIABILITY

Notwithstanding anything contrary contained herein, the aggregate total liability of Supplier under the Contract or otherwise shall be limited to **100% of contract value**. However, neither party shall be liable to the other party for any indirect and consequential damages, loss of profits or loss of production.

13. PURCHASER'S RIGHTS AND REMEDIES

Without prejudice to PURCHASER's right and remedies under Agreement, if SUPPLIER fails to commence delivery as per agreed schedule and/or in reasonable opinion of the PURCHASER, SUPPLIER is not in a position to makeup the delay to meet the intended purpose, the PURCHASER may terminate the AGREEMENT in full or part at SUPPLIER's default and may get supplies from other sources at SUPPLIER's risk and cost.

14. PERFORMANCE BANK GUARANTEE (PBG):

- I. Performance Bank Guarantee for 10% of total order value shall be furnished by successful vendors in BPCL format for orders of all values.
- II. In case of Supervision services: Bidders shall also provide additional BG of an amount equal to the per diem charges for the number of days considered for evaluation, over and above 10%

PBG to cover compensation for delay in mobilizing the erection/ commissioning personnel. This BG will be released to the bidder upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with last 10% supply payment and shall be initially valid up to 3 (three) months which shall be extended based on the request by BPCL.

15. PAYMENT TERMS

In partial modification of the payment terms as mentioned in the General Purchase Conditions, the following payment terms shall be applicable.

15.1 PAYMENT TERMS (INDIAN BIDDERS):

15.1.1 Where the material requisition is only for supply of materials and there is no vendor data requirement specified in MR e.g., bulk piping items etc.

100% within 30 days after receipt and acceptance of materials at site and on submission of a performance bank guarantee for 10% of total order value, valid till the full guarantee period plus three months' claim period.

15.1.2 Where the material requisition calls for vendor drawings/technical documentation.

15.1.2.1 90% payment within 30 days of receipt and acceptance of materials at site upon satisfactory completion of order including receipt of relevant technical documentation as specified in MR.

15.1.2.2 10% payment after receipt of final technical documentation as per purchase requisition against EIL's certification and on submission of performance bank guarantee for 10% of total order value, valid till full guarantee period plus three months claim period.

15.1.3 Where supply of materials and erection or site work are in the scope of supplier and package items.

15.1.3.1 SUPPLY

- i) **5%** on approval of all drawings at least in CODE-2 by EIL against submission of bank guarantee for an equivalent amount valid till complete execution of order plus three months claim period.
- ii) **15%** after receipt of identified raw materials at vendor's works and against certification by EIL and submission of bank guarantee for equivalent amount valid till complete execution of order plus three months claim period.
- iii) **60%** after receipt of equipment/materials at BPCL's site. Billing schedule to be furnished by the Vendor in case pro-rata payments are required.
- iv) **10%** after successful installation and erection of equipment (after site work) and submission of final technical documents as required in the Purchase Requisition against EIL's certification and on submission of performance bank guarantee for 10% of total order value (Supply plus Site Work), valid till full guarantee period plus three months claim period.
- v) **10%** within 30 days of handing over the successfully commissioned equipment after Site Acceptance Test/PGTR and handing over of equipment to the Owner as per purchase order against submission of final documents of certificate by EIL/BPCL for completion of activity.

In case owner intimation regarding availability of work front at site is not given upto 6 (Six) months after receipt of all supplies at site, then last 20% (i.e. **10% as per 15.1.3.1 (iv) and 10% as per 15.1.3.1 (v)**) payment shall be released against submission of a Bank Guarantee of equivalent amount valid for 1 (One) year or such extended period as may be required in addition to submission of performance bank guarantee for 10% of total order value (Supply plus Site Work), valid till full guarantee period plus three months claim period. However in the event of delay in conducting the Site Acceptance Test/PGTR, the bidder is not relieved of his responsibility to carry out the Site Acceptance Test/PGTR. No additional payment shall be made for visit of supplier to site for Site Acceptance Test/PGTR

15.1.3.2 Transportation Charges

100% within 4 weeks after receipt of materials at site.

15.1.3.3 Erection/ Site Work

90% against monthly running bills (based on agreed billing schedule), duly certified by EIL.

10% within 30 days after final handing over of equipment package to BPCL at site.

15.1.4 Fabricated Items (Vessels, Columns, Heat Exchangers etc.)

- i) **5%** on approval of all drawings at least in CODE-2 by EIL against submission of bank guarantee for an equivalent amount valid till complete execution of order plus three months claim period.
- ii) **15%** after receipt of identified raw materials at vendor's works and against certification by EIL and submission of bank guarantee for equivalent amount valid till complete execution of order plus three months claim period.
- iii) **60%** payment through NEFT against receipt of materials at site. Billing Schedule to be furnished by the vendor in case pro-rata payments are required.
- iv) **10%** payment after receipt of final documents as required in Purchase Requisition against EIL's certification and on submission of performance bank guarantee for 10% of total order value, valid till full guarantee period plus three months claim period.
- v) Balance 10% within 30 days of receipt of equipment at site.

15.1.5 Other Items (Pumps, Compressors, Switch Gears etc.)

- i) **5%** on approval of all drawings at least in CODE-2 by EIL against submission of bank guarantee for an equivalent amount valid till complete execution of order plus three months claim period.
- ii) **75%** payment through NEFT against receipt of material at site. Billing schedule to be furnished by the Vendor in case pro-rata payments are required.
- iii) **10%** payment after receipt of final documents as required in Purchase Requisition against EIL's certification and on submission of performance bank guarantee for 10% of total order value, valid till full guarantee period plus three months claim period.
- iv) Balance **10%** against commissioning /demonstration of Performance Guarantee (if applicable) or 6 months from receipt of material at site (against BG of equivalent amount valid for 1 year), whichever is earlier. However in the event of delay in conducting the performance guarantee test run, the bidder is not relieved of his responsibility to carry out the performance guarantee test run. No additional payment shall be made for visit of supplier to site for demonstrating the performance, if the same is included in the scope of supplier.

For items where supervision during erection, testing and commissioning is not required, Last 10% payment shall be released within 30 days of receipt of equipment at site

15.1.6 Payment of Per Diem Charges For Supervision of Erection Testing and Commissioning

- i) In case Performance Guarantee Test Run is not applicable, 100% of invoice amount shall be made on completion of supervision activity on submission of Invoice, time sheet duly certified by Site-In-charge at BPCL site. Payment shall be made after deducting income tax at applicable rates. Service tax, if any, shall be paid on submission of service Tax invoice.
- ii) In case Performance Guarantee Test Run is applicable, 100% of invoice amount shall be made only against commissioning /demonstration of Performance Guarantee Test Run. In case PGTR not performed within 6 months from erection & testing of material at site, payment of supervision for erection & testing shall be released against submission of BG of equivalent amount valid for 1 year. However in the event of delay in conducting the performance guarantee test run, the bidder is not relieved of his responsibility to supervision of commissioning / carry out the performance guarantee test run. No additional payment shall be made for visit of supplier to site for demonstrating the performance, if the same is included in the scope of supplier.
- iii) Where erection/commissioning supervision, commissioning assistance is required from the vendor, penalty for non mobilization/delay in mobilization as per order shall also be specified in the specifications. The penalty shall generally be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.
- iv) Wherever supervision is in the scope of MR, bidders shall provide additional BG of an amount equal to the per diem charges for the number of days considered for evaluation over and above 10% PBG to cover compensation for delay in mobilising the erection/ commissioning personnel.

This BG will be released to the bidder upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with PBG and shall be valid up to six months which shall be extended based on the request by BPCL.

15.1.7 Transportation Charges

100% within 4 weeks after receipt of materials at site.

15.1.8 GENERAL:

- i) Excise duty, Service Tax and VAT shall be released only on receipt of Cenvatable / Vatable copy of corresponding Invoice enabling availing of input credits by BPCL.
- ii) No initial advance payment along with order shall be made by the Owner against supplies as well as services (i.e., transportation, erection, site work etc.). If a supplier insists on the same, the offer shall be rejected.
- iii) Bank Guarantee(s) shall be issued through Scheduled commercial bank in India/ Indian Branch of foreign Bank, directly to BPCL as per pro-forma enclosed and Vendor shall enclose copy of the same along with invoice.
- iv) All payments shall be released within 30 days of receipt of invoice and all requisite documents, complete in all respects.
- v) Billing schedule shall be submitted to EIL & BPCL by the vendor for approval within 30 days from the date of Purchase order wherever specified in the purchase order. No payment against pro-rata dispatch shall be made without approval of billing schedule.

15.2 PAYMENT TERMS (FOREIGN BIDDERS):

15.2.1 Where The Material Requisition Is Only For Supply Of Materials

100% of FOB order value shall be paid through an irrevocable letter of credit against submission of Shipping Documents. The letter of credit shall be established only on receipt of acceptance of BPCL's Fax of acceptance/Order along with submission of 15% Bank Guarantee (10% Towards Performance & 5% Price Reduction due to delay in delivery) valid up to 3 months (claim Period) beyond the Guarantee period.

15.2.2 Where The Material Requisition Is Only For Supply Of Materials along with PGTR at Site

i) Supply:

90% of FOB order value of supply amount shall be paid through an irrevocable letter of credit against submission of Shipping Documents. The letter of credit shall be established only on receipt of acceptance of BPCL's Fax of acceptance/Order along with submission of 15% Bank Guarantee (10% Towards Performance & 5% Price Reduction due to delay in delivery) valid up to 3 months (claim Period) beyond the Guarantee period.

In case Performance Bank Guarantee Test Run (PGTR) is required as per MR, 10% of supply amount shall be released by wire transfer against successful demonstration of Performance Guarantee Test Run & submission of Invoices duly certified by Site-In-charge or 6 months from receipt of material at site (against BG of equivalent amount valid for 1 year), whichever is earlier. However in the event of delay in conducting the performance guarantee test run, the bidder is not relieved of his responsibility to carry out the performance guarantee test run. No additional payment shall be made for visit of supplier to site for demonstrating the PGTR, if the same is included in the scope of supplier.

ii) Performance Guarantee Test Run (PGTR):

Payment of PGTR shall be released only after successful demonstration of PGTR & submission of Invoices duly certified by Site-In-charge at BPCL site.

15.2.3 Where The Material Requisition Calls For Supply Of Material And Erection Or Site Work In The Scope Of Supplier And Package Items.

15.2.3.1 SUPPLY PAYMENT:

- i) **90%** of FOB Supply value payment through an irrevocable letter of credit against submission of Shipping Documents.
- ii) Balance **10%** of FOB Supply value through direct wire transfer through normal banking channels on completion of Site work including Installation, Commissioning and Site Acceptance Test/PGTR and handing over to the Owner Test as per purchase order against submission of final documents of certificate by EIL/BPCL for completion of activity or 6 months from receipt of material at site (against BG of equivalent amount valid for 1 year or such extended period as may be required), whichever is earlier. However in the event of delay in conducting the Site Acceptance Test/PGTR, the bidder is not relieved of his responsibility to carry out the Site Acceptance Test/PGTR. No additional payment shall be made for visit of supplier to site for Site Acceptance Test/PGTR.

15.2.3.2 SITE WORK PAYMENT:

100% of amount for site work shall be paid through direct wire transfer on pro-rata basis as per normal banking channels on completion of Site work including Installation, Commissioning and Site Acceptance Test and handing over to the Owner as per purchase order against submission of final documents of certificate by EIL/BPCL for completion of activity.

The letter of credit shall be established only on receipt of acceptance of BPCL's Fax of acceptance/Order along with submission of Bank Guarantee (Towards Performance & Price Reduction due to delay in delivery/completion) for 15% of Total order Value (Supply plus Site work) valid up to 3 months (claim Period) beyond the Guarantee period.

15.2.4 Payment of Per Diem Charges for Supervision of Erection, Testing & Commissioning

- i) In case Performance Guarantee Test Run is not applicable, 100% of invoice amount through direct wire transfer as per normal banking channels on completion of supervision activity on submission of Invoice, time sheet duly certified by Site-In-charge at BPCL site, legible copy of visa (showing date of entry and date of exit from India) and passport (showing Name and Nationality of the Personnel). Payment shall be made after deducting income tax at applicable rate.
- ii) In case Performance Guarantee Test Run is applicable, 100% of invoice amount shall be made only against commissioning /demonstration of Performance Guarantee Test Run. In case PGTR not performed within 6 months from erection & testing of material at site, payment of supervision for erection & testing shall be released against submission of BG of equivalent amount valid for 1 year. However in the event of delay in conducting the performance guarantee test run, the bidder is not relieved of his responsibility to supervision of commissioning / carry out the performance guarantee test run. No additional payment shall be made for visit of supplier to site for demonstrating the performance, if the same is included in the scope of supplier.
- iii) Where erection/testing/commissioning supervision, commissioning assistance is required as per RFQ Documents / Material requisition, penalty for non mobilization/delay in mobilization as per order shall be applicable. The penalty shall generally be 1.5 times the per diem rate for each day of delay of reporting to site and shall be in addition to price reduction for delayed delivery.
- iv) Bidders shall also provide additional BG of an amount equal to the per diem charges for the number of days considered for evaluation, over and above 10% PBG to cover compensation for delay in mobilizing the erection/ commissioning personnel. This BG will be released to the bidder upon the erection/ commissioning personnel reporting at site. This BG shall be furnished along with PBG and shall be initially valid up to six months which shall be extended based on the request by BPCL.
- v) Payment of supervision services shall be made through direct wire transfer as per normal banking channels on completion of supervision activity on submission of Invoice, time sheet duly certified by Site-In-charge at BPCL site, legible copy of visa (showing date of entry and date of exit from India) and passport (showing Name and Nationality of the Personnel). Payment shall be made after deducting income tax at applicable rate.

15.2.5 GENERAL:

- i) No initial advance payment along with order shall be made by Owner against supplies as well as services (i.e., transportation, erection, site work etc.). If a supplier insists on the same, the offer shall be rejected.
- ii) All Bank Guarantee(s) shall be issued through Scheduled Commercial bank in India or Indian branch of Foreign Bank as per pro-forma enclosed. All Bank Guarantees will be issued directly to BPCL by the bank.
- iii) All bank charges and stamp duties payable outside India in connection with payments shall be borne by the Supplier. All bank charges and stamp duties payable in India shall be borne by BPCL except L/C amendment charges for delays in delivery and confirmation charges for confirmed L/C (if required to seller) shall be borne by Supplier.
- iv) Billing schedule shall be submitted to EIL & BPCL by the vendor for approval within 30 days from the date of Purchase order wherever specified in the purchase order. No part shipment shall be made without approval of billing schedule.

15.2.6 TRANSPORTATION

In case of Purchase order placed on FOB Port of Exit basis, ocean transportation from FOB Port of Exit to Designated Indian Port shall be arranged by BPCL through their nominated freight forwarder. Bidder shall arrange handing over the material to BPCL freight forwarder at the designated port of exit.

In cases Purchase order placed on CFR basis, BPCL reserves the right to ask the bidder to arrange shipment through the bidder's own freight forwarder at the quoted freight rates & full Ocean Freight charges shall be released on receipt of despatch/ shipping documents along with Documents pertaining to Ocean Freight.

15.3 FOR TRAINING

15.3.1 AT SITE: 100% payment against final bill to be submitted by seller after completion of training duly certified by site-in-charge.

15.3.2 AT SUPPLIER'S WORKS: 100% payment against final bill to be submitted by seller after completion of training duly certified by purchaser.

15.4 ANNUAL MAINTAINANCE CONTRACT:

100% payment shall be paid at the end of each quarter of the contractual year against quarterly progressive bills to be submitted by Seller duly certified by Site-in-Charge.

Note:

- a) In case of Foreign Bidder if Ocean Transportation is in the Scope of the Bidder (order is placed on CFR basis), full Ocean Freight charges shall be released on receipt of despatch/ shipping documents along with Documents pertaining to Ocean Freight.
- b) The Invoice shall be made after adjusting:
Price Reduction for delay in Delivery pursuant to subject clause mentioned in SPC & GPC, if applicable.
- c) For Indian Bidder, 100% taxes and duties shall be released against despatch documents subject to furnishing proper invoices issued in accordance with relevant rules for enabling BPCL to avail CENVAT benefits. Further, the amount of excise duty, service tax, Central sales Tax, VAT shall only be payable against submission of CENVATABLE / VATABLE invoices subject to maximum amount quoted in the offer and in case of non-submission, will not be paid. In case purchaser is unable to avail CENVAT benefit based on the documents furnished by the seller, then such amount of taxes & duties shall not be reimbursed for which cenvat benefit was considered for evaluation..

16. DEDUCTION AT SOURCE

16.1. Purchaser will release the payment to the Supplier after effecting deductions as per applicable law in force. Purchaser will release the payment to the Supplier after effecting deductions as per applicable

law in force. Owner shall deduct VAT on Works Contract as applicable & shall furnish TDS certificate to supplier.

16.2. Purchaser will release payments to the Supplier after offsetting all dues to the Purchaser payable by the Supplier under the Contract.

17. PAYING AUTHORITY:

Bharat Petroleum Corporation Limited
Refinery Mahul
Mumbai – 400074

Purchaser's Bankers:

Shall be provide along with detailed Purchase Order.

18. ORIGIN OF GOODS:

A certificate issued by relevant Chambers of Commerce to this effect shall form part of shipping documents

19. QUALITY ASSURANCE / QUALITY CONTROL

19.1. The Supplier shall prepare a detailed quality assurance plan for the execution of contract for various facilities, which will be mutually discussed and agreed to.

19.2. The Supplier shall establish document and maintain an effective quality assurance system outlined in recognised codes

19.3. The purchaser / consultant, while agreeing to a quality assurance plan shall mark the stages where they would like to witness the tests; review any or all stages of work at shop as deemed necessary for quality assurance.

20. FRAUDULENT PRACTICES

20.1. The OWNER requires that Bidders/Vendors/Contractors observe the highest standard of ethics during the award/execution of Contract. "Fraudulent Practice" means a misrepresentation of facts in order to influence the award of a Contract to the detriment of the OWNER, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the OWNER of the benefits of free and open competition.

20.2. The OWNER will reject a bid for award if it determines that the bidder recommended for award has engaged in fraudulent practices in competing for the Contract in question.

Bidder is required to furnish the complete and correct information/ documents required for evaluation of their bids, if the information/ documents forming basis of evaluation is found to be false/ forged, the same shall be considered adequate ground for rejection of bids and forfeiture of Earnest Money Deposit.

20.3. In case, the information/ document furnished by the Bidder/vendor/Contractor forming basis of evaluation of his bid is found to be false/ forged after the award of the contract, OWNER shall have full right to terminate the contract and get the remaining job executed at the risk & cost of such Bidder/Vendor/ Contractor without any prejudice to other rights available to OWNER under the contract such as forfeiture of CPBG/Security Deposit, withholding of payment etc.

20.4. In case, this issue of submission of false document comes to the notice after execution of work, OWNER shall have full right to forfeit any amount due to the Bidder/Vendor/Contractor along with forfeiture of CPBG/Security Deposit furnished by the Bidder/Vendor/Contractor.

20.5. Further, such Bidder/Vendor/ Contractor shall be put on Blacklist/ Holiday/Negative List of OWNER debarring them from future business with OWNER and EIL for a time period, as per the prevailing policy of OWNER and EIL.

21. STATUTORY APPROVAL:

Approval from any authority (i.e. Inspector of Boiler, Electrical Inspector, and Municipal Corporation of Greater Mumbai (MCGM) etc.) required as per statutory rules and regulations of Central / State Government shall be the responsibility of Contractor agency. For MCGM approval, following is included in contractor's scope:

- (1) IOD from MCGM,
- (2) Commencement certificate for beginning of the job from MCGM,
- (3) Approval for layouts,
- (4) Occupation certificate and
- (5) Building completion certificate from MCGM.

The application on behalf of the OWNER for submission to relevant authorities along with copies of required certificate complete in all respects shall be prepared and submitted by the Contractor agency well ahead of time so that the actual construction / commissioning of the work is not delayed for want of the approval / inspection by concerned authorities. The Contractor agency shall arrange the inspection of the works by the authorities and necessary coordination and liaison work in this respect shall be the responsibility of the Contractor agency. Reimbursement by the OWNER of the statutory fees payable by Contractor agency (as per advance approval of OWNER) may be provided for, subject to submission of receipt.

The Contractor agency shall carry out any change / addition required to meet the requirements of the statutory authorities, within the quoted rates. The inspection and acceptance of the work by statutory authorities shall be the responsibility of the Contractor agency.

List of all documents, drawings, forms, affidavits etc required for the approvals shall be submitted by the contractor agency.

22. PRICE REDUCTION SCHEDULE (PRS)

The clause no.20.3.1 of General Purchase Conditions (GPC) stands modified to the extent as under:

In 2nd para: In the case of imports, the contractual delivery date shall be considered from the date of issue of FOA.

In 3rd para: In case of the shipment taking place on “ Cash against document”, the contractual delivery date shall be considered from the date of issue of FOA.

23. FINANCIAL DETERRENT FOR VIOLATION OF HSE:

The financial deterrent / penalty for violation of HSE mentioned elsewhere in the RFQ documents shall stand replaced as per Annexure-I enclosed.

24. LIEN

Supplier shall ensure that the Scope of Supply supplied under the Agreement shall be free from any claims of title/liens from any third party. In the event of such claims by any party, Supplier shall at his own cost defend, indemnify and hold harmless Purchaser or its authorised representative from such disputes of title/liens, costs, consequences etc.

25. SETTLEMENT OF DISPUTE BETWEEN GOVT. DEPT./ PUBLIC SECTOR UNDERTAKINGS

In the event of any disputes or differences between the CONTRACTOR and the OWNER, if the CONTRACTOR is a Government department, a Government company or an undertaking in the public sector, then in suppression of the provisions of Section 9 of the General Conditions of Contract, stands modified to following extent:

“In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.”

26. POST ORDER CORRESPONDENCE

All post-order correspondence shall be addressed to:

a) Deputy General Manager (Inspection)
M/s Engineers India Limited
EI Annexe 1st Floor,
1, Bhikaji Cama place
New Delhi – 110066, India

With a copy to:

b) Project Manager (BPCL- Project)
M/s Engineers India Limited
EIB, 4th Floor,
1, Bhikaji Cama place
New Delhi – 110066, India

c) Mr. Sankar M., Project Manager
M/s Bharat Petroleum Corporation Limited,
Refinery Division, Administration Building,
Corridor Road, Mahul, Mumbai – 400074
Contact No.: 022-25533320
e-mail: sankarm7620@bharatpetroleum.in

27. INDEPENDENT EXTERNAL MONITORS:

Bidders may raise disputes/complaints, if any, with the nominated Independent External Monitor, mentioned below:

T.S.KRISHNAMURTHY	Flat NO.9, Gokul Tower Next to Mookambika Complex No.7, C P Ramaswamy Road Alwarpet Chennai – 600 018	044-24993077 044-24993079 Mobile – 9444999555
SHRI JANKI BALLABH	Flat No. 605, Varsova Vainayak CO-OP. HSG. SOC. HSG Plot No. 8, Near Versova Telephone Exchange, Versova, Andheri (West), Mumbai – 400 053	022 – 2635 3456 (RES) Mobile – 9833363066

28. PART ORDER/REPEAT ORDER

28.1. Vendor hereby agrees to accept part order at Owner's option without any limitation whatsoever and also accept repeat order during a period of 12 months after placement of purchase order at the same unit prices, terms and conditions.

29. BID VAILIDTY

29.1. The bid shall remain valid for acceptance for period mentioned in RFQ from the final bid due date. Owner/EIL shall reject a bid valid for a shorter period being non-responsive.

29.2. In exceptional circumstances, prior to expiry of the original bid validity period, the Owner/EIL may request that the bidder extend the period of validity for a specified additional period. The requests and the responses thereto shall be made in writing (by fax/post/e-mail).

29.3. The validity of recommended spares (If applicable as per MR) for 2 years operation and maintenance will be 12 months beyond the validity of bid.

Annexure – 1

E-TENDERING METHODOLOGY

Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal (URL: <http://eprocure.gov.in>) only, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More detailed information useful for submitting online bids on the CPP Portal may be obtained at:

<https://eprocure.gov.in/eprocure/app> .

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link “Click here to Enroll” on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process and submit in EIL tender portal for updation of records (<http://tenders.eil.co.in>) . These details would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (DSC) (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Foreign Bidders have to refer “DSC details for foreign Bidders” for Digital signature Certificates requirements which comes under Download Tab at <https://eprocure.gov.in/eprocure/app> and the remaining part is same as above and below.
- 6) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 7) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, the same can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.

- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) To avoid Network congestion, Bidder is recommended to upload file size of up to Maximum 35 MB per part. However, in case file size exceeds 35 MB, bidder may compress the files by scanning with 75 dpi setting as per s.no 4 below and can use additional 25 MB space ("My Documents") provided to the bidder as per s.no 5 below.
- 4) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document and generally, they can be in PDF / XLS / RAR / DWF formats. **Bid documents may be scanned with 75 dpi with black and white option. However, Price Schedule / SOR shall be strictly in RAR format without altering any contents of the formats uploaded by EIL in their Bidding Document.**
- 5) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the Tender Processing Section, with in 7 calendar days of the date of Unpriced bid opening. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) A Price Bid format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the

Price Bid file, open it and complete the cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the Price Bid file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

RETENDER

- 1) **Please note that if Tender has been retendered, than it is mandatory for the bidder to submit their offer again on CPP Portal.**

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 3070 2232.

MATERIAL REQUISITION (TOP SHEET)

**ITEM: VALVES -
GATE, GLOBE, CHECK -
(FORGED & CAST)**

Issue Status (Fill 1 or 2 from below in this bracket) []

1. -> Entire Requisition Issued
2. -> Only Revised Pages are Issued

MR Category : I

DOCUMENT NUMBER

(Always quote this document number given below as reference)

A269	000	WB	MR	3314	A	07/07/2014	16/43
JOB NO.	UNIT/ AREA	COST CENTRE	DOC CODE	SR.NO.	REV	DATE	ORIGINATING DIVN./DEPT
VENDOR CODE		VENDOR NAME					

Material to be delivered at (job site) BPCL, MAHUL MUMBAI within the delivery period specified in the "Request For Quotation" (RFQ).

Notes :

1. This page is a record of all the Revisions of this Requisition.
2. The nature of the Revision is briefly stated in the "Details" column below, the Requisition in its entirety shall be considered for contractual purposes.
3. When a Requisition is revised, only the revised pages may be issued.
4. When revised pages only are issued, the revised pages shall form part of the original Requisition. The original requisition alongwith the revised pages shall be considered in its entirety for contractual purposes.
5. Vendors are required to quote strictly as per technical specifications / notes stipulated in the material requisition. The offers with deviations are likely to be summarily rejected.

REV.	DATE	BY	CHK.	APPD.	DETAILS
A	07/07/2014	AN	AAB	MI	ISSUED FOR BIDS

This is a system generated approved document and does not require signature



LIST OF ATTACHMENT

This drawing and design it covers are property of ENGINEERS INDIA LIMITED. They are merely loaned on the borrower's express agreement that it will not be reproduced, copied, exhibited nor used except in the limited way and private use permitted by written consent given by the lender to the borrower for the intended use. EIL-1641-515 Rev.0 A4-210x297

SR. NO	DOCUMENT TITLE	DOCUMENT NO.	REVISION	
			NO.	DATE
1	TECHNICAL NOTES FOR VALVES	6-44-0052	6	04/08/2010
2	INSPECTION AND TEST PLAN FOR VALVES	6-81-0004	5	17/06/2013
3	STANDARD SPECIFICATION FOR POSITIVE MATERIAL IDENTIFICATION (PMI) AT SUPPLIER'S WORK	6-81-0001	2	20/10/2011
4	SPECIFICATION FOR QUALITY MANAGEMENT SYSTEM REQUIREMENTS FROM BIDDERS	6-78-0001	0	04/06/2009
5	SPECIFICATION FOR DOCUMENTATION REQUIREMENTS FROM SUPPLIERS	6-78-0003	0	04/06/2009
6	ADDITIONAL TECHNICAL REQUIREMENT FOR VALVES	A269-000-16-43-ATR-3314	0	10/06/2014
7	SPECIFICATION FOR BY-PASS PIPING, FITTINGS AND VALVES	A269-6-44-0052-A2	0	12/09/2012
8	VALVESHEET NO.51001	A269-6-44-06-51001	5	30/06/2009
9	VALVESHEET NO.51002	A269-6-44-06-51002	5	30/06/2009
10	VALVESHEET NO.51007	A269-6-44-06-51007	7	30/06/2009
11	VALVESHEET NO.51011	A269-6-44-06-51011	6	30/06/2009
12	VALVESHEET NO.51013	A269-6-44-06-51013	6	30/06/2009
13	VALVESHEET NO.51036	A269-6-44-06-51036	6	30/06/2009
14	VALVESHEET NO.51045	A269-6-44-06-51045	5	30/06/2009
15	VALVESHEET NO.51066	A269-6-44-06-51066	5	30/06/2009
16	VALVESHEET NO.51080	A269-6-44-06-51080	6	30/06/2009
17	VALVESHEET NO.51093	A269-6-44-06-51093	0	15/09/2011
18	VALVESHEET NO.51096	A269-6-44-06-51096	0	15/09/2011
19	VALVESHEET NO.51098	A269-6-44-06-51098	0	15/09/2011
20	VALVESHEET NO.51301	A269-6-44-06-51301	5	30/06/2009
21	VALVESHEET NO.51302	A269-6-44-06-51302	5	30/06/2009
22	VALVESHEET NO.51307	A269-6-44-06-51307	7	30/06/2009
23	VALVESHEET NO.51366	A269-6-44-06-51366	5	30/06/2009
24	VALVESHEET NO.51384	A269-6-44-06-51384	6	30/06/2009
25	VALVESHEET NO.51396	A269-6-44-06-51396	1	25/07/2013
26	VALVESHEET NO.51401	A269-6-44-06-51401	5	30/06/2009
27	VALVESHEET NO.51402	A269-6-44-06-51402	5	30/06/2009
28	VALVESHEET NO.51413	A269-6-44-06-51413	5	30/06/2009
29	VALVESHEET NO.51496	A269-6-44-06-51496	0	15/09/2011



ENGINEERS INDIA LIMITED
NEW DELHI

Project: CDU-4
Client: BPCL

Requisition No. **A269-000-WB-MR-3314** Rev **A**
Page 2 of 7

LIST OF ATTACHMENT

SR. NO	DOCUMENT TITLE	DOCUMENT NO.	REVISION	
			NO.	DATE
30	VALVESHEET NO.51501	A269-6-44-06-51501	5	30/06/2009
31	VALVESHEET NO.51502	A269-6-44-06-51502	5	30/06/2009
32	VALVESHEET NO.52001	A269-6-44-06-52001	5	30/06/2009
33	VALVESHEET NO.52002	A269-6-44-06-52002	5	30/06/2009
34	VALVESHEET NO.52080	A269-6-44-06-52080	5	30/06/2009
35	VALVESHEET NO.52311	A269-6-44-06-52311	5	30/06/2009
36	VALVESHEET NO.52313	A269-6-44-06-52313	5	30/06/2009
37	VALVESHEET NO.52366	A269-6-44-06-52366	5	30/06/2009
38	VALVESHEET NO.52384	A269-6-44-06-52384	6	30/06/2009
39	VALVESHEET NO.52401	A269-6-44-06-52401	5	30/06/2009
40	VALVESHEET NO.52402	A269-6-44-06-52402	5	30/06/2009
41	VALVESHEET NO.52413	A269-6-44-06-52413	5	30/06/2009
42	VALVESHEET NO.53001	A269-6-44-06-53001	5	30/06/2009
43	VALVESHEET NO.53013	A269-6-44-06-53013	6	30/06/2009
44	VALVESHEET NO.53413	A269-6-44-06-53413	5	30/06/2009
45	VALVESHEET NO.53501	A269-6-44-06-53501	5	30/06/2009

MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U. RATE	TOT.VALUE	CDD
<i>Item Description: VLV.GATE, SHEET 51001</i>						
1	51001ZZZ004ZZZZZZ	0.5 INCH	172 NOS			
2	51001ZZZ005ZZZZZZ	0.75 INCH	272 NOS			
3	51001ZZZ006ZZZZZZ	1.0 INCH	64 NOS			
<i>Item Description: VLV.GATE, SHEET 51002, IBR</i>						
4	51002ZZZ104ZZZZZZ	0.5 INCH	262 NOS			
5	51002ZZZ105ZZZZZZ	0.75 INCH	105 NOS			
6	51002ZZZ108ZZZZZZ	1.5 INCH	4 NOS			
<i>Item Description: VLV.GATE, SHEET 51007</i>						
7	51007ZZZ005ZZZZZZ	0.75 INCH	4 NOS			
<i>Item Description: VLV.GATE, SHEET 51011, NACE</i>						
8	51011ZZZ204ZZZZZZ	0.5 INCH	16 NOS			
<i>Item Description: VLV.GATE, SHEET 51013</i>						
9	51013ZZZ004ZZZZZZ	0.5 INCH	101 NOS			
10	51013ZZZ0061ZZZZZ	1.0 INCH, LOCK OPEN	3 NOS			
11	51013ZZZ0081ZZZZZ	1.5 INCH, LOCK OPEN	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51036</i>						
12	51036ZZZ004ZZZZZZ	0.5 INCH	238 NOS			
13	51036ZZZ005ZZZZZZ	0.75 INCH	38 NOS			
14	51036ZZZ006ZZZZZZ	1.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51045</i>						
15	51045ZZZ004ZZZZZZ	0.5 INCH	13 NOS			
16	51045ZZZ005ZZZZZZ	0.75 INCH	26 NOS			
<i>Item Description: VLV.GATE, SHEET 51066</i>						
17	51066ZZZ004ZZZZZZ	0.5 INCH	10 NOS			
18	51066ZZZ0051ZZZZZ	0.75 INCH, LOCK OPEN	3 NOS			
19	51066ZZZ006ZZZZZZ	1.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51080</i>						
20	51080ZZZ004ZZZZZZ	0.5 INCH	16 NOS			
21	51080ZZZ005ZZZZZZ	0.75 INCH	14 NOS			
22	51080ZZZ008ZZZZZZ	1.5 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51093</i>						
23	51093ZZZ004ZZZZZZ	0.5 INCH	26 NOS			
24	51093ZZZ005ZZZZZZ	0.75 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51096</i>						
	ENGINEERS INDIA LIMITED NEW DELHI	Project: CDU-4 Client: BPCL	Requisition No.	Rev		
						A269-000-WB-MR-3314	A
Page 4 of 7						

MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U. RATE	TOT.VALUE	CDD
25	51096ZZZ005ZZZZZ	0.75 INCH	4 NOS			
<i>Item Description: VLV.GATE, SHEET 51098</i>						
26	51098ZZZ004ZZZZZ	0.5 INCH	9 NOS			
<i>Item Description: VLV.GATE, SHEET 51301</i>						
27	51301ZZZ0111ZZZZZ	3.0 INCH, LOCK OPEN	5 NOS			
28	51301ZZZ0161ZZZZZ	8.0 INCH, LOCK OPEN	2 NOS			
<i>Item Description: VLV.GATE, SHEET 51302, IBR</i>						
29	51302ZZZ1161ZZZZZ	8.0 INCH, LOCK OPEN	2 NOS			
<i>Item Description: VLV.GATE, SHEET 51307</i>						
30	51307ZZZ009ZZZZZ	2.0 INCH	4 NOS			
31	51307ZZZ016ZZZZZ	8.0 INCH	1 NOS			
32	51307ZZZ024ZZZZZ	24.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51366</i>						
33	51366ZZZ009ZZZZZ	2.0 INCH	1 NOS			
<i>Item Description: VLV.GATE, SHEET 51384</i>						
34	51384ZZZ015ZZZZZ	6.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51396</i>						
35	51396ZZZ009ZZZZZ	2.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51401</i>						
36	51401ZZZ017ZZZZZ	10.0 INCH	2 NOS			
<i>Item Description: VLV.GATE, SHEET 51402, IBR</i>						
37	51402ZZZ109ZZZZZ	2.0 INCH	13 NOS			
38	51402ZZZ111ZZZZZ	3.0 INCH	3 NOS			
39	51402ZZZ117ZZZZZ	10.0 INCH	5 NOS			
<i>Item Description: VLV.GATE, SHEET 51413</i>						
40	51413ZZZ009ZZZZZ	2.0 INCH	3 NOS			
<i>Item Description: VLV.GATE, SHEET 51496</i>						
41	51496ZZZ013ZZZZZ	4.0 INCH	14 NOS			
<i>Item Description: VLV.GATE, SHEET 51501</i>						
42	51501ZZZ009ZZZZZ	2.0 INCH	8 NOS			
<i>Item Description: VLV.GATE, SHEET 51502, IBR</i>						
43	51502ZZZ109ZZZZZ	2.0 INCH	1 NOS			
44	51502ZZZ111ZZZZZ	3.0 INCH	2 NOS			
	ENGINEERS INDIA LIMITED NEW DELHI	Project: CDU-4 Client: BPCL	Requisition No.	Rev		
	A269-000-WB-MR-3314		A			
Page 5 of 7						

MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U. RATE	TOT.VALUE	CDD
<i>Item Description: VLV.GLOBE, SHEET 52001</i>						
45	52001ZZZ006ZZZZZZ	1.0 INCH	26 NOS			
46	52001ZZZ008ZZZZZZ	1.5 INCH	7 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52002, IBR</i>						
47	52002ZZZ108ZZZZZZ	1.5 INCH	15 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52080</i>						
48	52080ZZZ004ZZZZZZ	0.5 INCH	3 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52311, NACE</i>						
49	52311ZZZ209ZZZZZZ	2.0 INCH	2 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52313</i>						
50	52313ZZZ009ZZZZZZ	2.0 INCH	2 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52366</i>						
51	52366ZZZ015ZZZZZZ	6.0 INCH	1 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52384</i>						
52	52384ZZZ018ZZZZZZ	12.0 INCH	1 NOS			
53	52384ZZZ020ZZZZZZ	16.0 INCH	1 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52401</i>						
54	52401ZZZ011ZZZZZZ	3.0 INCH	3 NOS			
55	52401ZZZ018ZZZZZZ	12.0 INCH	1 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52402, IBR</i>						
56	52402ZZZ111ZZZZZZ	3.0 INCH	1 NOS			
57	52402ZZZ113ZZZZZZ	4.0 INCH	1 NOS			
58	52402ZZZ117ZZZZZZ	10.0 INCH	1 NOS			
<i>Item Description: VLV.GLOBE, SHEET 52413</i>						
59	52413ZZZ009ZZZZZZ	2.0 INCH	3 NOS			
<i>Item Description: VLV.CHECK, SHEET 53001</i>						
60	53001ZZZ005ZZZZZZ	0.75 INCH	13 NOS			
61	53001ZZZ006ZZZZZZ	1.0 INCH	4 NOS			
<i>Item Description: VLV.CHECK, SHEET 53013</i>						
62	53013ZZZ006ZZZZZZ	1.0 INCH	4 NOS			
<i>Item Description: VLV.CHECK, SHEET 53413</i>						
63	53413ZZZ009ZZZZZZ	2.0 INCH	4 NOS			
<i>Item Description: VLV.CHECK, SHEET 53501</i>						
	ENGINEERS INDIA LIMITED NEW DELHI	Project: CDU-4 Client: BPCL	Requisition No.	Rev		
	A269-000-WB-MR-3314		A			
Page 6 of 7						

MR ATTACHMENT

SR.NO.	ITEMCODE	DETAIL DESCRIPTION	QTY.	U. RATE	TOT.VALUE	CDD
64	53501ZZZ017ZZZZZZ	10.0 INCH	1 NOS			

This drawing and design it covers are property of ENGINEERS INDIA LIMITED. They are merely loaned on the borrower's express agreement that it will not be reproduced, copied, exhibited nor used except in the limited way and private use permitted by written consent given by the lender to the borrower for the intended use. EIL-1641-515 Rev.0 A4-210x297
EIL - 588 A - 216 x 279



ENGINEERS INDIA LIMITED
NEW DELHI

Project: CDU-4
Client: BPCL

Requisition No. Rev

A269-000-WB-MR-3314

Page 7 of 7

वाल्वों के लिए तकनीकी टिप्पणियाँ

TECHNICAL NOTES FOR VALVES

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
6	04.08.10	REVISED AND ISSUED AS STANDARD SPECIFICATION	<i>Patel</i> RN	<i>ATD</i> ATD	<i>SC</i> SC	<i>ND</i> ND
5	04.07.08	REVISED AND ISSUED AS STANDARD SPECIFICATION	RN	SC	DM	VC
4	15.11.00	REVISED AND ISSUED AS STANDARD SPECIFICATION	RN	BRB	NS	MI
3	04.04.94	ISSUED IN LINE WITH GENERAL REVISION	AKG	NS	GRR	AS
2	09.06.93	ISSUED AS GENERAL REVISION	AKG	BPV	GRR	
<i>Approved by</i>						

Abbreviations:

AARH :	Arithmetic Average Roughness Height
ANSI :	American National Standards Institute
API :	American Petroleum Institute
ASME :	American Society of Mechanical Engineers
ASTM :	American Society for Testing & Materials
BGO :	Bevel Gear Operator
BHN :	Brinnel Hardness Number
BIS :	Bureau of Indian Standards
BS :	British Standard
BVIS :	Bureau Veritas Industrial Services
BW :	Butt Weld
CAT :	Category
CEIL :	Certification Engineers International Limited
CS :	Carbon Steel
DFT :	Dry Film Thickness
DNV :	Det Norske Veritas
DP :	Dye-Penetrant
IBR :	Indian Boiler Regulations
IGC :	Inter Granular Corrosion
IS :	Indian Standard
LT :	Low Temperature
LTCS :	Low Temperature Carbon Steel
MOV :	Motor Operated Valve
MP :	Magnetic Particle
MR :	Material Requisition
NDT :	Non Destructive Testing
PMI :	Positive Material Identification
PO :	Purchase Order
PR :	Purchase Requisition
RFQ :	Request for Quotation
SCRD :	Screwed
SS :	Stainless Steel
SW :	Socket Weld

Piping Standards Committee

Convenor : Mr. S Chanda

Members :

- Mr V K Bhatli
- Mr A T Dharmik
- Mr P K Bali
- Mr R Nanda
- Mr L B Ajwani
- Mr D Khare (HMTD)
- Mr P P Lahiri/ S Ghoshal (SMMS)
- Mr G K Iyer (Const.)
- Mr R K Bhandari (Proj)

CONTENTS

1.0	GENERAL	4
2.0	DOCUMENTATION	4
3.0	DESIGN AND CONSTRUCTION	5
4.0	OPERATION	8
5.0	INSPECTION AND TESTING	9
6.0	RADIOGRAPHY OF CAST VALVES	10
7.0	IBR CERTIFICATION	10
8.0	MARKING	11
9.0	DESPATCH	11
10.0	ATTACHMENTS	11
11.0	REFERENCES	12

1.0 GENERAL

- 1.1 Vendor shall supply valves in accordance with the valve specification sheets along with auxiliaries, if any, such as gear operator, bypasses, drains, locking arrangements etc. wherever specified in the specification sheets, subject notes and other enclosures to the material requisition (MR).
- 1.2 Vendor shall quote in strict accordance with the valve data / specification sheets, subject technical notes and all other enclosures to the MR. For 'Cat-I valves', no deviations whatsoever shall be accepted. Post Order Waiver/ Deviation format 5-0000-0180-F1 as mentioned in Cl. 5.18 of specification for Quality Management System Requirements from Bidder (6-78-0001) is not applicable for Cat-I valves. For Cat-II Valves, if exceptions/ deviations become absolutely must, the same shall be requested as explained in clause 2.1.6 giving reasons for seeking such exceptions/ deviations.
- 1.3 All codes and standards for manufacture, testing, inspection etc. shall be of latest editions as on issue date of RFQ.

2.0 DOCUMENTATION

- 2.1 For 'Cat-I' valves no documents shall be submitted with the offer. However, for 'Cat-II' valves, vendor shall submit the following documents with the offer:
 - 2.1.1 Manufacturer's complete descriptive and illustrative catalogue / literature.
 - 2.1.2 Detailed dimensioned cross section drawing with parts / material lists, weight etc.
 - 2.1.3 Drawings for valves with accessories like gear operator, hydraulic / pneumatic operator, motor, extension bonnet, extended stems with stands, bypass etc. giving major salient dimensions.
 - 2.1.4 One copy of the valve specification sheets signed as "Accepted" by the manufacturer. Deviations, if any shall be marked as applicable on the valve specification sheet.
 - 2.1.5 If the valve is regretted or has no deviation, the manufacturer shall write clearly on valve specification sheets as "Regret" or "No Deviation".
 - 2.1.6 For 'CAT-II' valves, if there is any deviation, the same shall be listed clausewise.
 - 2.1.7 On failure to submit documents as specified in clauses 2.1.1 to 2.1.6 above, the offer is likely to be rejected.
- 2.2 The following documents shall be submitted after placement of the order:
 - 2.2.1 For 'Cat-II' valves, Vendor shall submit for review drawings mentioned in clauses 2.1.2 & 2.1.3 before start of manufacture. No other drawings shall be submitted for review.
 - 2.2.2 Test report shall be supplied for all mandatory tests as per the applicable code. Test reports shall also be furnished for any supplementary tests as specified in clauses 3.13, 3.14 & 3.15.
 - 2.2.3 Material test certificates (physical properties, chemical composition & heat treatment report) of the pressure containing parts shall be furnished for the valves supplied. Material test certificates for the other parts shall also be furnished for verification during inspection.

2.3 Catalogues/Drawings (6 sets) shall be furnished alongwith delivery for Purchaser's record for all categories/types of valves.

3.0 DESIGN AND CONSTRUCTION

3.1 Valve shall be designed, manufactured, tested, inspected and marked as per the manufacturing standards, design codes and standards indicated in the respective valve specification sheets. Any conflict between the requisition, enclosures, specification sheets and referred standards/codes shall be brought to the notice of the purchaser for clarifications and resolution, before proceeding with the manufacture. The purchaser's decision shall be final and binding to the vendor. The drawings submitted for review shall not include any deviations except as communicated in writing in Deviation permits. The Drawings shall be reviewed only for design and construction features.

3.2 All flanged valves shall have flanges integral (except forged valves) with the valve body. Flange face finish shall be normally specified in the valve specification sheet as 125 AARH etc. The interpretation for range of face finish shall be as follows:

Stock Finish	:	1000 μ in AARH max.
125 AARH	:	Serrations with 125 to 250 μ in AARH
63 AARH	:	32 to 63 μ in AARH

3.3 For all weld end valves with bevel end as per ASME B16.25, the contour of bevel shall be as follows:

Material	Wall Thickness	Weld Contour
Carbon Steel (Except Low Temp. Carbon Steel)	Upto 22 mm	Figure 2 Type A
	> 22 mm	Figure 3 Type A
Alloy Steel, Stainless Steel & Low Temp. Carbon Steel	Upto 10 mm	Figure 4
	> 10 mm & Upto 25 mm	Figure 5 Type A
	> 25 mm	Figure 6 Type A

Valve ends shall match thickness of the connecting pipe. Sloping of inside contour of valves shall be done wherever necessary to achieve this.

3.4 For flanged valves with ring joint flanges the hardness shall be as follows:

Flange Material	Min. Hardness of Groove (BHN)
Carbon Steel	140
1% Cr to 5% Cr	150
Type 304, 316, 321, 347	160
Type 304L, 316L	140

3.5 Following requirements for check valves shall be met over and above the valve specification sheet requirements:

3.5.1 Unless specified otherwise in the data sheet all check valves 3" & above (except in 900#, 1500# & 2500# rating) shall have a drain boss at location "G" (Refer Fig.No.1 of ASME B16.34). A tapped drain hole with plug shall be provided as per ASME B16.34. Threads shall be as per ASME B1.20.1 (Taper) NPT.

3.5.2 For heavy check valves, provisions shall be available for lifting by way of lugs, eye bolts and other such standard devices.

3.6 If an overlay weld-deposit is used for the body seat ring seating surface, the corrosion resistance of the seat ring base material shall be at least equal to the corrosion resistance of the material of the shell.

3.7 Following valve bypass requirements shall be met:

3.7.1 By-pass requirement for Gate valves shall be as follows unless otherwise mentioned.

ANSI 150 Class	On sizes 26" and above
ANSI 300 Class	On sizes 16" and above
ANSI 600 Class	On sizes 6" and above
ANSI 900 Class	On sizes 4" and above
ANSI 1500 Class	On sizes 4" and above
ANSI 2500 Class	On sizes 3" and above

3.7.2 The by-pass piping arrangement shall be such that clearance between main valve body and by-pass assembly shall be the minimum possible for layout reasons. Vendor shall follow the sketch enclosed in Specification No. 6-44-0052-A1.

3.7.3 By-pass valve shall be a globe valve. The sizes shall be as under:

On main valve \leq 4"	:	1/2"
On main valve 6" to 8"	:	3/4"
On main valve 10" & above	:	1"

The by-pass piping, fittings and valve tag numbers shall be as specified in Specification No. 6-44-0052-A2.

3.7.4 Vendor shall supply the by-pass valve duly tested and fitted to the main valve. Valves with by-pass shall have the direction of flow marked on the main valve. By-pass attachment to the main valve body shall not be screwed. All fillet welds for by-pass installation shall be 100% examined by DP/MP test and Butt-weld joints shall be 100% examined by radiography.

3.8 Valve body / bonnet shall be forged / cast as specified. forgings are acceptable in place of casting but not vice-versa.

3.9 Stem shall be forged or machined from forged / rolled bar. No casting is permitted. However, integral stem of cast material is acceptable for Plug valves.

3.10 Stelliting / hardfacing by deposition, shall be minimum 1.6 mm.

3.11 Renewable seat rings shall be seal welded for valves of size 3" and above to prevent loosening in service.

3.12 For Low Temperature & Cryogenic valve requirements, refer Specification No. 6-44-0052-A3 unless otherwise specified.

3.13 For Hydrogen service valve requirements, refer Specification.No.6-44-0052-A4 unless otherwise specified.

3.14 Valves under 'NACE' category shall meet the requirements specified in MR-0103 unless otherwise specified.

3.15 For all austenitic stainless steel valves Inter Granular Corrosion (IGC) test shall be conducted as per the following:

3.15.1 ASTM A262 Practice 'B' with acceptance criteria of '60 mils/year (max.)' for all materials - forged, rolled, wrought and casting.
Or
ASTM A262 Practice 'E' with acceptance criteria of 'No cracks as observed from 20X magnification' for all materials other than castings. 'Microscopic structure to be observed from 250X magnification' in addition.

3.15.2 When specifically asked for in MR for high temperature application of some grades of austenitic stainless steel (eg. SS309, 310, 316, 316H etc.) ASTM A262 Practice 'C' with acceptance criteria of '15 mils/year (max.)' shall be conducted.

3.15.3 For the IGC test as described in Clauses 3.15.1 & 3.15.2, two sets of samples shall be drawn from each solution annealing lot. One set shall correspond to the highest Carbon content and the other to the highest pressure rating. When testing is conducted as per practice 'E', photograph of the microscopic structure shall be submitted for record.

3.16 All types of 321 or 347 stainless steel valves shall be in a stabilised heat treated condition. Stabilising heat treatment shall be carried out subsequent to the normal solution annealing. Soaking temperature and holding time for stabilising heat treatment shall be 900°C and 4 hours respectively.

3.17 Spiral wound bonnet gaskets are to be provided with inner/outer ring except when encapsulated gaskets type body-bonnet joints are employed. Outer ring may be avoided in case of non-circular spiral wound gasket used in 150# valve provided the outermost layer of spiral touches the bolts ascertaining the centering.

3.18 Ball / Plug / Butterfly Valves

3.18.1 As a prequalification, fire safe test as per API 607 / API 6FA / BS EN ISO 10497 (Supersedes BS 6755 Part II) shall be carried out on soft seated ball, plug & butterfly valves and also on lubricated plug valves. The test shall be witnessed and certified by a third party inspection agency like Lloyds, BVIS, DNV or EIL/ CEIL unless otherwise specified. For Indian vendors inspection agency shall be EIL/ CEIL only unless otherwise specified. The vendor has to submit test certificate for the particular design of the valve offered.

3.18.2 Each valve shall be supplied with a lever / wrench except for gear operated / motor operated valves.

3.18.3 Soft-seated ball, plug & butterfly valves shall be supplied with antistatic devices.

3.18.4 Soft-seated BW / SW end ball valves shall have a 100 mm long seamless pipe nipple welded to each end of the valve. Nipples are to be welded prior to assembling Teflon seats / seals. Specifications of the nipples shall be as indicated in the MR.

3.18.5 The face-to-face dimensions of all ball valves shall be same as those of gate valves of the corresponding ANSI class (except 10" onwards in Class 150 where the face-to-face dimensions shall be as per API 6D long pattern).

3.18.6 The ball of ball valve shall not protrude outside the end flanges of valve.

3.18.7 Ball valves shall be of floating ball/trunnion mounted type as per following:

150#	8" & below	Floating ball
	10" & above	Trunnion mounted
300#	4" & below	Floating ball
	6" & above	Trunnion mounted
600#	1.5" & below	Floating ball
& above	2" & above	Trunnion mounted

3.18.8 Unless otherwise specified in the data sheets, bore of all reduced bore ball valves shall be limited to one size lower than the nominal bore.

3.19 The MOVs are to be installed in an open area and the actuators shall be suitable for all weather conditions. The testing of complete assemblies of MOVs along with the actuators shall be done by the supplier at his works.

3.20 Ends of flanged valves of 22" size shall match corresponding flanges to MSS-SP44 unless otherwise specified.

4.0 OPERATION

4.1 Gear operation shall be provided as under:

Valve Type	Class	Size Requiring Gear-Operator
Gate Valve, Globe Valve & Diaphragm Valve	150 Class	12" and larger
	300 Class	12" and larger
	600 Class	10" and larger
	900 Class	6" and larger
	1500 Class	3" and larger
	2500 Class	3" and larger
Ball Valve / Plug Valve (Other than pressure balance plug valves)	150 Class	6" and larger
	300 Class	6" and larger
	600 Class	4" and larger
	900 Class	3" and larger
	1500 Class	3" and larger
Butterfly Valve	150, 300 Class	6" and larger

For sizes lower than these ranges, hand wheel / lever / wrench shall be provided. For pressure balance plug valves manufacturer's recommendation shall be acceptable provided the requirements specified in clause 4.6 are met.

- 4.2 Gear operator shall be provided, with position indicators for open / close positions and with limit stops. (Limit stops are not applicable for gate and globe valves).
- 4.3 Where gear operator is not called for as per Clause 4.1 but vendor recommends a gear operator, the same shall be highlighted.
- 4.4 Gear operator shall be so designed as to operate effectively with the differential pressure across the closed valve equal to the cold non-shock pressure rating.
- 4.5 Ball, plug and butterfly valves, shall have "Open" position indicators with limit stops.
- 4.6 Hand wheel diameter shall not exceed 750mm and lever length shall not exceed 500mm on either side. Effort to operate shall not exceed 35 Kg at handwheel periphery. However, failing to meet the above requirements, vendor shall offer gear operated valve and quote as per clause 4.3.

5.0 INSPECTION AND TESTING

- 5.1 Every valve shall be subjected to all the mandatory tests and checks called in the respective codes / data sheet by EIL inspection or any third party as approved by the purchaser. For IBR valves refer clause 7.0.
- 5.2 Every valve, its components and auxiliaries must be subjected to all the mandatory tests and checks called for in the respective codes, data sheets etc. by the manufacturer.
- 5.3 Though the extent of inspection shall be as under, exact extent with hold points shall be decided by EIL regional inspection office and recorded in the form of inspection plan. In case of third party inspection, the inspection plan shall be approved by the purchaser.

Forged Valves:

1. Visual and dimensional inspection.
2. Review of material test certificates.
3. Any mandatory or supplementary test.
4. Hydrostatic test on 10% valves selected on random basis.
5. Strip check is required for 1% of total ordered quantity of Gate & Globe valves (min. 1 No.) for each Valve sheet no., however, strip check is not required for CS/ Brass/ Bronze material valves with 13% Cr/ Brass/ Bronze trims.

Cast Steel Valves:

1. Visual and dimensional inspection.
2. Review of material test certificates.
3. Review of radiographs/radiographic reports or any other NDT tests wherever applicable as per data sheet.
4. Any mandatory or supplementary test.
5. Hydrostatic test 100% for body, 10% other test.
6. Strip check is required for 1% of total ordered quantity of Gate & Globe valves (min. 1 No.) for each Valve sheet no., however, strip check is not required for CS/ Brass/ Bronze material valves with 13% Cr/ Brass/ Bronze trims.

Samples for strip check shall be selected at random and shall generally be in the highest size in the lot.

5.4 In case of motor operated or actuator operated valves, functional / operational checks as per the requirements of the specifications shall be made on each valve.

6.0 RADIOGRAPHY OF CAST VALVES

6.1 Valve castings shall undergo radiographic examination as specified below.

Material	Rating	Size Range	Radiography
All	150#	24" and below	NIL**
		26" and above*	100%
	300#	16" and below	NIL**
		18" and above	100%
	600# & above	All sizes	100%

* No radiography is required for valves of size 26" in cooling water service.

**For sizes 24" & below in 150# and 16" & below in 300#, radiography percentage if specifically mentioned in individual valve material spec sheet shall govern.

Radiography specified as random 10% or 20% etc. in the respective valve data sheet implies 10% or 20% etc. of number of valves ordered against each item number with a minimum of one valve against each item.

6.2 Radiography procedure, areas of casting to be radiographed shall be as per ASME B16.34 and acceptance criteria shall be as per ASME B16.34 Annexure-B. However for areas of casting to be radiographed for types of valves not covered in ASME B16.34, vendor shall enclose details of areas to be radiographed in line with ASME B16.34.

6.3 For random radiography wherever specified in individual data sheets, the sampling shall be per size of the quantity ordered for each foundry.

6.4 Radiography wherever specified in the data sheets or as per clause 6.1 shall be done by X-ray / γ -ray to get the required sensitivity.

6.5 Over and above the stipulations laid down in clauses 6.1, 6.2, 6.3 & 6.4, all valve castings when sourced indigenously shall only be procured from foundries approved by EIL. A list of such foundries is available with EIL Regional Inspection Offices.

7.0 IBR CERTIFICATION

7.1 For valves described "IBR", valves shall be in accordance with the latest IBR (Indian Boiler Regulation) including the requirements specified in the specification.

7.2 For SW / BW end carbon steel valves under IBR, the chemical composition shall conform to the following:

Carbon (Max) : 0.25%
Others (S, P, Mn) : As per IBR

7.3 Valves coming under the purview of "IBR"(Indian Boiler Regulations) shall each be individually accompanied by IBR certificate original in Form III-C duly approved by IBR authority / local authority empowered by the Central Boiler Board of India. Photocopy of original certificate duly attested by the local boiler inspector where the supplier is located is the minimum requirement for acceptance.

7.4 All "IBR" valves shall be painted red in body-bonnet / body-cover joint.

8.0 MARKING

8.1 Valve markings, symbols, abbreviations etc. shall be in accordance with MSS-SP-25 or the standard referred in specification sheet as applicable. Vendor's name, valve rating, material designation, nominal size, direction of flow (if any) etc. shall be integral on the body.

8.2 Each valve shall have a corrosion resistant tag giving size, valve tag / code no., securely attached to the valve body.

8.3 Paint or ink for marking shall not contain any harmful metal or metal salts such as zinc, lead or copper which cause corrosive attack on heating.

8.4 Carbon Steel / Alloy Steel valves shall be painted with one coat of inorganic zinc silicate (minimum DFT 65 to 75 microns).

9.0 DESPATCH

9.1 Valve shall be dry, clean and free from moisture, dirt and loose foreign materials of any kind.

9.2 Valves shall be protected from rust, corrosion and any mechanical damage during transportation, shipment and storage.

9.3 Rust preventive on machined surfaces to be welded shall be easily removable with a petroleum solvent or shall not be harmful to welding.

9.4 Each end of valve shall be protected with the following materials:

Flange Face	:	Wood or Plastic Cover
Bevelled End	:	Wood or Plastic Cover
SW & SCRD. End	:	Plastic Cap

9.5 End protectors of wood / plastic to be used on flange faces shall be attached by at least three bolts and shall not be smaller than the outside diameter of the flange. However, plastic caps for SW & SCRD end valves shall be press fit type.

9.6 End protectors to be used on bevelled end shall be securely and tightly attached.

9.7 For special service valves additional requirement for despatch shall be as prescribed in data sheet.

10.0 ATTACHMENTS

6-44-0052-A1 : Bypass Piping Arrangement

6-44-0052-A2 : Specifications for Bypass Piping, Fittings and Valves

6-44-0052-A3 : Special Requirements for Low Temperature and Cryogenic Valves

6-44-0052-A4 : Special Requirements for Hydrogen Service Valves

11.0 REFERENCES

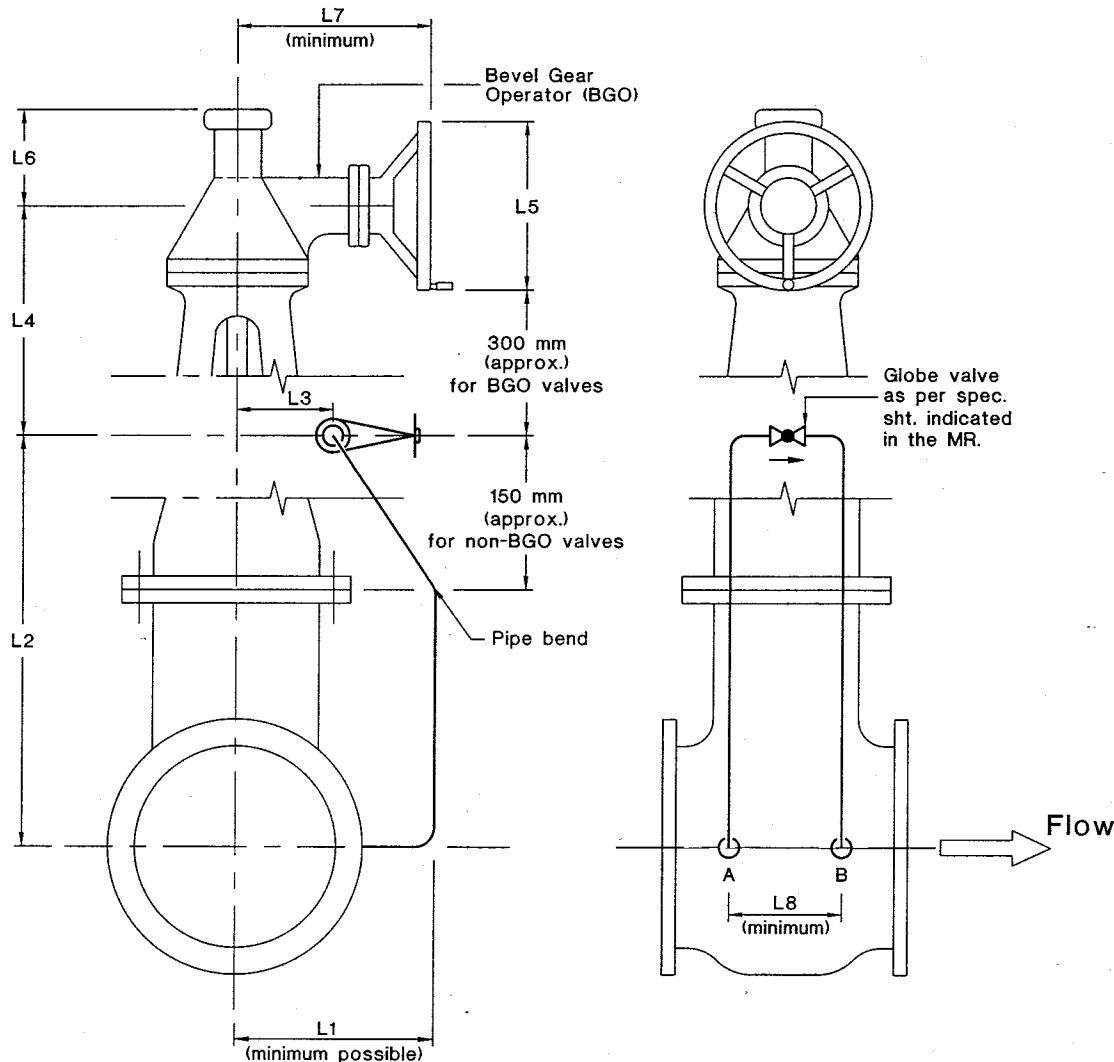
6-78-0001 : Specification for Quality management system requirements from bidders

6-78-0003 : Specification for documentation requirements from suppliers

6-81-0001 : Specification for Positive Material Identification (PMI) at Supplier's Works

6-81-0004 : Inspection and Test plan for Valves

BYPASS PIPING ARRANGEMENT



NOTES :

1. The orientation & location of handwheel of bevel gear operator & the bypass arrangement shall be strictly as per this sketch.
2. The bypass connection ends shall be socket welded upto 600# and butt welded for 900# and above rating.
3. The bypass arrangement shall be properly clamped to & supported by the body of the main valve.
4. Basic design of bypass shall be to MSS-SP-45.
5. Material of bypass pipe & 90° elbows shall be same or equivalent to the body material as indicated in Specification No. 6-44-0052-A2.
6. This sketch is applicable for both BGO & NON-BGO Valves.
7. Vendor shall furnish dimensions L1 to L8.

SPECIFICATIONS FOR BYPASS PIPING, FITTINGS AND VALVES

Class (Main Valve Sht.no.)	Pipe	Fittings	Bypass Valve Sht.no.
A1A(51301), A3A(51321), A9A(51301), A10A(51301), A11A(51301), A33A(51301), B1A(51401), B9A(51401), D1A(51501), D9A (51501)	ASTM A106 Gr.B (SMLS) 0.5"-0.75": S160 1.0"-1.5" : XS	ASTM A105 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52001
A6A(51301), B6A(51401)	ASTM A106 Gr.B (SMLS) 0.5"-0.5" : XXS 0.75"-1.5": S160	ASTM A105 0.5"-0.5" : SW 9000# 0.75"-1.5": SW 6000#	52001
A13A(51301), B13A(51401)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : XXS	ASTM A105 0.5"-1.5" : SW 9000#	52001
A2A(51302), B2A(51402), D2A (51502)	ASTM A106 Gr.B (SMLS)- IBR 0.5"-0.75": S160 1.0"-1.5" : XS	ASTM A105 - IBR 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52002
A4A (51303), B4A (51403), D4A (51503)	ASTM A333 Gr.6 (SMLS)- LT 0.5"-0.75": S160 1.0"-1.5" : XS	ASTM A350Gr.LF2-LT 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52003
A5A (51304), B5A (51404), D5A (51504)	ASTM A106 Gr.B (SMLS) - H2 0.5"-0.75": S160 1.0"-1.5": XS	ASTM A105 - H2 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52004
A7A (51307)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A105 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52007
A16A (51311), B16A (51411), D16A (51511)	ASTM A106 Gr.B (SMLS) - NACE 0.5"-0.5" : XXS 0.75"-1.5": S160	ASTM A105 - NACE 0.5"-0.5" : SW 9000# 0.75"-1.5": SW 6000#	52011
A19A (51313), B19A (51413), D19A (51513)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A105 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52013
E1A (51601), F1A (51701)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : S160	ASTM A234 Gr.WPB/ ASTM A105 0.5"-1.5" : BW, S160	52101
E2A (51602), F2A (51702)	ASTM A106 Gr.B (SMLS) - IBR 0.5"-1.5" : S160	ASTM A234 Gr.WPB/ ASTM A105 - IBR 0.5"-1.5" : BW, S160	52102
E5A (51604), F5A (51704)	ASTM A106 Gr.B (SMLS) - H2 0.5"-1.5" : S160	ASTM A234 Gr.WPB/ ASTM A105 - H2 0.5"-1.5" : BW, S160	52104
E9A (51605), F9A (51705)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : SCH XXS	ASTM A234 Gr.WPB/ ASTM A105 0.5"-1.5" : BW, SCH XXS	52105
E19A (51613), F19A (51713)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : SCH XXS	ASTM A234 Gr.WPB/ ASTM A105 0.5"-1.5" : BW, SCH XXS	52113

Class (Main Valve Sht.no.)	Pipe	Fittings	Bypass Valve Sht.no.
A5Y (51384), A33Y (51384)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : S160	ASTM A105 0.5"-1.5" : SW 6000#	52085
A1D (51330), B1D (51430), D1D (51530)	ASTM A335Gr.P11(SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F11Cl.2 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52030
D2D (51531)	ASTM A335Gr.P11 (SMLS) - IBR 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F11Cl.2 - IBR 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52031
B5D (51432), D5D (51532)	ASTM 335Gr.P11(SMLS)- H2 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F11Cl.2 - H2 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52032
B1E (51433)	ASTM A335Gr.P22(SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F22Cl.3 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52033
D5E (51534)	ASTM A335Gr.P22(SMLS) - H2 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F22Cl.3 - H2 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52034
A4F (51336), B4F (51436)	ASTM A335 Gr.P5(SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F5 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52036
B3F (51436)	ASTM A335 Gr.P5(SMLS) 0.5"-1.5" : XXS	ASTM A182 Gr.F5 0.5"-1.5" : SW 9000#	52036
A4G (51339), B4G (51439)	ASTM A335 Gr.P9(SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F9 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52039
F2D (51731)	ASTM A335 Gr.P11 (SMLS) - H2 0.5"-1.5" : S160	ASTM A234Gr.WP11Cl.1/ A182 Gr.F11Cl.2 - H2 0.5"-1.5" : BW, S160	52131
E5E (51634)	ASTM A335 Gr.P22(SMLS) - H2 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A234Gr.WP22Cl.1/ A182 Gr.F22Cl.3 - H2 0.5"-0.75" : BW, S160 1.0"-1.5" : BW, XS	52134
A1K (51345), A3K (51345), B1K (51445), D1K (51545)	ASTM A312 TP304(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F304 0.5"-1.5" : SW 3000#	52045
A2K (51346), B2K (51446), D2K (51546)	ASTM A312 TP304(SMLS) - CRYO 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F304 - CRYO 0.5"-1.5" : SW 3000#	52046
B4K (51448), B5K (51448)	ASTM A312 TP304H (SMLS) 0.5"-1.5" : 80S	ASTM A182 Gr.F304H 0.5"-1.5": SW 3000#	52048
A6K (51350), B6K (51450)	ASTM A312 TP304L (SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F304L 0.5"-1.5": SW 3000#	52050

Class (Main Valve Sht.no.)	Pipe	Fittings	Bypass Valve Sht.no.
A1M (51361), B1M (51461)	ASTM A312 TP316(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F316 0.5"-1.5": SW 3000#	52061
B5M (51462)	ASTM A312 TP316H (SMLS) - H2 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F316H - H2 0.5"-1.5": SW 3000#	52062
B3M (51463)	ASTM A312 TP321(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F321 0.5"-1.5": SW 3000#	52063
A1N (51366), B1N (51466)	ASTM A312 TP 316L (SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F316L 0.5"-1.5": SW 3000#	52066
B6N (51471)	ASTM A312 TP316L (SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F316L 0.5"-1.5": SW 3000#	52071

SPECIAL REQUIREMENTS FOR LOW TEMPERATURE & CRYOGENIC VALVES

1.0 SCOPE

All valves of Low Temperature Carbon Steel (LTCS) and all grades of austenitic SS (CRYO) material are categorised as cryogenic valves. All these valves shall have extended bonnet as per BS 6364 except check valves. Valves shall be suitable for installation in any position (on vertical, horizontal or skewed pipe line).

Following qualification criteria shall be met by the valve vendors to quote valves for cryogenic services:

2.0 QUALIFICATION CRITERIA

- i) Both cryogenic test (clause 2.1) and reference list (clause 2.2) together shall be considered for vendor qualification and vendor shall furnish the same, along with his offer.
- ii) Vendors who do not have cryogenic test reports and reference list covering valves of all sizes, materials and ratings required by MR, should confirm / furnish the following for consideration of their offer:
 - a. Evidence of having conducted successfully at least one cryogenic test as per BS 6364. Test certificate shall be furnished with the offer.
 - b. Vendor shall confirm to conduct cryogenic test per clauses 2.1 & 2.3 for the remaining valves not later than 12 weeks from the date of purchase order.
 - c. Vendor shall also furnish reference list for valves supplied for non-cryo service if reference list referred in 2.2.1 does not cover all the sizes of MR.

Offers of vendors who do not comply with above requirements would be rejected.

2.1 Cryogenic Test

Vendors to furnish copies of cryogenic test certificate for tests conducted as per details given below:

- 2.1.1 Test shall be as per BS 6364.
- 2.1.2 Test temperature, unless specifically called for otherwise in the individual MR, shall be -45°C for LTCS and -196°C for all grades of austenitic stainless steel.
- 2.1.3. Tests carried out on a particular size of one type of valve, pressure rating and material shall qualify all sizes equal to and below the test valve size for the same type, pressure rating and material. In case of austenitic SS any one grade would qualify for all other grades of austenitic SS.
- 2.1.4. Tests should have been witnessed and certified by any one of the following third party inspection agencies; M/s Lloyd, BV, DNV, TUV or EIL/ CEIL. For vendors located in India only EIL/ CEIL shall be certification agency.
- 2.1.5. Cryogenic test need not be conducted for every order. Test conducted previously and witnessed by inspection agencies listed above shall be considered acceptable and need not be repeated.

2.2 Reference List

Vendor shall furnish reference list for valves supplied for cryogenic service indicating the name of client, year of supply, size, material, pressure rating, type of valve and quantity.

2.3 Post Order Testing Procedure

2.3.1. Before conducting post order testing, vendor shall submit the following for approval:

- a. Test procedure (as per BS 6364).
- b. Cross-section drawing of the valve with material of construction.
- c. Schematic of test rig (as per BS 6364) with complete details.

2.3.2. Test has to be conducted on largest size for each type of valve and for each material and class rating. Vendor shall offer one, two or three valves for selection of test valve by inspector depending upon whether quantity of largest valve in the order is one, two or three and more than three respectively.

In the event of failure of the test valve to meet the specification requirements, the vendor shall conduct test on two more valves. These two valves which pass test successfully, are of lower size, then the qualification will be valid only to sizes upto which test has been conducted successfully.

2.3.3. In case of non-conductance of cryogenic test(s) within 12 weeks or failure in the test(s) conducted after receipt of order, the owner reserves the right to invoke any of the provisions of the purchase order including cancellation of the purchase order at the risk and cost of vendor.

3.0 Bonnet extension, wherever specified in the valve sheet to BS 6364 shall be for "non cold box application" unless otherwise specified in the MR. Even if not called for in valve sheet, valves indicated as "LT" or "CRYO" shall be supplied with bonnet extension.

4.0 Bonnet and Gland extension joints shall be of butt welded construction.

5.0 Repair welding procedure for austenitic stainless steel valves in "CRYO" service shall have to be qualified for impact test as per ASME B31.3. Minimum acceptable impact energy shall be 20 J or lateral expansion of 0.38 mm at temperature of -196°C.

6.0 Wherever impact test of SS studs / nuts is called for in the data sheet, the impact value shall be 27 J at the intended service temperature specified in the data sheets.

SPECIAL REQUIREMENTS FOR HYDROGEN SERVICE

1.0 GENERAL

1.1 These requirements are applicable for valves used in Hydrogen service. These are in addition to the requirements described in "Technical Notes for Valves" Spec. No. 6-44-0052, and shall be read in conjunction with this specification.

1.2 All cast valve flanges & bodies with flange rating of Class 900 or greater shall be examined in accordance with paragraphs 7.2 through 7.5 of Appendix-VII of ASME SEC-VIII, DIV.1, regardless of casting quality factor.

1.3 Body / bonnet / cover joints & stuffing box of all valves shall have low emission. One valve per metallurgy, per rating, per size shall be helium leak tested as per ASME Sec.V, Subsection A, Article 10 (Detector Probe Technique), Appendix IV at a minimum of 25% of the allowable (rated) cold working pressure. Selection of valves for helium leak test shall be at random. Test duration shall be as follows:

Nominal Size	Test Duration in Minutes				
	Pressure Class				
	Upto 300	600	800 & 900	1500	2500
Upto 2"	3	6	9	12	12
3" to 6"	6	9	12	15	18
8" to 16"	9	9	12	15	18
18" to 24"	9	12	15	18	21

The valve shall show no leakage. No leakage is defined as a total leakage rate of less than 0.0001 ml/s of helium.

2.0

Only normalized and tempered material shall be used in the following specifications:

Castings : A217 Gr.WC1, A217 Gr.WC4, A217 Gr.WC5, A217 Gr.WC6, A217 Gr.WC9, A217 Gr.C5, A217 Gr.C12

Forgings : A182 Gr.F11 Cl.2

3.0 CS & AS VALVES

3.1 Bend test and Magnetic Particle inspection of the entire surface of body and bonnet casting shall be in accordance with ASTM A217. Supplementary requirement S3 & S4 evaluation of magnetic particle, inspection shall be in accordance with MSS-SP-53 except that no linear discontinuities shall be allowed.

3.2 The Brinell hardness of heat treated casting shall not exceed 200 BHN for carbon steel & 225 for alloy steel.

3.3 Repair to defective casting shall be outlined in writing to the purchaser before repair starts. Repair method to be approved prior to welding.

3.4 Casting shall be preheated to a minimum of 400°F prior to welding and all Chromium-Molybdenum alloys shall be postweld heat treated after welding is complete. Stress relieving is essential for welds.

- 3.5 Carbon steel shall be normalised and alloy steels shall be normalised & tempered.
- 3.6 Dye Penetrant test of welds shall be in accordance with ASTM B165 Procedure B-2. Interpretation as per Appendix-8 of ASME-VIII Div.1.
- 3.7 The tensile stress for AS shall be less than 100,000 psi.
- 3.8 Charpy V-notch impact testing is to be done for valve material (average 20 ft-lb for set of 3 [minimum value 15 ft-lb] at 30°F).
- 3.9 For radiography and acceptance criteria for valve castings, refer Cl. 4.2.
- 4.0 SS VALVES**
- 4.1 Valve casting shall be in solution heat treated and pickled condition.
- 4.2 Critical body and bonnet casing section typically defined by ASME B16.34 shall be radiographed and shall meet ASTM E446 (upto 2" thick) Category A, B & CA Level 2, Category CB, OC & CD Level 3, Category D, B & F Level 0. For wall thickness 2" to 4.5" comparable plates of ASTM E186 shall be used. ASTM E94 and ASTM E142 shall be used for recommended practice & controlling quality of radiography as guide. The entire surface of all castings shall be dye-penetrant inspected after pickling.
- 4.3 Welds shall be 100% radiographed and evaluated in accordance with paragraph 344.5 of ASME B31.3 with a minimum casting quality factor of 0.95. Dye Penetration test shall be as per ASTM E165 Procedure B-2, Interpretation as per Appendix-8 of ASME-VIII Div.1.

विक्रेता कार्यशाला में
सकारात्मक सामग्री पहचान
के लिए मानक विनिर्देश

**STANDARD SPECIFICATION
FOR
POSITIVE MATERIAL
IDENTIFICATION
(PMI)
AT SUPPLIER'S WORKS**

Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
2	20.10.11	REVISED AND RE-ISSUED	<i>[Signature]</i> BKS 21/10/11	SOG	AKC	DM
1	15.07.08	REVISED AND RE-ISSUED	NKR	SSL	SKP	VC
0	07.12.00	ISSUED AS STANDARD SPECIFICATION	AKC	AKB	AKB	MI
Approved by						

Abbreviations:

API	:	American Petroleum Institute
AS	:	Alloy Steel
LSTK	:	Lump Sum Turn Key
PMI	:	Positive Material Identification
Sch	:	Schedule
SS	:	Stainless Steel
TPI or TPIA	:	Third Party Inspection Agency

Inspection Standards Committee

Convenor: Mr.AK Chaudhary

Members:

- Mr. SS Lotay
- Mr. SC Gupta
- Mr. RK Singh
- Mr. Rajeev Kumar
- Mr. Anoop Goel
- Mr. G Suresh
- Mr. G Poornachandra Rao
- Mr. MP Jain (Projects)

CONTENTS

1.0	SCOPE.....	4
2.0	REFERENCE DOCUMENTS	4
3.0	DEFINITIONS	4
4.0	PMI EXAMINATION	5
5.0	ACCEPTABLE METHODS FOR PMI.....	5
6.0	EXTENT OF PMI EXAMINATION.....	6
7.0	RECORDING AND DOCUMENTATION.....	7
8.0	MARKING.....	7

1.0 SCOPE

- 1.1 This specification applies to the requirements for Positive Material Identification (PMI) to be performed at the Supplier's works on Metallic Materials procured either directly by the Owner/EIL/ LSTK contractor or indirectly through the sub-Suppliers.
- 1.2 Any post order deviation from this specification must be approved by Owner/EIL in the Deviation/ Waiver Permit format (No. 5-0000-0180-F1) enclosed with Material Requisition.
- 1.3 This specification covers the procedures and methodology to be adopted to assure that the chemical composition of the material is consistent with the material specifications as specified in purchase documents using 'Alloy Analyzer' at the time of final inspection before dispatch.
- 1.4 The scope of this specification shall include but shall not be limited to Positive Material Identification (PMI) to be performed on Materials listed below:
 - 1.4.1 For alloy Steel materials as below:
 - Alloy Steel Pipes including Clad Pipes
 - Alloy Steel Flanges & Forgings
 - Alloy Steel Fittings including Clad Fittings
 - Alloy Steel Fasteners
 - Alloy Cast & Forged steel valves
 - Alloy Steel Instrumentation Items (Control Valves, Safety Valves etc.)
 - Longitudinal Pipe & Fittings Welds.
 - Gaskets (for Ring Type Joints)
 - 1.4.2 For Carbon Steel materials as below:
 - All Carbon Steel Piping items under NACE or HIC or H2
 - Carbon Steel flanges and valves (Rating 900# and above)
 - Carbon Steel Pipes & fittings for following thicknesses:

Size 1"- 2" NB	: Sch 160 & above
Size 3" NB	: Sch XS & above
Size 4" - 12" NB	: Sch 120 & above

Following items shall be excluded from scope of PMI examination.

- Gaskets other than for Ring Type Joints
- Internal Components of Valves

- 1.5 All grades of material supplies including Stainless Steels shall be liable for PMI test at site. In case of any defective materials being found at site, the Supplier shall be responsible to effect replacement of such defective materials at project site without any delays to the satisfaction of EIL site RCM (Resident Construction Manager).

2.0 REFERENCE DOCUMENTS

- 2.1 API Recommended Practice 578 (First Edition, May 1999) - Material Verification Program for New and Existing Alloy Piping Systems.

3.0 DEFINITIONS

- 3.1 **Supplier:** Any Supplier or Manufacturer on whom an order is placed for the supply of referred items. This definition shall also include any sub-Supplier or manufacturer on whom a sub-order is placed by the Supplier.

3.2 **Inspection Lot:** A group of items offered for inspection covered under same size, Heat and Heat treatment lot.

3.3 **Alloy Material:** Any metallic material (including welding filler materials) that contains alloying elements such as chromium, nickel, molybdenum or vanadium, which are intentionally added to enhance mechanical or physical properties and/or corrosion resistance.

4.0 PMI EXAMINATION

4.1 The Supplier shall submit a procedure of PMI to comply with the requirements of this Specification Approval of PMI Procedure shall be obtained from Owner/EIL/TPIA prior to commencing manufacture/ inspection of product.

4.2 PMI examination of materials is independent of any certification, markings or colour coding that may exist and is aimed at verifying that the alloy used are as per specified grades.

4.3 The Supplier shall identify all incoming alloy materials and maintain full traceability of all alloy materials, including all off-cuts. Transfer of identification marks shall be undertaken prior to cutting to ensure maintenance of identification on off-cuts.

4.4 The Supplier shall ensure that all alloy materials are segregated and stored in separately identified locations to prevent the mix up of materials of different alloy specifications or alloy material with carbon steel. Non ferro-magnetic materials shall be segregated at all times from ferro-magnetic materials.

4.5 PMI examination is subject to surveillance inspection by Owner/EIL/TPIA.

5.0 ACCEPTABLE METHODS FOR PMI

5.1 The method used for PMI examination shall provide a quantitative determination of the alloying elements like chromium, nickel, molybdenum or vanadium in Alloy Steel items.

5.2 Instruments or methods used for PMI examination shall be able to provide quantitative, recordable, elemental composition results for positive identification of alloying elements present.

5.3 The acceptable instruments for alloy analyzer shall be either "Portable X-Ray fluorescence" or "Optical Emission" type each capable of verifying the percentage of alloy elements within specified range.

5.4 Chemical spot testing, magnets, alloy sorters and other methods using eddy current or triboelectric testing methods are not acceptable for PMI examination.

5.5 The PMI instrument used shall have the sensitivity to detect the alloying elements in the specified range.

5.6 All PMI instruments shall have been serviced within a 6 month period of the time of use to verify the suitability of batteries, sources etc., and the data of the last service shall be stated on the PMI Report Form (Sample enclosed).

5.7 Each analyzer must be calibrated according to the manufacturer's specification at the beginning and end of each shift. Instrument must be checked against known standard for each alloy type to be inspected during the shift.

- 5.8 Certified samples, with full traceability, of a known alloy materials shall be available for use as a random spot check on the instrument calibration.
- 5.9 The surfaces to be examined shall be prepared by light grinding or abrasive paper and solvent cleaner. Evidence of Arc burn resulting from examination shall be removed by light grinding or abrasive paper. No permanent marks, which are injurious to the usage of product in service, are acceptable.
- 5.10 Alloy Steel ring type joint Gaskets shall be inspected by using portable X-Ray fluorescence instrument.
- 5.11 Testing shall be done as per the procedures outlined by the manufacturers of alloy analyzer being used. Modification of these procedures if any must be approved by Owner/EIL.
- 5.12 The persons performing PMI shall demonstrate their capabilities to the satisfaction of Owner/EIL/TPIA visiting engineer. If the Supplier has qualified operator on their rolls, he may perform the examination. Otherwise PMI examination shall be sub-contracted to an independent testing agency approved by EIL.
- 5.13 Whenever material is identified as not meeting requirements by the visiting engineer a rejection note shall be issued.

6.0 EXTENT OF PMI EXAMINATION

Following sampling plans shall be applicable for PMI examination of various items.

A.	Flanges, Fittings Valves, RTJ Gaskets	-	100%
B.	Pipes	-	100% (for pipes procured from traders).
C.	Fasteners	-	2 random samples drawn from each Size/Heat/Lot (for pipes procured directly from mills)
	<u>Lot Size</u>		<u>Sample Size</u>
	Upto 100		2% (Min 2)
	101 to 500		1% (Min 3)
	501 and above		0.5% (Min 5)

Note:

- a. For Welded Pipes and Fittings, PMI shall be performed on Base Metal as well as weldments.
- b. Whenever any sample drawn to PMI test on the basis of percentage selection in B & C above, fails to meet specification requirements, 100% of items of lot shall be tested for PMI.

7.0 RECORDING AND DOCUMENTATION

The results of PMI examination shall be recorded in a Report Format as enclosed with this specification.

8.0 MARKING

8.1 All alloy materials tested by PMI shall be identified using either of the following methods by indicating "PMI OK"

- a) Bar Code/Hologram Sticker
- b) A low stress stamp marking

POSITIVE MATERIAL IDENTIFICATION REPORT BULK MATERIALS					Page of
Project:	Client				Job No.
PMI Report No.	Supplier/Sub-Supplier				
Purchase Order No.	Testing Agency				
Purchase Requisition No:	PMI Location				
Bulk Item Type (as per Requisition)					
Material Specification/Grade					
Number of items in Lot					
Requisition Item No./ Description	Major content, Weight Percent				Remarks Accept/Reject
Element	Cr	Mo	Ni	V	
Specified Range					
Actual observations					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
Instrument Type / ID					
Last Service Date	Inspection Agency				Witnessed By

वाल्वों के लिये
निरीक्षण व परीक्षण योजना

INSPECTION AND TEST PLAN
FOR
VALVES

5.	17.06.2013	REVISED AND RE-ISSUED	TKK	RKS	SCG	DM
4	15.07.2011	REVISED AND RE-ISSUED	TKK	SCG	AKC	DM
3	30.06.2010	REVISED AND RE-ISSUED	RKB	VKJ	SKP	ND
2	31.01.2008	REVISED AND RE-ISSUED	CS	SS	MVKK	VC
1	05.10.2005	QUANTUM OF CHECK & SCOPE OF INSPECTION REVISED	SS	MVKK	SY	VJN
Rev. No.	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
						Approved by

INSPECTION AND TEST PLAN
FOR
VALVES

STANDARD SPECIFICATION NO.

6-81-0004 Rev. 5

Page 2 of 7

Abbreviations:

CEIL	:	Certification Engineers International Limited	MRT	:	Mechanical Run Test
CIMFR	:	Central Institute of Mining & Fuel Research	NDT	:	Non Destructive Testing
CE	:	Carbon Equivalent	NPSH	:	Net Positive Suction Head
DFT	:	Dry Film Thickness	PO	:	Purchase Order
DPT	:	Dye Penetrant Testing	PESO	:	Petroleum Explosive Safety Organization
DHT	:	De-hydrogen Heat Treatment	PQR	:	Procedure Qualification Record
ERTL	:	Electronics Regional Test Laboratory	PR	:	Purchase Requisition
FCRI	:	Fluid Control Research Institute	PMI	:	Positive Material Identification
HT	:	Heat Treatment	RT	:	Radiography Testing
HIC	:	Hydrogen Induced Cracking	SSCC	:	Sulphide Stress Corrosion Cracking
ITP	:	Inspection and Test Plan	TC	:	Test Certificate
IP	:	Ingress Protection	TPI or TPIA	:	Third Party Inspection Agency
IHT	:	Intermediate Heat Treatment	UT	:	Ultrasonic Testing
IC	:	Inspection Certificate	VDR	:	Vendor Data Requirement
IGC	:	Inter Granular Corrosion	WPS	:	Welding Procedure Specification
MPT/MT	:	Magnetic Particle Testing	WPQ	:	Welders Performance Qualification
MTC	:	Material Test Certificate			

Inspection Standards Committee

Convenor : Mr. S C Gupta

Members:

Mr. R.K. Singh
Mr. Neeraj Mathur
Mr. Mayank Jain

Mr. Rajeev Kumar
Mr. T Kamalakannan

Mr. Himangshu Pal
Mr. Deepak Gupta (Project)

1.0 SCOPE

This Inspection and Test Plan covers the minimum testing requirements of Valves.

2.0 REFERENCE DOCUMENTS

PO/PR/Standards referred therein/ Job specifications /Approved documents.

3.0 INSPECTION AND TEST REQUIREMENTS

SL NO	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
1.0	Procedure						
1.1	Hydrostatic Test, Heat Treatment, NDT, Helium Leak Test And Other Procedures	Documented Procedures	100%	Procedure Documents	-	H	R
1.2	WPS,PQR & WPQ	Welding Parameters & Qualification Record	100%	WPS,PQR & WPQ	-	H	W- New R- Existing
1.3	Pre-Qualification Tests	Fire safe, Cryogenic & Other Test as applicable	As per PR / Purchase Specification	Acceptance Report	-	H	H (If new)

INSPECTION AND TEST PLAN
FOR
VALVES

STANDARD SPECIFICATION NO.

6-81-0004 Rev. 5

Page 4 of 7

SL NO	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
2.0	Material Inspection						
2.1.	Castings & Forgings (Body, Bonnet, Disc, Stem, Body ring)	Chemical ,Mechanical , Heat Treatment, NDT,IGC & Other Properties as applicable	100%	Test Certificates	H	R	R
2.2	Castings & Forgings (Body, Bonnet, Disc, Stem, Body ring)	Visual & Dimension	100%	Inspection Report	H	H	-
2.3.	Body and Bonnet Castings	Radiography Examination	As per PR / Purchase Specification	Films and report	H	R	R
2.4	Bars for Trim material	Chemical Analysis	Each Heat	Test Certificates& Lab Report	H	R	-
2.5	Gaskets, Gear units, Fasteners, Gland, Packings, etc.	Physical / Chemical Properties	100%	Test Certificates& Lab Report	H	R	-
2.6	Actuators as applicable	Performance , Statutory Certificates as applicable	100%	Test Certificates , Inspection report	H	H	R

INSPECTION AND TEST PLAN
FOR
VALVES

STANDARD SPECIFICATION NO.

6-81-0004 Rev. 5

Page 5 of 7

SL NO	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
3.0	In Process Inspection						
3.1	Welding	Welding Parameters as per WPS / PQR	100%	Inspection Reports	-	H	-
3.2	Machining of components	Visual / Dimension	100%	Inspection Reports	-	H	-
4.0	Final Inspection						
4.1	Hydrostatic / Pneumatic Test and Helium Leak test as applicable	Leak Check	As per PR / Purchase Specification	Test Report	-	H	RW (Note 1)
4.2	Visual / Dimension	Surface & Dimension Check	100%	Test Report	-	H	RW (Note 1)
4.3	Functional Test for Actuator Operated Valves	Satisfactory Performance	100%	Test Report	-	H	RW

INSPECTION AND TEST PLAN
FOR
VALVES

STANDARD SPECIFICATION NO.

6-81-0004 Rev. 5

Page 6 of 7

SL NO	STAGE/ ACTIVITY	CHARACTERISTICS	QUANTUM OF CHECK	RECORD	SCOPE OF INSPECTION		
					SUB SUPPLIER	SUPPLIER	EIL/TPIA
4.4	PMI Check	Chemical	As per EIL Spec. 6-81-0001	Inspection Report	-	H	RW
4.5	Strip Check(As applicable)	Verify Components & Differential hardness if applicable	As per PR / Purchase Specification	Inspection Report	-	H	RW (Note-1)
4.6	Final Stamping	Stamping Of Accepted Valves	Stamping of Valves which are witnessed by EIL/TPIA.	Inspection Report	-	H	H (Note-1)
5.0	Painting						
5.1	Painting and Color coding as applicable	Visual / DFT Check	100%	Inspection Report	-	H	-
6.0	Documentation & IC						
6.1	Documentation & Inspection Certificate(IC)	Review of Stage Inspection Reports / Test Reports & Issue of IC	100%	Supplier TC & IC	-	H	H

Legend: H- Hold (Do not proceed without approval), P-Perform, RW - Random Witness (As specified or 10% (min.1 no. of each size and type of Bulk item)), R- Review, W-Witness (Give due notice, work may proceed after scheduled date).

NOTES (As applicable):

1. For Non NACE & Non Hydrogen service Carbon Steel Valves up to size 12" will be accepted on review of Supplier Test Certificates. Supplier Test Certificate to be reviewed by EIL/TPIA.
2. This document describes the generic test requirements. Any additional test or Inspection scope if specified in contract documents shall also be applicable.(Unless otherwise agreed upon)
3. Acceptance Norms for all the activities shall be as per PO/PR/STANDARDS referred there in /Job Specification /Approved Documents.

बोलीकर्ता से गुणवत्ता प्रबंधन
प्रणाली अपेक्षाओं हेतु विनिर्देश

**SPECIFICATION FOR QUALITY
MANAGEMENT SYSTEM
REQUIREMENTS FROM BIDDERS**

0	04.06.09	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND
Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standard Bureau Chairman

Approved by



Abbreviations:

MR	-	Material Requisition
PR	-	Purchase Requisition
PO	-	Purchase Order
QA	-	Quality Assurance
QMS	-	Quality Management System
ISO	-	International Organization for Standardization
CV	-	Curriculum Vitae

QMS Standards Committee

Convenor: Mr. S.C. Tyagi

Members:

- Mr. Chandra Kant (Insp.)
- Mr. R.K. Trivedi (Engg.)
- Mr. R.K. Sabharwal (C&P)
- Mr. M.P. Jain (Projects)
- Mr. Ravindra Kumar (Const.)
- Mr. Mukesh Meena (CQA)

CONTENTS

Clause	Title	Page No.
1.0	SCOPE.....	4
2.0	DEFINITIONS	4
3.0	REFERENCE DOCUMENTS.....	4
4.0	QUALITY MANAGEMENT SYSTEM – GENERAL	4
5.0	QUALITY SYSTEM REQUIREMENTS.....	4
6.0	AUDITS.....	7
7.0	DOCUMENTATION REQUIREMENTS	7

Attachment

Format for Concession/Deviation Permit : Format No.5-0000-0180-F1

1.0 SCOPE

This specification establishes the Quality Management System requirements to be met by BIDDER for following purpose:

- QMS requirements to be met by suppliers/contractors after award of work/during contract execution.

2.0 DEFINITIONS

2.1 Bidder

For the purpose of this specification, the word “BIDDER” means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service). The word is considered synonymous to supplier, contractor or vendor.

2.2 Project Quality Plan

Document tailored from Standard Quality Management System Manual of BIDDER, specifying how the quality requirements of the project will be met.

2.3 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

6-78-0002	Specification for Documentation Requirements from Contractors
6-78-0003	Specification for Documentation Requirements from Suppliers

4.0 QUALITY MANAGEMENT SYSTEM – GENERAL

Unless otherwise agreed with EIL / Owner, the BIDDER proposed quality system shall fully satisfy all relevant requirements of ISO 9001 “Quality Management Systems – Requirements.” Evidence of compliance shall be current certificate of quality system registration to ISO 9001 or a recent compliance audit recommending registration from a registrar. The quality system shall provide the planned and systematic control of all quality related activities for execution of contract. Implementation of the system shall be in accordance with BIDDER’S Quality Manual and PROJECT specific Quality Plan.

5.0 QUALITY SYSTEM REQUIREMENTS

- 5.1 BIDDER shall ensure that the responsible authority for execution of the order / contract has communicated the PO / contract requirements including any identified or intended statutory and regulatory requirements to all concerned in their organization and sub-contractor’s organization who are contributing to the execution of the PO/ contract.
- 5.2 BIDDER shall establish a documented Quality Policy and Quality Objectives to achieve the specified and intended requirement of PO / contract.

5.3 BIDDER shall identify and communicate the responsibilities and authorities of the personnel contributing to the execution of the PO / contract.

5.4 BIDDER shall deploy competent and trained personnel for various activities for fulfillment of PO / contract. BIDDER shall arrange adequate infrastructure and work environment to ensure that the specification and quality of the deliverable are maintained.

5.5 BIDDER shall do the quality planning for all activities involved in delivery of order. The quality planning shall cover as minimum the following:

- Resources
- Product / deliverable characteristics to be controlled.
- Process characteristics to ensure the identified product characteristics are realized
- Identification of any measurement requirements, acceptance criteria
- Records to be generated
- Need for any documented procedure

The quality planning shall result into the quality assurance plan, inspection and test plans (ITPs) and job procedures for the project activities in the scope of bidder. These documents shall be submitted to EIL/Owner for review/approval, before commencement of work.

5.6 Requirements for sub-contracting / purchasing of services specified in contract / tender shall be adhered to. Wherever requirements are not specified, the sub-contractor shall establish and maintain a system for purchasing / sub-contracting to ensure that purchased product / service conforms to specified requirements. Criteria for selection of sub-contractor, evaluation, re-evaluation, maintenance of purchasing data and verification of purchased product (sub-contractor services), constitute important components of this requirement.

5.7 BIDDER shall plan and carry production and service provision under controlled conditions. Controlled conditions shall include, as applicable

- a) the availability of information that describes the characteristics of the product
- b) the availability of work instructions
- c) the use of suitable equipment
- d) the availability and use of monitoring and measuring devices
- e) the implementation of monitoring and measurement
- f) the implementation of release, delivery and post delivery activities

5.8 BIDDER shall validate any processes for production and service provision where resulting output cannot be verified by subsequent monitoring and measurement. This includes any process where deficiencies become apparent only after the product is in use or service has been delivered.

5.9 BIDDER shall establish a system for identification and traceability of product / deliverable throughout product realization. Product status with respect to inspection and testing requirements shall be identified.

5.10 BIDDER shall identify, verify, protect and safeguard EIL / Owner property (material / document) provided for use or incorporation into the product. If any Owner / EIL property is lost, damaged or otherwise found to be unsuitable for use, this shall be reported to the EIL / Owner.

5.11 BIDDER shall preserve the conformity of product / deliverable during internal processing and delivery to the intended destination. Requirements mentioned in the tender shall be adhered to.

5.12 BIDDER shall establish system to ensure that inspection and testing activities are carried out in a manner that is consistent with the inspection and testing requirements. Where necessary, measuring equipments shall be calibrated at specified frequency, against national or international measurement standards; where no such standard exists, the basis used for calibration shall be recorded. The measuring equipments shall be adjusted or re-adjusted as necessary, identified to enable the calibration status to be determined. The measuring equipments shall be protected from damage during handling, maintenance and storage.

5.13 BIDDER shall ensure effective monitoring, using suitable methods, of the processes involved in production and other related processes for delivery of the scope of contract.

5.14 BIDDER shall monitor and measure the characteristics of the product/deliverable to verify that product requirement has been met. The inspection (stage as well as final) by BIDDER and EIL / Owner personnel shall be carried out strictly as per the ITPs forming part of the contract. Product release or service delivery shall not proceed until the planned arrangements have been satisfactorily completed, unless otherwise approved by relevant authority and where applicable by Owner / EIL.

5.15 BIDDER shall establish and maintain a documented procedure to ensure that the product which does not conform to requirements is identified and controlled to prevent its unintended use or delivery

5.16 All non-conformities (NCs) / deficiencies found by the BIDDER'S inspection / surveillance staff shall be duly recorded, including their disposal action shall be recorded and resolved suitably. Effective corrective and preventive action shall be implemented by the BIDDER so that similar NCs including deficiencies do not recur.

5.17 All deficiencies noticed and reported by EIL / Owner shall be analyzed by the BIDDER and appropriate corrective and preventive actions shall be implemented. BIDDER shall intimate EIL / Owner of all such corrective and preventive action implemented by him.

5.18 BIDDER should follow the standards, specifications and approved drawings. Concessions/Deviations shall be allowed only in case of unavoidable circumstances. In such situations Concession/deviation request must be made by the BIDDER in attached Format No. 5-0000-0180-F1.

5.19 BIDDER shall have documented procedure for control of documents.

5.20 All project records shall be carefully kept, maintained and protected for any damage or loss until the project completion, then handed over to EIL / Owner as per contract requirement (Refer Specification Nos. 6-78-0002 - Specification for Documentation Requirements from Contractors and 6-78-0003 - Specification for Documentation Requirements from Suppliers), or disposed as per relevant project procedure.

5.21 BIDDER shall prepare and submit for review and approval, Project Quality Plan / Quality Assurance Plan for contracted scope / job. The BIDDER'S Quality Plan shall address all of the applicable elements of ISO 9001, identify responsible parties within BIDDER'S organization, for the implementation / control of each area, reference the applicable procedures used to control / assure each area, and verify the documents produced for each area. The Project Quality Plan shall necessarily define control or make reference to the relevant procedures, for design and engineering, purchase, documentation, record control, bid evaluation, inspection, production/manufacturing, preservation, packaging and storage,

quality control at construction site, pre-commissioning, commissioning and handing over (as applicable) in line with contract requirement and scope of work.

6.0 AUDITS

BIDDER shall plan and carry out the QMS audit for the job. Quality audit programme shall cover design, procurement, construction management and commissioning as applicable including activities carried out by sub-vendors and sub-contractors. This shall be additional to the certification body surveillance audits carried out under BIDDER'S own ISO 9001 certification scheme.

The audit programmes and audit reports shall be submitted to EIL / Owner as per specified documentation requirements. EIL or Owner's representative reserves the right to attend, as a witness, any audit conducted during the execution of the WORKS.

In addition to above EIL, Owner and third party appointed by EIL/Owner may also perform Quality and Technical compliance audits. BIDDER shall provide assistance and access to their systems and sub-contractor / vendor systems as required for this purpose. Any deficiencies noted shall be immediately rectified by BIDDER.

7.0 DOCUMENTATION REQUIREMENTS

BIDDER shall submit following QMS documents immediately after award of work (Within one week) for record / review by EIL / Owner.

- Organization chart (for complete organization structure and for the project)
- Project Quality Plan/Quality Assurance Plan
- Job specific Inspection Test Plans
- Job Procedures
- Inspection/Test Formats

In addition to above QMS documents, following documentation shall be maintained by the BIDDER for submission to EIL / Owner on demand at any point of time during execution of the project.

- Quality Manual
- CVs of the personnel in BIDDER'S QA Organogram
- Certificate of approval for compliance to ISO: 9001 standard
- Procedure for Control of Non-conforming Product
- Procedure for Control of Documents
- Sample audit report of the QMS internal and external audits conducted during last one year
- Customer satisfaction reports from at least 2 customers, during the last one year
- Project audit report
- Corrective action report on the project audits
- Technical audit reports for the project

Documents as specified above are minimum requirements. BIDDER shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

CONCESSION/DEVIATION PERMIT

(USE ONLY THIS PAGE FOR COMMUNICATION WITH VENDOR/CONTRACTOR)

Decision on Concession/Deviation including decision, on time and cost implications

(To be filled by the Inspection engineer [at RPO/HO] or RCM, responsible for conveying the decision to the originator, after resolution)

Date:

Signature

Location :

Name _____

Opinion from EIL site supervisor/inspection engineer
(Specify whether post-facto approval required for regularization)

Date : _____

Name : _____
RPO/Site Name _____

Original forward to : _____
(Target division/department/group)

Copy to : _____
(Project Manager)

Date : _____

Name : _____

Disposal by target division/department

Whether any vendor/contractor made 'Technically not Acceptable' during bid evaluation, on the aspect of which this concession/deviation is sought-----YES/NO

Date : _____

Name : _____

Final decision of Project Manager along with overall review
(Client's decision required/not required)

Date : _____

Name : _____

Client's decision, if required

Date : _____

Signature : _____
Name : _____

आपूर्तिकर्ताओं से प्रलेखन
अपेक्षाओं हेतु विनिर्देश

**SPECIFICATION FOR
DOCUMENTATION REQUIREMENTS
FROM SUPPLIERS**

0	04.06.09	Issued as Standard Specification	QMS Standards Committee	QMS Standards Committee	SCT	ND
Rev. No	Date	Purpose	Prepared by	Checked by	Standards Committee Convenor	Standards Bureau Chairman
						Approved by

Abbreviations:

HOD	-	Head of Division / Department
QMS	-	Quality Management System
MOU	-	Memorandum of Understanding
PO	-	Purchase Order
PR	-	Purchase Requisition
MR	-	Material Requisition
EDMS	-	Electronic Document Management System
FOA	-	Fax of Acceptance
LOA	-	Letter of Acceptance
ITP	-	Inspection and Test Plan
URL	-	Universal Resource Locator
PVC	-	Poly Vinyl Chloride
TPIA	-	Third Party Inspection Agency

QMS Standards Committee

Convenor: Mr. S.C. Tyagi

Members: Mr. Chandra Kant (Insp.)
Mr. R.K. Trivedi (Engg.)
Mr. R.K. Sabharwal (C&P)
Mr. M.P. Jain (Projects)
Mr. Ravindra Kumar (Const.)
Mr. Mukesh Meena (CQA)

CONTENTS

Clause	Title	Page No.
1.0	SCOPE.....	4
2.0	DEFINITIONS	4
3.0	REFERENCE DOCUMENTS	4
4.0	DOCUMENTATION REQUIREMENTS	4

Attachments

Format for Drawing/Documentation Transmittal	:	Format No. 3-78-0001
Format for Drawing/Documentation Schedule	:	Format No. 3-78-0002
Format for Comments Resolution sheet	:	Format No. 3-78-0003
Format for completeness of Final Documentation	:	Format No. 3-78-0004

1.0 SCOPE

This specification establishes the Documentation Requirements from Suppliers.

All documents/data against the PO / PR / MR shall be developed and submitted to EIL/Owner by the suppliers for review / records, in line with this specification.

2.0 DEFINITIONS

2.1 Supplier

For the purpose of this specification, the word “SUPPLIER” means the person(s), firm, company or organization who is under the process of being contracted by EIL / Owner for delivery of some products (including service). The word is considered synonymous to bidder, contractor or vendor.

2.2 Owner

Owner means the owner of the project for which services / products are being purchased and includes their representatives, successors and assignees.

3.0 REFERENCE DOCUMENTS

6-78-0001 Specification for Quality Management System Requirements from Bidders

4.0 DOCUMENTATION REQUIREMENTS

4.1 Documents/Data to be Submitted by the Supplier

4.1.1 The Supplier shall submit the documents and data against the PO/PR/MR as per the list given in respective PO/PR/MR.

4.1.2 Review of the supplier drawings by EIL would be only to review the compatibility with basic designs and concepts and in no way absolve the supplier of his responsibility/contractual obligation to comply with PR requirements, applicable codes, specifications and statutory rules/regulations. Any error/deficiency noticed during any stage of manufacturing/execution/installation shall be promptly corrected by the supplier without any extra cost or time, whether or not comments on the same were received from EIL during the drawing review stage.

4.1.3 Unless otherwise specified, submission of documents for Review/Records shall commence as follows from the date of Fax of Intent /Letter of Intent:

QMS - 1 week

Drawing/Document Index - 2 weeks

Other Documents/Drawings - As per approved Drawing/Document Index/Schedule

4.1.4 Documents as specified in PO/PR/MR are minimum requirements. Supplier shall submit any other document/data required for completion of the job as per EIL/Owner instructions.

4.2 Style and Formatting

- 4.2.1 All Documents shall be in ENGLISH language and in M.K.S System of units.
- 4.2.2 A blank space measuring 75 mm (W) x 38 mm (H) shall be provided on the body of all supplier drawings for marking of review codes by EIL.
- 4.2.3 Before forwarding the drawings and documents, contractor shall ensure that the following information are properly entered in each drawing:

Purchase Requisition Number
Name of Equipment / Package
Equipment / Package Tag No.
Name of Project
Client
Drawing / Document Title
Drawing / Document No.
Drawing / Document Revision No. and Date
Transmittal Number
EIL Vendor Print No.
(In case of second & subsequent Revisions)

Note: EIL "Vendor Print Number" is to be picked up from the EIL Review Code Stamp affixed on the previous revision.

4.3 Review and Approval of Documents by Supplier

- 4.3.1 The Drawing/Documents shall be reviewed, checked, approved and duly signed/stamped by supplier before submission. Revision number shall be changed during submission of the revised supplier documents and all revisions shall be highlighted by clouds. Whenever the supplier require any sub-supplier drawings to be reviewed by EIL, the same shall be submitted by the supplier after duly reviewed, approved and stamped by the supplier. Direct submission of sub-supplier's drawings without contractor's approval shall not be entertained.

4.4 Document Category

4.4.1 Review Category

Following review codes shall be used for review of supplier Drawings/Documents:

Review Code 1	-	No comments.
Review Code 2	-	Proceed with manufacture/fabrication as per commented document. Revised document required
Review Code 3	-	Document does not conform to basic requirements as marked. Resubmit for review
R	-	Retained for Records.
V	-	Void

4.4.2 Records Category

Documents under this category are meant for EIL records. These documents would not be returned to supplier. However, comments, if any, will be communicated to supplier.

4.5 Methodology for Submission of Documents to EIL/Owner

4.5.1 Submission of Soft Copy of Drawings/Documents

Soft copy of drawings/documents and data shall be uploaded on the EIL EDMS Portal. The detail guidelines for uploading documents on EIL EDMS Portal are available on following URL

<http://edocx.eil.co.in/vportal>

4.5.2 Submission of Hard Copy of Drawings/Documents

Required number of hard copies of drawings/documents shall be submitted as per PO/PR/MR along with drawing/document transmittal, Format for Drawing/Document Transmittal (Format No. 3-78-0001) is attached with this specification.

4.5.3 Designated Authority for Submission of Drawings/Documents

Drawings/Documents shall be submitted to the designated authority of EIL/Owner as per PO/PR/MR or as communicated to the supplier during kick off meeting or subsequent correspondences.

4.5.4 Details of Contact Persons of Supplier

After placement of order supplier shall inform in writing the details of contact persons associated with the project / job. The details should include e-mail address, mailing address, telephone nos., fax nos. and names of associated persons of the supplier. The above details shall be sent to EIL Project Manager, EIL Inspection HO and concerned Regional Procurement office of EIL.

4.5.5 Drawing/Document Schedule

Supplier shall submit total index of drawings/documents required for review/records based on PO/PR/MR along with schedule date of submission of each drawing/document. The drawing schedule shall be submitted in Format No. 3-78-0002 for approval of EIL/Owner. The drawing schedule shall be specific with regard to drawing/document no., the exact title and size of the drawing/document. For submission of drawing schedule, the supplier shall proceed based on PO/PR/MR and subsequent correspondence. With each submission of drawings/documents, supplier shall submit updated index with schedule v/s actual submission dates, status of drawings, revision no., date, of approval etc. Any submission without index shall not be entertained for review. It shall be ensured that proper sequencing of the drawings/documents to be submitted is maintained in the drawing schedule

4.5.6 Schedule and Progress Reporting

Supplier shall submit monthly progress report and updated procurement, engineering and manufacturing status (schedule vs. actual) every month in, beginning within 2 weeks from FOA/LOA. In case of exigencies, EIL/Owner can ask for report submission as required on weekly/fortnightly/adhoc basis depending upon supply status and supplier shall furnish such reports promptly without any price implication. Format for progress report shall be submitted by the Supplier during kick off meeting or within one week of receiving FOA/LOA, whichever is earlier.

4.5.7 Quality Assurance Plan/Inspection and Test Plan

Inspection and test plans attached if any, to the MR/PR are generic and indicative only. Immediately after receipt of the order, supplier shall submit within one week of receiving FOA/LOA, the Quality Assurance Plan for manufacturing, covering quality control of critical bought out items/materials, inspection & testing at various stages of production, quality control records and site assembly & testing as may be applicable to the specific order and obtain approval from concerned Regional procurement Office of EIL/third party inspection agency, as applicable.

4.5.8 Inspection Release Note (IRN)

Supplier shall ensure that all documents viz. documents reviewed, manufacturer's test certificate etc. mentioned in Inspection Release Note(IRN) issued by EIL/third party, are sent to EIL for issue of IRN.

IRN shall be issued by EIL Inspector/ third party inspection agency only after all the drawings/documents as per Supplier's index of drawings/documents are submitted and are accepted under review code-1. Material/Equipments dispatch from Supplier's/sub Supplier's works shall not commence till above condition is met.

Note: Non fulfilling above requirement shall result into appropriate penalty or with- holding of payment as per conditions of PO/PR/MR.

4.5.9 Transportation Plan

Transportation Plan for Over Dimensional Consignments (ODC), if any, shall be submitted to concerned Regional procurement Office within 2 weeks of receiving FOA/LOA, for approval. Consignment with parameters greater than following shall be considered as over dimensional.

Dimensions: 5.5 meters width x 5.5 meters height x 25 meters length

Weight : 100 MT

4.5.10 Statutory Approvals

Wherever approval by any statutory body is required to be taken by Supplier, the Supplier shall submit copy of approval by the authority to EIL.

4.5.11 Comments Resolution Sheets

While re-submitting drawings/documents the supplier shall confirm whether all comments have been incorporated, through a comments resolution sheet (As per attached format No. 3-78-0004). If any comments are not incorporated or excluded, then reason or justification for the same shall be furnished in comments resolution sheet

4.5.12 Multi Sheet Documents

Multi sheet documents other than drawings shall be submitted in their entirety in the event of a re-submission, even if only few sheets are revised.

4.6 Final Documentation

4.6.1 As Built Drawings

Shop changes made by Supplier after approval of drawings under 'Code 1' by EIL and deviations granted in deviation permits, if any, shall be marked in hard copies of drawings which shall then be stamped 'As-built' by the supplier. These 'As-built' drawings shall be reviewed and stamped by EIL Inspector or TPIA also. Supplier shall prepare scanned images files of all marked – up 'As – built' drawings. Simultaneously Supplier shall incorporate the shop changes in the native soft files of the drawings also.

4.6.2 As Built Final Documents

As built final documents shall be submitted as listed in PO/PR/MR.

4.6.3 Packing/Presentation of Final Documents

Final Documents shall be legible photocopies in A4, A3 size only. Drawings will be inserted in plastic pockets (both sides transparent, sheet thickness minimum 0.1 mm) with an extra strip of 12 mm wide for punching so that drawings are well placed.

Final Documentation shall be bound in Hard board Plastic folder(s) of size 265 mm x 315 mm (10¹/₂ inch x 12¹/₂ inch) and shall not be more than 75 mm thick. It may be of several volumes and each volume shall have a volume number, index of volumes and index of contents of that particular volume. Where number of volumes are more, 90mm thickness can be used. Each volume shall have top PVC sheet of minimum 0.15 mm thick duly fixed and pressed on folder cover and will have 2 lever clip. In case of imported items documents, 4 lever clip shall also be accepted. All four corners of folders shall be properly metal clamped. Indexing of contents with page numbering must be incorporated by supplier. Spiral/Spico bound documents shall not be acceptable. As mentioned above, books should be in hard board plastic folders with sheets punched and having 2/4 lever clips arrangement.

Each volume shall contain on cover a Title Block indicating package Equipment Tag No. & Name, PO/Purchase Requisition No., Name of Project and Name of Customer. Each volume will have hard front cover and a reinforced spine to fit thickness of book. These spines will also have the title printed on them. Title shall include also volume number (say 11 of 15) etc.

4.6.4 Submission of Soft Copies

Supplier shall submit to EIL, the scanned images files as well as the native files of drawings/documents, along with proper index.

In addition to hard copies, Supplier shall submit electronic file (CD-ROM) covering soft copies of all the final drawings and documents, all text documents prepared on computer, scanned images of all important documents (not available as soft files), all relevant catalogues, manuals available as soft files (editable copies of drawings/text documents, while for catalogues/manuals/proprietary information and data PDF files can be furnished).

4.6.5 Completeness of Final Documentation

Supplier shall get the completeness of final documentation verified by EIL and attach the Format for Completeness of Final Documentation (Format No. 3-78-004) duly signed by EIL Inspector or TPIA as applicable to the document folder.

DRAWING/DOCUMENT TRANSMITTAL SHEET

CONTRACTOR'S VENDOR'S LOGO ETC.
PL. DO NOT CHANGE LOCATION OR EXCEED THIS SPACE

PR/TENDER NO.	:	JOB NO.	:
CONTRACTORS/VENDOR'S NAME	:	PROJECT	:
EIL LOI/PO NO.	:	CLIENT	:
CONTRACTOR'S VENDOR'S LETTER NO.	:	DATE	:

CATEGORY CODES:

R- Drawings which are required to be reviewed by EIL
I – Drawings which are to be submitted for EIL record

Page 1 of 1

CONTRACTOR'S/VENDOR'S DRAWING/DOCUMENT SCHEDULE

EIL JOB NO.:
CONTRACTOR'S/VENDOR'S NAME
EIL LOU/PON NO.
DATE
CLIENT

PROJECT

CATEGORY CODES:

- R – Drawings which are required to be reviewed by EIL.
- I – Drawings which are to be submitted for EIL record.

Comment Resolution Sheet

Job. No.

Project Title _____

Drawing/Document No. _____

Revision No.

COMPLETENESS OF FINAL DOCUMENTATION

Name of Supplier/Contractor :
Customer :
Project :
EIL's Job No. :
Purchase Order No./
Contract No.
Purchase Requisition No./
Tender No. Rev. No. :
Name of the Work/ Equipment :
Tag. No. :
Supplier's/ Contractor's Works
Order No.

Certified that the Engineering Documents/ Manufacturing & Test Certificates submitted by the supplier are complete in accordance with the Supplier Data Requirements of Purchase Requisition.

Signature	:	.....	Signature	:	.....
Date	:	.....	Date	:	.....
Name	:	.....	Name	:	.....
Designation	:	.....	Designation	:	.....
Department	:	.....	Department	:	.....

Supplier/Contractor

EIL

**ADDITIONAL TECHNICAL
REQUIREMENTS**
**(VALVES-GATE, GLOBE, CHECK)-
(FORGED & CAST)**
(CAT-I)

0	10.06.14	ISSUED FOR BIDS	AN	AAB	MI
Rev. No	Date	Purpose	Prepared by	Checked by	Approved by



ADDITIONAL TECHNICAL REQUIREMENTS
(VALVES- GATE, GLOBE & CHECK- FORGED & CAST)
(CAT-I)

1. Bidder to note that no correspondence whatsoever shall be entered into or entertained after the bid submission.
2. Vendor shall furnish quotations only for those items, for which he can supply strictly as per MR specifications and for which he is approved by EIL/Owner.
3. No technical details of any nature shall be included in the offer. If the offer contains any technical deviation or clarification or stipulates any technical specifications (even if in line with the MR requirements), the offer shall be liable for rejection.
4. The submission of prices by the Bidder shall be construed to mean that he has confirmed compliance with all technical specifications of the corresponding item(s).
5. Bidder shall ensure compliance to all the attachments listed in the “list of attachment sheet” of the MR, A269-000-WB-MR-3314.
6. Valves specified as LO (Lock Open) shall be supplied with arrangement suitable for locking in open as well as in close position. Supply of locks/ pad locks are in bidder's scope.
7. Note-2 on Valve Specification Sheets (VMS) is not applicable for category-I valves.
8. Following attachments of Technical Notes for Valves(6-44-0052) are not applicable:
 - a) 6-44-0052-A4: Special requirement for Hydrogen Service valves.
 - b) 6-44-0052-A5: Special requirement for Low temperature and Cryogenic valves.
9. Refer Specification 6-44-0052-A2 for By-Pass Piping, Fittings and Valves. Bidder to note that Job specification for By-Pass Piping, Fittings and Valves, A269-6-44-0052-A2 shall be referred in place of 6-44-0052-A2.



ADDENDUM TO TECHNICAL NOTES FOR VALVES

(SPECIFICATIONS FOR BYPASS PIPING, FITTINGS AND VALVES)

Rev. No	Date	Purpose	Prepared by	Checked by	Approved by
0	12/09/2012	ISSUED AS JOB SPECIFICATION	AGR	AAB	UC/MI

Class (Main Valve Sht.no.)	Pipe	Fittings	Bypass Valve Sht.no.
A1A(51301), A6A(51301), A9A(51301), A10A(51301), A11A(51301), A13A(51301), A96A(51301), A3A(51321), A95A(51321), B1A(51401), B6A(51401), B9A(51401), B13A(51401), D1A(51501), D9A(51501), D13A(51501), D6A(51501)	ASTM A106 Gr.B (SMLS) 0.5"-1.5" : XXS	ASTM A105 0.5"-1.5" : SW 9000#	52001
A2A(51302), B2A(51402), D2A (51502)	ASTM A106 Gr.B (SMLS)- IBR 0.5"-0.75": S160 1.0"-1.5" : XS	ASTM A105 - IBR 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52002
A5A (51304), B5A (51404)	ASTM A106 Gr.B (SMLS) -H2 0.5"-0.75": S160 1.0"-1.5": XS	ASTM A105 - H2 0.5"-0.75": SW 6000# 1.0"-1.5" : SW 3000#	52004
A7A (51307), B7A(51497), D7A(51962)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A105 0.5"-0.75": SW 6000# 1.0"-1.5": SW 3000#	52007
A16A (51311)	ASTM A106 Gr.B (SMLS) - NACE 0.5"-0.5" : XXS 0.75"-1.5": S160	ASTM A105 - NACE 0.5"-0.5" : SW 9000# 0.75"-1.5": SW 6000#	52011
A19A (51390)(51313), B19A (51413), D19A(51513), A28A(51313)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 0.5"-1.5" : XS	ASTM A105 0.5"-0.75": SW 6000# 0.75"-1.5": SW 3000#	52013
A76A(51396), B76A(51496)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A105 0.5"-0.75": SW 6000# 1.0"-1.5": SW 3000#	52096
A3F (51336), A4F (51336), B3F (51436), B4F (51436) , D4F (51590), D3F (51590)	ASTM A335 Gr.P5(SMLS) 0.5"-1.5" : XXS	ASTM A182 Gr.F5 0.5"-1.5" : SW 9000#	52036
A4G (51339), B4G (51439), D4G(51599), A66G(51339), B66G(51439) , D66G(51599)	ASTM A335 Gr.P9(SMLS) 0.5"-1.5" : S160	ASTM A182 Gr.F9 0.5"-1.5": SW 6000#	52039
B1K (51445),A3K(51345),A1K(51345)	ASTM A312TP304(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F304 0.5"-1.5" : SW 3000#	52045
A11K (51350)	ASTMA312TP304L(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F304L 0.5"-1.5": SW 3000#	52050
B1N (51466),A1N(51366)	ASTMA312TP316L(SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F316L 0.5"-1.5": SW 3000#	52066
A77A(51392)	ASTM A106 Gr.B (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A105 0.5"-0.75": SW 6000# 0.75"-1.5": SW 3000#	52092

Class (Main Valve Sht.no.)	Pipe	Fittings	Bypass Valve Sht.no.
A70M(51393), A74M(51393), B70M (51493), B74M (51493), D70M(51593), D74M(51593)	ASTM A312 TP321 (SMLS) 0.5"-0.75" : 80S 1.0"-1.5": 40S	ASTM A182 Gr.F321 0.5"-1.5": SW 3000#	52093
A72F(51398), B72F(51498)	ASTM A335 Gr.5 (SMLS) 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F5 0.5"-0.75": SW 6000# 0.75"-1.5": SW 3000#	52098
B22F(51495)	ASTM A335 Gr.P5 (SMLS) - IBR 0.5"-0.75" : S160 1.0"-1.5": XS	ASTM A182 Gr.F5- IBR 0.5"-0.75": SW 6000# 0.75"-1.5": SW 3000#	52095
A72G(51397), B72G(51499), D72G(51599)	ASTM A335 Gr.P9 (SMLS) 0.5"-1.5" : S160	ASTM A182 Gr.F9 0.5"-1.5": SW 6000#	52099

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52366 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52366	PIPING CLASS : A1N	STANDARD:
RATING : 150	STANDARD :	MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 16.0"	ENDS :	RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 351 GR CF3M
BONNET	BOLTED	ASTM A 351 GR.CF3M
STEM	RISING	SS 316L (NO CASTING)
DISC	LOOSE PLUG TYPE/BALL TYP	SS 316L
BODY SEAT RING	RENEWABLE/NON RENEWABLE	SS 316L
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B7
BONNET NUTS		ASTM A194 GR 2H
BONNET GASKET		SP WND SS316L-GRAFOIL FILLER/CORRUGATED SS316L
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
OTHERS	O S & Y	
SPECIAL SERVICE CONDITION		MAX TEMP 371 DEG. C.
BACK SEAT & SHOULDER		SS316L
HYDROSTATIC TEST PRESSURE	BODY : 425 PSIG	SEAT : 325 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 ALL CASTINGS SHALL BE SOLUTION HEAT TREATED.
- 7 WELD REPAIR, IF ANY, SHALL BE CARRIED OUT BEFORE SOLUTION HEAT TREATMENT.
- 8 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/2005	12/12/2000	28/05/2001	30/06/2009	

52366

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51001 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51001	PIPING CLASS : A10A, A11A, A13A, A1A, A20A, A32A, A3A, A6A, A95A, A96A, A9A, B13A, B1A, B32A, B6A, B9A, D13A, D1A, D6A, D9A		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.25" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
BONNET	BOLTED	ASTM A 105	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP.WND SS316- GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP. 427 DEG. C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG.	SEAT : 2175 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/01/2005 212	14/12/2000	28/05/2001	30/06/2009	

51001

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51002 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51002	PIPING CLASS : A2A, B2A, D2A		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
BONNET	BOLTED	ASTM A 105	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316 - GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX TEMP. 427 DEG. C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG.	SEAT : 2175 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IBR ALSO.
- 5 ALL VALVES SHALL BE SUPPLIED WITH IBR CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF IBR ALSO.
- 8 VALVES AS PER API-602 AND TESTING AS PER API-598 & IBR ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/1995 212	14/12/2000	28/05/2001	30/06/2009	

51002

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51007 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51007	PIPING CLASS : A75A, A7A, B7A, D7A		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
BONNET	BOLTED	ASTM A 105	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316 - GRAFOIL FILLER.	
SPECIAL SERVICE CONDITIONS		VACUUM; MAX TEMP 427 DEG.C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG.	SEAT : 2175 PSIG.	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 5 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.
- 6 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5	6	7	
DATE	14/12/2009 212	28/05/2001	06/08/2002	01/12/2004	30/06/2009	

51007

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51011 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51011	PIPING CLASS : A16A, B16A		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
BONNET	BOLTED	ASTM A 105	
STEM	RISING	SS 316L (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7M	
BONNET NUTS		ASTM A194 GR 2HM	
BONNET GASKET		SP WND SS316L -GRAFOIL FILLER.	
SPECIAL SERVICE CONDITIONS	NACE	SOUR SERVICE (MAX TEMP 427 DEG.C.)	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 NACE REQUIREMENTS SHALL BE AS PER MR0103.
- 5 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	6	
DATE	02/01/2005	12/14/2000	28/05/2001	31/12/2001	30/06/2009	

51011

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51013 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51013	PIPING CLASS : A19A, A28A, B19A, D19A		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
BONNET	BOLTED	ASTM A 105	
STEM	RISING	SS 304/ SS 316; (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316 - GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		CAUSTIC(MAX.TEMP.110 DEG.C) AND AMINE	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	6	
DATE	02/01/1995	12/12/2000	28/05/2001	23/06/2003	30/06/2009	

51013

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51036 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51036	PIPING CLASS : A3F, A4F, B3F, B4F, D3F, D4F		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 182 GR.F5	
BONNET	BOLTED	ASTM A 182 GR.F5	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B16	
BONNET NUTS		ASTM A194 GR 4/GR7	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 538 DEG.C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 3000 PSIG	SEAT : 2200 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	6	
DATE	02/01/2005	12/12/2000	28/05/2001	06/08/2002	30/06/2009	

51036

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51045 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51045	PIPING CLASS : A1K, B1K		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 182 GR.F304	
BONNET	BOLTED	ASTM A 182 GR.F304	
STEM	RISING	SS 304/ SS 316; (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR.2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 454 DEG.C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2900 PSIG	SEAT : 2125 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

51045

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51066		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51066	PIPING CLASS : A1N, B1N		
RATING : 800	STANDARD : API 602/ ISO 15761		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 182 GR.F316L	
BONNET	BOLTED	ASTM A 182 GR.F316L	
STEM	RISING	SS 316L (NO CASTING)	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316L-GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 454 DEG.C.	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2400 PSIG	SEAT : 1775 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/1995	12/12/2000	28/05/2001	30/06/2009	

51066

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51080 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51080	PIPING CLASS : A21Y, A33Y, J2A		
RATING : CL.2	STANDARD : IS:778 CL.2		
SIZE RANGE : 0.5" TO 1.5"	ENDS : SCRF 3000 TO B-1.20.1		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	IS 318 GR.LTB2 (LEADED TIN BRONZE)	
BONNET	BOLTED/SCREWED	IS 318 GRLTB2	
STEM	RISING	IS 320 ALLOY HT2 HIGH TENSILE BRASS	
WEDGE DISC	SOLID	IS 318 GR LTB2	
BODY SEAT RING	RENEWABLE	IS 318 GR LTB2	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	PTFE	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		IS 1367 CLAUSE 4.6 & 4 / ASTM A193 GR B7	
BONNET NUTS		IS 1367 CLAUSE 4.6 & 4 / ASTM A194 GR 2H	
BONNET GASKET		RUBBER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 75 DEG.C.	
BACK SEAT & SHOULDER		IS 320 ALLOY HT2	
OTHERS			
HYDROSTATIC TEST PRESSURE	BODY : 348 PSIG	SEAT : 232 PSIG	
TEST PRESSURE WITH AIR			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IS:778 CL.2



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5	6	
DATE	14/12/2009	28/05/2001	06/08/2002	30/06/2009	

51080

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51093		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51093	PIPING CLASS : A70M, A74M, B70M, B74M, D70M, D74M		STANDARD:
RATING : 800	STANDARD : API 602/ ISO 15761		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 182 GR.F321	
BONNET	BOLTED	ASTM A 182 GR.F321	
STEM	RISING	SS 321 (NO CASTING), 32 RMS FINISH	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL DIE MOLDED RINGS WITH SACRIFICIAL CORROSION INHIBITOR	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A453 GR 660 CL.A	
BONNET NUTS		ASTM A453 GR 660 CL.A	
BONNET GASKET		SP WND SS321 + GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 500 DEG.C.(VACUUM)	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2900 PSIG	SEAT : 2125 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.
- 5 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V SUBSECTION-A ARTICLE 10(HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 6 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM HgA VACUUM SERVICE AT INTENDED TEMPERATURE.
- 7 STRESS RUPTURE TEST AS DETAILED IN ASTM A453 SHALL BE CARRIED OUT FOR ALL ASTM A453 BOLTING MATERIAL IRRESPECTIVE OF TEMPERATURE.



SIGNATURE
&
SEAL
OF MANUFACTURER

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 51096 Sheet No. 1 of 1

GATE VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :51096		PIPING CLASS : A76A, B76A	STANDARD:	
RATING : 800		STANDARD : API 602/ ISO 15761	MFGRS CAT/FIG: (For category -II MRs only)	
SIZE RANGE : 0.5" TO 1.5"		ENDS : SW 3000 TO B-16.11	RATING: ENDS:	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
BONNET	BOLTED	ASTM A 105		
STEM	RISING	SS 316L (NO CASTING)		
WEDGE DISC	SOLID	STELLITED		
BODY SEAT RING	RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL DIE MOLDED RINGS WITH SACRIFICAL CORROSION INHIBITOR		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316L + GRAFOIL FILLER		
SPECIAL SERVICE CONDITIONS		MAX TEMP. 427 DEG. C.(VACUUM) + PWHT		
BACK SEAT & SHOULDER	INTEGRAL			
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG.	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API 598 ARE ALSO ACCEPTABLE.
- 5 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 6 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.



Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51098		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51098	PIPING CLASS : A72F, B72F		
RATING : 800	STANDARD : API 602/ ISO 15761		STANDARD:
SIZE RANGE : 0.5" TO 1.5"	ENDS : SW 3000 TO B-16.11		MFGRS CAT/FIG: (For category -II MRs only)
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 182 GR.F5	
BONNET	BOLTED	ASTM A 182 GR.F5	
STEM	RISING	13% CR. STEEL (NO CASTING).	
WEDGE DISC	SOLID	STELLITED	
BODY SEAT RING	RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	GRAFOIL DIE MOLDED RINGS WITH SACRIFICIAL CORROSION INHIBITOR	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B16	
BONNET NUTS		ASTM A194 GR 4/GR7	
BONNET GASKET		SP WND SS316 + GRAFOIL FILLER	
SPECIAL SERVICE CONDITIONS		MAX TEMP 538 DEG.C. (VACUUM)	
BACK SEAT & SHOULDER	INTEGRAL		
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 3000 PSIG	SEAT : 2200 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-602 AND TESTING AS PER API 598 ARE ALSO ACCEPTABLE.
- 5 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 6 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	0	
DATE	15/02/2014	Page 185 of 212

51098

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51301		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51301	PIPING CLASS : A10A, A11A, A13A, A1A, A32A, A6A, A96A, A9A		
RATING : 150	STANDARD : API 600/ ISO 10434		
SIZE RANGE : 2.0" TO 42.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	13% CR STEEL FACING/13% CR. STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS 316	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		MAX TEMP 371 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 GATE VALVES OF SIZE 26" AND ABOVE SHALL BE IN ACCORDANCE WITH ANSI B-16.34 WITH TESTING AS PER API 598 AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.
- 5 5% VALVE CASTINGS UPTO 24" AND 100% VALVE CASTINGS 26" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 FOR VALVE SIZE UPTO 24", VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.
- 7 GATE VALVES OF SIZE 26" & ABOVE AS PER BS-1414 ARE ALSO ACCEPTABLE WITH TESTING AS PER BS 6755 (PART-I) AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/1995	12/14/2000	28/05/2001	30/06/2009	

51301

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51302		Sheet No. 1 of 2
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51302	PIPING CLASS : A2A		
RATING : 150	STANDARD	: API 600/ ISO 10434	
SIZE RANGE : 2.0" TO 36.0"	ENDS	: FLGD TO B-16.5 RF/125AARH	
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	13% CR STEEL FACING/13% CR. STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS 316	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX. TEMP. 371 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IBR ALSO.
- 5 ALL VALVES SHALL BE SUPPLIED WITH IBR CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 5% VALVE CASTINGS UPTO 24" AND 100% VALVE CASTINGS 26" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 8 GATE VALVES OF SIZE 26" AND ABOVE SHALL BE IN ACCORDANCE WITH ANSI B-16.34 WITH TESTING AS PER API-598 RESPECTIVELY & IBR AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.
- 9 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF IBR ALSO.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

51302

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Sheet No. 2 of 2

NOTES

- 10 FOR VALVE SIZE UPTO 24", VALVES AS PER API-600 AND TESTING AS PER API-598 & IBR ARE ALSO ACCEPTABLE.
- 11 GATE VALVES OF SIZE 26" & ABOVE AS PER BS-1414 ARE ALSO ACCEPTABLE WITH TESTING AS PER BS 6755 (PART-I) & IBR AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.

SHEET REV. NO.	2	3	4	5
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009

51302

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 51307 Sheet No. 1 of 1

GATE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :51307	PIPING CLASS : A75A, A7A		STANDARD:
RATING : 150	STANDARD : API 600/ ISO 10434		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 42.0"	ENDS : FLGD TO B-16.5 RF/125AARH		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	13% CR STEEL FACING/13% CR. STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS316	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		VACUUM; MAX TEMP 371 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 5 5% VALVE CASTINGS UPTO 24" AND 100% VALVE CASTINGS 26" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.
- 7 GATE VALVES OF SIZE 26" AND ABOVE SHALL BE IN ACCORDANCE WITH ANSI B-16.34 WITH TESTING AS PER API-598 AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.
- 8 FOR VALVE SIZE UPTO 24", VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.
- 9 GATE VALVES OF SIZE 26" & ABOVE AS PER BS-1414 ARE ALSO ACCEPTABLE WITH TESTING AS PER BS 6755 (PART-I) AND FLANGE ENDS SHALL BE IN ACCORDANCE WITH ASME B16.47 SERIES B.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5	6	7	
DATE	14/12/2000 212	28/05/2001	06/08/2002	01/12/2004	30/06/2009	

51307

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51366 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51366	PIPING CLASS : A1N		
RATING : 150	STANDARD : API 600/ ISO 10434		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 351 GR CF3M	
BONNET	BOLTED	ASTM A 351 GR.CF3M	
STEM	RISING	SS 316L (NO CASTING)	
WEDGE DISC	FLEXIBLE	316L	
BODY SEAT RING	NON-RENEWABLE/RENEWABLE	316L	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316L-GRAFOIL FILLER/CORRUGATED SS316L	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		MAX TEMP 371 DEG.C.	
BACK SEAT & SHOULDER		SS 316L	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 425 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 10 % VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 ALL CASTING SHALL BE SOLUTION HEAT TREATED
- 6 WELD REPAIR, IF ANY, SHALL BE CARRIED OUT BEFORE SOLUTION HEAT TREATMENT.
- 7 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

51366

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51384 Sheet No. 1 of 1		
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51384	PIPING CLASS : A21Y, A33Y		
RATING : 150	STANDARD : API 600/ ISO 10434		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 FF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	BRONZE (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	BRONZE	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	BRONZE	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT.IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS316	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		SEA WATER: MAX TEMP 70 DEG.C. MAX.PR. 15.4 KG/CM2G	
BACK SEAT & SHOULDER		BRONZE	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 RADIOGRAPHY OF VALVE CASTINGS NOT REQUIRED.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5	6	
DATE	14/12/2009 212	28/05/2001	06/08/2002	30/06/2009	

51384

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51396		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51396	PIPING CLASS : A76A		
RATING : 150	STANDARD : API 600/ ISO 10434		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	SS 316L (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	SS 316L	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	SS 316L	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316L + GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		MAX TEMP 371 DEG.C.(VACUUM)	
BACK SEAT & SHOULDER		SS 316L	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER API-600 AND TESTING AS PER API 598 ARE ALSO ACCEPTABLE.
- 5 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 6 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.
- 7 50% VALVE CASTINGS UPTO 24" SHALL UNDERGO RADIOGRAPHIC EXAMINATION.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	0	1
DATE	15/09/2014	25/07/2013

51396

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 51401 Sheet No. 1 of 1

GATE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :51401 **PIPING CLASS :** B13A, B1A, B32A, B6A, B9A
RATING : 300 **STANDARD :** API 600/ ISO 10434
SIZE RANGE : 2.0" TO 24.0" **ENDS :** FLGD TO B-16.5 RF/125AARH

STANDARD:
MFGRS CAT/FIG:
 (For category -II MRs only)
RATING: **ENDS:**

DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB		
BONNET	BOLTED	ASTM A 216 GR.WCB		
STEM	RISING	13% CR. STEEL (NO CASTING)		
WEDGE DISC	FLEXIBLE/SOLID	13% CR STEEL FACING/13% CR. STEEL		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.		
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER		13% CR STEEL		
OTHERS	O.S & Y.			
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 10% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO
RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009

51401

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51402		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51402	PIPING CLASS : B2A		
RATING : 300	STANDARD : API 600/ ISO 10434		STANDARD:
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		MFGRS CAT/FIG: (For category -II MRs only)
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	13% CR STEEL FACING/13% CR. STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX. TEMP. 427 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IBR ALSO.
- 5 ALL VALVES SHALL BE SUPPLIED WITH IBR CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 10% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 8 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF IBR ALSO.
- 9 VALVES AS PER API-600 AND TESTING AS PER API-598 & IBR ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	12/14/2000	28/05/2001	30/06/2009	

51402

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 51413 Sheet No. 1 of 1

GATE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :51413	PIPING CLASS : B19A	STANDARD:
RATING : 300	STANDARD : API 600/ ISO 10434	MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH	RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB
BONNET	BOLTED	ASTM A 216 GR.WCB
STEM	RISING	SS 304/ SS 316; (NO CASTING)
WEDGE DISC	SOLID/FLEXIBLE	SS 304
BODY SEAT RING	RENEWABLE/NON RENEWABLE	SS 304
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B7
BONNET NUTS		ASTM A194 GR 2H
BONNET GASKET		SP WND SS316-GRAFOIL FILLER
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
SPECIAL SERVICE CONDITIONS		CAUSTIC SERVICE(MAX.TEMP.110 DEG.C) & AMINE;
BACK SEAT & SHOULDER		SS 304
OTHERS	O.S & Y.	
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 50% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	212	14/12/2000	28/05/2001	

51413

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 51496 Sheet No. 1 of 1

GATE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :51496	PIPING CLASS : B76A		STANDARD:
RATING : 300	STANDARD : API-600		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 42.0"	ENDS : FLGD TO B-16.5 RF/125AARH		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	SS 316L (NO CASTING)	
WEDGE DISC	FLEXIBLE	SS 316L FACING/SS 316L	
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	SS 316L FACING/SS 316L	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316L + GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		SOUR SERVICE/MAX TEMP 427 DEG.C.	
BACK SEAT & SHOULDER		SS 316L	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 10% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.
- 6 ONE VALVE PER SIZE SHALL BE HELIUM VACUUM TESTED AS PER ASME V, SUBSECTION-A, ARTICLE 10 (HOOD METHOD) APPENDIX IX TO CHECK SUITABILITY FOR VACUUM SERVICE.
- 7 VENDOR SHALL CERTIFY SUITABILITY OF VALVES FOR 10MM OF HgA VACUUM SERVICE AT INTENDED TEMPERATURE.



SHEET REV. NO.	0	
DATE	15/09/2014	

51496

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51501		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51501	PIPING CLASS : D13A, D1A, D6A, D9A		
RATING : 600	STANDARD : API 600/ ISO 10434		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	FLEXIBLE/SOLID	STELLITED	
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 5 VALVES AS PER API-600 AND TESTING AS PER API-598 ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

51501

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 51502		Sheet No. 1 of 1
GATE VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :51502	PIPING CLASS : D2A		
RATING : 600	STANDARD : API 600/ ISO 10434		STANDARD:
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		MFGRS CAT/FIG: (For category -II MRs only)
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
WEDGE DISC	SOLID/FLEXIBLE	STELLITED	
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	NON RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
SPECIAL SERVICE CONDITIONS	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX. TEMP. 427 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
OTHERS	O.S & Y.		
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IBR ALSO.
- 5 ALL VALVES SHALL BE SUPPLIED WITH IBR CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 8 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF IBR ALSO.
- 9 VALVES AS PER API-600 AND TESTING AS PER API-598 & IBR ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

51502

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52001 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

TAG NO. :52001 **PIPING CLASS :** A10A, A11A, A13A, A1A, A20A, A32A, A3A, A6A, A95A, A96A, A9A, B13A, B1A, B32A, B6A, B9A, D13A, D1A, D6A, D9A
RATING : 800 **STANDARD :** BS EN ISO 15761
SIZE RANGE : 0.25" TO 1.5" **ENDS :** SW 3000 TO B-16.11

MANUF'S OFFER

STANDARD:

MFGRS CAT/FIG:

(For category -II MRs only)

RATING: ENDS:

DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
BONNET	BOLTED	ASTM A 105		
STEM	RISING	13% CR. STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE	STELLITED		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316-GRAFOIL FILLER		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION		MAX TEMP 427 DEG.C.		
BACK SEAT & SHOULDER	INTEGRAL			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) ARE ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/01/0005	14/12/2000	28/05/2001	30/06/2009	

52001

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52002 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

TAG NO. :52002 **PIPING CLASS :** A2A, B2A, D2A
RATING : 800 **STANDARD :** BS EN ISO 15761
SIZE RANGE : 0.5" TO 1.5" **ENDS :** SW 3000 TO B-16.11

DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
BONNET	BOLTED	ASTM A 105		
STEM	RISING	13% CR. STEEL (NO CASTING)		
DISC	LOOSE PLUG TYPE	STELLITED		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		ASTM A193 GR B7		
BONNET NUTS		ASTM A194 GR 2H		
BONNET GASKET		SP WND SS316 WITH GRAFOIL FILLER		
OTHERS	O S & Y			
SPECIAL SERVICE CONDITION	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX TEMP. 427 DEG.C.		
BACK SEAT & SHOULDER	INTEGRAL			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR	80 PSIG			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER IBR ALSO.
- 5 ALL VALVES SHALL BE SUPPLIED WITH IBR CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF IBR ALSO.
- 8 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) & IBR ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/2005	12/12/2000	28/05/2001	30/06/2009	

52002

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52080 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52080 PIPING CLASS : A21Y, A33Y, J2A
RATING : CL.2 **STANDARD** : IS:778 CL.2
SIZE RANGE : 0.5" TO 1.5" **ENDS** : SCRF 3000 TO B-1.20.1

STANDARD:

MFGRS CAT/FIG:
(For category -II MRs only)

RATING: **ENDS:**

DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	CAST	IS 318 GR.LTB2 (LEADED TIN BRONZE)		
BONNET	BOLTED/SCREWED	IS 318 GR.LTB2		
STEM	RISING	IS 320 ALLOY HT2 HIGH TENSILE BRASS		
DISC	LOOSE PLUG TYPE	IS 318 GR.LTB2		
BODY SEAT RING	RENEWABLE/NON RENEWABLE	IS 318 GR.LTB2		
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	PTFE		
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON		
BONNET BOLTS		IS 1367 CLAUSE 4.6 & 4 / ASTM A 193 GR B7		
BONNET NUTS		IS 1367 CLAUSE 4.6 & 4 / ASTM A 194 GR 2H		
BONNET GASKET		RUBBER		
OTHERS				
SPECIAL SERVICE CONDITION		MAX TEMP 75 DEG CENT.		
BACK SEAT & SHOULDER		IS 320 GR HT2		
HYDROSTATIC TEST PRESSURE	BODY : 348 PSIG	SEAT : 232 PSIG		
TEST PRESSURE WITH AIR				

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1/ IS STD.
- 5 SCREWED ENDS OF VALVES SHALL BE FEMALE TYPE AS PER ANSI B 1.20.1
- 6 VALVE TESTING AS PER BS 6755(PART-I) ARE ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5
DATE	14/12/2009 212	28/05/2001	30/06/2009

52080

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52311 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52311	PIPING CLASS : A16A	STANDARD:
RATING : 150	STANDARD :	MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 16.0"	ENDS :	RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB
BONNET	BOLTED	ASTM A 216 GR.WCB
STEM	RISING	SS 316L (NO CASTING)
DISC	LOOSE PLUG TYPE/BALL TYP	SS 316L FACING/SS 316L
BODY SEAT RING	NON RENEWABLE	SS 316L FACING/SS 316L
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B7M
BONNET NUTS		ASTM A194 GR 2HM
BONNET GASKET		SP WND SS316L-GRAFOIL FILLER/CORRUGATED SS316L
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
OTHERS	O S & Y	
SPECIAL SERVICE CONDITION	NACE	SOUR SERVICE; MAX TEMP 371 DEG.C.
BACK SEAT & SHOULDER		SS316L
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 50% OF VALVE CASTING SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 NACE REQUIREMENTS SHALL BE AS PER MR0103.
- 7 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SHEET REV. NO.	2	3	4	5	
DATE	02/04/1995	12/14/2000	28/05/2001	30/06/2009	

52311

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52313 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52313	PIPING CLASS : A19A, A28A	STANDARD: MFGRS CAT/FIG: (For category -II MRs only)
RATING : 150	STANDARD : BS-1873	RATING: ENDS:
SIZE RANGE : 2.0" TO 16.0"	ENDS : FLGD TO B-16.5 RF/125AARH	
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB
BONNET	BOLTED	ASTM A 216 GR.WCB
STEM	RISING	SS 304/ SS 316; (NO CASTING)
DISC	LOOSE PLUG TYPE/BALL TYP	SS 304
BODY SEAT RING	RENEWABLE/NON RENEWABLE	SS 304
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B7
BONNET NUTS		ASTM A194 GR 2H
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS316
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
OTHERS	O S & Y	
SPECIAL SERVICE CONDITION		CAUSTIC SERVICE(MAX.TEMP.110 DEG.C) & AMINE;
BACK SEAT & SHOULDER		SS 304
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 50% OF VALVE CASTING SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5
DATE	02/01/2005	14/12/2000	28/05/2001	30/06/2009

52313

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52336 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52336	PIPING CLASS : A3F, A4F	STANDARD: MFGRS CAT/FIG: (For category -II MRs only)
RATING : 150	STANDARD : BS-1873	RATING:
SIZE RANGE : 2.0" TO 16.0"	ENDS : FLGD TO B-16.5 RF/125AARH	ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 217 GR.C5 (NORM. & TEMP.)
BONNET	BOLTED	ASTM A 217 GR.C5 (NORM. & TEMP.)
STEM	RISING	13% CR. STEEL (NO CASTING)
DISC	LOOSE PLUG TYPE/BALL TYP	STELLITED
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B16
BONNET NUTS		ASTM A194 GR.4/GR7
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/CORRUGATED SS316
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
OTHERS	O S & Y	
SPECIAL SERVICE CONDITION		MAX TEMP 371 DEG. C.
BACK SEAT & SHOULDER		13% CR STEEL
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

52336

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52384 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52384	PIPING CLASS : A21Y, A33Y		STANDARD:
RATING : 150	STANDARD : BS-1873		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 16.0"	ENDS : FLGD TO B-16.5 FF/125AARH		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	BRONZE (NO CASTING)	
DISC	LOOSE PLUG TYPE/BALL TYP	BRONZE	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	BRONZE	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER/ CORRUGATED SS316	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
OTHERS	O S & Y		
SPECIAL SERVICE CONDITION		SEA WATER; MAX TEMP 70 DEG. C.; MAX.PR. 15.4 KG/CM2G	
BACK SEAT & SHOULDER		BRONZE	
HYDROSTATIC TEST PRESSURE	BODY : 450 PSIG	SEAT : 325 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 RADIOGRAPHY OF VALVE CASTINGS NOT REQUIRED.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	3	4	5	6	
DATE	14/12/2009 212	28/05/2001	06/08/2002	30/06/2009	

52384

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52401 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52401	PIPING CLASS : B13A, B1A, B6A, B9A		STANDARD:
RATING : 300	STANDARD : BS-1873		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 12.0"	ENDS : FLGD TO B-16.5 RF/125AARH		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
DISC	LOOSE PLUG TYPE/BALL TYP	13% CR STEEL FACING/13% CR STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
OTHERS	O S & Y		
SPECIAL SERVICE CONDITION		MAX TEMP 427 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

52401

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52402 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52402	PIPING CLASS : B2A		STANDARD:
RATING : 300	STANDARD :	BS-1873	MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 12.0"	ENDS :	FLGD TO B-16.5 RF/125AARH	RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
BONNET	BOLTED	ASTM A 216 GR.WCB	
STEM	RISING	13% CR. STEEL (NO CASTING)	
DISC	LOOSE PLUG TYPE/BALL TYP	13% CR STEEL FACING/13% CR. STEEL	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	13% CR STEEL FACING/13% CR. STEEL	
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS	
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON	
BONNET BOLTS		ASTM A193 GR B7	
BONNET NUTS		ASTM A194 GR 2H	
BONNET GASKET		SP WND SS316-GRAFOIL FILLER	
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
OTHERS	O S & Y		
SPECIAL SERVICE CONDITION	I.B.R	STEAM/CONDENSATE/BOILER FEED WATER; MAX. TEMP. 427 DEG.C.	
BACK SEAT & SHOULDER		13% CR STEEL	
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG	
TEST PRESSURE WITH AIR	80 PSIG		

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1 & I.B.R.
- 5 ALL VALVES SHALL BE SUPPLIED WITH I.B.R CERTIFICATE IN FORM-III C.
- 6 ALL VALVES SHALL BE PAINTED RED ON BODY-BONNET JOINT.
- 7 10% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 8 VALVES TO COMPLY WITH DESIGN REQUIREMENTS OF I.B.R ALSO.
- 9 VALVE TESTING AS PER BS 6755 (PART-I) & I.B.R IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

52402

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 52413 Sheet No. 1 of 1

GLOBE VALVE SPECIFICATION

MANUF'S OFFER

TAG NO. :52413	PIPING CLASS : B19A	STANDARD:
RATING : 300	STANDARD : BS-1873	MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 2.0" TO 12.0"	ENDS : FLGD TO B-16.5 RF/125AARH	RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL
BODY	CAST	ASTM A 216 GR.WCB
BONNET	BOLTED	ASTM A 216 GR.WCB
STEM	RISING	SS 304/ SS 316; (NO CASTING)
DISC	LOOSE PLUG TYPE/BALL TYP	SS304
BODY SEAT RING	RENEWABLE/NON RENEWABLE	SS304
STEM PACKING	RENEWABLE WITH VALVE OPEN ON STREAM	CORROSION INHIBITED DIE FORMED FLEXIBLE GRAPHITE WITH BRAIDED ANTI EXTRUSION RINGS
HAND WHEEL	RISING	MALLEABLE IRON/CAST ST/FAB.ST/DUCT. IRON
BONNET BOLTS		ASTM A193 GR B7
BONNET NUTS		ASTM A194 GR 2H
BONNET GASKET		SP WND SS316-GRAFOIL FILLER
REQUIREMENT OF GEAR OPERATOR		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.
OTHERS	O S & Y	
SPECIAL SERVICE CONDITION		CAUSTIC SERVICE(MAX.TEMP.110 DEG.C) & AMINE
BACK SEAT & SHOULDER		SS304
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG
TEST PRESSURE WITH AIR	80 PSIG	

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST
EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH
EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 50% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

52413

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 53001 Sheet No. 1 of 1		
CHECK VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :53001	PIPING CLASS : A10A, A11A, A13A, A1A, A20A, A32A, A3A, A6A, A95A, A96A, A9A, B13A, B1A, B32A, B6A, B9A, D13A, D1A, D6A, D9A		
RATING : 800	STANDARD : BS EN ISO 15761		
SIZE RANGE : 0.25" TO 1.5"	ENDS : SW 3000 TO B-16.11		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	FORGED	ASTM A 105	
COVER	BOLTED	ASTM A 105	
DISC/PISTON		STELLITED	
BODY SEAT RING	RENEWABLE/NON RENEWABLE	STELLITED	
DISC HINGE/HINGE PIN			
COVER STUD BOLT		ASTM A193 GR B7	
COVER NUT		ASTM A194 GR 2H	
COVER GASKET		SP WND SS316-GRAFOIL FILLER	
TYPE	LIFT CHECK TYPE		
OTHERS			
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG.C.	
WASHER,NUT,PIN			
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG	
TEST PRESSURE WITH AIR			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES SHALL BE OF STANDARD BORE DESIGN.
- 5 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) IS ALSO ACCEPTABLE .



SHEET REV. NO.	2	3	4	5	
DATE	02/04/2005	14/12/2000	28/05/2001	30/06/2009	

53001

Client : BPCL	Dept./Sect. : 16/43
Project : CDU-4	
Location : MAHUL MUMBAI	Tag No: 53013 Sheet No. 1 of 1

CHECK VALVE SPECIFICATION			MANUF'S OFFER	
TAG NO. :53013		PIPING CLASS : A19A, A28A, B19A, D19A		STANDARD:
RATING : 800		STANDARD : BS EN ISO 15761		MFGRS CAT/FIG: (For category -II MRs only)
SIZE RANGE : 0.5" TO 1.5"		ENDS : SW 3000 TO B-16.11		RATING: ENDS:
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION	MATERIAL
BODY	FORGED	ASTM A 105		
COVER	BOLTED	ASTM A 105		
DISC/PISTON		STELLITED		
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED		
DISC HINGE/HINGE PIN				
COVER STUD BOLT		ASTM A193 GR B7		
COVER NUT		ASTM A194 GR 2H		
COVER GASKET		SP WND SS316-GRAFOIL FILLER		
TYPE	LIFT CHECK TYPE			
OTHERS				
SPECIAL SERVICE CONDITIONS		CAUSTIC SERVICE(MAX.TEMP.110 DEG.C) & AMINE		
WASHER,NUT,PIN				
HYDROSTATIC TEST PRESSURE	BODY : 2975 PSIG	SEAT : 2175 PSIG		
TEST PRESSURE WITH AIR				

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRs, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 VALVES SHALL BE OF STANDARD BORE DESIGN.
- 5 VALVES AS PER BS-5352 AND TESTING AS PER BS 6755(PART-I) IS ALSO ACCEPTABLE .



SHEET REV. NO.	2	3	4	5	6	
DATE	02/05/2005	14/12/2000	28/05/2001	23/10/2003	30/06/2009	

53013

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 53501		Sheet No. 1 of 1
CHECK VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :53501	PIPING CLASS : D13A, D1A, D6A, D9A		
RATING : 600	STANDARD : BS-1868		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
COVER	BOLTED	ASTM A 216 GR.WCB	
DISC		STELLITED	
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	STELLITED	
HINGE PIN		13% CR STEEL(NO CASTING)	
DISC HINGE		13% CR STEEL/A 216 GR WCB	
COVER STUD BOLT		ASTM A193 GR B7	
COVER NUT		ASTM A194 GR 2H	
COVER GASKET		SP WND SS316-GRAFOIL FILLER	
BY PASSES			
TYPE	SWING CHECK TYPE		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
OTHERS			
SPECIAL SERVICE CONDITIONS		MAX TEMP 427 DEG. C.	
WASHER,NUT,PIN		13% CR STEEL(NO CASTING)	
HYDROSTATIC TEST PRESSURE	BODY : 2225 PSIG	SEAT : 1650 PSIG	
TEST PRESSURE WITH AIR			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 100% VALVE CASTINGS SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.

SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/1995	21/05/2012	14/12/2000	28/05/2001	

53501

Client : BPCL	Dept./Sect. : 16/43		
Project : CDU-4			
Location : MAHUL MUMBAI	Tag No: 53413		Sheet No. 1 of 1
CHECK VALVE SPECIFICATION			MANUF'S OFFER
TAG NO. :53413	PIPING CLASS : B19A		
RATING : 300	STANDARD : BS-1868		
SIZE RANGE : 2.0" TO 24.0"	ENDS : FLGD TO B-16.5 RF/125AARH		
DESCRIPTION	CONSTRUCTION	MATERIAL	CONSTRUCTION
BODY	CAST	ASTM A 216 GR.WCB	
COVER	BOLTED	ASTM A 216 GR.WCB	
DISC		SS 304	
BODY SEAT RING	RENEWABLE/NON-RENEWABLE	SS304	
DISC HINGE		SS304/A 216 WCB/A515 GR 70	
HINGE PIN		SS304/ SS316 (NO CASTING)	
COVER STUD BOLT		ASTM A193 GR B7	
COVER NUT		ASTM A194 GR 2H	
COVER GASKET		SP WND SS316-GRAFOIL FILLER	
BY PASSES			
TYPE	SWING CHECK TYPE		
REQUIREMENT OF RADIOGRAPHY		REFER TECHNICAL NOTES FOR PURCHASE OF VALVES.	
OTHERS			
SPECIAL SERVICE CONDITIONS		CAUSTIC SERVICE(MAX.TEMP.110 DEG.C) & AMINE	
WASHER,NUT,PIN			
HYDROSTATIC TEST PRESSURE	BODY : 1125 PSIG	SEAT : 825 PSIG	
TEST PRESSURE WITH AIR			

NOTES

- 1 THIS VALVE SPEC SHEET SHALL BE READ IN CONJUNCTION WITH TECHNICAL NOTES FOR VALVES.
- 2 ONLY IN THE CASE OF CATEGORY - II MRS, BIDDER SHALL CLEARLY WRITE ALL/ ANY DEVIATION AGAINST EACH PART/ MATERIAL OF VALVE IN THE SPACE PROVIDED FOR AND WHEREVER BIDDER AGREES WITH EIL'S SPEC BIDDER SHALL INDICATE "AGREED".
- 3 NO CUTTING/ OVERWRITING BY BIDDER ON EIL'S SPEC IS ALLOWED.
- 4 TESTING SHALL BE AS PER BS EN 12266-1.
- 5 50% VALVE CASTINGS UPTO 16" AND 100% VALVE CASTINGS 18" AND ABOVE SHALL UNDERGO RADIOGRAPHIC EXAMINATION.
- 6 VALVE TESTING AS PER BS 6755 (PART-I) IS ALSO ACCEPTABLE.



SIGNATURE
&
SEAL
OF MANUFACTURER

SHEET REV. NO.	2	3	4	5	
DATE	02/01/2005	14/12/2000	28/05/2001	30/06/2009	

53413