



BHEL GOINDWAL

**TERMS AND CONDITIONS FOR
(Tender Enquiry No. 1415-009 Dated: 26.04.2014)
Item: Ball Seat Assemblies**

Due Date of Opening: 19.05.2014

Pre-qualification term

Bidders should primarily be engaged in manufacturing and supply of same/similar type of product /product having similar profile. Surface finish and hardness of material may be considered for evaluation of supplier. Supplier need to submit relevant document like Purchase Order copy/ies of same/similar type of item having similar profile/surface finish/hardness. Vendor may submit drawing of item that he had supplied against PO/s.

Bidders to clearly mention/specify the infrastructure available with him for intended operations. If any operation (full or part) is further sub-contracted, the same should be clearly mentioned in the pre-qualification bid itself with detail of extent of operations proposed to be sub-contracted and details of subcontractors. BHEL may carry out evaluation of bidder's capability. BHEL reserves the right to accept/reject any offer based on evaluation of bidder's capability. For verification of data presented for prequalification bid, BHEL may decide to visit the bidder(s) works.

BHEL may decide to visit the bidder(s) works/appoint any representative to visit/may ask for further documents/may enquire from customer and whatsoever to satisfy itself in the context of capability of bidder.

Any fact found deviating from bids during evaluation shall make the bidder liable to be disqualified.

1. INVITING TENDERS:

Two-part sealed quotations are invited for manufacture and supply of **Ball Seat Assys** as per specifications in the tender enquiry at following terms and conditions. Submission of two parts shall be as follows:

Bid	Bid description	Super scribing on envelope	*** Should contain ***
Part I	Techno-Commercial Offer	Part-I (Techno-Commercial) bid against tender enquiry no: 1415-009 dated 26.04.2014 due for opening on 19.05.2014	<ol style="list-style-type: none"> 1. Acceptance of all terms and conditions of tender enquiry. (Preferred is submitting signed copy of terms and conditions; if nothing is mentioned for any term, it shall be summarily concluded that the same is acceptable and no representation whatsoever shall be entertained later on). 2. Un-priced bid as per format attached. All details, i.e. whether quoted for item, duties and taxes etc. should be filled.
Part II	Price Bid	Part-II (Price) bid against tender enquiry no: 1415-009 dated 19.05.2014	<p>Price bid in the format attached. Bidder should mention prices of items in Words and Figure both. Prices should be FOR Goindwal Basis. Preferably the price bid envelop should contain ONLY the price bid. Further, if even the same conditions are mentioned in the Part-II, but after scrutiny of Part-I, the bidder has agreed to BHEL terms, the same shall be binding and any such condition found in Part-II shall in no case be discussed.</p> <p>Anything other than price mentioned in the price bid shall be considered invalid.</p>



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Both the sealed envelopes should be put in outer sealed envelope superscribing all details i.e. Enquiry Number, Date, Supplier's Name and Address and Item.

Time of submission by 1500 Hrs on Due Date. Time of Techno-Commercial bid (Part I) opening is 1600 Hrs on due date. Based on evaluation of techno-commercial offers, Price bids of bidders who qualify from techno-commercial evaluation shall be opened. BHEL may decide to open the Price bid same day at 1700 hrs. If not opened on the same day, all qualifying bidders shall be notified for date of opening of Price bids.

Sealed Tenders can be dropped in the tender box labeled as 'Tender box for MM contracts'. This tender box is located at the entrance of Admin block BHEL Goindwal.

Fax (01859-222061) / E-Mail (tendermm@bhelivp.in) offers received in time shall be considered only when such offers are complete in all respects.

2. AGENCY COMMISSION:

In respect of offers from overseas suppliers, agency commission, if any, payable to their agents in India, shall invariably be shown separately in the proforma invoice and this will be paid by us in India, in Indian Rupees, on satisfactory completion of the Contract.

If overseas Principal has any tie up with any third party in respect of Agency Commission it should be declared while submitting the offers.

Copies of current Agency, / Agreemental Authorization Letter in respect of Agency Commission shall be furnished along with order, if not made available earlier.

Price quotation format shall be as per under:

Sl. No.	Material Code	Mat Description	Approx Qty (Pcs)	Currency of Quote	Rate/Pc FOR BHEL, Goindwal		
					In figures	In words *	
1.	964655840000	Ball Seat Assy-BA51	2				
2.	964656120000	Ball Seat Assy-BA01	2				
	Present ED (%)						
	Present cess on ED (%)						
	Present CST/VAT rate (%)						
* In case of disputes/errors/difficulty in interpretation of rates mentioned in figures, rates mentioned in words shall be taken as final.							

- 2a. Rates shall be quoted on **rate per pc basis & on FOR GOINDWAL SHAIB basis only. Foreign supplier can also quote on CIF Nhava Sheva (Mumbai) basis & in USD. For foreign supplier quotes on FOR Goindwal Sahib or CIF Nhava Sheva (Mumbai) basis will be considered only.**
- 2b. Excise duty + any cess on ED, CST/VAT shall be payable extra against ED Gate Pass valid for CENVAT benefit.
- 2c. **Comparison shall be made on landed rate per pc to BHEL Goindwal Sahib for deciding L1 offer.** Foreign supplier quoting on CIF basis will attract loading for duties, loading charges on CIF value, road transportation, Agent commission etc. For comparison purpose & Agent commission conversion rate from USD to INR will be taken for tender opening date. For conversion into USD, the \$ rate at tender opening



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date will be taken throughout the contract. If the relevant day happens to be a bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken.

- 2d. Unloading of material at Main Stores of BHEL shall be arranged by BHEL.
- 2e. In case of disputes/errors/difficulty in interpretation of rates mentioned in figures, rates mentioned in words shall be taken as final.

3. **VALIDITY OF OFFERS:**

The offers shall valid for **90** days from the date of opening of the techno-commercial (Part-1) of the tender. In case of extension of tender opening date, the validity shall be deemed to be suitably revised.

4. **SCOPE OF SUPPLY:**

Material shall be supplied as per the applicable latest Technical Document **TBV** Material Standard requirements/QP/ Drawing No. National & International material Standards shall have to be arranged by vendors themselves.

5. **DELIVERY SCHEDULE:**

Supplies shall be affected and completed as per schedule mentioned in the POs. **Supplies shall be completed within 4 Months from PO placement date.** Further, BHEL may release delivery schedule from time to time based upon our requirement. Vendor shall be required to complete the order as per the PO/schedule requested.

6. **REPLACEMENT OF REJECTION:**

If the material is rejected due to defective workmanship during inspection or at the time of actual use, the rejected material shall be replaced by the supplier. Corresponding quantity shall be treated as unsupplied against respective purchase order till replacement is received at BHEL. If the material is found defective and rejected during use for which payment has already been released the rejected quantity shall be supplied free of cost by the vendor within a month of intimation of the rejection by BHEL.

7. **ACCESS TO MANUFACTURING PREMISES:**

While Purchase Orders placed on the vendor are under execution, authorized representatives of BHEL shall be allowed free access to the manufacturing facilities for the purpose of inspection or monitoring the progress of purchase orders. This access will also be extended to representatives of BHEL's customers accompanying the authorized representative/s of BHEL (which shall be intimated in advance), if our contractual requirements with our customers call for the same.

8. **TERMS OF PAYMENT:**

- a. Due payment against supplies received shall be due after 30 days of receipt and acceptance of material and shall be paid within next 15 days period. In case of any deviation from standard payment term mentioned, BHEL at it's discretion may load on the item price at "Base rate of SBI (as applicable on the date of bid opening; Techno-commercial bid opening) + 6% shall be considered for loading for the period of relaxation sought by bidders. Documents to be submitted
 - i. Commercial invoice (in duplicate)
 - ii. Excise invoice (in duplicate) valid for claiming CENVAT credit
 - iii. Original VAT invoice valid for claiming input tax credit, if applicable
 - iv. Material Test Certificates (MTC) and
 - v. Compliance Certificate.



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- b. Above documents should include your Registration numbers such as ECC no, PAN no, CST no, TIN/ VAT nos. etc.
- c. **It is mandatory to mention proper material codes in the invoices and separate invoices to be raised for different POs.**
- d. **BHEL releases payment through EFT mode ONLY. Necessary details may please be submitted by filling required format before release of payment.**

For Foreign Supplier:

Payment shall be made in USD/INR only. 100% payment shall be made within 30-45 days of acceptance of received material at IVP Goindwal and receipt of following dispatch documents.

Documents Required (Complete in all respects)

- a. Bill of Lading.
- b. Packing list & Invoice
- c. Country of origin Certificate
- d. Test Certificates / Compliance Certificate
- e. PBG for 10% value of contract. The validity of PBG should be for 18 months from acceptance of material at BHEL with additional 2 months for claim period. Vendor has to furnish a Performance Bank Guarantee from a consortium Bank at no extra cost in a proforma attached.
- f. A Certificate that :

One copy of Tests / Compliances Certificate with non-negotiable documents, comprising of House Airway Bill, Invoice, Packing list, Country of origin Certificate, applicable drawings and catalogues, duly signed and stamped, have been sent separately to the port Consignee, purchaser

Attn: Sr. DGM/ MM Department, BHEL, IVP Goindwal Sahib -142423 Distt. Tarn Taran, Punjab –India and to DGM / Finance, <<Same address>>

Above documents should include your Registration numbers such as ECC no, PAN no, CST no, TIN/ VAT nos. etc.

BHEL releases payment through EFT mode ONLY. Necessary details may please be submitted by filling required format before release of payment.

It is mandatory to mention proper material codes in the invoices and separate invoices to be raised for different POs. It is necessary to send MTCs/RT films along with material, failing which material will not be accounted for and no receipt will be given. If RT is applicable prices should be inclusive of RT charges.

9. INSPECTION:

- a. All required tests shall be carried out by vendor at no extra cost. Relevant TCs shall accompany the consignment. BHEL may decide to inspect itself/arrange third party at vendors' works itself as and when necessary with prior intimation to the vendor. No additional charges shall be claimed for such inspections.
- b. Vendor will give inspection call sufficiently in advance considering the delivery period stipulated in the purchase order.



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- c. Material Test Certificates (MTC) and Compliance/Guarantee Certificate are to be provided along with the supplies.
- d. Latest applicable revisions of standards/procedures to be referred.
- e. Any inspection carried out before supply by vendor/incoming stage at BHEL notwithstanding, if any defect/non-conformity is noted during processing, the same shall be attended/replaced by vendor at no extra cost.
10. **GUARANTEE:**
Vendor shall give a guarantee of 18 months from the date of dispatch or 12 months from the date of put to use whichever is earlier against any manufacturing defects.
11. **Penalty for delay in delivery of material:**
'Time is the essence of the contract'. As such, delivery of goods specified in the Purchase Orders released under the scope of this contract shall be made within the time limit prescribed therein. Penalty clause will be applicable for delayed supplies @ 0.5% per week or part thereof subject to a maximum of 10.0 %.
12. **RISK PURCHASE:**
BHEL shall be entitled to terminate the contract/pending POs at any stage and to purchase elsewhere at the risk and cost of the vendor, either the whole of the goods or any part thereof which the supplier has failed to deliver or dispatch within the time stipulated as aforesaid. Vendor shall be liable for the losses, which BHEL may sustain by way of such risk purchase in addition to aforesaid penalty for delayed delivery.
13. **SUB-CONTRACT:**
The purchase order or any part thereof shall not be sub-contracted, assigned or otherwise transferred without previously obtaining the BHEL's consent in writing.
14. **FORCE MAJEURE:**
If at any time during the continuance of the contract, the performance in which or in any part by either party of any obligations under the contract are prevented or delayed by reason of any war, hostilities, acts of public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine restrictions, or acts of God (hereinafter referred to "an events" then provided the notice of happening of any such event is given by either party to the other within 21 days of the occurrence thereof, neither party shall by reason of such event be entitled to terminate the contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance and delivery under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. If the performance in whole or part of any obligation under the contract is prevented or delayed by reason of any such event, claims of extension of time shall be granted for periods considered reasonable by BHEL subject to prior notification by the vendor to BHEL of the particulars of the event and supply to BHEL, if required, of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed a waiver of time in respect of remaining deliveries.
15. **DISPUTES:**
In the event of any dispute and/or difference arising between the Vendor and BHEL as to interpretation and/or execution of the contract and/or the respective rights and liabilities of the parties, such disputes and/or differences shall be referred to the sole arbitrator nominated by BHEL. The provisions of the Indian Arbitration Act and the rules there under



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shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

16. JURISDICTION:

The court of the place from where the purchase order is issued during the contractual period shall alone have jurisdiction to decide any dispute arising out of or in connection with the purchase order.

17. Clarifications:

The correspondence exchanged against the tender from both tenderer and BHEL through email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business. Any transaction pertaining to the tender from both the parties of business done round the clock irrespective of the office or business hours of the companies, are valid legally and binding on both the parties. This applies to the extent only in such cases where deadline time for transaction is not specifically declared by either or both the parties to the business.

18. LOI (Letter of Intent):

BHEL may issue LOI prior to the PO for any reason whatsoever. The LOI in such cases is to be treated as PO for all practical purposes and all the Terms & Conditions of the tender shall be applicable from the date of issue of LOI.

19. BANNED FIRMS

The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com

20. WORDS AND FIGURES

- a. If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity}, the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
- b. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- c. If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.
- d. If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the purchaser, the bid is liable to be ignored.

21. GENERAL:

BHEL will not be bound by any power of attorney granted by the vendors or by changes in the composition of the firm made subsequent to the execution of the contract. They may,



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however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the vendor concerned.

BHEL reserves the right to extend the due date of opening, which shall be informed. Bidder can revise his offer, if already sent, and clearly mentioning "Revised offer due to extension of due date of opening-canceling the earlier quotation." Validity of offer shall be revised accordingly.

BHEL reserves the right to cancel the tender without assigning any reason thereof and without any obligation.

Acceptance of all terms and conditions, in the form of signed copy of T&C or confirmation separately written, shall be submitted along with quotation. If nothing is mentioned, it shall be concluded that terms and conditions are acceptable.

Every dispatch of material shall accompany the packing list, detailing the Numbers of item with specifications. An advance copy of dispatch details shall be furnished to Purchase/BHEL/IVP.

Manufacturer's name, Trade Mark or Patent No. if any should be specified. Illustrative leaflets giving technical particulars are required along with quotation wherever necessary. The materials are to be dispatched with proper packing and binding.

The Drawings and Technical documents given in this enquiry are the sole property of BHEL. It must not be used directly or indirectly in any way detrimental to the interest of the company.

For Foreign Supplier only:

- a. All documents are to be in "ENGLISH LANGUAGE" only.
- b. Contract No. and Import License No. are to be inducted in all documents
- c. Invoice should show the description of the goods and the unit rate of each item as in the purchase contract.
- d. Packing list must indicate case identification, case dimension, and case contents, gross and net weight.
- e. Against each item in the invoice and packing list, the serial number of the corresponding item in the purchase contract or as per order acknowledgement should be indicated.
- f. Demurrage charges due to delayed presentation of the original shipping documents for the reason not attributable to the buyer should be borne by the seller
- g. All documents should be submitted in triplicate.



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CHECKLIST AND SEQUENCE OF DOCUMENTS TO BE SUBMITTED IN TWO PARTS BIDS

S. No.	Document	Status
1	Envelope should contain (1) Techno-Commercial bid preferably with signed copy of terms & conditions (2) Unpriced bid format (Annexure-I) with applicable taxes (item prices not to be mentioned)	Sealed envelope marked as Part-I "Techno-Commercial Bids" Yes, Sealed
2.	Price Bid (Preferably in Annexure-II) sealed in separate envelope superscribing tender enquiry detail, due date of opening, sender address	Sealed envelope marked as Part-II "Price Bid" Yes, sealed
3.	All two sealed envelopes put in an outer envelope mentioning all details like Enquiry no., description, due date	Yes

Price Bid Annexure to Enquiry No.1415- 009 Dated 26.04.2014, Due date 19.05.2014

Enq Sl. No.	Material Code	Description of material	Drawing No.	Technical Delivery Conditions	Quality Plan	Enquiry Qty (Nos.)	Unit Basic Price, Rs. per No. (In figures) (For foreign supplier prices in USD)	Unit Basic Price, Rs. per No. (In Words) (For foreign supplier prices in USD)
1	964655840000	Ball Seat assy-BA51	3VBA5125285/00	TBV:001/00	QP No: QP:IVP:BV:rev:00 date 04.04.2014	2		
2	964656120000	Ball Seat assy-BA01	3VBA0125318/00			2		

Authorised signatory with seal

Techno-Commercial Bid Annexure to Enquiry No.1415- 008 Dated 26.04.2014, Due date 03.05.2014

Enq Sl. No.	Material Code	Description of material	Drawing No.	Technical Delivery Conditions	Quality Plan	Enquiry Qty (Nos.)	Quoted	Unit Basic Price, Rs. per No. (For foreign supplier prices in USD)
1	964655840000	Ball Seat assy-BA51	3VBA5125285/00	TBV:001/00	QP No: QP:IVP:BV:rev:00 date 04.04.2014	2	Yes/No	Please see price bid
2	964656120000	Ball Seat assy-BA01	3VBA0125318/00			2	Yes/No	Please see price bid
Excise Duty rate (mention in % if applicable, mention as NIL if not applicable)								
Cess on ED rate (mention in % if applicable)								
CST (%) / VAT (%)								
Validity of offers (As per BHEL terms 90 days validity is required)								

The above prices are **Firm, without any price escalation; are Rs. per piece; and are on FOR Goindwal Sahib basis.**

We accept all terms and conditions of the Enquiry No.1415- 009 Dated 26.04.2014, Due date 19.05.2014

Authorised signatory with seal



QUALITY ASSURANCE
BHEL, IVP- GOINDWAL

QUALITY PLAN FOR BALL-SEAT RING ASSEMBLY OF BALL VALVE

QP No: QP:IVP:BV Rev.:00
Date:04-04-2014
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Sl. No.	Component/Operation	Characteristics	Check			Reference Doc./ Acceptance Stnd.	Type of records	Agency		Remarks	
			Cl.	Type	Quantum			M	C		
1.0	RAW MATERIAL SEAT RING(UPSTREAM/DOWN STREAM) & BALL	Mechanical Properties & Soundness		B	TC Verification	100%	Drawing and TDC no:0404 REV 11	TC	P	V	
1.1	IN PROCESS CONTROL			B	Measurement/ Dimension Report	100%	Drawing	R	P	V	
2.1	Machining of Components	Critical Dimensions		A	Visual	100%	ASME Section V	R	P	W	10% of total lot
2.2	LPI test on Chromium Carbide surface	No Visible defect		A	TC Verification	100%	Drawing	TC	P	W	10% of total lot
2.3	Chromium Carbide surface Hardness	Hardness value		A	TC Verification	100%	Drawing	TC	P	W	10% of total lot
2.4	Chromium Carbide thickness	Coating Thickness Value		A	TC Verification	100%	Drawing	TC	P	W	10% of total lot
2.5	Lapping on Chromium Carbide surface	Surface Roughness Value		A	Surface Roughness measurement	100%	Drawing	R	P	W	10% of total lot
2.6	Stellite 6 surface (As applicable)	No Visible defect		A	Visual	100%	BHE:NDT:W:PT:02/Latest	R	P	W	10% of total lot
3.0	FINAL INSPECTION						Continuous impression for metal to metal contact	R	P	W	100%
3.1	Blue Matching	Matching Impression		A	Matching Impression	100%		R	P	W	100%

LEGEND: C:Class (A:Critical B:Major)

M: Manufacturer, C: BHEL/ Nominated Inspection Agency

R: Test / Dimension / Inspection Reports

V: Verification of test/Dimension/Insp Reports

P: Perform, W: Witness

Prepared By

PRIKSHIT RAVESH
Sr. ENGINEER (QM)

Reviewed & Approved By:

S.R.KENNY
DGM (QM)



QUALITY ASSURANCE

IVP-GOINDWAL

QUALITY PLAN FOR BALL-SEAT RING ASSEMBLY OF BALL VALVE

QP No: QP-IVP:06 Rev.:00
Date: 08-11-2010
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NOTE:- 1 Wherever special contract requirements are envisaged a separate TDC/CQP may be issued, special instructions may be provided through P. O, or stock material may be upgraded to special requirements.

NOTE:- 2 Machined/ Lapped surfaces should be placed/stacked on rubber sheet and should be protected from any damage. Packing should be secured enough so that the assembly is not damaged during transit.

NOTE:-3 Material to be offered for inspection to BHEL / TPI before final assembly. Records as mentioned in Quality Plan by BHEL to be produced during Final inspection.

Remarks:Raw material to be used is A182-F316

Note: 1. Visible - solvent removable die and Non-aqueous developer to be used for PLI test At CI 202

2. No indication acceptable in LPI test at CI 2.2

3. This QP is with ref.to TDC no TBV:001

LEGEND:CI:Class (A:Critical,B:Major)


M: Manufacturer, C: BHEL/ Nominated Inspection Agency

R: Test / Dimension / Inspection Reports


V: Verification of test/Dimension/Insp Reports

P: Perform, W: Witness

Prepared By


PRIKSHIT RAVESH
Sr. ENGINEER (QM)

Reviewed & Approved By:


S.R.KENNY
DGM (QM)

 EC-002	PURCHASE SPECIFICATION	TBV	001
	TECHNICAL DELIVERY CONDITIONS FOR BALL-SEAT RING ASSEMBLY	Rev. No.	00
		Pages	1 of 2

- 1.0 Component : Ball-Seat Assembly
- 1.1 Material Code : 964655840000 (8-C300-CF8M-BA51)
964656120000 (8-C300-CF8M-BA01)
- 2.0 Scope : It includes the manufacturing of individual components, lapping and their assembly. Material / assembly should be dispatched in lapped condition.
- 3.0 Specifications :
- 3.1 Dimensions : Refer the individual drawings of components and assembly for dimensions and tolerance's.
- 3.2 Manufacturing : Manufacturing / workmanship of Ball, Seat Rings and Assembly must be as per individual and assembly drawings mentioned under list of drawings.
- 4.0 Inspection and Testing : 1. Inspection shall be carried out by BHEL /Third Party Inspector (TPI) at supplier's works.
2. Test certificate should be supplied including raw material, coating thickness, surface finish after lapping and assembly.
- 5.0 Marking / Identification : Material code should be legitimately printed /marked on each assembly.
- 6.0 Packing and Dispatch : a) The components should be covered with material like thermocol to avoid any surface damage during transit and handling.
b) Ball-Seat assembly must be packed in Sea worthy packing in such a manner that there should not be any damage to surface of components and assembly during the transit.
- 7.0 Storage : Ball-Seat Ring assembly must be stored under covered area. The storage area should be dust free.
- 8.0 Critical check points : a) Visual check for any deformation / deviation.
b) Dimensional check as per drawing.
c) After lapping, the sealing impression of ball with the seat rings to be ensured for continuity with help of blue matching.

Rev: 00 Dt.:11.01.2014	<i>BHEL, IVP, Goindwal Sahib</i>	
Ravinder Singh (Prepared By)	Ravinder Singh (Checked By)	Rakesh Kumar (Approved By)

 EC-002	PURCHASE SPECIFICATION	TBV	001
	TECHNICAL DELIVERY CONDITIONS FOR BALL-SEAT RING ASSEMBLY	Rev. No.	00
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LIST OF DRAWINGS / FIGURES

1.	964655840000	:	8-C300-CF8M-BA51
1.1.	3-V-BA51-25285	:	BALL-SEAT ASSEMBLY (BA51)
1.2.	3-V-BA51-25220	:	SEAT RING - DOWNSTREAM
1.3.	3-V-BA51-25219	:	SEAT RING - UPSTREAM
1.4.	3-V-BA51-25221	:	BALL 8"-C300-FLOATING
2.	964656120000	:	8-C300-CF8M-BA01
2.1.	3-V-BA01-25318	:	BALL-SEAT ASSEMBLY (BA01)
2.2.	3-V-BA01-25067	:	SEAT RING
2.3.	3-V-BA01-25069	:	BALL 8"-C300-TRUNNION

Rev: 00 Dt.:11.01.2014	<i>BHEL, IVP, Goindwal Sahib</i>	
Ravinder Singh (Prepared By)	Ravinder Singh (Checked By)	Rakesh Kumar (Approved By)