

(SUB-CONTRACTING DEPARTMENT)

**PART - A**

1. Sealed tenders in two parts; Part-I: Techno-commercial bids and Part-II: Price bids are invited for machining of Stainless Steel castings of Ball Valve- Big Body and Small Body as per relevant BHEL drawings on job work basis. BHEL will provide raw casting with proper machining allowances. The machining drawings of both - Ball Valve Big Body and Ball valve Small body along with their casting drawings are attached.

Vendors having Suitable CNC Machinery for the machining of the above mentioned job may only quote in this Tender. Vendor needs to provide self-certified machinery detailed list.

The vendor's Techno Commercial bid shall be duly evaluated and after Tender committee's recommendation, the bidder will be qualified for Price Bid Opening. BHEL reserves the right to assess type of machinery by visiting vendor's works. Technical Qualification of the bidder will be at sole discretion of BHEL.

BHEL will not provide any fixture development cost or Tooling cost for machining of items. The vendor has to quote inclusive rates keeping in mind anticipated tenders for same items from BHEL after successful completion of the Order.

The two bids should be submitted in separate inner envelopes duly mentioning the detail as follows:

Bid	Description	Superscription on envelope	Documents to be submitted
Part-I	Techno-Commercial bid in response to Tender Enquiry No. BHE:IVP:SC:BALL-1415 DATED: 02.09.2014.	PART-I "Techno-Commercial Bid" Tender Enquiry No. BHE:IVP:SC:BALL-1415 DATED: 02.09.2014. Due date of opening: 24.09.2014 Sender:	Acceptance of all terms and conditions. Taxes applicable, if any, are to be mentioned in this part bid.
Part-II	Price bid in response to Tender Enquiry No. BHE:IVP:SC:BALL-1415 DATED: 02.09.2014.	PART-II "Price Bid" Tender Enquiry No. BHE:IVP:SC:BALL-1415 DATED: 02.09.2014.	Price bid duly filled prices in numbers and words along with the taxes as mentioned in un-priced bid.

Part-I: Techno-Commercial bid should contain:

- Acceptance of Techno-Commercial terms and conditions should be attached next. This can be attached either by signing each page of terms and conditions or a confirmation statement. 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.
- Unprice bid, filling all other details except unit price.

Both the sealed envelopes should be put in an outer envelope clearly mentioning Tender Enquiry No. and due date of opening & sender's address on it. Quotations shall reach us by 1100 Hrs. on or before 24.09.2014. Sealed tender can be dropped in tender box marked as "TENDER BOX". This tender box is located at entrance of administrative building of IVP Goindwal.

Techno-Commercial bid shall be opened at 11:30 Hrs. on same day, i.e 24.09.2014 at Conference Hall IVP Goindwal. For finalizing prices, BHEL will open the sealed price bids (Part-II).

Based on evaluation of techno-commercial offer, Price bid of the bidder, who qualifies from techno-commercial evaluation, shall be opened. The Price bid will be opened on 26.09.2014 at 11:30 Hrs. In case of any rescheduling, the same will be intimated to the bidder before 17:00 Hrs on 25.09.2014.

**2. PRICE QUOTATION SHALL BE AS PER UNDER:**

The items are to be machined as per the scope and the drawing number as mentioned in Sub Contract Purchase Order and minimum rates are to be quoted by the Vendor (hereinafter referred as Sub-Contractor) on per piece basis and on FOR Goindwal Basis. The Vendor quoting lower total rates for both the item shall be given the load for both the items. Rates shall be inclusive of all statutory levies applicable.

- Excise duty and other taxes, if any, applicable on scrap retained by sub-contractor shall be borne by the sub-contractor.
- Contractor should quote rates for each item with retention of cutting/turning/boring/Notching/Piercing of scrap.
- Excise duty/ VAT for materials lying at their works for a period more than 180/90 days resp., whatsoever may be the reason for retention of the material, if any, shall be borne by the Sub-contractor.

**3. SCOPE OF WORK:**

The scope of work includes machining of components as per drawing number mentioned in tender enquiry and mentioned in sub-contracting purchase order. BHEL shall provide raw castings for the items to be machined.

**4. VALIDITY OF OFFER:**

The rate quoted will be valid for 60 days after tender opening for finalization of the Tender. Rates will remain valid till execution of purchase order.

**5. LOADING:**

- BHEL reserves the right to negotiate with L1 vendor or re-float the tender, in case the quoted prices are not acceptable.
- The vendor quoting lower total rates for both the items shall be given load for both the items.

**6. INSPECTION:**

- Inspection of the finished components will be done at vendor's premises after receipt of inspection request along with dimension report. No deviation unless authenticated by authorized BHEL Officials will be allowed. The inspection request and the dimensional report shall be in the format prescribed by Quality Department.
- BHEL reserves the right to carry out inspection at its premises, if required.
- In case of Rework at Sub Contractor's end due to operator fault, the rework shall be carried out by Sub Contractor free of cost.
- In case of rejection at Sub-contractor's end due to operator fault, raw material cost along with any other relevant charges will be recovered.

**7. DELIVERY OF FINISHED COMPONENTS:**

- The inspected components shall be delivered at Component Stores along with 4 copies of delivery challan, bearing seal of Main Gate Security and 2 copies of Inspection Report.
- Delivery challan should have the details like PO No., IR NO., Component Code and special material description such as CF8/CF8M.
- Finished components shall be unloaded in designated area as directed by the Store-keeper.
- Finished goods shall be delivered at Component Stores at Sub-contractor's own cost.

**8. DELIVERY SCHEDULE:**

Vendor shall be required to complete the order within 45 days of PO placement.

**9. ISSUE OF RAW MATERIAL:**

- Raw materials shall be issued from Main Stores and cost of transportation shall be borne by the Sub-contractor.
- The raw material shall be provided by BHEL as per BHEL drawing with proper machining allowances.

- c) The vendor is required to lift the material within four days of release of PO.
- d) Vendor has to appoint an authorized representative for issue and collect of raw material from BHEL.

**10. ACCESS TO MANUFACTURING PREMISES:**

During the currency of the Sub-Contracting Order on the vendor 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, if our contractual requirements with our customer's call for the same.

**11. GUARANTEE:**

The components machined as per BHEL drawing should be free of machining/welding/gas cutting/fabrication defects. If the item is found defective after receipt during onward processing at Shop, total cost will be recovered from Sub-contractor as per clause no. 7c & 7d.

**12. CONFIDENTIALITY OF BHEL DRAWINGS/DOCUMENTS:**

Sub-contractor/s shall ensure confidentiality of BHEL drawings and documents issued to them and shall not pass on the same to any unauthorized agency/person. Violation of the same shall tantamount to cancellation of the contract of the Sub-contractor.

**13. BANK GUARANTEE:**

Sub-contractor will have to execute a Bank Guarantee/Cash Deposit at BHEL, in the prescribed format, for a sum of 10% of the value of the maximum materials likely to be in possession of the Sub-contractor at any point of time.

**14. INDEMNITY BOND:**

Sub-contractor shall have to indemnify BHEL for any loss to BHEL's material in custody of the Sub-contractor against theft or financial liability against funding agency/financial institution or any other loss. The bond is to be executed on non-judicial stamp paper as per the format prescribed by BHEL.

**15. TERMS OF PAYMENT:**

- a) Due payment against job work done shall be made within 30-45 days from receipt of accepted material at IVP Goindwal and receipt of following documents:
  - i. Two copies of Invoice i.e. Original & Duplicate for Transporter
  - ii. Original Challan
  - iii. Original Inspection Report
  - iv. Scrap Accountal statement for retained ferrous scrap duly verified by Sub-Contg. Dept.
- b) The rejected material should also be deposited along with the accepted material through Delivery Challan.

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

**16. FIRM PRICES:**

The Tender shall be on the basis of firm prices. No variation in price shall be entertained during the currency of the Tender.

**17. PENALTY AND TERMINATION:**

- a) If the Sub-contractor fails to deliver the material or any installment thereof within the period fixed for such delivery or at any time repudiates the purchase order before the expiry of such period, BHEL may without prejudice to the right of the Sub-contractor impose damages for breach of the Sub-contracting order.



BHEL GOINDWAL

**Annexure A TERMS AND CONDITIONS FOR TENDER ENQUIRY NO. BHE:IVP:SC:BALL-1415**  
**DATED: 02.09.2014 OPENING DUE DATE: 24.09.2014**

- b) Recovery from the Sub-contractor liquidated damages a sum equivalent to 0.5% of the price of any stores which the Sub-contractor has failed to deliver within the period fixed for delivery in the order for each week or part of a week (subject to a maximum of 10% of the price) during which the delivery of such components may be in arrears and where delivery thereof is accepted after expiry of the aforesaid period, or
- c) Withdraw the material and Sub-contract elsewhere without notice to the Sub-contractor, on the account and at the risk of the Sub-contractor, of the components not so delivered. The decision of BHEL in this regard shall be final and binding without canceling the Sub-contracting order in respect of the installments not yet due for delivery, or
- d) Cancel the Sub-contracting order or a portion thereof and if so desired Sub-Contract the materials not so delivered at the risk and cost of the Sub-contractor. If the Sub-contractor has defaulted in the performance of the original order, the BHEL shall have the right to ignore its tender for risk purchase even though the lowest. Where action is taken under this clause, the Sub-contractor shall be liable, for any loss which the BHEL may incur due to the Sub-contractor failure to deliver the component within the period fixed for such delivery.

**18. 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.

**19. DISPUTES/ARBITRATION:**

In the event of any dispute and /or difference arising between the Sub-contractor 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 shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

**20. JURISDICTION:**

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

**21. SUB-LETTING:**

The Sub-contracting order or any part thereof shall not be Sub-contracted, assigned or otherwise transferred without giving the notification to BHEL in writing.

**22. MISCELLANEOUS:**

- a) BHEL reserves the right to accept or reject any part or whole of the tender without assigning any reason thereof.
- b) BHEL reserves the right to discontinue any component/change scope of work as the need arises from time to time during the currency of tender

- c) In case of any loss that might be caused to BHEL due to lapse on the part of the workers deployed by Sub contractor, such loss shall be compensated by Sub Contractor and in this connection, BHEL has the right to deduct appropriate amount from his bills etc. to make good of such loss to BHEL beside imposition of penalty. In case of any deficiencies /lapses on the part of personnel deployed by Sub contractor, BHEL shall be within its right to terminate the contract forthwith or take any other action without assigning any reasons whatsoever.
- d) The identification and traceability w.r.t Make/Melt/Heat & Material type of raw material issued to Sub Contractor shall be maintained by him during processing and onward final submitting the components in BHEL Stores. BHEL reserves the right to verify the compositions/mechanical/chemical properties of parent material at any stage of processing at Sub Contractors end and also of final machined components submitted in BHEL stores.

**23. PERFORMANCE MONITORING:**

- a) The Sub-contractor/s with whom contract is entered into will be evaluated based on the "System for Performance Monitoring & Rating for Vendors".
- b) Performance Rating will be taken into consideration while releasing further orders on the Sub-contractor. Based on performance of the Sub-contractor, supplier control checks will be specified from time to time and will be binding on the sub-contractor.

**24. DEALING WITH BANNED SUPPLIERS /CONTRACTORS:**

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](http://www.bhel.com).

**25. 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.

**26. SUPPLIER REGISTRATION:**

Bidders, who currently are not on registered List of BHEL IVP Goindwal Sahib may submit duly filled format for "Vendor Registration form". The vendor registration form can be requested by emailing/calling at [sb@bhelivp.in](mailto:sb@bhelivp.in) (01859-224647)/[prikshit@bhelivp.in](mailto:prikshit@bhelivp.in) (01859-224643)/[abhishek@bhelivp.in](mailto:abhishek@bhelivp.in) (01859-224645). Registered vendor with BHEL IVP Goindwal has to mention their Vendor Code. Registered vendor with any other unit of BHEL are also required to mention their vendor code given by respective BHEL unit along with photocopy of latest PO from BHEL unit. Techno Commercially qualified bidder may be asked for submission of supplier registration form.

For and on behalf of BHEL

Abhishek Mishra  
 Engineer/Sub-Contg.

Price Bid Bid Annexure to Enquiry No.BHE:IVP:SC:BALL-1415 Dated 02.09.2014

Vendor Name and Vendor Code(Must be Filled) :

S. No	Mat. Code	Description	Valve Size	Drawing No	Qty (No)	Rate per pc (In Figures)	Rate per pc (Words)
1	932025530000	BODY SMALL -BA01	8-C300-BV-FL-MO-CF8M- TRUNNION	2VBA0114732	1		
2	932025540000	BODY BIG- BA01	8-C300-BV-FL-MO-CF8M- TRUNNION	2VBA0114734	1		

\*Please Note that both the items will be given to the bidder who will quote minimum total rate.

Authorised signatory with seal

Techno-Commercial Bid Annexure to Enquiry No.BHE:IVP:SC:BALL-1415 Dated 02.09.2014  
Vendor Name and Vendor Code(Must be Filled) :

S. No	Mat. Code	Description	Valve Size	Drawing No	Qty (No)	Quoted (Yes/No)	Unit Basic Price, Rs. per pc (In Figures and Words)
1	932025530000	BODY SMALL -BA01	8-C300-BV-FL-MO-CF8M- TRUNNION	2VBA0114732	1		Please see 'Price Bid'
2	932025540000	BODY BIG- BA01	8-C300-BV-FL-MO-CF8M- TRUNNION	2VBA0114734	1		Please see 'Price Bid'

\*Please Note that both the items will be given to the bidder who will quote minimum total rate.

Validity of offers (As per BHEL terms 60 days validity is required)

The above prices are Firm, without any price escalation; are Rs. per piece; and are on FOR goindwal basis inclusive of all taxes.

1	CNC machinery available for machining of the above two components, if yes please attach additional document specifying the technical specification of the machine(s)	Yes/No
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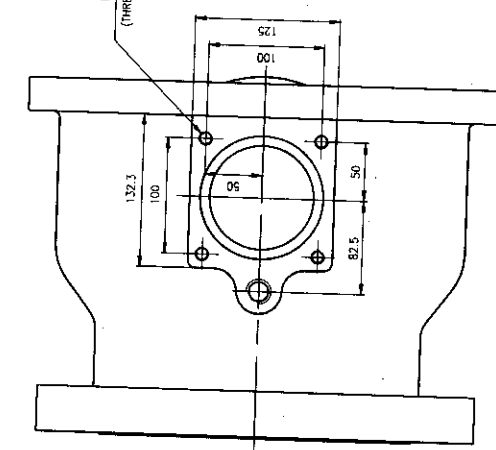
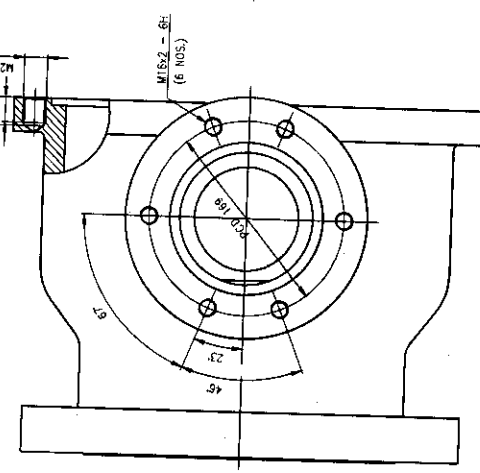
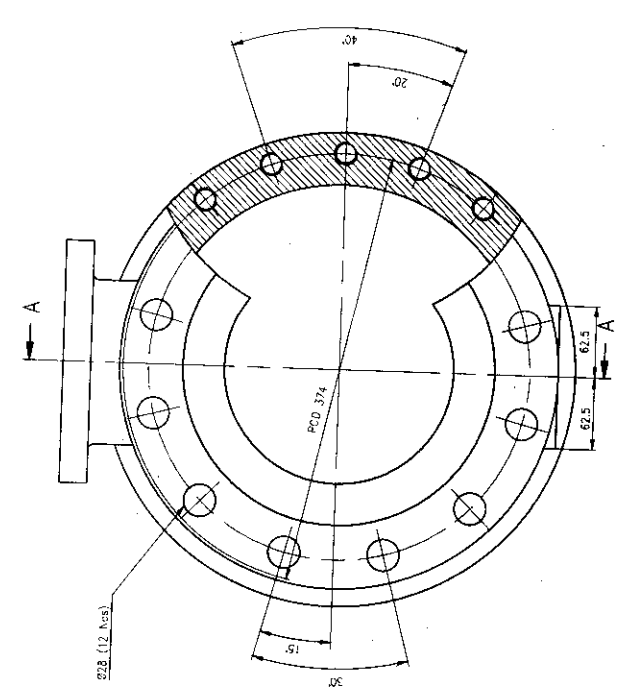
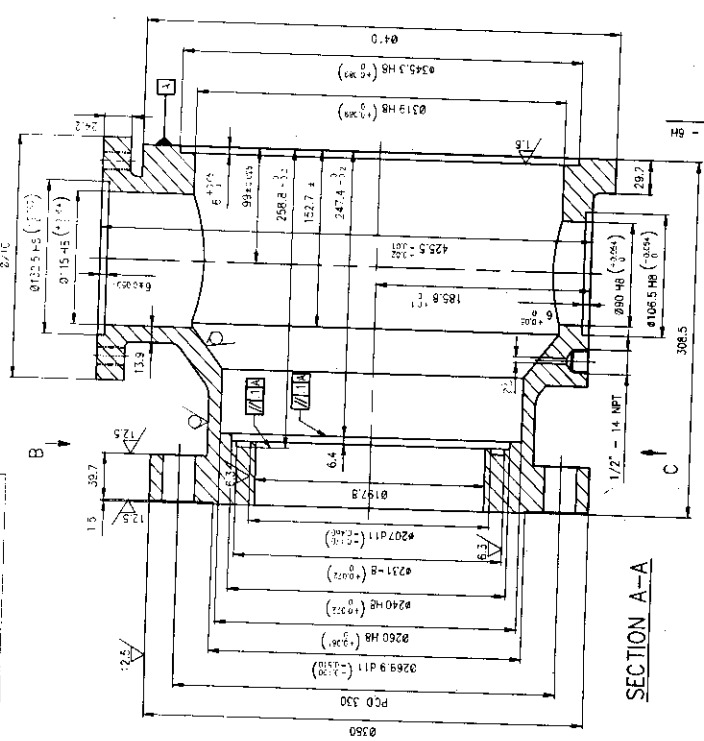
We accept all terms and conditions of the Tender Enquiry No.BHE:IVP:SC:BALL-1415 Dated 02.09.2014

Authorised signatory with seal

BODY BIG MACHINING DRAWING

AAAB/A

2-V-BA01-14734



NOTE

1. UNSPECIFIED SHARP CORNERS TO BE CHAMFERED TO 1:45.

01	CASTING	822030280000	SA 551 CF8M	ATTEST	SH	46	77	107	2-V-BA01-14734	03
TYPE OF PRODUCT										
OR NAME OF										
CUSTOMER PROJECT										
BHARAT HEAVY ELECTRICALS LTD										
UNIT HIGH PRESSURE ROTARY PUMP										
INDUSTRIAL DEVELOPMENT										
DESIGN										
DRAWING NO										
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VIEW-C

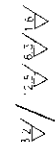
VIEW-B

Size A2




































































































































































































































































































































2-V-BA01-14732



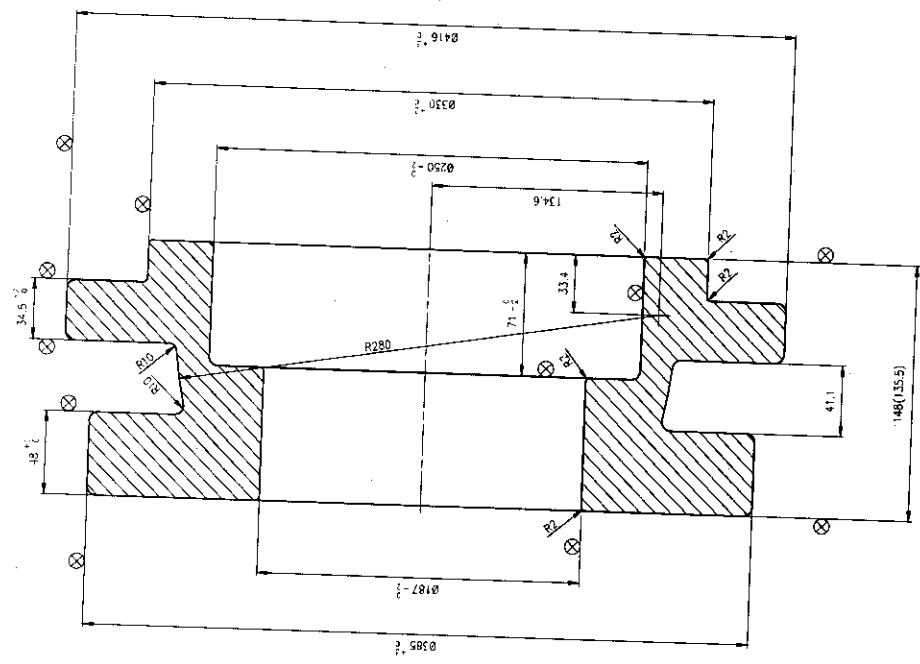
1. UNSPECIFIED CORNERS TO BE CHAMFERED TO 1x45°.

01	CASTING	822035270000	SA 351 CF8M ATTEST	SH	46	48.2	74.8	3-4-80 - 14732	01
TYPE OF PRODUCT									
OR NAME OF									
CUSTOMER PROJECT									
									
BHARAT ELECTRICALS LTD									
UNIT HIGH PRESSURE BOLTS UNIT (INCORPORATED 2ND NOV 1971)									
LEFT	RIGHT	SCALE		NTS	48.2	ELUCIDATE INCH DIMENSIONS		MATERIAL SPECIFICATIONS	
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									
									

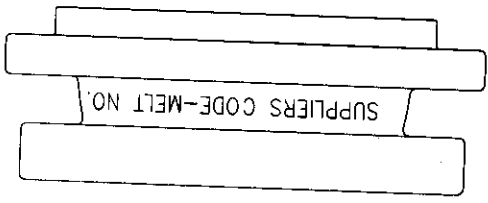
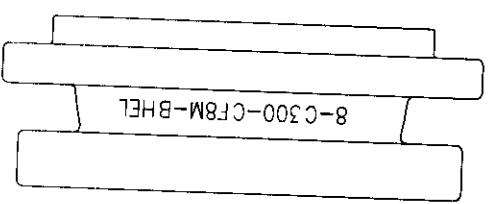
BODY SMALL CASTING DRAWING

2-V-0000-14733R

VIEW A



VIEW A



VIEW B

NOTES:

- 01. NECESSARY MACHINING ALLOWANCES HAVE BEEN KEPT ON ALL MACHINABLE SURFACES.
- 02. PERMISSIBLE DEVIATIONS OF NON-TOLERANCED CASTING DIMENSIONS REFER APPLICABLE QUALITY PROCEDURE.
- 03. FINISH MACHINE DIMENSIONS INDICATED WITHIN SAMPLE'S FOR INFORMATION ONLY.
- 04. CASTING SHALL COMPLY WITH THE REQUIREMENTS OF LATEST APPLICABLE QUALITY PROCEDURE.
- 05. UNSPECIFIED RND = R3 TO R5
- 06. HEIGHT OF CASTING LETTERS=20 mm
- 07. INDICATES SURFACE TO BE MACHINED.

VIEW B

01	CASTING	8-C300-CF8M-BHEL	ATTEST	SK	75.4	1-4-800-14733R	01
TYPE OF PRODUCT OR NAME OF CUSTOMER PROJECT							
BHARAT HEAVY ELECTRICALS LTD.							
UNIT: HIGH PRESSURE BALL BEARING							
DRAWING NO. 2-V-0000-14733R							
DATE 01.01.13							
BY 06.08.13							
CHECKED 06.08.13							
APPROVED 06.08.13							
SCALE 7:1							
MATERIAL 74.8							
BODY SMALL (8-C300-FL)							
DRAWING NO. 2-V-0000-14733R							
DATE 01.01.13							
BY 06.08.13							
CHECKED 06.08.13							
APPROVED 06.08.13							