

TENDER TERMS & CONDITIONS OF End Covers and other Fabrication items

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib,
Distt Tarn Taran, Punjab-143422]

Tender Enquiry No	1920-011
Enquiry date	29-Apr-19
Last time and date of tender submission	1400 Hrs 15-May-19
Tender opening time and date	1530 Hrs 15-May-19
Quotation Parts	<u>Two-part Bid</u>
Item Description	End Covers and other Fabrication items
Item Specification	<u>AS PER ANNEXURE II & III</u>
Delivery schedule (In days)	<u>90 days from date of release of PO/LOI</u>
Validity of offer (In days)	<u>45 days</u>

Documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder.

QUOTATION SUBMISSION

Tenders in two part bids are invited for Supply of **End Covers and other Fabrication items to BHEL IVP Goindwal Sahib.**

Following point need to be noted by supplier as follows: -

Sealed tenders in two parts; Part-I: Techno-commercial bid and Part-II: Price bid are hereby invited for supply of **“End Covers and other Fabrication items” to BHEL IVP Goindwal** as per tender enquiry. The relevant documents are attached with the Enquiry.

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

Bid	Bid description	Superscribing on envelope	*** Should contain ***
Part I in First sealed envelope	Techno-Commercial Offer	Part-I (Techno-Commercial) bid against tender enquiry no: 1920-011 Dated 29-Apr-19.	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 in Second sealed envelope	Price Bid	Part-II (Price) bid against tender enquiry No: : 1920-011 Dated 29-Apr-19.	<i>Price bid in the format attached.</i> Anything other than prices mentioned in the price bid shall be considered invalid & in no case will be accepted.

All 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.

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

S. No.	Document	Status
1	Envelope should contain: - Techno-Commercial offer	Sealed envelope marked as Part-I Techno-Commercial Bids” Yes, Sealed
2	Price Bid (Price Bid Format as per Annexure III) sealed in separate envelope super scribing 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

Pre-Qualification Term

P1. Bidders should primarily be engaged in manufacturing of products of any MS sheet metal fabrication items. Supplier needs to submit any customer’s Purchase Order(s) (Not older than Dt. 01.04.2016) copy/ies of any MS sheet metal fabrication items, having cumulative value not less of Rs. 3,00,000.00 (Three Lakh). For MSEs, the required cumulative value of PO shall be Rs. 1,50,000.00 (One Lakh & Fifty thousand). This Pre-Qualification terms shall not be applicable to Start-Up Firms. These relaxations and exemptions are in line with D.O. No. 5(4)/2016-BE-I dated 15.02.2017. For claiming Start-Up exemption, bidders have to give documentary evidence or undertaking. For Claiming MSE benefits, bidder have to give documentary evidence like NSIC, UAN, etc. Bidder has to give undertaking that he is manufacturer of MS sheet metal fabrication items.

SPECIAL TERMS

Online bids in two parts are invited for the Procurement of **END COVERS AND OTHER FABRICATION ITEMS**. The relevant documents can be downloaded from <https://bhel.abccprocure.com>.

S1. Scope of Supply

Material shall be supplied as per the applicable Material Standard requirements/BPS/Drawing/IS and other requirement as given in the Purchase Order. National & International material Standards shall have to be arranged by vendors themselves. Refer list of items for details.

Comparison and procurement shall be done for Individual item, i.e END COVERS AND OTHER FABRICATION ITEMS, where one bidder is found to L1, then for individual quantity PO will be released and bidders have to execute the order what so ever be the quantity and PO value.

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S2. General Contract Conditions (GCC)

These Special terms and conditions and General Contract Conditions (GCC) collectively form the part of tender terms and conditions

S3. LOADING CRITERIA CUM COUNTER OFFER

CASE-A

BHEL will give counter-offer to vendors other than L1 as per provisions of CASE-A, in order to have broader vendors base for ensuring timely delivery for the items where the quantity is more than 500 nos. Following directions shall be followed when allotting the tender quantities

1. Tender quantity shall be divided in the proportion 60:15:25 (60% for L1, 15% for L2 and 25% for MSE's) in case the L1 vendor is not a MSE subject to following conditions:

I. L2 acceptance of L1 rates.

II. In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be offered 25% quantity of tender quantity at L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise. In case of more than one such Micro and Small Enterprise, the supply shall be shared equally. If there are more than one MSE in the price band of L1+15% to whom the offer has been sent and some of them reject the offer, then the remaining quantity shall be distributed equally to the MSEs accepting L1 prices.

III. 25% from the 25% quantity (i.e. 6.25% of the tender quantity) offered to the MSE's shall be reserved for MSE's owned by SC/STs. In event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 6.25 per cent quantity for Micro and Small Enterprises owned by SC/ST entrepreneurs shall be met from other Micro and Small Enterprises. 3% from within the 25% quantity offered to the MSE's will be offered to women owned MSE's. Failure to participate by any MSE owned by women; this 3% quantity shall be offered to other MSEs.

IV. In case any MSE vendor does not accept the counter offer, the above mentioned 25% quantity shall be offered to L2.

V. If there is no MSE in the Price band of L1+15% then the 25% quantity shall be offered to L2 vendor.

VI. If other suppliers (other than L1) are not under MSE then 60% qty shall be given to L1 and 40% qty shall be offered to L2 supplier.

2. In case if the L1 vendor is MSE then quantity shall be provided as 60 % for L1, 30.75% for L2 and 6.25% tender quantity shall be offered to the MSEs owned by SC/ST's in the price band of L1+15%. In event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 3% quantity offered to women owned MSE's. Failure to participate by any MSE owned by women; this 3% quantity shall be met from L2 vendor.

3. In case L1 vendor is MSE owned by SC/ST Women entrepreneur then quantity shall be provided as 60 % to L1 and 40% to L2.

All above offered qty are subject to acceptance of L1 rates.

In case of non- acceptance of counter offer by any vendor after above applicable provisions the whole quantity shall be given to L1 vendor.

All above mentioned preferences shall be given to MSEs, SC/STs & women only on the submission of documentary evidence.

BHEL will not give counter offer to highest bidder in any case.

If there are more than one L1 bidders, quantity shall be equally divided, except MSE portion.

CASE B

For items where quantity is less than or equal to 500 nos. only MSE benefit will be given as mentioned below:

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[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib,
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1. Tender quantity shall be divided in the proportion 75:25 (75% for L1 and 25% for MSE's) in case the L1 vendor is not a MSE subject to following conditions:

- a. In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be offered 25% quantity of tender quantity at L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise. In case of more than one such Micro and Small Enterprise, the supply shall be shared equally. If there are more than one MSE in the price band of L1+ 15% to whom the offer has been sent and some of them reject the offer, then the remaining quantity shall be distributed equally to the MSEs accepting L1 prices.
- b. 25% of the 25% quantity (i.e. 6.25% of the tender quantity) offered to the MSE's shall be reserved for MSE's owned by SC/STs. In case of more than one such Micro and Small Enterprise, the supply shall be shared equally. In event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 6.25 per cent quantity for Micro and Small Enterprises owned by SC/ST entrepreneurs shall be met from other Micro and Small Enterprises.
- c. 3% from within the 25% quantity offered to the MSE's shall be reserved for women owned MSE's. In case of more than one such Micro and Small Enterprise, the supply shall be shared equally. In event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 3 per cent quantity for Micro and Small Enterprises owned by women entrepreneurs shall be met from other Micro and Small Enterprises.
- d. In case any MSE vendor does not accept the counter offer, the above mentioned 25% quantity shall be given to L1.
- e. If there is no MSE in the Price band of L1+15% then the 25% quantity shall be given to L1 vendor.
- f. If other suppliers (other than L1) are not under MSE then 100% quantity shall be given to L1 supplier.

2. In case if the L1 vendor is MSE then quantity shall be provided as 90.75 % for L1, 6.25% tender quantity shall be offered to the MSEs owned by SC/ST's and 3% tender quantity shall be offered to the MSEs owned by women in the price band of L1+15%. In event of failure of such Micro and Small Enterprises to participate in tender process or meet tender requirements and L1 price, 6.25 per cent sub-target for procurement earmarked for Micro and Small Enterprises owned by SC/ST entrepreneurs and 3 per cent sub-target for procurement earmarked for Micro and Small Enterprises owned by women entrepreneurs shall be met from L1 vendor.

3. In case the L1 vendor is a MSE owned by a SC/ST & women entrepreneur then the 100 % quantity shall be loaded on L1 bidder.

In case of non- acceptance of counter offer by any vendor after above applicable provisions the whole quantity shall be given to L1 vendor.

This ratio can be altered in case of any failure on part of L1 regarding delivery commitment/quantity/quality of material.

All above mentioned preferences shall be given to MSEs and SC/STs only on the submission of documentary evidence.

BHEL will not give counter offer to highest bidder in any case (except MSE Vendors whose rates falling in the range of L1 +15%).

If there are more than one L1 bidders, quantity shall be equally divided, except MSE portion (if any).

S4. OTHER CONTRACT CONDITIONS

These Special terms & conditions and GCC collectively are the part of tender terms and conditions.

List of Items					
Sr. No.	Material	Material Description	Drawing Document	Unit of measurement	Req. Qty
1	964659030000	METAL.END COVER-NK44-28-300 GV	2VNK4415483	no	10
2	964653070000	METAL. END COVER-W001-24-150GV	2VN80514336	no	60
3	964653060000	METAL. END COVER-W001-20-300GV	2VN59514336	no	100
4	964653030000	METAL. END COVER-W001-16-300GV	2VN59414336	no	770
5	964653020000	METAL. END COVER-W001-14-300GV	2VN59314336	no	70
6	964652980000	METAL. END COVER-W001-10-300FV	2VN23514336	no	100
7	964652960000	METAL. END COVER-W001-10-150GV	2VN26714336	no	100
8	964652950000	METAL. END COVER-W001-8-300RV	2V288814336	no	150
9	964652930000	METAL. END COVER-W001-8-300GV/	2VN24414336	no	300
10	964652920000	METAL. END COVER-W001-8-150GV	2VN27114336	no	300
11	964652810000	METAL. END COVER-W001-4-600GV	2VF60314336	no	150
12	964652800000	METAL. END COVER-W001-3-300GV	2VN25514336	no	600
13	964652790000	METAL. END COVER-W001-3-150GV/	2VN28914336	no	1000
14	964652780000	METAL. END COVER-W001-3-300RV	2V288514336	no	1000
15	964652770000	METAL. END COVER-W001-3-600	2VF60214336	no	100
16	964652090000	METAL. END COVER-P366	2VP36615483	no	300
17	964651370000	METAL. END COVER-3204	2V320415483/000/02	no	150
18	964608200000	METAL END COVER 24/600-L752	3VL75222633	no	10
19	964565510000	METTALIC ENDCOVER-K601	3VK60195348	no	20
20	964530090000	METAL. END COVER-G001	2VG00115483	no	50
21	964530040000	METAL. END COVER-G004	2VG00415483	no	150
22	964530010000	METAL. END COVER-G041	2VG04115483	no	50
23	842020115800	GUARD ASSY-20003900	22020100039	no	1500
24	842020136700	Bottom Cover	22020100257	no	1500

	Annexure-II :	UNPRICED BID FORMAT				
Tender Enquiry No :	1920-011			Dated :	29-04-19	
Item description	End Covers					
Indent:	1920-022					
indent date :	27-04-19					
Sr. No.	Material Description	Material Specification	Drawing Doc	Unit of measurement	Req. Qty	Quoted
1	964659030000	METAL.END COVER-NK44-28-300 GV	2VNK4415483	no	10	Yes/No
2	964653070000	METAL. END COVER-W001-24-150GV	2VN80514336	no	60	Yes/No
3	964653060000	METAL. END COVER-W001-20-300GV	2VN59514336	no	100	Yes/No
4	964653030000	METAL. END COVER-W001-16-300GV	2VN59414336	no	770	Yes/No
5	964653020000	METAL. END COVER-W001-14-300GV	2VN59314336	no	70	Yes/No
6	964652980000	METAL. END COVER-W001-10-300FV	2VN23514336	no	100	Yes/No
7	964652960000	METAL. END COVER-W001-10-150GV	2VN26714336	no	100	Yes/No
8	964652950000	METAL. END COVER-W001-8-300RV	2V288814336	no	150	Yes/No
9	964652930000	METAL. END COVER-W001-8-300GV/	2VN24414336	no	300	Yes/No
10	964652920000	METAL. END COVER-W001-8-150GV	2VN27114336	no	300	Yes/No
11	964652810000	METAL. END COVER-W001-4-600GV	2VF60314336	no	150	Yes/No
12	964652800000	METAL. END COVER-W001-3-300GV	2VN25514336	no	600	Yes/No
13	964652790000	METAL. END COVER-W001-3-150GV/	2VN28914336	no	1000	Yes/No
14	964652780000	METAL. END COVER-W001-3-300RV	2V288514336	no	1000	Yes/No
15	964652770000	METAL. END COVER-W001-3-600	2VF60214336	no	100	Yes/No
16	964652090000	METAL. END COVER-P366	2VP36615483	no	300	Yes/No
17	964651370000	METAL. END COVER-3204	2V320415483/000/02	no	150	Yes/No
18	964608200000	METAL END COVER 24/600-L752	3VL75222633	no	10	Yes/No
19	964565510000	METTALIC ENDCOVER-K601	3VK60195348	no	20	Yes/No
20	964530090000	METAL. END COVER-G001	2VG00115483	no	50	Yes/No
21	964530040000	METAL. END COVER-G004	2VG00415483	no	150	Yes/No
22	964530010000	METAL. END COVER-G041	2VG04115483	no	50	Yes/No
23	842020115800	GUARD ASSY-20003900	22020100039	no	1500	Yes/No
24	842020136700	Bottom Cover	22020100257	no	1500	Yes/No
GST rate				applicable? (kindly	Applicable / Not applicable	
				kindly tick whether it	Extra / Inclusive	
				% age rate of GST (if applicable)	Please mention clearly>>	
Delivery destination (FOR Goindwal Sahib basis)					Please accept>>	
Validity of offers as required by BHEL (days) : 45					Please accept>>	
The above prices are Firm, without any price esclation; are Rs. per unit Basis; and are on FOR Goindwal Sahib basis. We accept all terms and conditions of the Tender Enquiry No :1920-011 Dated 29-04-19						
Authorised signatory with seal						

	Annexure-III :	PRICE BID FORMAT					
Tender Enquiry No :	1920-011			Dated :	29-04-19		
Item description	End Covers						
Indent:	1920-022						
indent date :	27-04-19					Unit Basic Price, Rs. (to be filled by bidder)	
Sr. No.	Material Description	Material Specification	Drawing Doc	Unit of measurement	Req. Qty	Quoted Price in figures	Quoted Price in words
1	964659030000	METAL.END COVER-NK44-28-300 GV	2V NK4415483	no	10		
2	964653070000	METAL. END COVER-W001-24-150GV	2VN80514336	no	60		
3	964653060000	METAL. END COVER-W001-20-300GV	2VN59514336	no	100		
4	964653030000	METAL. END COVER-W001-16-300GV	2VN59414336	no	770		
5	964653020000	METAL. END COVER-W001-14-300GV	2VN59314336	no	70		
6	964652980000	METAL. END COVER-W001-10-300FV	2VN23514336	no	100		
7	964652960000	METAL. END COVER-W001-10-150GV	2VN26714336	no	100		
8	964652950000	METAL. END COVER-W001-8-300RV	2V288814336	no	150		
9	964652930000	METAL. END COVER-W001-8-300GV/	2VN24414336	no	300		
10	964652920000	METAL. END COVER-W001-8-150GV	2VN27114336	no	300		
11	964652810000	METAL. END COVER-W001-4-600GV	2VF60314336	no	150		
12	964652800000	METAL. END COVER-W001-3-300GV	2VN25514336	no	600		
13	964652790000	METAL. END COVER-W001-3-150GV/	2VN28914336	no	1000		
14	964652780000	METAL. END COVER-W001-3-300RV	2V288514336	no	1000		
15	964652770000	METAL. END COVER-W001-3-600	2VF60214336	no	100		
16	964652090000	METAL. END COVER-P366	2VP36615483	no	300		
17	964651370000	METAL. END COVER-3204	2V320415483	no	150		
18	964608200000	METAL END COVER 24/600-L752	3VL75222633	no	10		
19	964565510000	METTALIC ENDCOVER-K601	3VK60195348	no	20		
20	964530090000	METAL. END COVER-G001	2VG00115483	no	50		
21	964530040000	METAL. END COVER-G004	2VG00415483	no	150		
22	964530010000	METAL. END COVER-G041	2VG04115483	no	50		
23	842020115800	GUARD ASSY-20003900	22020100039	no	1500		
24	842020136700	Bottom Cover	22020100257	no	1500		
The above prices are Firm, without any price esclation; are Rs. per unit Basis; are on FOR Goindwal Sahib basis. Nothing except prices will be entertained in part-II of tender.							
Authorised signatory with seal							

Documents submitted with the offer shall be signed and stamped in each page by authorized representative of the bidder.

G1. INSTRUCTION TO BIDDER

Quotations shall be submitted before due date and time. Late offers are liable to be rejected, so please ensure to submit bid well within due date and time. Techno-commercial part will be opened 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 by email/fax/post/courier/E-procurement system generated email.

G1.1 INSTRUCTION TO BIDDER (In case of Non-E-Procurement / Paper/ Manual/ Hard Copy based tenders)

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_ivp@bhel.in) offers received in time shall be considered only when such offers are complete in all respects. In case of bulky tender please handover quotation to Sh Rakesh Kumar/ SDGM/Head-MM or Sh Gurcharan Singh / AGM-Operations & MM. [Contact: 01859 224 615/631]. Bid can be send to following address:

**BHEL, Industrial Valve Plant,
#433, Industrial Complex,
Goindwal Sahib, Distt. Tarn Taran,
Punjab-143422.**

G1.2 INSTRUCTION TO BIDDER (In case of E-Procurement)

Interested bidders/Suppliers shall submit their offer through e-Procurement mode at <https://bhel.abcpurchase.com>. **Offers in any other mode will not be accepted.**

For Enterprise Procurement System (EPS) Bidders/Suppliers are requested to follow these steps:

a. Requirements

1. Computer with good Internet Connection.
2. Operating System should be Windows Vista / Windows 7 and above.
3. Web Browsers: Internet Explorer 9.0 (32-bit Browser only) & above

b. Mandatory Requirements:

Suppliers interested for registration for BHEL Open Tenders should have a valid DSC (Digital Signature Certificate) before Proceeding forward for Registration. Herein a Valid DSC refers to a Class-II/III Digital Signature Certificate (DSC) for Signing & Encryption (Required both digital signature certificate: Signing & Encryption) of bids issued by any of the valid Certifying Authorities (approved by Controller of Certifying Authorities) in India. Valid Digital Signature Certificate (DSC) must be installed in a computer system from where you want to access the website.

For Unregistered Suppliers in EPS:

Procedure for Online Registration in EPS for Open Tender Suppliers for BHEL. Please follow the below steps for registration: -

1. Click Register Button (Top of the Screen).


05/01/19



General Contract Conditions (GCC) of MM Tenders

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib, Distt Tarn Taran, Punjab-143422]

2. Please input your organization PAN No (in case of Indian supplier) or select your "country" in case you are an overseas Supplier.
3. Select Units to participate in.
4. Fill up Company details.
4. Key in your desired login id If you have registered by keying in PAN No. then your desired login id will be prefixed by "OTI", In case of overseas suppliers it will be also prefixed with "OTI".
5. Fill in the Captcha code & agree to the terms & conditions and privacy policy of this website and click SUBMIT.

Once the above steps are completed, contact to M/s eProcurement Technologies Limited for ID Activation. M/s e Procurement Technologies limited, Ahmedabad will activate your ID within 2 business hours. After registering, follow the steps provided in "For Registered Supplier" to view RFQ.

NB: - 1 BHEL Administrator or user will have no role for approving Registration and Open Tenders and DSC for any supplier who has registered himself from the front END which is in case of OT.

For Registered Supplier in EPS:

1. Supplier visits EPS home page
2. Supplier Login in with their user id and password
3. Search the RFQ ID and views it.
4. Attaches themselves to the RFQ by clicking the "I/We wish to participate".
5. Supplier fills the bid template and makes necessary attachments
6. Supplier submits their bid by clicking Sign, Encryption & Save button.

In any problem is faced by supplier while login/registration in EPS (<https://bhel.abcprocure.com>) and any other assistance, please contact the support team of M/s e Procurement Technologies limited, Ahmedabad as per details mentioned in table below: -

Name	Contact Nos.	e-mail ID	Role	Location
Mukunthan	+91 6353215001	Trichy.bhel@eptl.in	Support Executive	Trichy
Swapnil Hamilton	+91 7940270549	swapnil.h@eptl.in	Support Executive	HO – Ahmedabad
Hardik Oza	+91 7940270560	Hardik.oza@eptl.in	Support Executive	HO – Ahmedabad
Ankur Bhatt	+91 7940270590	ankur.bhatt@eptl.in	Support Executive	HO – Ahmedabad
Prashant Rajyaguru	+91 7940270545	prashant@eptl.in	Asst. Manager – Implementation & Support	HO – Ahmedabad
Dharam Rathod	+91 7940270596	dharam@eptl.in	Manager – Implementation & Support	HO – Ahmedabad
Pradip Parmar	+91 7940270532	pradip@eptl.in	Sr Mgr – Implementation & Support	HO – Ahmedabad
Devang Patel	+91 7940270576	devang@eptl.in	Sr Manager – Implementation & Support	HO – Ahmedabad

G2 OTHER IMPORTANT INFORMATION RELATED TO E-PROCUREMENT TENDERS

1. The bidder has to keep track of any changes by viewing the addendum / Corrigendum's issued by the Purchaser on time-to- time basis in the E-Procurement platform. The Company calling for tenders shall not be responsible for any claims/problems arising out of this.
2. The user should complete all the processes and steps required for bid submission. The successful bid submission can be ascertained once acknowledgement is given by the system through bid submission number after completing all the processes and steps. BHEL and M/s e Procurement Technologies limited will not be responsible for incomplete bid submission by users. Users may also note that the incomplete bids will not be saved by the system and are not available for the Purchaser for processing.
3. Before uploading scanned documents if any, the bidders shall sign on all the statements, documents, certificates uploaded by him, owning responsibility for their correctness / authenticity.
4. On the due date of tender opening, only technical bids will be opened. The opened technical bids will be evaluated by us and clarifications required, if any, will be called for from the bidders on technical and commercial points. If no reply is received from the vendor for the clarification raised by BHEL with in the final cut-off date, those vendors offer will be processed with the documents available / submitted against this tender. Offers not meeting the required specification and technical condition will be summarily rejected. The price bids of technically suitable bidders will be opened on a later date with prior intimation to techno-commercially suitable bidders.
5. Ranking L-1, L-2 etc. shall be done for individual item for the techno-commercially acceptable offers on landed cost to BHEL, IVP Goindwal basis and BHEL reserves the right to place order for individual items with different vendors. In the event of more than one vendor becoming L1 for the item, the enquiry quantity will be shared equally among all the L1 vendors.
6. BHEL reserves the right to negotiate with L1 vendor or re-float the tender for items where, L1 price is not the lowest acceptable price; BHEL reserves the right to increase or decrease the tender quantity.
7. **If supplier is mentioning delivery destination within state/ outside state depending upon his location of factory, Free On Road etc these are assumed as on FOR Goindwal. If supplier is wishing to give delivery on Ex works basis, then he has to clearly mention about it.**

G3 PRICE BASIS

- a. Order of enquiry item sl. No. shall be maintained in the quotation.
- b. The rates quoted shall be firm and fixed. No price variation is proposed and allowed.
- c. Rates quoted should be F.O.R Goindwal basis. If bidder has quoted Ex Works, loading shall be done as per BHEL discretion for tender evaluation.

Variation in GST or any other statutory levies during contractual delivery period shall be to BHEL's account

G4 VALIDITY OF OFFERS:

The offers shall be kept open for acceptance 'for number of days mentioned in special terms and conditions' from the date of opening of the tender. In case of extension of tender opening date, the validity shall be suitably revised.

G5 SCOPE OF SUPPLY

Material shall be supplied as per the applicable latest Technical Delivery Conditions (TDC)/ Material Standard requirements/BPS/Drawing and other requirement as given in the Tender

GCC: REV:08

General Contract Conditions (GCC) of MM Tenders

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib, Distt Tarn Taran, Punjab-143422]

Enquiry. National & International material Standards shall have to be arranged by vendors themselves.

G6 REPLACEMENT OF REJECTION

If the material is rejected due to defective workmanship during inspection or at the time of actual use, within the guarantee period (i.e. as per clause 13), 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.

Lifting of rejected material is under Supplier's scope. BHEL will inform related invoice, qty etc to supplier. Supplier is expected to give the plan to lift and advance intimation when visiting to lift the material. Material should be lifted within one month from date of intimation. After one month BHEL will not be responsible for rejected material. BHEL may decide to send the rejected material on to Pay basis to supplier. Any leniency/ unresponsiveness/delay on part of supplier may lead to appropriate action by BHEL. Any request to postpone in written may be considered but replacement should not be linked with lifting of material.

G7 SUPPLIED MATERIAL ADJUSTMENT

Item/s pending in previous PO has to be billed in previous PO only. Otherwise BHEL will be free to adjust the supplies in previous PO. Any implication of tax will be on supplier's account. For this it is desirable to reconcile the pending PO statement every month/frequently. BHEL will give pending PO statement every month. This can also be viewed at Portal (<http://vis.bheltry.co.in/mm/index.jsp>).

G8 DELIVERY SCHEDULE

Supplies shall be affected and completed as per schedule mentioned in special terms and conditions. **Further, BHEL may release delivery schedule from time to time based upon our requirement with mutual understanding.** Vendor shall be required to complete the order as per the BHEL schedule requested.

G9 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.

G10 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 its 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.
- b. Documents to be submitted (if applicable)
 - i. Tax invoice (Invoice shall be GST compliant and should contain all the required information such as GST No, HSN code etc.)
 - ii. Transporter copy along with material/consignment.
 - iii. Material Test Certificates (MTC) and
 - iv. Compliance Certificate.
- c. GST registration number is to be submitted by qualified vendor as per GST law.
- d. It is mandatory to mention proper material codes in the invoices and separate invoices to be raised for different POs.

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

f. Conditions relating to release of GST portion:

Payment of GST portion will be released to vendor only upon completion of statutory requirement and further subject to following:

The reimbursement of GST portion of invoice shall be released only upon: -

1. vendor declaring such invoice in his GSTR-1 and
 2. receipt of goods and Tax invoice by BHEL and
 3. Confirmation of payment of GST thereon by vendor on GSTN portal.
 4. Above is subject to receipt of goods/service and tax invoice thereof along with vendor declaring invoice in his return and paying GST within timeline prescribed for availing ITC by BHEL.
- In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from vendor along with interest levied / leviable on BHEL.
 - In case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied / leviable on BHEL.

G11 AVAILING INPUT TAX CREDIT (ITC) BY BHEL:

1. Since ITC can be availed only when BHEL is in possession of GST Tax invoice and after receipt of goods. Thus, vendor to ensure timely dispatch of goods and Tax invoice. It may be noted that in case of any delay in receipt of Tax Invoice and/or receipt of goods, the ITC availment by BHEL will get delayed thus entailing additional cash outflow & may even get denied if ITC availment timelines are breached.
2. Further ITC can be availed only when vendor has declared such invoice in his outward supply Return GSTR-1 and after GST thereon has been paid by him at the time of filing of monthly Return.
3. If GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from vendor along with interest levied/leviable on BHEL.
4. Further, in case vendor delays declaring such invoice in his return and GST credit availed by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST law shall be recoverable from vendor/contractor along with interest levied/leviable on BHEL.

G12 LIABILITY UNDER REVERSE CHARGE (RCM)

General Contract Conditions (GCC) of MM Tenders

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib, Distt Tarn Taran, Punjab-143422]

Any GST liability arising on BHEL under Reverse Charge (RCM) before actual receipt of goods and/ or Invoice thereof would be subject to recovery of Interest leviable for the period between the date of such liability and actual date of eligibility of ITC based on receipt of goods, receipt of Invoices and other conditions specified in GST Law as applicable.

G13 INSPECTION

- a. All required tests as called in referred material standard/BHEL/TDC/drawing etc shall be carried out by vendor at no extra cost. **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. Third party inspection charges will be borne by BHEL. Moreover, all required infrastructure (testing, tools etc) have to be arranged by supplier.
- c. **Vendor will give inspection call sufficiently in advance considering the delivery period stipulated in the purchase order.**
- d. Material Test Certificates (MTC), Inspection reports and Compliance/Guarantee Certificate are to be provided along with the supplies.
- e. Latest applicable revisions of standards/procedures to be referred. International/National standards are to be arranged by vendor.
- f. 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.
- g. Necessary tooling including thread gauges etc. have to be arranged by vendor. Only in exceptional cases, based on BHEL discretions item/nature, BHEL may consider request to provide gauges if available with BHEL. But in no case this shall be linked with delivery of material.
- h. BHEL representative from unit or CQ is authorized to carry out audits along with TPIA at vendor's works before clearing the items for dispatch.

G14 PREFERENCES FOR MSE's

Preferences as mentioned in "Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012" & "Public Procurement Policy for Micro and Small Enterprises (MSEs) Amendment Order, 2018", shall be given to Micro and Small enterprises.

Main points which are mentioned in the above orders are as follows:

- 25% Procurement of the tender value shall be made from MSE (Micro, Small Enterprises) firms.
- 25% of the 25% quantity (i.e. 6.25% of the tender quantity) offered to the MSE's shall be reserved for MSE's owned by SC/STs. Failure to participate by any MSE owned by SC/ST's; this 6.25% quantity shall be procured from other MSEs.
- 3% from within the 25% quantity offered to the MSE's shall be reserved for women owned MSE's. Failure to participate by any MSE owned by women; this 3% quantity shall be procured from other MSEs.
- EMD shall be exempted for MSE's. All these benefits are subject to production of all statutory documents
- In tender, participating Micro and Small Enterprises quoting price within price band of L1+15 per cent shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a Micro and Small Enterprise and such Micro and Small Enterprise shall be allowed to supply up to 25 per cent of total tendered

value. In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).

“MSE suppliers can avail the intended benefits only if they submit along with the offer UAM (Udyog Aadhaar Memorandum), attested copies of either EM II certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II certificate along with attested copy of a CA certificate (Format enclosed at Annexure -1 where deemed validity of EM II certificate of five years has expired) applicable for the relevant financial year (latest audited). Date to be reckoned for determining the deemed validity will be the date of bid opening (Part 1 in case of two part bid). Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry if any deficiency in the above required documents is not submitted before price bid opening. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal. Documents should be notarized or attested by a Gazetted officer.

G15 GUARANTEE/WARRANTEE

Vendor shall give a guarantee of 18 months from the date of dispatch or 12 months from date of receipt, against manufacturing defects, whichever is earlier. In case of non-acceptance of this term bid will be rejected.

G16 PENALTY FOR LATE DELIVERY

‘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 for late delivery will be applicable @ 0.5% per week or part thereof subject to a maximum of 10.0 %.

If any vendor does not accept LD ½% of the supply for each week of delay subject to a maximum of 5%, their offer is likely to be rejected by BHEL and the price bid shall not be opened. Bidders accepting for 10% LD shall not be loaded on account of LD. However, bidders who offer any other % LD [between 5% to 10%] shall be loaded @ % deviation from 10% and their accepted %. e.g. If a bidder accepts for a max of 7% LD only, their offer would be loaded @ 3% (10 – 7 = 3).

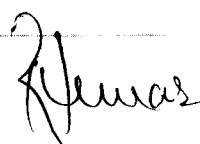
BHEL reserves the right to receive or not receive the material after the due date of PO. Applicable GST shall also be recovered from suppliers/contractors on LD amount. For this Debit note will be issued by BHEL indicating the respective supply invoice number.

G17 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.

G18 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.





General Contract Conditions (GCC) of MM Tenders

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib, Distt Tarn Taran, Punjab-143422]

G19 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.

G20 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 shall apply to such arbitration. The award passed by the arbitrator shall be final and conclusively binding on all the parties.

G21 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.

G22 CLARIFICATIONS

The correspondence exchanged against the tender from both tenderer and BHEL through email/e-procurement 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.

G23 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.

G24 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.
- e. Bids should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else shall be liable for rejection.
- f. All overwriting/cutting, etc will be numbered by bid opening officials and announced during bid opening.

G25 GENERAL

- a. 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, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the vendor concerned.
- b. BHEL reserves the right to extend the due date of opening, which shall be informed. Validity of offer shall be deemed to be revised accordingly.
- c. BHEL reserves the right to accept or reject any part or whole of the tender of a bidder by assigning a valid reason thereof. BHEL reserves the right to cancel the tender without assigning any reason thereof and without any obligation before any commitment.
- d. If possible, please submit soft copy of price quotation [copied on a blank CD of standard make] put in the sealed offer.
- e. 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.
- f. BHEL may increase/decrease item/s based on BHEL requirement before price bid opening. Suitable price implication may be asked from suppliers.
- g. BHEL may drop item/items from tender at any stage of tender before placing PO. BHEL may also delete PO with consent with supplier within delivery date of PO.
- h. After releasing PO, it is assumed that supplier has accepted PO if we do not receive acknowledgement from supplier within 5 days of date of PO.
- i. Any term is special tender terms and conditions will supersede the GCC.
- j. BHEL reserves the right to negotiate with L1 bidder/s.

G26 BANNED FIRMS

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

G27 DISCLAIMER CLAUSE: (Only for E procurement)

Neither the Organization (Bharat Heavy Electricals Ltd.) nor the service provider (M/s e Procurement Technologies limited) is responsible for any failure of submission of bids due to failure of internet or other connectivity problems or reasons thereof.



General Contract Conditions (GCC) of MM Tenders

[Address: BHEL Industrial Valve Plant: 433, Industrial Complex, Goindwal Sahib, Distt Tarn Taran, Punjab-143422]

G28 FRAUD PREVENTION POLICY

The Bidder along with its associate / collaborators / sub-contractors / sub-vendors / consultants / service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

G29 REVERSE AUCTION

BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

G30 SUSPENSION OF BUSINESS DEALINGS WITH DEFAULTERS

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

1.0 Integrity commitment, performance of the contract and punitive action thereof:

1.1. Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

1.2. Commitment by Bidder/ Supplier/ Contractor:

1.2.1. The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence

punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

1.2.2. The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

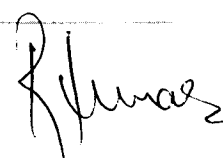
1.2.3. The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on [www. bhel.com](http://www.bhel.com) and/or under applicable legal provisions

G31 PREFERENCE TO MAKE IN INDIA

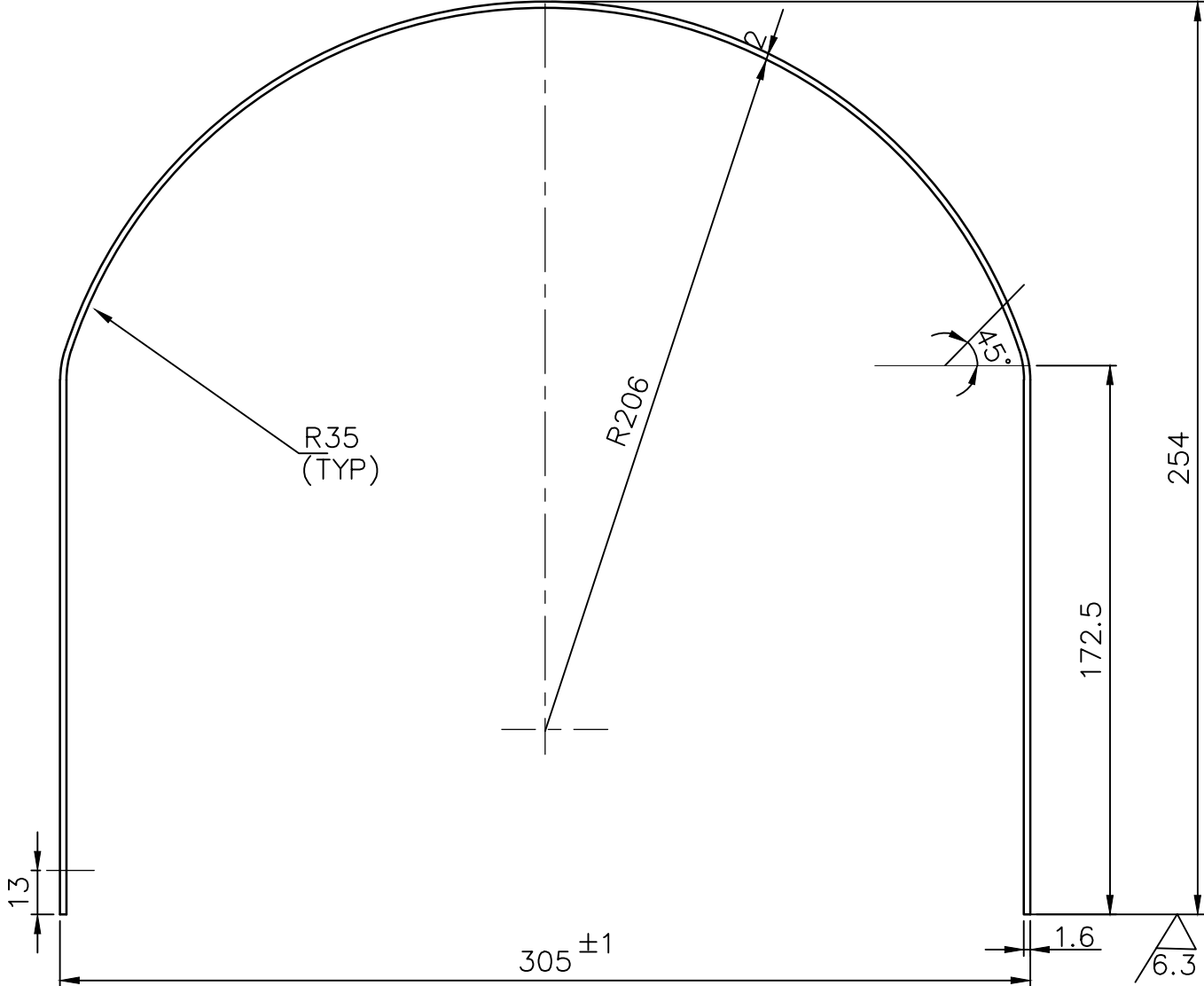
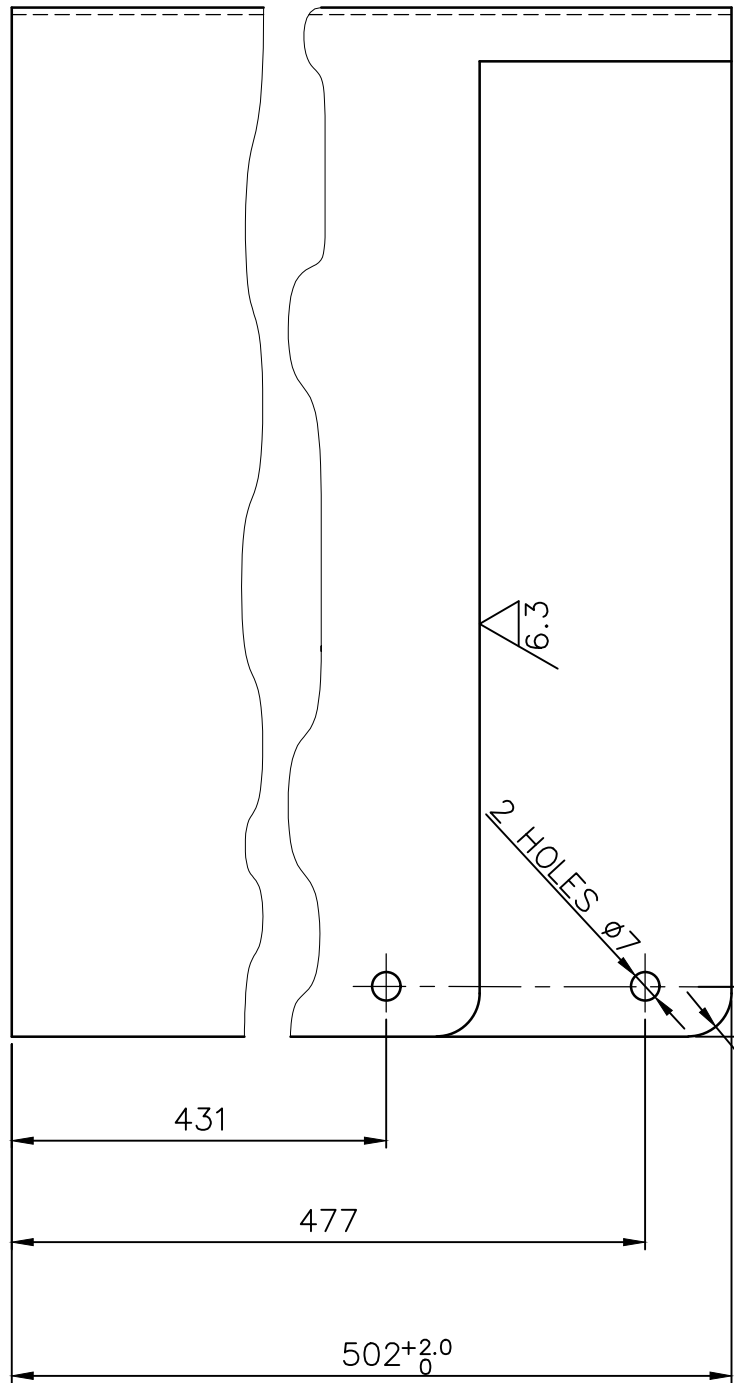
For the procurement, Public Procurement (Preference to make in India), order 2017 dated 15.06.2017 & 28.05.2018 and subsequent Orders issued by respective Nodal Ministry shall be applicable even if issued after issue of this NIT before finalisation of contract/PO/WO against this NIT.

In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable.



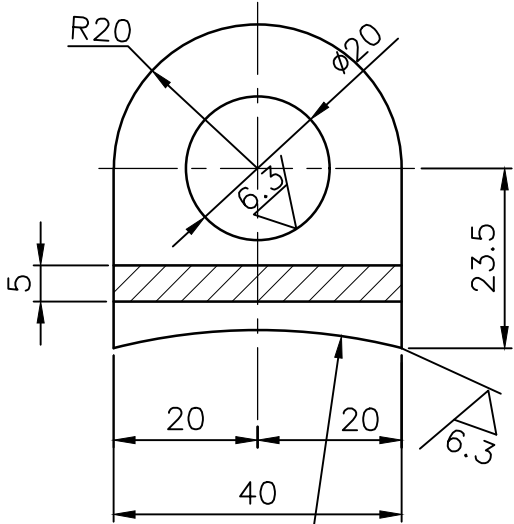
2-20-201-00039
DRAWING NO.

ALL DIMENSIONS ARE IN MILLIMETRES. FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP / QP

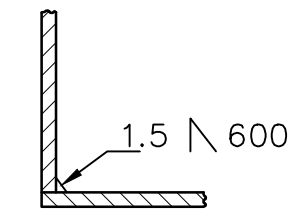


ITEM-01

(SEE NOTE-3)



ITEM-02



DETAIL-A

NOTE: —

1. SHARP CORNERS ARE TO BE ROUNDED OFF.
2. SURFACES SHOULD BE FREE FROM BENDS AND THEY SHOULD BE PERFECTLY STRAIGHT & SMOOTH.
3. THIS DIMENSION IS CRITICAL. INSPECTOR SHOULD CHECK THIS DIMENSION ON ALL PIECES.
FOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURES.

REV	DATE	ALTERED	J.S
15	22.10.18	CHD & APPD	J.S & G.S
ZONE	TABLE & CODE 963532010001		
	INTRODUCED.		
	DCN: SB: 802407/5024455		

5	HEX HD SCRU-M6X10-8.8	412380691000	IS 1364 P2	-	0.004	4
4	NUT-M6-CL4	413040000600	IS 1363 P3	-	0.003	4
3	COVER	842020126100	IS 513 Gr.CR2	4-20-201-00016	0.980	1
2	PLATE 5.00 MM	150110290000	IS2062 E250A(Fe410W)	-	0.098	1
1	SHEET 1.6 MM	150110760000	IS 513 Gr.CR2	-	4.800	1
ITEM No.	DESCRIPTION	MATERIAL CODE	MATERIAL SPECIFICATION	DRAWING No.	UNIT WEIGHT(kg)	QUANTITY (Nos)

PART CODE : 842020115800/963532010001

No OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
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TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT

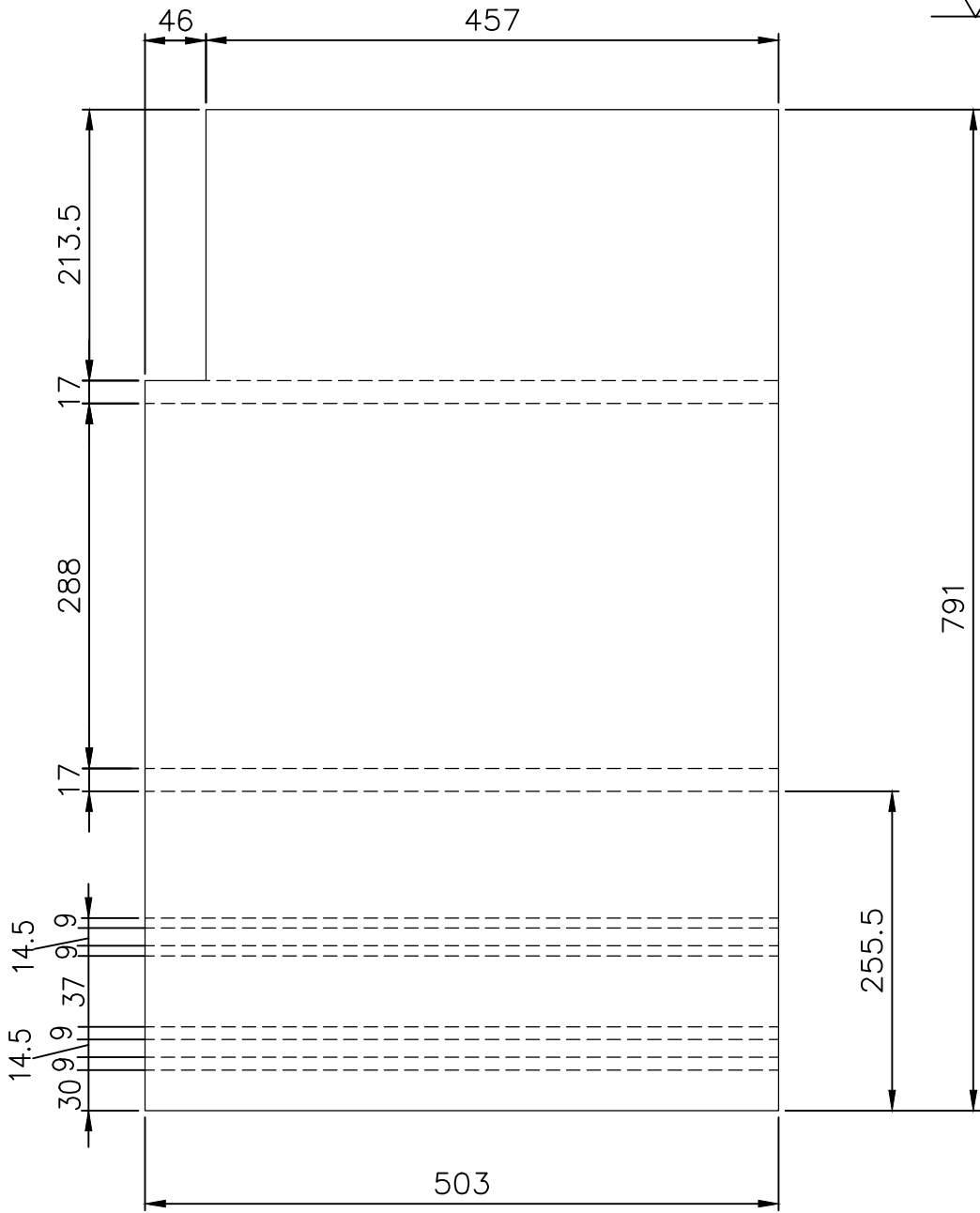
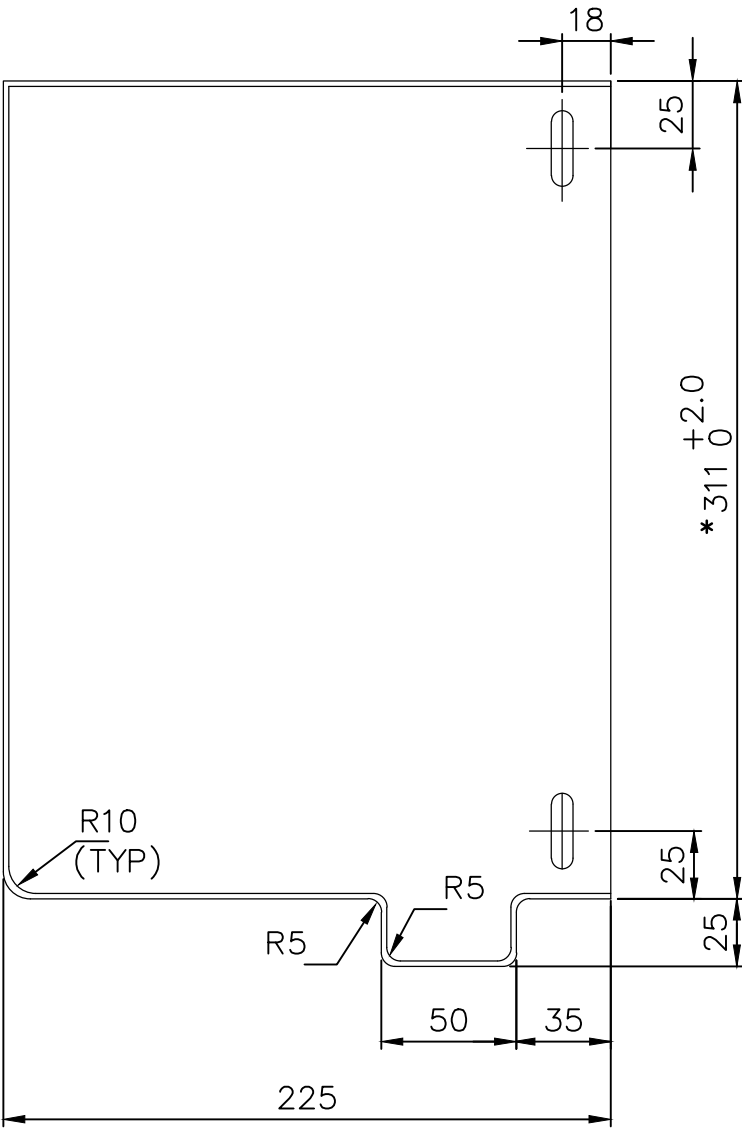
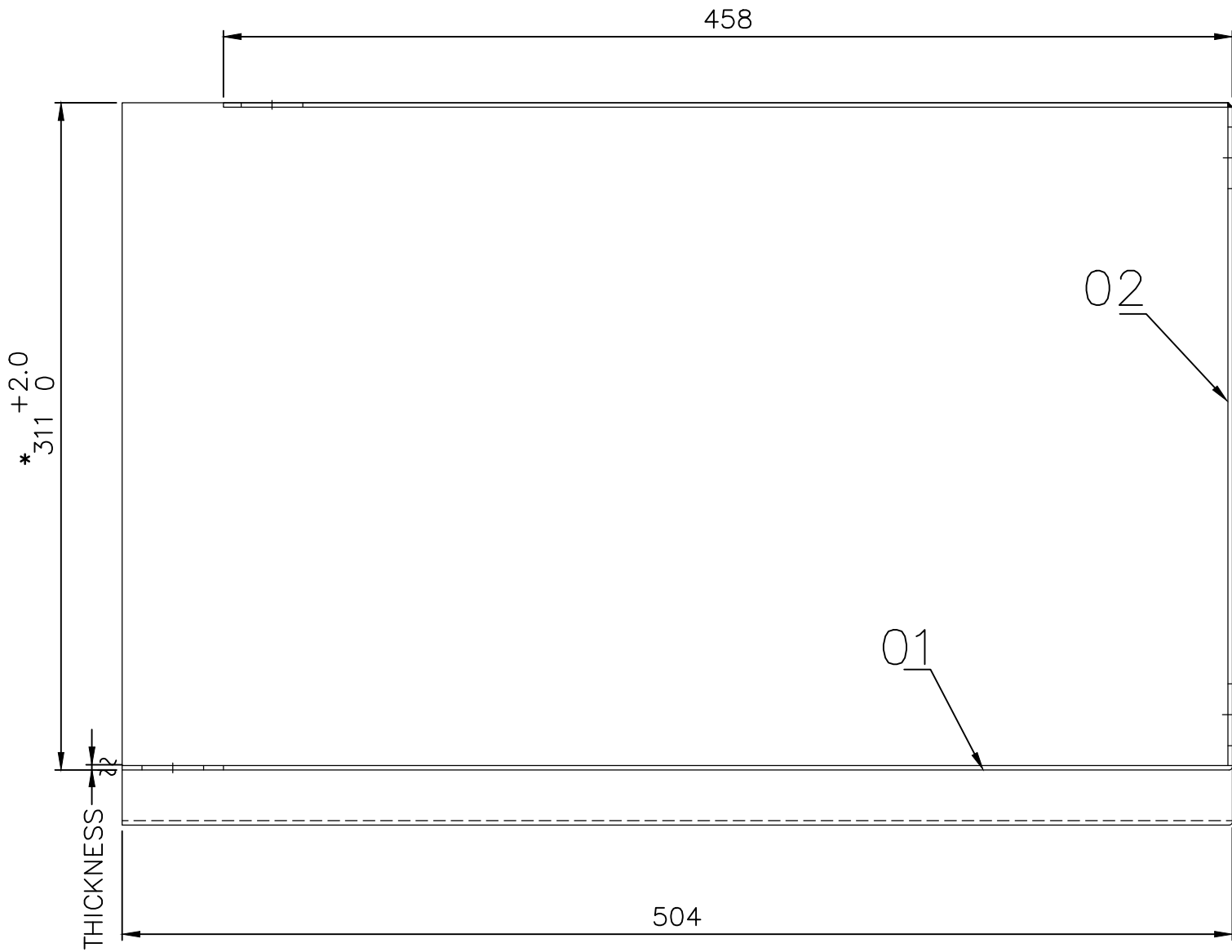
	DRN	NAME	SIGN	DATE	NO.OF VAR.
	CHD	V.ARUMUGAM	V.A.	11.06.01	
	APPD	K.SRIDHARAN	K.S.	11.06.01	
365-120		S.NATARAJAN	S.N.	11.06.01	

DEPT	SB	SCALE	WEIGHT (KG).	REFERENCE INFORMATIONS	NO. OF ITEMS
CODE	330	NTS	5.9	L-130908	

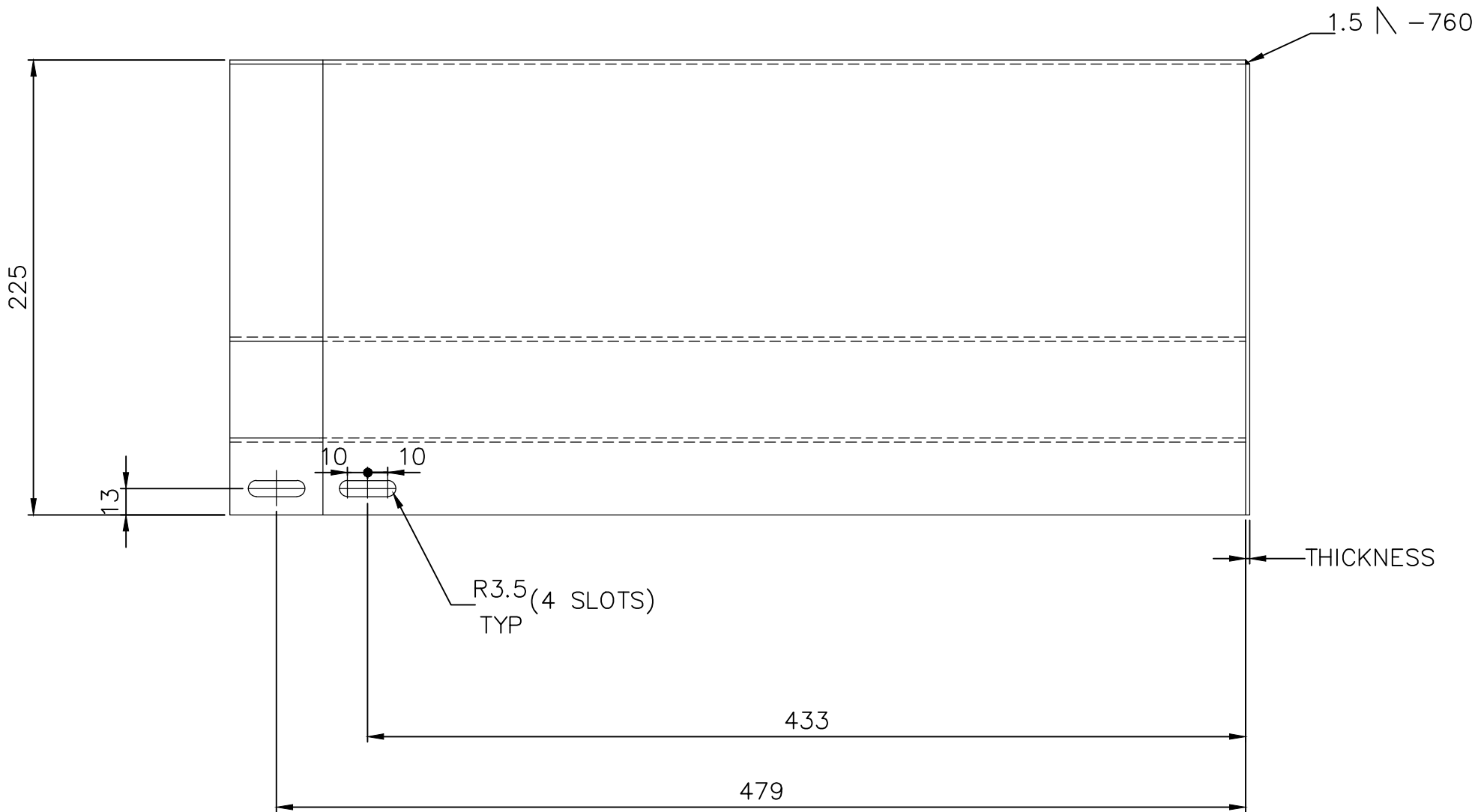
TITLE	CARD CODE	DRAWING NO.	REV
GUARD	U 01	2-20-201-00039	15

DRAWING NO.
2-20-201-00257

ALL DIMENSIONS ARE IN MILLIMETRES. FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP / 12.5^{OP} / (~)



DEVELOPMENT OF ITEM 01



NOTES: —

- * 01. THIS DIMENSION IS CRITICAL, INSPECTOR TO CHECK ON ALL PIECES.
- 02. FOR QUALITY REQUIREMENTS REFER LATEST APPLICABLE QUALITY PROCEDURES.

PART CODE : 842020136700/963532010002

2	SHEET 2.0 MM/ SHEET 1.6 MM	150111040000/ 150110760000	IS 513-D	4-20-201-01413	0.912	1
1	SHEET 2.0 MM/ SHEET 1.6 MM	150111040000/ 150110760000	IS 513-D	4-20-201-01413	4.960	1
ITEM No.	DESCRIPTION	MATERIAL CODE	MATERIAL SPECIFICATION	DRAWING No.	UNIT WEIGHT(kg)	QUANTITY (Nos)

No OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No
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TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT

 365-125	BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI -620014.		DRN V.ARUMUGAM	SIGN V.A.	DATE 11.06.01	NO.OF VAR.	
	DEPT SB	SCALE NTS	WEIGHT (KG). 5.87	REFERENCE INFORMATIONS			
	CODE 330	TITLE BOTTOM COVER	CARD CODE U 01	DRAWING NO. 2-20-201-00257			

DEPT	SB		SCALE	WEIGHT (KG).	REFERENCE INFORMATION	NO. OF ITEMS
CODE	330		NTS	5.87		
TITLE				CARD CODE	DRAWING NO.	REV
BOTTOM COVER				U 01	2-20-201-00257	08

1

2

3

4

5

6

7

8

2-V-0000-14336

DRAWING NO.

SL.No.

DRAWING No.

MATL. CODE

øD⁺²₀

L⁺⁴₀

NET WT (Kg)

APPLICABLE VALVE SIZES

01

2-V-N298-14336/2

96 465 276 0000

122

22

0.33

2-C150-GV

02

2-V-F602-14336/2

96 465 277 0000

135

27

0.42

3-C600-GV

03

2-V-2885-14336/2

96 465 278 0000

142

23

0.43

3-C300-RV

04

2-V-N289-14336/2

96 465 279 0000

148

20

0.43

3-C150-FV,3-C150-GV

05

2-V-N255-14336/2

96 465 280 0000

158

20

0.48

3-C300-GV

06

2-V-F603-14336/2

96 465 281 0000

166

33

0.63

4-C600-GV

07

2-V-5171-14336/2

96 465 282 0000

168

23

0.56

3-C300-FV

08

2-V-N294-14336/2

96 465 283 0000

176

35

0.71

4-C150-GV

09

2-V-2886-14336/2

96 465 284 0000

180

33

0.71

4-C300-RV

10

2-V-5177-14336/2

96 465 285 0000

188

18

0.62

4-C150-FV

11

2-V-N251-14336/2

96 465 286 0000

206

30

0.85

4-C300-GV

12

2-V-F604-14336/2

96 465 287 0000

227

43

1.14

6-C600-GV

13

2-V-N248-14336/2

96 465 288 0000

230

30

1.04

6-C150-GV,6-C300-GV

14

2-V-5176-14336/2

96 465 289 0000

232

25

0.98

6-C150-FV

15

2-V-2887-14336/2

96 465 290 0000

236

24

0.99

6-C300-RV

16

2-V-5173-14336/2

96 465 291 0000

242

39

1.22

6-C300-FV

17

2-V-N271-14336/2

96 465 292 0000

282

39

1.55

8-C150-GV

18

2-V-N244-14336/2

96 465 293 0000

288

33

1.52

8-C300-FV,8-C300-GV,8-C600-GV

19

2-V-5170-14336/2

96 465 294 0000

292

30

1.44

8-C150-FV

20

2-V-2888-14336/2

96 465 295 0000

297

33

1.60

8-C300-RV

21

2-V-N267-14336/2

96 465 296 0000

336

40

2.09

10-C150-GV

22

2-V-F609-14336/2

96 465 297 0000

344

35

2.09

10-C600-GV

23

2-V-N235-14336/2

96 465 298 0000

357

43

2.37

10-C300-FV,10-C300-GV

24

2-V-Z018-14336/2

96 465 299 0000

386

63

3.08

12-C300-FV

25

2-V-N903-14336/2

96 465 300 0000

416

45

3.10

12-C300-GV

26

2-V-N631-14336/2

96 465 301 0000

432

58

3.59

12-C300-GV

27

2-V-N593-14336/2

96 465 302 0000

460

50

3.79

14-C300-GV

28

2-V-N594-14336/2

96 465 303 0000

492

47

4.18

16-C300-GV,16-C300-FV

29

2-V-N575-14336/2

96 465 304 0000

540

80

5.79

18-C150-GV

30

2-V-N822-14336/2

96 465 305 0000

593

58

6.10

20-C150-FV,20-C150-GV

31

2-V-N595-14336/2

96 465 306 0000

648

60

7.10

20-C300-GV

32

2-V-N805-14336/2

96 465 307 0000

698

58

8.08

24-C150-GV

1

2

3

4

5

6

7

8

2-V-0000-14336

DRAWING NO.

SL.No.

DRAWING No.

MATL. CODE

øD⁺²₀

L⁺⁴₀

NET WT (Kg)

APPLICABLE VALVE SIZES

01

2-V-N298-14336/2

96 465 276 0000

122

22

0.33

2-C150-GV

02

2-V-F602-14336/2

96 465 277 0000

135

27

0.42

3-C600-GV

03

2-V-2885-14336/2

96 465 278 0000

142

23

0.43

3-C300-RV

04

2-V-N289-14336/2

96 465 279 0000

148

20

0.43

3-C150-FV,3-C150-GV

05

2-V-N255-14336/2

96 465 280 0000

158

20

0.48

3-C300-GV

06

2-V-F603-14336/2

96 465 281 0000

166

33

0.63

4-C600-GV

07

2-V-5171-14336/2

96 465 282 0000

168

23

0.56

3-C300-FV

08

2-V-N294-14336/2

96 465 283 0000

176

35

0.71

4-C150-GV

09

2-V-2886-14336/2

96 465 284 0000

180

33

0.71

4-C300-RV

10

2-V-5177-14336/2

96 465 285 0000

188

18

0.62

4-C150-FV

11

2-V-N251-14336/2

96 465 286 0000

206

30

0.85

4-C300-GV

12

2-V-F604-14336/2

96 465 287 0000

227

43

1.14

6-C600-GV

13

2-V-N248-14336/2

96 465 288 0000

230

30

1.04

6-C150-GV,6-C300-GV

14

2-V-5176-14336/2

96 465 289 0000

232

25

0.98

6-C150-FV

15

2-V-2887-14336/2

96 465 290 0000

236

24

0.99

6-C300-RV

16

2-V-5173-14336/2

96 465 291 0000

242

39

1.22

6-C300-FV

17

2-V-N271-14336/2

96 465 292 0000

282

39

1.55

8-C150-GV

18

2-V-N244-14336/2

96 465 293 0000

288

33

1.52

8-C300-FV,8-C300-GV,8-C600-GV

19

2-V-5170-14336/2

96 465 294 0000

292

30

1.44

8-C150-FV

20

2-V-2888-14336/2

96 465 295 0000

297

33

1.60

8-C300-RV

21

2-V-N267-14336/2

96 465 296 0000

336

40

2.09

10-C150-GV

22

2-V-F609-14336/2

96 465 297 0000

344

35

2.09

10-C600-GV

23

2-V-N235-14336/2

96 465 298 0000

357

43

2.37

10-C300-FV,10-C300-GV

24

2-V-Z018-14336/2

96 465 299 0000

386

63

3.08

12-C300-FV

25

2-V-N903-14336/2

96 465 300 0000

416

45

3.10

12-C300-GV

26

2-V-N631-14336/2

96 465 301 0000

432

58

3.59

12-C300-GV

27

2-V-N593-14336/2

96 465 302 0000

460

50

3.79

14-C300-GV

28

2-V-N594-14336/2

96 465 303 0000

492

47

4.18

16-C300-GV,16-C300-FV

29

2-V-N575-14336/2

96 465 304 0000

540

80

5.79

18-C150-GV

30

2-V-N822-14336/2

96 465 305 0000

593

58

6.10

20-C150-FV,20-C150-GV

31

2-V-N595-14336/2

96 465 306 0000

648

60

7.10

20-C300-GV

32

2-V-N805-14336/2

96 465 307 0000

698

58

8.08

24-C150-GV

1

2

3

4

5

6

7

8

2-V-0000-14336

DRAWING NO.

SL.No.

DRAWING No.

MATL. CODE

øD⁺²₀

L⁺⁴₀

NET WT (Kg)

APPLICABLE VALVE SIZES

01

2-V-N298-14336/2

96 465 276 0000

122

22

0.33

2-C150-GV

02

2-V-F602-14336/2

96 465 277 0000

135

27

0.42

3-C600-GV

03

2-V-2885-14336/2

96 465 278 0000

142

23

0.43

3-C300-RV

04

2-V-N289-14336/2

96 465 279 0000

148

20

0.43

3-C150-FV,3-C150-GV

05

2-V-N255-14336/2

96 465 280 0000

158

20

0.48

3-C300-GV

06

2-V-F603-14336/2

96 465 281 0000

166

33

0.63

4-C600-GV

07

2-V-5171-14336/2

96 465 282 0000

168

23

0.56

3-C300-FV

08

2-V-N294-14336/2

96 465 283 0000

176

35

0.71

4-C150-GV

09

2-V-2886-14336/2

96 465 284 0000

180

33

0.71

4-C300-RV

10

2-V-5177-14336/2

96 465 285 0000

188

18

0.62

4-C150-FV

11

2-V-N251-14336/2

96 465 286 0000

206

30

0.85

4-C300-GV

12

2-V-F604-14336/2

96 465 287 0000

227

43

1.14

6-C600-GV

13

2-V-N248-14336/2

96 465 288 0000

230

30

1.04

6-C150-GV,6-C300-GV

14

2-V-5176-14336/2

96 465 289 0000

232

25

0.98

6-C150-FV

15

2-V-2887-14336/2

96 465 290 0000

236

24

0.99

6-C300-RV

16

2-V-5173-14336/2

96 465 291 0000

242

39

1.22

6-C300-FV

17

2-V-N271-14336/2

96 465 292 0000

282

39

1.55

8-C150-GV

18

2-V-N244-14336/2

96 465 293 0000

288

33

1.52

8-C300-FV,8-C300-GV,8-C600-GV

19

2-V-5170-14336/2

96 465 294 0000

292

30

1.44

8-C150-FV

20

2-V-2888-14336/2

96 465 295 0000

297

33

1.60

8-C300-RV

21

2-V-N267-14336/2

96 465 296 0000

336

40

2.09

10-C150-GV

22

2-V-F609-14336/2

96 465 297 0000

344

35

2.09

10-C600-GV

23

2-V-N235-14336/2

96 465 298 0000

357

43

2.37

10-C300-FV,10-C300-GV

24

2-V-Z018-14336/2

96 465 299 0000

386

63

3.08

12-C300-FV

25

2-V-N903-14336/2

96 465 300 0000

416

45

3.10

12-C300-GV

26

2-V-N631-14336/2

96 465 301 0000

432

58

3.59

12-C300-GV

27

2-V-N593-14336/2

96 465 302 0000

460

50

3.79

14-C300-GV

28

2-V-N594-14336/2

96 465 303 0000

492

47

4.18

16-C300-GV,16-C300-FV

29

2-V-N575-14336/2

96 465 304 0000

540

80

5.79

18-C150-GV

30

2-V-N822-14336/2

96 465 305 0000

593

58

6.10

20-C150-FV,20-C150-GV

31

2-V-N595-14336/2

96 465 306 0000

648

60

7.10

20-C300-GV

32

2-V-N805-14336/2

96 465 307 0000

698

58

8.08

24-C150-GV

1

2

3

4

5

6

7

8

2-V-0000-14336

DRAWING NO.

SL.No.

DRAWING No.

MATL. CODE

øD⁺²₀

L⁺⁴₀

NET WT (Kg)

APPLICABLE VALVE SIZES

01

2-V-N298-14336/2

96 465 276 0000

122

22

0.33

2-C150-GV

02

2-V-F602-14336/2

96 465 277 0000

135

27

0.42

3-C600-GV

03

2-V-2885-14336/2

96 465 278 0000

142

23

0.43

3-C300-RV

04

2-V-N289-14336/2

96 465 279 0000

148

20

0.43

3-C150-FV,3-C150-GV

05

2-V-N255-14336/2

96 465 280 0000

158

20

0.48

3-C300-GV

06

2-V-F603-14336/2

96 465 281 0000

166

33

0.63

4-C600-GV

07

2-V-5171-14336/2

96 465 282 0000

168

23

0.56

3-C300-FV

08

2-V-N294-14336/2

96 465 283 0000

176

35

0.71

4-C150-GV

09

2-V-2886-14336/2

96 465 284 0000

180

33

0.71

4-C300-RV

10

2-V-5177-14336/2

96 465 285 0000

188

18

0.62

4-C150-FV

11

2-V-N251-14336/2

96 465 286 0000

206

30

0.85

4-C300-GV

12

2-V-F604-14336/2

96 465 287 0000

227

43

1.14

6-C600-GV

13

2-V-N248-14336/2

96 465 288 0000

230

30

1.04

6-C150-GV,6-C300-GV

14

2-V-5176-14336/2

96 465 289 0000

232

25

0.98

6-C150-FV

15

2-V-2887-14336/2

96 465 290 0000

236

24

0.99

6-C300-RV

16

2-V-5173-14336/2

96 465 291 0000

242

39

1.22

6-C300-FV

17

2-V-N271-14336/2

96 465 292 0000

282

39

1.55

8-C150-GV

18

2-V-N244-14336/2

96 465 293 0000

288

33

1.52

8-C300-FV,8-C300-GV,8-C600-GV

19

2-V-5170-14336/2

96 465 294 0000

292

30

1.44

8-C150-FV

20

2-V-2888-14336/2

96 465 295 0000

297

33

1.60

8-C300-RV

21

2-V-N267-14336/2

96 465 296 0000

336

40

2.09

10-C150-GV

22

2-V-F609-14336/2

96 465 297 0000

344

35

2.09

10-C600-GV

23

2-V-N235-14336/2

96 465 298 0000

357

43

2.37

10-C300-FV,10-C300-GV

24

2-V-Z018-14336/2

96 465 299 0000

386

63

3.08

12-C300-FV

25

2-V-N903-14336/2

96 465 300 0000

416

45

3.10

12-C300-GV

26

2-V-N631-14336/2

96 465 301 0000

432

58

3.59

12-C300-GV

27

2-V-N593-14336/2

96 465 302 0000

460

50

3.79

14-C300-GV

28

2-V-N594-14336/2

96 465 303 0000

492

47

4.18

16-C300-GV,16-C300-FV

29

2-V-N575-14336/2

96 465 304 0000

540

80

5.79

18-C150-GV

30

2-V-N822-14336/2

96 465 305 0000

593

58

6.10

20-C150-FV,20-C150-GV

31

2-V-N595-14336/2

96 465 306 0000

648

60

7.10

20-C300-GV

32

2-V-N805-14336/2

96 465 307 0000

698

58

8.08

24-C150-GV

1

2

3

4

5

6

7

8

2-V-0000-14336

DRAWING NO.

SL.No.

DRAWING No.

MATL. CODE

øD⁺²₀

L⁺⁴₀

NET WT (Kg)

APPLICABLE VALVE SIZES

01

2-V-N298-14336/2

96 465 276 0000

122

22

0.33

2-C150-GV

02

2-V-F602-14336/2

96 465 277 0000

1			2			3			4			5			6			7			8		
CORPORATE DRG ID:TP-DG-2-V-0000-15483/33			ALL DIMENSIONS ARE IN MILLIMETRES. FOR TOLERANCES OF UNTOLERANCED DIMENSIONS DURING MANUFACTURE REFER RELEVANT QCP / QP																				
A	SL.No.	DRAWING No.	MATL. CODE	ØD ⁺² ₀	L ⁺⁴ ₀	NET WT (Kg)	APPLICABLE VALVE SIZES		SL.No.	DRAWING No.	MATL. CODE	ØD ⁺² ₀	L ⁺⁴ ₀	NET WT (Kg)	APPLICABLE VALVE SIZES								
	01	2-V-G041-15483/3	964530010000	92.5	30	0.24	65/1500 GL,RE		48	2-V-N370-15483/4	964650100000	532	100	6.4	20"/150C GV								
	02	2-V-W049-15483/3	964530020000	98.5	30	0.27	65/1500 WG		49	2-V-N594-15483/4	964650120000	440	100	4.4	16"/300C GV								
	03	2-V-W001-15483/3	964530030000	102.5	30	0.28	65/2500 WG,GL,RE,65/1500 NR		50	2-V-3204-15483/2	964651370000	790	70	10.5	700MM/1500 RHID								
	04	2-V-G004-15483/3	964530040000	106.5	40	0.35	65/3500 GL,80/1500 GL,RE		51	2-V-P366-15483/2	964652090000	311	40	1.8	10"/C300-RV								
	05	2-V-L161-15483/3	964530050000	112.5	40	0.38	80/1500 NR,65/2500 NR		52	2-V-WA81-15483/3	964660030000	685	200	12.6	550/3000 SPL GV								
B	06	2-V-G145-15483/3	964530060000	117.5	40	0.40	80/2500/ GL,80/1500 WG		53	2-V-NC24-15483/2	964653650000	486	100	5.3	18/300-GV								
	07	2-V-W345-15483/3	964530070000	122.5	50	0.49	65/3500 RE,80/2500 WG		54	2-V-3319-15483/2	964654100000	869	70	12.3	800/1500-RHID								
	08	2-V-L025-15483/3	964530080000	127.5	40	0.45	80/3500 RE,80/2500 NR		55	2-V-P560-15483/2	964654140000	356	40	2.3	300/300-RV								
	09	2-V-G001-15483/3	964530090000	137.5	50	0.57	100/1500 RE,GL,WG,100/2500 RE,GL		56	2-V-3314-15483/2	964661000000	970	125	17.6	800/600-RHID								
	10	2-V-L053-15483/3	964530100000	142.5	40	0.53	100/1500 NR		57	2-V-U482-15483/2	964661010000	882	110	14.6	700/1500-RHID								
	11	2-V-W369-15483/3	964530110000	147.5	40	0.56	80/3500 WG		58	2-V-F999-15483/1	964655050000	1023	80	16.95	38"/600C GV, 38"/300C SCV								
C	12	2-V-W002-15483/3	964530120000	152.5	50	0.66	100/2500 WG,NR		59	2-V-L401-15483	964663610000	790	175	14.5	24"/C3000 NRV								
	13	2-V-W353-15483/3	964530130000	158	75	0.69	125/2500 WG		60	2-V-V567-15483	964665240000	345	120	3.52	10"/C3500 GV								
	14	2-V-W441-15483/3	964530140000	163	50	0.73	125/1500 WG,RE		61	2-V-L420-15483	964665280000	179	45	0.82	4"/C3500 SCV								
	15	2-V-W065-15483/3	964530150000	188	75	1.13	150/2500 WG,NR		62	2-V-G371-15483	964665290000	212	40	0.71	6"/C3500 GLV								
	16	2-V-W057-15483/3	964530160000	193	75	1.17	150/1500 WG,NR		63	2-V-WD11-15483	964665300000	774	162	13.7	22"/C3500 GV								
	17	2-V-G002-15483/3	964530170000	205	75	1.28	150/2500 RE,GL		64	2-V-V396-15483	964665440000	519	200	8.5	450/C2500 GV								
D	18	2-V-W113-15483/3	964530180000	238	75	1.58	200/1500 WG,NR		65	2-V-L435-15483/1	964665450000	638	190	11.01	22"/2500C NRV								
	19	2-V-L002-15483/3	964530190000	243	100	1.93	200/2500 NR		66	2-V-G366-15483	964665470000	212	80	1.4	6"/3500C GNV								
	20	2-V-W003-15483/3	964530200000	248	100	1.98	200/2500 WG		67	2-V-V730-15483	964665490000	695	185	12.4	22"/3500C GV								
	21	2-V-L177-15483/3	964530210000	287.5	100	2.43	250/2500 NR,WG,250/1500 WG		68	2-V-3394-15483	964665500000	902	125	12.78	32"/600C RHID								
	22	2-V-L129-15483/3	964530220000	293	100	2.50	250/1500 NR		69	2-V-3311-15483	964658050000	810	150	11.13	30"/600C-RHID								
	23	2-V-W061-15483/3	964530230000	340	100	3.10	300/1500 WG,NR		70	2-V-G390-15483	964665520000	129	40	0.50	3"/3500C-GLV / GNV								
E	24	2-V-W005-15483/3	964530240000	354.5	100	3.29	300/2500 WG,NR		71	2-V-NK44-15483	964659030000	760	45	8.89	28"/300C GV								
	25	2-V-W117-15483/3	964530250000	383	100	3.69	350/1500 WG		72	2-V-U829-15483	964665530000	730	185	13.33	22"/3500C GV F92								
	26	2-V-L121-15483/3	964530260000	393	100	3.84	350/1500 NR		73	2-V-3397-15483	964665540000	754	140	12.31	28"/900C RHID F92								
	27	2-V-W465-15483/3	964530270000	403	100	3.99	350/2000 WG																
	28	2-V-L029-15483/3	964530280000	418.5	100	4.22	300/2000 ELB,350/2500 NR																
	29	2-V-W006-15483/3	964530290000	423	150	5.33	350/2500 WG																
F	30	2-V-L081-15483/3	964530300000	443	150	5.70	350/2500 SCH																
	31	2-V-L113-15483/3	964530310000	448	100	4.68	300/2000 ELB,350/2750 WG																
	32	2-V-W069-15483/3	964530320000	473	150	6.25	400/2500 WG																
	33	2-V-G137-15483/3	964530330000	482	150	6.43	400/2500 RE,18"/150C GV																
	34	2-V-W457-15483/3	964530340000	503	100	5.60	450/1500 WG																
	35	2-V-W073-15483/3	964530350000	533	175	8.10	450/2500 WG																
G	36	2-V-W515-15483/3	964530360000	558	175	8.65	450/2000 WG																
	37	2-V-W417-15483/3	964530370000	613	150	9.17	600/1500 WG																
	38	2-V-W077-15483/2	964531150000	563	175	8.77	500/2750 WG																
	39	2-V-W505-15483/1	964531160000	197	75	1.21	150/2750 WG																
	40	2-V-L033-15483/3	964531740000	513	200	8.33	450/2500 SCH																
	41	2-V-L169-15483/2	964531750000	463	150	6.09	400/2500 SCH																
H	42	2-V-W393-15483/2	964531760000	458	100	4.86	400/1500 WG																
	43	2-V-L089-15483/2	964531770000	168	80	1.02	125/1500 & 125/2500 SCH																
	44	2-V-W752-15483/2	964533550000	593	175	9.20	500/2850 SPL WG																
	45	2-V-W021-15483/2	964533590000	325	100	2.94	300/2500 WG (FOR P91)																
	46	2-V-K616-15483/4	964650090000	638	100	9.2	24"/150C GV																
	47	2-V-N589-15483/4	964650110000	372	100	3.4	14"/150C GV																

2*

ØD⁺²₀

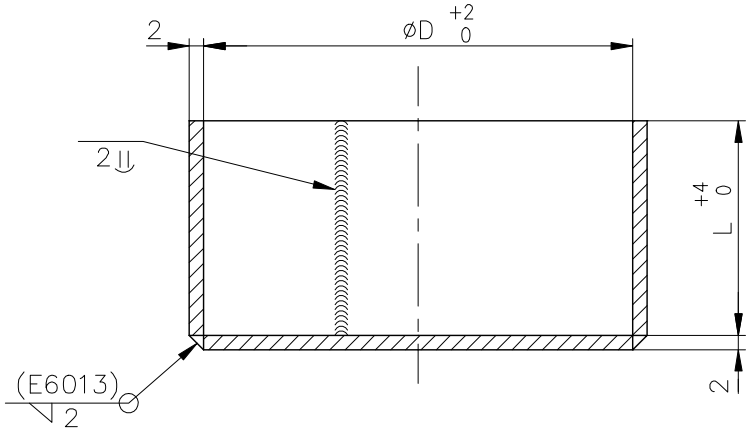
2*

1⁺⁴₀

2*

3- ∇ -0000-22633
DRAWING NO.

SL.NO.	DRAWING NUMBER	MATERIAL CODE	$\phi D \begin{smallmatrix} +2 \\ 0 \end{smallmatrix}$	$L \begin{smallmatrix} +4 \\ 0 \end{smallmatrix}$	WEIGHT	SIZE
01	3-V-L752-22633/00	964608200000	712	130	17.68	24"/600CL
02	3-V-L753-22633/00	964620070000	762	80	10.3	24"/600CL
03	3-V-L472-22633/00	964620210000	982	100	18.0	32"/600CL
04	3-V-L475-22633/00	964620220000	584	100	4.5	18"/600CL



NOTES:

1. MATERIAL SPECIFICATION – IS 1079 GR.ST34
2. APPLICABLE LATEST QUALITY PROCEDURE SHALL BE FOLLOWED IN ALL RESPECTS.

NO OFF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No	ITEM No	
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT										
 365-121 BHARAT HEAVY ELECTRICALS LTD., UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI-620014.					DRN	NAME M P S	SIGN M P S	DATE 01.05.98	NO.OF VAR.	
					CHD	P R K	P R K	01.05.98		
					APPD	S C S	S C S	01.05.98		
DEPT VL		SCALE NTS.		WEIGHT (KG). —	REFERENCE INFORMATION				NO. OF ITEMS	
CODE 320										
TITLE METALLIC END COVERS (FABRICATED)					CARD CODE U 01	DRAWING NO. 3-V-0000-22633				REV 03

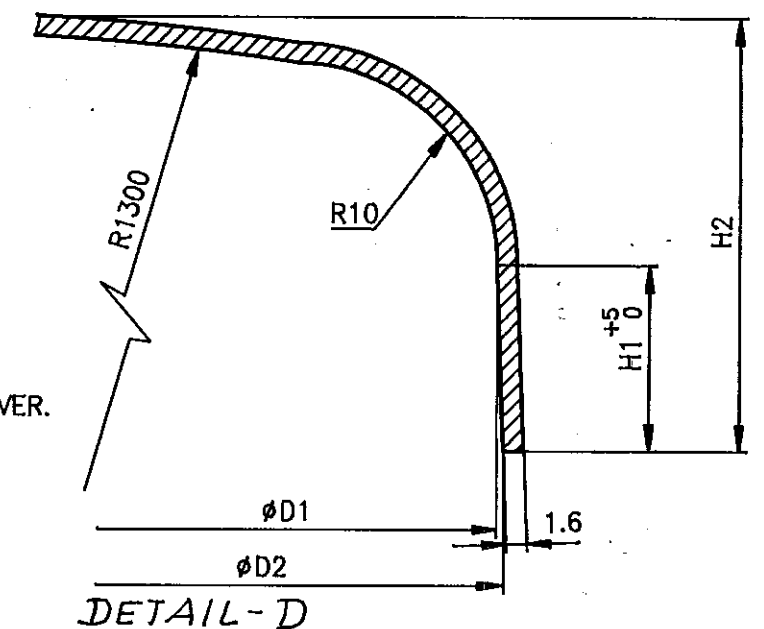
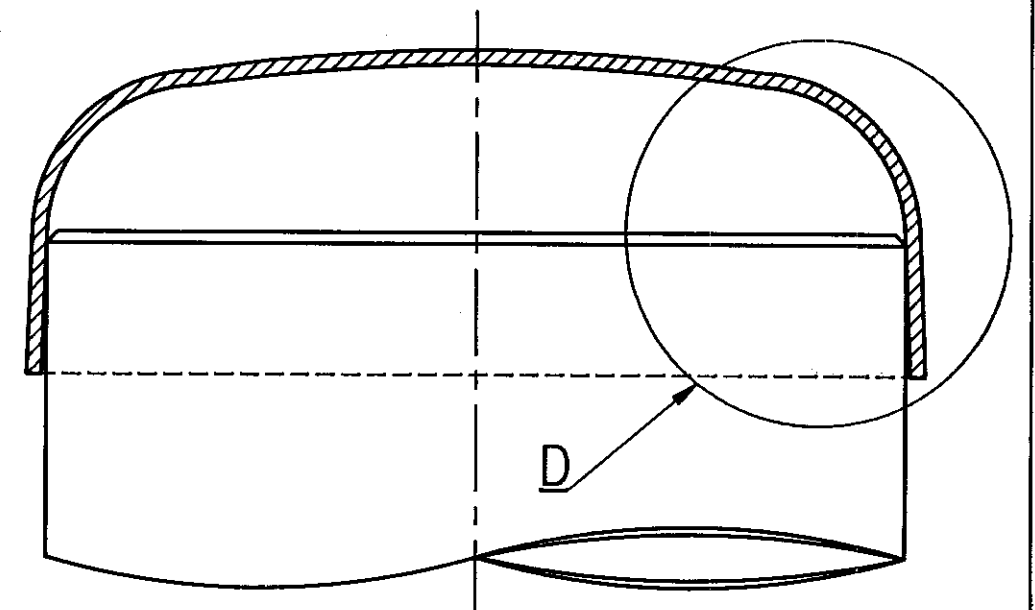
REV 03	DATE 25.10.2010	ALTERED Jalaludeen.K. CHD & APPD PRK
SERIAL NUMBER 03 AND 04 ADDED.		

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84596-0000-3-V-348

DRAWING NO.

SL.No.	DRAWING No.	MATL. CODE	MATL. SPECN.	ØD1	ØD2	H1	H2	WT.(Kg)	MATCH PIPE OD	NOMINAL BORE
01	3-V-K600-95348	96456550	IS-1079 ST 34 - CERTIFY	57±0.75	57.5 ^{+1.5} ₀	30	47	0.11	57	2"
02	3-V-K601-95348	96456551		76±0.75	77.0 ^{+1.5} ₀	30	47	0.17	76.1	2½"
03	3-V-K602-95348	96456552		89±1	90.0 ^{+2.0} ₀	30	47	0.24	88.9	3"
04	3-V-K603-95348	96456553		108±1	109.0 ^{+2.0} ₀	35	53	0.29	108.0	4"
05	3-V-K604-95348	96456554		114±1	115.0 ^{+2.0} ₀	35	53	0.30	114.3	4"
06	3-V-K605-95348	96456555		127±1	128.0 ^{+2.0} ₀	35	53	0.32	127.0	5"
07	3-V-K606-95348	96456556		159 ^{+1.5} ₋₁	161.0 ^{+2.0} ₀	35	53	0.59	159.0	6"
08	3-V-K607-95348	96456557		168 ^{+2.0} ₋₁	170.0 ^{+2.5} ₀	33	50	0.57	168.3	6"
09	3-V-K608-95348	96456558		219 ^{+2.0} ₋₁	221.0 ^{+2.5} ₀	40	60	0.84	219.1	8"
10	3-V-K609-95348	96456559		273 ^{+2.5} ₋₁	276.0 ^{+2.5} ₀	40	60	1.31	273.0	10"
11	3-V-K610-95348	96456560		324 ^{+2.5} ₋₁	327.0 ^{+2.5} ₀	45	71	1.63	323.9	12"
12	3-V-K611-95348	96456561		356 ^{+2.5} ₋₁	359.0 ^{+2.5} ₀	45	71	1.66	355.6	14"
13	3-V-K612-95348	96456562		368 ^{+2.5} ₋₁	371.0 ^{+3.0} ₀	45	71	2.04	368.0	14"
14	3-V-K613-95348	96456563		406 ⁺³ ₋₁	409.0 ^{+3.0} ₀	55	83	2.25	406.4	16"
15	3-V-K614-95348	96456564		508 ⁺³ ₋₁	512.0 ^{+3.0} ₀	55	83	4.10	508.0	20"
16	3-V-K615-95348	96456565		558 ^{+3.5} ₋₁	562.0 ^{+4.0} ₀	55	83	4.60	558.0	22"
17	3-V-K616-95348	96456566		660 ⁺⁴ ₋₁	665.0 ^{+4.5} ₀	65	90	6.50	660.4	26"



NOTE:

MARK NOMINAL BORE SIZE ON END COVER.

NO. OF	DESCRIPTION	MATL CODE	MATL SPECN	HEAT TREATMENT	SCRAP SORT	NET WT (kg)	GROSS WT (kg)	DRAWING No.	ITEM No.
	TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT								
	BHARAT HEAVY ELECTRICALS LTD. UNIT: HIGH PRESSURE BOILER PLANT. TIRUCHIRAPALLI - 620014.								
DRN	NAME	SIGN	DATE	NO. OF VAR.					
CHD	K.P.LEON		24.07.95						
APPD	N.DHANAPAL		24.7.95						
	A.VISWANATHAN		24.7.95						
DEPT VL	SCALE	WEIGHT (KG).	REFERENCE INFORMATION						
CODE 320	NTS.		CAD:C395348						
TITLE	CARD CODE	DRAWING NO.							
METALLIC END COVER	U 01	3-V-0000-95348							

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REV	DATE	ALTERED
		CHD & APPD