


By Courier/Regd. Post/Speed Post

 TENDER ENQUIRY (Supplier's Copy)	Enquiry no. & Date	Due date for Quotation
	14E0241 14.11.14	09.12.14
To, Bharat Heavy Electricals Ltd. (A Govt. of India Under Taking) Rudrapur - 263153 Distt. Udham Singh Nagar (Uttarakhand) India Phone no.- 05944-241400/242326 Fax no. 05944-243605 e-mail : shilanand@bhel.in manoher@bhel.in		

Sl.No.	Description	Unit	Req. Qty.	Delivery Schedule																				
	MA.CODE RU 9003606013, METALLIC EXPANSION BELLOWS ASSEMBLY AS PER DRAWING NO. 32001200051, REV.01, VAR.00 SUITABLE FOR 1700 OD IPBD, MEETING ALL REQUIREMENT OF ATTACHED ANNEXURE-BDE/MB/14-15/1700/003 Terms & Conditions <table border="1"> <tr> <td>general terms & conditions as per ANNEXURE-A ENCLOSED</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Technical Requirements of Metallic Bellow- Annexure-BDE/MB/14-15/1700/003</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Drawings -- 32001200051 Rev01, 32001200052 Rev00, 32001200053 Rev00, 32001200054 Rev00, 32001200055 Rev00, M. Bellow Rev01</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Quantity details as per Annexure-II enclosed.</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Public Procurement Policy as per Annexure-D</td> <td></td> <td></td> <td></td> </tr> </table>	general terms & conditions as per ANNEXURE-A ENCLOSED				Technical Requirements of Metallic Bellow- Annexure-BDE/MB/14-15/1700/003				Drawings -- 32001200051 Rev01, 32001200052 Rev00, 32001200053 Rev00, 32001200054 Rev00, 32001200055 Rev00, M. Bellow Rev01				Quantity details as per Annexure-II enclosed.				Public Procurement Policy as per Annexure-D				Nos.	52	As mentioned in the annex.
general terms & conditions as per ANNEXURE-A ENCLOSED																								
Technical Requirements of Metallic Bellow- Annexure-BDE/MB/14-15/1700/003																								
Drawings -- 32001200051 Rev01, 32001200052 Rev00, 32001200053 Rev00, 32001200054 Rev00, 32001200055 Rev00, M. Bellow Rev01																								
Quantity details as per Annexure-II enclosed.																								
Public Procurement Policy as per Annexure-D																								

Dear Sir,

Please submit your lowest quotation, subject to our terms and conditions written overleaf for the above mentioned items so as to reach us on or before the due date by 2.00 P.M.

Enquiry No. & Due Date should be superscribed on the envelope containing the quotation


 FOR BHARAT HEAVY ELECTRICALS LTD.
 (SIGN: & NAME)

Public Procurement Policy for MSEs Order 2012

Tender Enquiry No. 14E024J dated: 14/11/2014

In line with the order dated 23-03-2012 of Ministry of Micro, Small & Medium enterprises, New Delhi following provisions shall apply to the tenders floated against this TC MoU:

1. BHEL, CFP, Rudrapur has set an annual goal of procurement from Micro and Small Enterprises from the FY 2012-13 and onwards, with the objective of achieving an overall procurement of minimum of 20% of total annual purchases of products produced and services rendered by Micro and Small Enterprises in a period of 3 years.
2. Out of 20% target of annual procurement from Micro and Small Enterprises, a sub-target of 20% (i.e. 4% out of 20%) is earmarked for procurement from Micro and Small Enterprises owned by the Scheduled Caste or Scheduled Tribe entrepreneurs. In the even of failure of such Micro and Small Enterprises to participate in the tender process or meet tender requirements or L1 price, 4% sub-target for procurement earmarked for Micro and Small Enterprises owned by Scheduled Caste or Scheduled Tribe entrepreneurs shall be met from other Micro and Small Enterprises.
3. In tender, participating Micro and Small Enterprises quoting price within price band of L1+15% 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 & Small Enterprise shall be allowed to supply up to 20% of total tendered quantity. In case of more than one such Micro and Small Enterprise, the supply shall be shared proportionately (to tendered quantity).
4. Tender Cost is free for Micro and Small Enterprises
5. Micro and Small Enterprises are exempt from paying Earnest Money Deposit.

Note:

- a) All Micro and Small Enterprises and those Micro and Small Enterprises which are owned by the Scheduled Caste or the Scheduled Tribe entrepreneurs are required to submit LATEST & VALID CERTIFICATES for availing the benefits enumerated in "Public Procurement Policy for MSEs Order 2012".
- b) Out of the 358 items reserved for exclusive purchase from Micro and Small Enterprises, the following items are procured by BHEL, CFP, Rudrapur at present from Industrial Entrepreneurs:
 - a. Bolts & Nuts upto 10 mm² nominal CS.
 - b. Boots & shoes of all types including canvas shoes.
 - c. Conduit pipes
 - d. Hand Gloves of all types
 - e. Hand tools of all types
 - f. Crates, wooden & plastic
 - g. Lightning arresters upto 22 kV
 - h. Domestic Electric appliances as:
 - i. Measuring tapes & sticks as per BIS specifications.
 - ii. Metal Clad Switches up to 30 Amps
 - iii. Domestic (house wiring) PVC Cables and Wires (Aluminium)
 - iv. PVC Pipes upto 110 mm conforming to the prescribed
 - i. Screws of all types including High Tensile strength.

Enquiry NO. 14E0241 Date-14-11-14
Duan-09-12-14

Annexure-A General Terms & Conditions

1. Rates shall be quoted FOR BHEL RUDRAPUR (Address: CFP-BHEL RUDRAPUR, Kichha Bye Pass Road, Near FCI Godown, U.S.Nagar, Uttaranchal). Delivery terms FOR BHEL Rudrapur is mandatory Clause, bidders not meeting this clause shall be rejected for the tender.
2. 100% payment shall be made in 45 days after receipt and verification of material at store. Any deviation in payment terms will be loaded @ (SBI PLR rate at the time of tender opening + 6 %) annual interest for comparing standing.
3. Validity of the quotation must be 3 months from the date of quotation.
4. Delivery time shall be within 45 days from the date of PO for 01 no of metallic expansion bellow . For lot 01 BHEL do inspection at vendor's work. After sample approval only, party shall take up bulk manufacturing. Remaining qty. shall be supplied progressively within 02 months from the date of PO.
5. Risk Purchase clause shall be applicable with this enquiry.
6. LD/Penalty clause shall be applicable with this enquiry.
The delivery of goods shall be made strictly as per time limit specified in delivery schedule. Failure to supply within this period will make the supplier liable to a penalty of ½% (half percent) of the total order value per week of delay or part thereof subject to a maximum of 10% of the total order value for the reasons attributable to the party.
7. The Offered Bids against tender must reach at our office on or before due date. Late offers shall not be considered received after due date even if posted by speed/registered post before due date.
8. In addition to above terms and conditions, provision of public procurement policy of MSEs order 2012 shall also apply as per Annexure-'D'.
9. **Offers shall be submitted in TWO BID SYSTEM.**
PART- (A) BID :: TECHNO COMMERCIAL BID WITH UNPRICE COPY
PART- (B) BID :: PRICE BID
Offer submitted in single bid shall be liable to REJECT.

BHEL reserves the right to decide the successful bidder on the basis of Reverse Auction (RA) process. In such case all qualified bidders will be intimated regarding procedure / modality for RA process prior to Reverse Auction and price will be decided as per the rules for Reverse Auction. However, if reverse auction process is unsuccessful as defined in the RA rules/ procedures, or for whatsoever reason, then the sealed 'PRICE BIDS' will be opened for deciding the successful bidder. BHEL's decision in this regard will be final and binding on bidder.

10. For terms & conditions other than mentioned here, the bidders should go through the terms & conditions mentioned on the reverse of Enquiry format before submitting their offers.



उत्तरांचल राज्य
राज्य अधिकांशक
अधिकारिका
उत्तरांचल राज्य
उत्तरांचल राज्य
उत्तरांचल राज्य

M.S. Chatterjee
Sr. Engineer (COP)
BHEL, Rudrapur
Uttarakhand-247463
Uttarakhand-247463

ANNEXURE-II

S. No.	Project	Quantity
1	Mouda	7 No
2	Solapur	7 No
3	Bellary	3 No
4	Lalitpur	4 No
5	Rapp	14 No
6	Kudgi	11 No
7	Suratgarh	6 No

TOTAL	52 No
-------	-------

Brijesh Kumar
22-10-14



राज्य निर्वाह अख्यतः
राज्य निर्वाह अख्यतः
राज्य निर्वाह अख्यतः
राज्य निर्वाह अख्यतः



PRODUCT STANDARD

BUSDUCT ENGINEERING DIVISION

Annexure
Ref: BDE/MB/
14-15/1700/003
PAGE 1 OF 3

MANUFACTURING SPECIFICATION & TESTING REQUIREMENTS OF METALLIC BELLOWS

1.0 APPLICATION:

METALLIC BELLOW IS USED FOR ELECTRICAL CONTINUITY OF BUSDUCT ENCLOSURE (HAVING RATED CONTINUOUS CURRENT OF BUSBAR) WITHOUT OVER-HEATING. IN ADDITION TO THIS, METALLIC BELLOW ALSO PROVIDES FLEXIBILITY.

2.0 MANUFACTURING PARAMETERS/REQUIREMENTS OF METALLIC BELLOW:

- I. THE METALLIC BELLOW AND PART ASSEMBLIES SHALL BE SUPPLIED AS PER DRAWING NO. 32001200051 Var00 SUITABLE FOR 1700 MM OD BUSDUCT ENCLOSURE.
- II. BELLOW SHALL BE MANUFACTURED BY DIE PRESSING METHOD SO AS TO MAINTAIN FLEXIBILITY IN BELLOW. IN CASE ANY ALTERNATIVE METHOD OF MANUFACTURING IS SUGGESTED, THIS SHOULD BE ACCOMPANIED WITH SUITABLE AND PROPER JUSTIFICATION TO THE SATISFACTION OF BHEL BEFORE CLEARING OF TECHNICAL OFFERS. PARTY SHOULD HAVE PRIOR EXPERIENCE OF MANUFACTURING METALLIC BELLOWS OF AT LEAST 500 MM DIA. PARTY WILL SUBMIT PROOF FOR THE SAME ALONGWITH OFFER.
- III. IT SHOULD CONSIST OF STRIPS PRESSED TOGETHER. THICKNESS OF STRIPS TO BE USED TO BE BETWEEN 0.6mm TO 1.0mm. HOWEVER, TOTAL THICKNESS OF BELLOW CALCULATED BY ADDING STRIP THICKNESSES SHOULD NOT BE LESS THAN 10MM.
- IV. EACH STRIP SHOULD BE FIRMLY PRESSING ONE OVER THE OTHER WITH NO UNEVENNESS IN BETWEEN. ALSO, THERE SHOULD BE NO DENTS OR VOIDS ON THE SURFACE, PEAKS AND CRESTS OF THE BELOW. FOR THIS PURPOSE, HYDRAULIC PRESSING IS SUGGESTED.

COPYRIGHT AND CONFIDENTIAL
The information on this document is the property of Bharat Heavy Electricals Limited
It must not be used directly or indirectly in any way

REV.	00	PRINTS TO:-	APPROVED -		
ALTD.			R K BINDAL <i>[Signature]</i>		
APPD.			PREPARED	ISSUED	DATE
DATE.			PIYUSH VERMA <i>[Signature]</i>		16.10.14

[Signature]
 Director (Engineering) BHEL, Bhopal
 BHEL, Bhopal
 BHEL, Bhopal
 BHEL, Bhopal



PRODUCT STANDARD
BUSDUCT ENGINEERING DIVISION

Annexure
 Ref: BDE/MB/
 14-15/1700/003

PAGE 2 OF 3

- V. NO CIRCUMFERENTIAL BUTT WELDING IS ALLOWED (EXCEPT FOR BOTH EXTREME ENDS) FOR MANUFACTURING THE BELLOW.
- VI. LONGITUDINAL WELDING BETWEEN CURVES OF STRIPS IS ALLOWED. HOWEVER WELDING IN EACH STRIP SHALL BE STAGGERED. (IT WILL NOT MATCH WITH LOCATION OF WELDING WITH OTHER STRIPS). THIS MEANS LOCATION OF WELD JOINT IN EACH CIRCULAR STRIP SHALL BE AT DIFFERENT LOCATION. MOREOVER, ONLY ONE NO. OF WELDED JOINTS IN EACH CYLINDER OF STRIP SHALL BE ALLOWED.
- VII. WELDING DETAILS ARE MENTIONED ON THE DRAWING FOR COMPLIANCE.
- VIII. PROPER FINISHING OF LONGITUDINAL WELDING OF STRIP TO BE ENSURED.

3.0 TESTING REQUIREMENT: FOLLOWING TESTS TO BE CONDUCTED ON EACH BELLOW:

1. VISUAL INSPECTION.
2. DIMENSIONAL VERIFICATION
3. IN PROCESS CHECKS: PHYSICAL VERIFICATION OF WELDING JOINTS OF LONGITUDINAL WELDING OF ALL STRIPS.
4. MEASUREMENT OF COMPRESSION & RECOVERY (+/-5mm)
5. MILLI VOLT DROP TEST.
6. 100% DP TEST ON WELDED JOINTS

COPYRIGHT AND CONFIDENTIAL

The information on this document is the property of Bharat Heavy Electricals Limited
 It must not be used directly or indirectly in any way

REV.	00	PRINTS TO:-	APPROVED -		
ALTD.			R K BINDAL <i>[Signature]</i>		
APPD.			PREPARED	ISSUED	DATE
DATE.			PIYUSH VERMA <i>[Signature]</i>		16.10.14



PRODUCT STANDARD

BUSDUCT ENGINEERING DIVISION

Annexure
Ref: BDE/MB/
14-15/1700/003
PAGE 3 OF 3

COPYRIGHT AND CONFIDENTIAL
The information on this document is the property of Bharat Heavy Electricals Limited
It must not be used directly or indirectly in any way

4.0 INSPECTION:

- a) STAGE INSPECTION MAY BE DONE BY BHEL BEFORE PRESSING OF STRIPS.
- b) FINAL INSPECTION SHALL BE DONE BY BHEL AFTER COMPLETE ASSEMBLY.

5.0 DOCUMENTS TO BE SUBMITTED AT THE TIME OF OFFER:

- 1. QAP.
- 2. SIGNED AND SEALED COPY OF DRAWINGS.
- 3. SIGNED AND SEALED COPY OF THIS SPECIFICATION.
- 4. A BRIEF WRITE-UP ON PROCESS TO BE FOLLOWED.
- 5. DETAILS OF EARLIER SUPPLY OF METALLIC BELLOW OF SIZE 500 MM DIA OR MORE.

6.0 DOCUMENTS TO BE SUBMITTED ALONGWITH SUPPLY:

- 1. RAW MATERIAL TC
- 2. GUARANTEE CERTIFICATE.
- 3. INSPECTION/TESTING REPORTS (OF TESTS AS PER CLAUSE 3.0)

7.0 IDENTIFICATION:

EACH UNIT SHALL BE WITH PROPER AND PERMANENT IDENTIFICATION AT SUITABLE LOCATION ON METALLIC BELLOW. THIS WILL INCLUDE

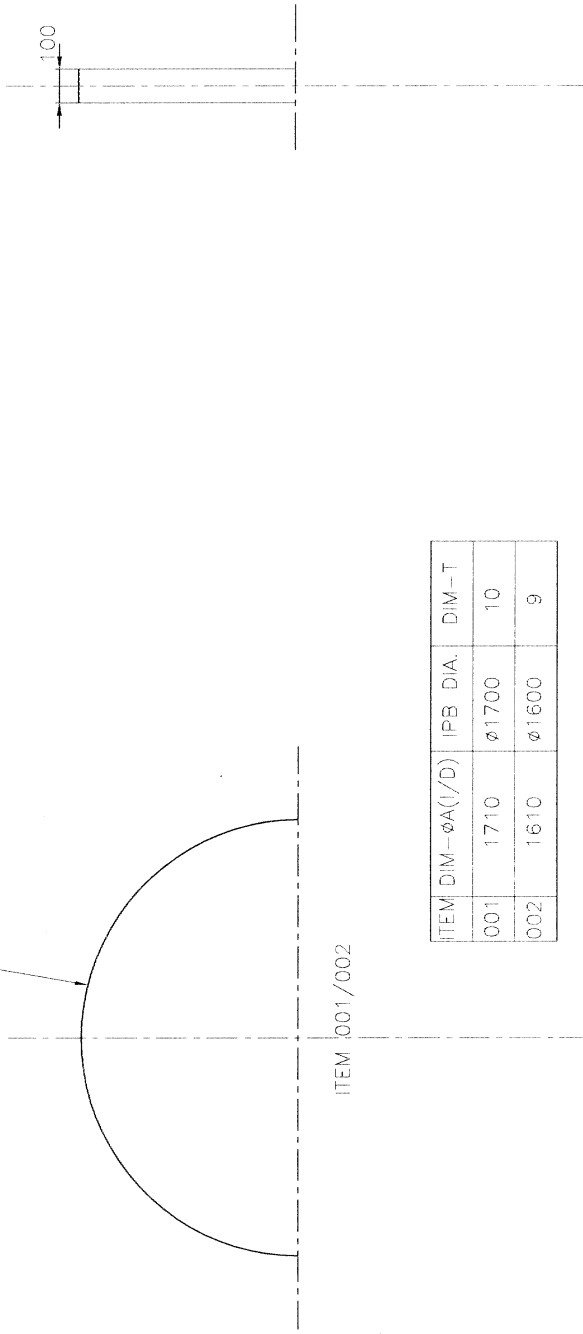
- I. VENDOR CODE
- II. MONTH & YEAR OF MANUFACTURING
- III. SERIAL NO. OF BELLOW.

8.0 PACKING REQUIREMENT:

EACH UNIT SHALL BE PACKED IN COMPLETELY COVERD WOODEN BOXES. PROPER CUSHIONING TO BE PROVIDED TO AVOID DAMAGE DURING TRANSIT/STORAGE AS DONE FOR FRAGILE ITEMS.

REV.	00	PRINTS TO:-	APPROVED -		
ALTD.			R K BINDAL <i>[Signature]</i>		
APPD.			PREPARED	ISSUED	DATE
DATE.			PIYUSH VERMA <i>[Signature]</i>		16.10.14

"T" Tk ϕ A ID AL ENCLOSURE BONDING



ITEM	DIM - $\phi A(I/D)$	IPB DIA.	DIM-T
001	1710	$\phi 1700$	10
002	1610	$\phi 1600$	9

MATERIAL : AL GRADE - 19501
 QUANTITY : 4 Nos. / METALLIC BELLOW

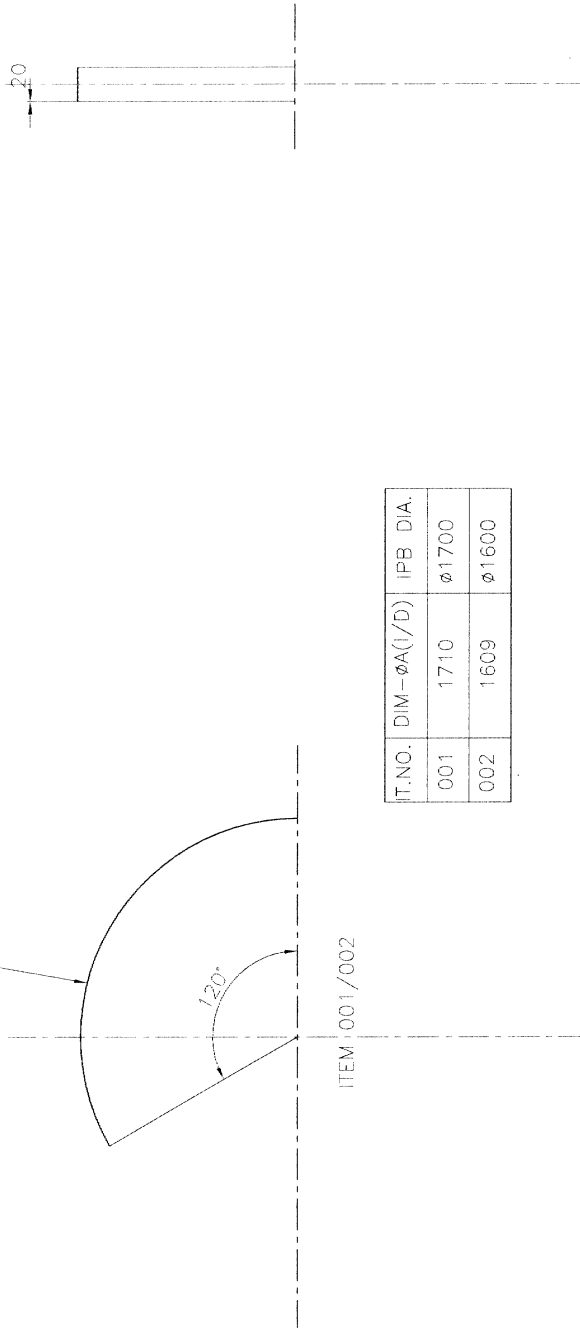
BONDING STRIP
 METALIC BELLOW

PROJECT/PRODUCT 2X660 MW SOLAPUR	NAME	SIGN.	DATE	NO. OF VAR.
	S.BASU		12.03.14	
DRN.	S.BASU			
CHKD.	S.BASU			
APPD.	R.K.LAL			
REF. TO ASSY.DRG.	IT.NC.			NO. OF REV.
DRAWING NO.	32001200053			REV.
				00
SHEET NO. - 01	NO. OF SHEETS - 01			SIZE - A3

CUSTOMER NTPC LIMITED	UNTO. DIM. GR.	SCALE	WEIGHT - KG
BHARAT HEAVY ELECTRICALS LIMITED RUDRAPUR			
DEPTT. ENGG.	TITLE	ALTERD. CHECKED	ALTERD. CHECKED
	BONDING STRIP FOR $\phi 1700/1600$ IPBD METALLIC BELLOW		
REV.	DATE	REV.	DATE

M.S. Dharmashakti
 283153
 283153

5TK 1712 ID AL PACKING STRIPS



IT. NO.	DIM - $\phi A(I/D)$	IPB DIA.
001	1710	$\phi 1700$
002	1609	$\phi 1600$

MATERIAL : AL GRADE - 19501
 QUANTITY : 6 Nos. / METALLIC BELLOW

1712-002-001
 Sr. Engineer (Mech)
 BHPL, Rudrapur
 Uttarakhand-261150


[Handwritten Signature]

PROJECT/PRODUCT 2X660 MW SOLAPUR		NAME S. BASU		DATE 12.03.14		NO. OF VAR.	
CUSTOMER NTPC LIMITED		DRN. S. BASU		SIGN.			
BHARAT HEAVY ELECTRICALS LIMITED RUDRAPUR		APPD. R. K. LAL		REF. TO ASSY. DRG.		IT. NO.	
UNTO. DIM. GR.		SCALE		WEIGHT-KG		NO. OF ITEM	
DEPTT. ENGG.		TITLE		DRAWING NO.		REV.	
REV.		DATE		REV.		DATE	
ALTERD. CHECKED		ALTERD. CHECKED		ALTERD. CHECKED		ALTERD. CHECKED	
PACKING STRIP FOR $\phi 1700/1600$ IPBD METALLIC BELLOW		32001200054		00		00	
SHEET NO. - 01		NO. OF SHEETS - 01		NO. OF SHEETS - 01		NO. OF SHEETS - 01	

METHOD FOR FITTING THE METALLIC BELLOW AT SITE (BHEL SCOPE)

1. INSERT THE METALLIC BELLOW IN THE GAP BETWEEN THE ENCLOSURE & SLIDE IT TO ONE SIDE OF ENCLOSURE.
2. WELD THE INNER CONDUCTORS.
3. MARK 45 MM LINE ON BUSDUCT ENCLOSURE FROM PERIPHERY
4. PLACE 90 MM BONDING ENCLOSURE, ALIGNING WITH MARKED LINE
5. FIX FIRMLY THE BONDING ENCLOSURE WITH CLAMPS
6. TACK WELD THE BOND ENCLOSURE
7. REPEAT STEPS 4 TO 6 FOR BOTTOM PORTION OF ENCLOSURE
8. MARK ON THE BONDING ENCLOSURE 15 MM FROM PERIPHERY AWAY FROM ENCLOSURE
9. MOVE GENTLY THE BELLOW & ALIGN WITH 15 MM MARKED LINE
10. REPEAT STEPS 3 TO 9 ON ENCLOSURE OF OTHER SIDE OF BELLOW OPENING
11. IN THE GAP BETWEEN BELLOW & BODING ENCLOSURE, BONDING STRIP TO BE PLACED
12. SPACER FITTED IN THE GAP BETWEEN ENCLOSURE & BONDING STRIP TO BE WELDED
13. STOPPERS TO BE PLACED ON THE BONDING STRIP SURFACE.

STEPS FOR METALLIC BELLOW

		CUSTOMER NTPC LIMITED		PROJECT/PRODUCT 2x660 MW SOLAPUR	
DEPTT. ENGG.		BHARAT HEAVY ELECTRICALS LIMITED RUDRAPUR		DRN. S. BASU DATE 12.03.14 NO. OF VAR.	
TITLE METALLIC BELLOW FOR ϕ 1700/1600 IPBD		UNTO. DIM. GR.		S.G.N. S. BASU S. BASU R. K. LAL	
ALTERD. CHECKED		SCALE		REF. TO ASSY. DRG.	
REV. DATE		WEIGHT-KG		IT. NO.	
ALTERD. CHECKED		NO. OF SHEETS-01		NO. OF SHEETS-01	
REV. DATE		DRAWING NO. M.BELLOW		REV. 01	
ALTERD. CHECKED		SHEET NO.- 01		NO. OF SHEETS-01 SIZE- A3	

M