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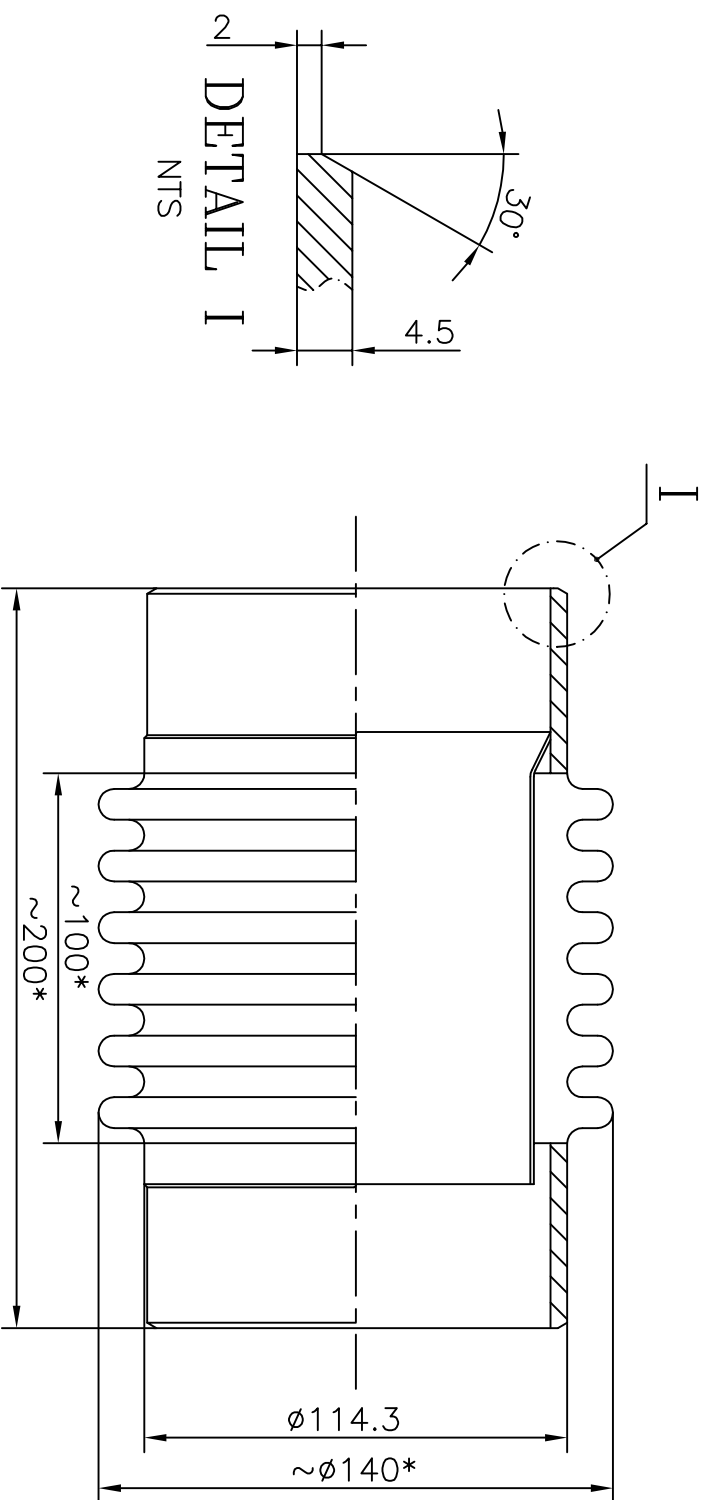
20014-44201-3

DRAWING No.

FIRST ANGLE PROJECTION

( ALL DIMENSIONS ARE IN mm )

FORM DG 38(B)



**DESIGN SPECIFICATIONS OF COMPENSATOR :-**

OPERATING PRESSURE : 1.008bar  
 OPERATING TEMPERATURE : 325°C  
 MOVEMENT OF BELLOWS (mm) :  
 AXIAL : 7  
 LATERAL 1 : 5  
 LATERAL 2 : 1  
 No. OF CONVOLUTIONS : \*  
 ACTIVE LENGTH OF BELLOWS : \*  
 NATURAL FREQUENCY : \*  
 FREQUENCY OF BELLOW SHOULD BE AWAY FROM 50Hz. BY ATLEAST 25%.  
 PERMISSIBLE LIFE : 10,000 CYCLES AT ROOM TEMP.

**MATERIAL OF BELLOW & BACKING RING :-**

BHEL MATERIAL GRADE AA10740 (X100C-18N10T1)  
 EQUIVALENT MATERIAL GRADES IS:6911 (GR.X100C-18N10T1 FINISH No.1)/ASTM A240 TP321 / EN10088 PART-3 GR. H6cN111810 (MATERIAL CODE 1.4541) ARE ALSO ACCEPTABLE.

**WELD ENDS & PROTECTIVE TUBE :-**

BHEL MATERIAL GRADE AA10401 BOILER QUALITY PLATE H11.  
 EQUIVALENT MATERIAL GRADES IS:2002 GR.II NORMALISED / EN 10028 PART-2 GR. P265GH (MATERIAL CODE 1.0425) PART-2 / ASTM A516 GR. 70 ARE ALSO ACCEPTABLE PROVIDED PLATES MORE THAN 12 mm ARE NORMALISED, IF ALREADY NOT DONE SO DURING ROLLING OF PLATES. OTHER EQUIVALENT MATERIALS CAN ALSO BE CONSIDERED WITH PRIOR APPROVAL OF BHEL.

**TECHNICAL REQUIREMENTS :**

- 100% RADIOGRAPHIC EXAMINATION OF LONGITUDINAL SEAM OF BELLOW BEFORE FORMING THE BELLOW.
- 100% DPT ON OUTSIDE & INSIDE LONGITUDINAL SEAM BEFORE AND AFTER FORMING.
- 100% DPT OF FILLET WELDS.
- 100% RADIOGRAPHIC EXAMINATION OF ALL BUTT WELDS.
- LEAK TEST (NEKA TEST) WITH FOAMING MEDIUM.
- HYDRAULIC TEST PRESSURE : 2bar FOR 10min. AT ROOM TEMPERATURE.
- DIRECTION OF FLOW TO BE MARKED ON THE COMPENSATOR.
- EACH COMPENSATOR TO BE PACKED SUITABLY TO AVOID DAMAGE DURING TRANSIT.
- SUITABLE SHIPPING BRACKETS SHOULD BE PROVIDED, WHICH SHALL BE REMOVED AFTER INSTALLATION AT SIDE.

**NOTE :**

- EXACT DIMENSIONS AND DATA MARKED \* ARE TO BE FURNISHED AND INCORPORATED BY SUPPLIER ON THEIR DRG.
- SUPPLIER TO FURNISH SPRING RATE, FREQUENCY, DESIGN CALCULATIONS AS PER EJMA AND DRAWING FOR APPROVAL.

MATERIAL CODE : W97310744110

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT : STEAM TURBINE

**BHARAT HEAVY ELECTRICALS LTD.**  
**RANIPUR, HARDWAR**



DRN	NAME	SIGN	DATE	NO. OF VAR
SUDHIR	SD/-		9.3.07	
N.VERMA	SD/-		9.3.07	
A.SHAH	SD/-		9.3.07	

Inventory No	Sign & Date	Ref.Drawing No>
REV	DATE	ALTERED
		CHECKED
REV	DATE	ALTERED
		CHECKED
GRADE OF UNTOL. DIM		
M/CG.- AA0230208 m		
WELDING-CLASS 'B' OF AA0621104		
GAS CUTTING-TABLE 3 OF AA0621101		
REV	DATE	ALTERED
		CHECKED
REV	DATE	ALTERED
		CHECKED
GMS No. / 0-10744-41000	C B O M	STATUS OF DRG
AGREED DEPT	NAME	SIGN
		DATE
DEPT	STE	SCALE
CODE 4011		1:2
WEIGHT (KG)		2.0
TITLE :	COMPENSATOR Dn 100	
CARD CODE	DRAWING NO.	
7	3-10744-41002	
SHEET No.	No. OF SHEETS	
1	1	
REF. TO ASSY. DRG.	ITEM No.	NO. OF ITEMS
0-10744-41500	85	75
		77

SIZE A3