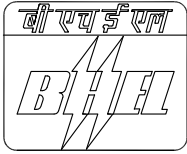


CAUTION: The information on this document is the property of BHARAT HEAVY ELECTRICALS LTD. It must not be used directly or indirectly in any way detrimental to the interest of the company.



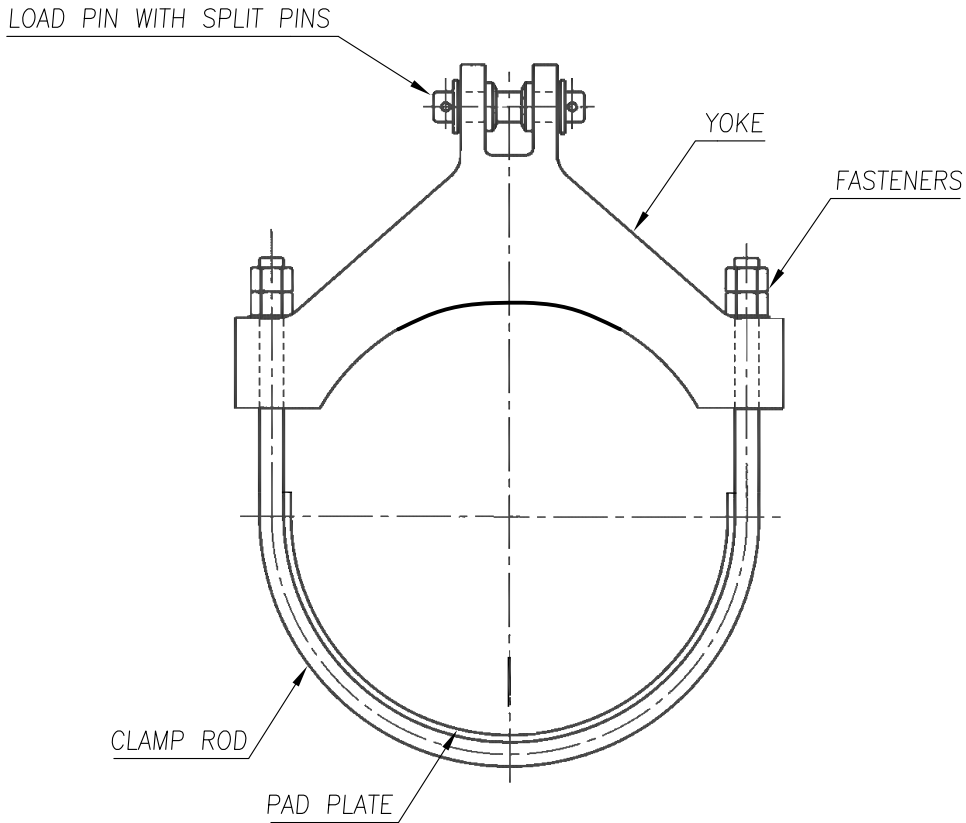
PIPING CENTRE

SKETCH OF YOKE RESTRAINT CLAMP

PROJECT : BARH STPP STAGE-1 (3x660 MW)

CUSTOMER : NTPC

CUST No. : 7285, 7286 & 7287



NOTES :-

1. VENDOR SHALL BE RESPONSIBLE FOR THE DESIGN OF CLAMP FOR THE DESIGN PARAMETERS SPECIFIED IN THE DATA SHEET.
2. DESIGN CALCULATION SHALL BE SUBMITTED FOR APPROVAL.
3. MATERIAL SELECTION SHALL BE AS PER BELOW TABLE OR ITS EQUIVALENT:

SL. NO.	ITEM	CS CLAMP	AS CLAMP
1.	CLAMP BODY	ASTM A36	ASTM A387 Grade 22 Class 2
2.	CLAMP BOLTS	ASTM A307 Grade B	ASTM A193 Grade B16
3.	U-BOLT	ASTM A36	ASTM A182 Grade F12 Class 2
4.	NUTS	ASTM A563 Grade A	ASTM A194 Grade 4
5.	PIN	ASTM A193 Grade B7	ASTM A193 Grade B7
6.	SPACERS(CLAMP)	ASTM A106 Grade B	ASTM A335 Grade P12
7.	SPACERS(PIN)	AISI 1213	AISI 1213

4. ALL SHARP CORNERS ARE TO BE ROUNDED OFF.
5. CLAMP SHALL BE SUPPLIED IN ASSEMBLED CONDITION WITH FASTENERS PROPERLY TIGHTENED.
6. HIGH TEMPERATURE PAINT FINISH IS REQUIRED.

PREPARED	APPROVED	DATE	DRG. No.	REV.
SOURAV	M.MANO	16.07.15	4-00-301-40763	00