

52861-00C-08-C

DRWING

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FIRST ANGLE PROJECTION (ALL DIMENSIONS IN MILLIMETRES)

NOTES:-

- 1) APPLICABLE FOR P91/P92
- 2) STRAIGHT WITH STRAIGHT/FITTING
- 3) BEND WITH BEND/FITTING
- 4) FOR OD MISMATCHING REF. FIGURE-Xa
- 5) $\alpha = 6^\circ$ FOR WALL THICKNESS ≤ 30 mm
- 6) $\alpha = 10^\circ$ FOR WALL THICKNESS > 30 mm
- 7) $\alpha = 10^\circ$ FOR WALL THICKNESS > 30 mm

FIGURE - X

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

MATCHING EDGE PREPARATION

FOR MISMATCH OD APPLICABLE FOR BENDS/FITTINGS OF P91/P92 MATERIALS

NOTES:-

- 1) OD OF STRAIGHT TO BE PHYSICALLY MEASURED/VERIFIED.
- 2) $\alpha = 6^\circ$ FOR WALL THICKNESS ≤ 30 mm
- 3) $\alpha = 10^\circ$ FOR WALL THICKNESS > 30 mm
- 4) t = THK OF CONNECTING PIPE (STRAIGHT)

FIGURE - Xa

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

MATCHING EDGE PREPARATION FOR MISMATCH OD DIAMETRICALLY GREATER THAN 8 mm (ie OD1 - OD2 > 8mm.) APPLICABLE FOR BENDS/FITTINGS OTHER THAN P91/P92 MATERIALS

NOTES:-

- 1) OD OF STRAIGHT TO BE PHYSICALLY MEASURED/VERIFIED.
- 2) WHEN t=85, S+A = 65 Min. & t=65, S=65 Min. WHERE t=THK OF CONN. PIPE (STRAIGHT).

FIGURE - Pa

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

MATCHING EDGE PREPARATION FOR MISMATCH OD DIAMETRICALLY GREATER THAN 8 mm (ie OD1 - OD2 > 8mm.) APPLICABLE FOR ELBOWS OTHER THAN P91/P92 MATERIALS

NOTES:-

- 1) OD = OUTSIDE DIA OF CONN. PIPE (STRAIGHT) TO BE PHYSICALLY MEASURED/VERIFIED.
- 2) t = THK OF CONN. PIPE (STRAIGHT)

FIGURE - Z

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

NOTES:-

- 1) APPLICABLE FOR P91 PIPE BEND WELDED WITH P91 STRAIGHT PIPE
- 2) $\alpha = 6^\circ$ FOR WALL THICKNESS ≤ 30 mm AND OD ≥ 556 mm.
- 3) FOR OD MISMATCH, REFER THE OD MACHINING ONLY SHOWN IN FIGURE-Xb
- 4) FIGURE-Xb AND FIGURE-Xc ARE NOT APPLICABLE FOR P92 MATERIALS.

FIGURE - Xb

(BEND END)

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

FIGURE - Xc

(STRAIGHT END)

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

STYLE - P

NOTES:-

- 1) USE WHEN $t \geq 14.2$ mm.
- 2) FOR OD MISMATCHING REF. FIGURE-Po

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

STYLE - D

NOTES:-

- 1) USE WHEN $t < 14.2$ mm.

FOR OD PIPES ϕ d1

FOR ID CONTROLLED PIPES ϕ d1

GENERAL NOTES:-

- 1) THE MINIMUM THICKNESS AT WELD END SHALL NOT BE LESS THAN 0.875 TIMES t NOM. FOR OD PIPES.
- 2) t MIN. FOR ID CONTROLLED PIPES.
- 3) SHARP CORNERS SHALL BE AS PER SPECIFIED PIPE SIZE.

NOTES FOR WELDING:-

- 1) WELD REINFORCEMENT TO BE FLUSH GROUND AND MERGED WITH PARENT METAL WITHOUT ANY UNEVENNESS.

REV.	DATE	BY	CHKD.	DESCRIPTION
03				ISSUED FOR APPROVAL
02				ISSUED FOR APPROVAL
01				ISSUED FOR APPROVAL

EDGE PREPARATION DETAILS

STANDARD

BHARAT HEAVY ELECTRICALS LTD.

PIPING CENTRE, MADRAS

NAME	K.B. RAO	DATE	11.10.01
CHKD.	H.C. SANKARAN	DATE	11.10.01
APPD.	A. V. S. SIVARAMAN	DATE	11.10.01

DRWING No. 3-80-300-19825

REV 03

1422C-894-08-3
DRAWING NO.

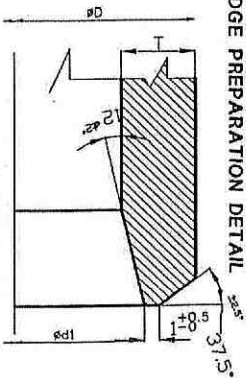
MATERIAL SPECN. - IS: 3589-410 MPA
(SPIRAL/LS WELD)

Sl. No.	DESCRIPTION	DU No.	QTY	SPECIFIC LENGTH	MATL. CODE
01	PIPE OD 1422X14 (UNDER GROUND PIPING)	001	320MR	10M	15.938 714 00UG IS3589-410MPA
02	PIPE OD 1422X14 (OVER GROUND PIPING)	002	60MR	10M	15.938 714 000G IS3589-410MPA
03	PIPE OD 1118X10 (UNDER GROUND PIPING)	003	130MR	10M	15.938 711 0001 IS3589-410MPA
04	PIPE OD 1118X10 (OVER GROUND PIPING)	004	10MR	10M	15.938 711 000G IS3589-410MPA
05	PIPE OD 813X8 (UNDER GROUND PIPING)	005	1650MR	6.5M	15.938 537 0001 IS3589-410MPA
06	PIPE OD 813X8 (OVER GROUND PIPING)	006	150MR	6.5M	15.938 537 0001 IS3589-410MPA

NOTES:-

- DESIGN PRESSURE:- 7.5 Kg/cm² (g)
- DESIGN TEMPERATURE:- 60° C
- 01 PIPES ARE TO BE SUPPLIED WITH EDGE PREPARATION
- 02 TOLERANCE ON THE LENGTH OF EACH PIPE SHALL BE ± 100 mm AND TOLERANCE ON TOTAL LENGTH FOR EACH SERIAL NO IS ±2M IF TOTAL QTY IS MORE THAN 50MTRS.
- 03 PAINTING / COATING SHALL BE AS PER CUSTOMER APPROVED QUALITY PLAN.
- 04 SPIDER ARRANGEMENT HAS TO BE PROVIDED AT THE ENDS AFTER EDGE PREPARATION, AS PER DRG. NO. 4-80-999-93078
- 05 FOR ITEM NOS 1-6, EDGE PREPARATION HAS TO BE DONE AS PER STY "D" OF GIVEN DETAIL.
- 06 HYDRO TEST SHALL BE CARRIED OUT AT SITE FOR THE SITE WELD
- 07. LIFTING LUG ARRANGEMENT TO BE PROVIDED ON EACH ITEM/FITTING AS PER DRAWING NUMBER: 3-80-468-27927

EDGE PREPARATION DETAIL



PIPE SIZE	φd1
φ1422 X 14	1394
φ1118 X 10	1098
φ813 X 8	797

STYLE-D

CUSTOMER NO- 7245

CUSTOMER



NTPC Limited
(A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT NORTH KARANPURA SUPER THERMAL POWER PROJECT (3X660MW)

BHARAT HEAVY ELECTRICALS LIMITED
PIPING CENTRE
MADRAS 600 017

DRN	NAME	SIGN	DATE	NO. OF VARS.
L.O.A. RAJU			06.01.2015	
CHD S.R.K.			06.01.2015	
APPD C.KARUNAKARAN			06.01.2015	

REV	DATE	ALTERED APPROVED
01		

DEPT PC	GRADE OF UNTOOL. DIM	SCALE	WEIGHT (KG)	REF. TO ASSTY./OLD DRG.	ITEM NO.	NO. OF ITEMS
C/M/F		N.T.S				

TITLE	CARD CODE	DRAWING NO.	REV
PRODUCTION NOTES FOR ACW PIPING	U 01	3-80-468-32741	00