



**BHARAT HEAVY ELECTRICALS LIMITED,  
TIRUCHIRAPPALLI 620 014  
OUTSOURCING DEPARTMENT**

**NIT: 2025OSB058; NIT DTD: 25.11.2025**

**NIT DESCRIPTION: CRITICAL PIPING ITEMS WITH BHEL MATERIAL**

**Annexure I: Corrigendum**

- **Following drawing has been added in RS01 & RS04.**
  - **Drawing No: 3-80-300-19825 Rev 04 [Description: Edge Preparation Details]**

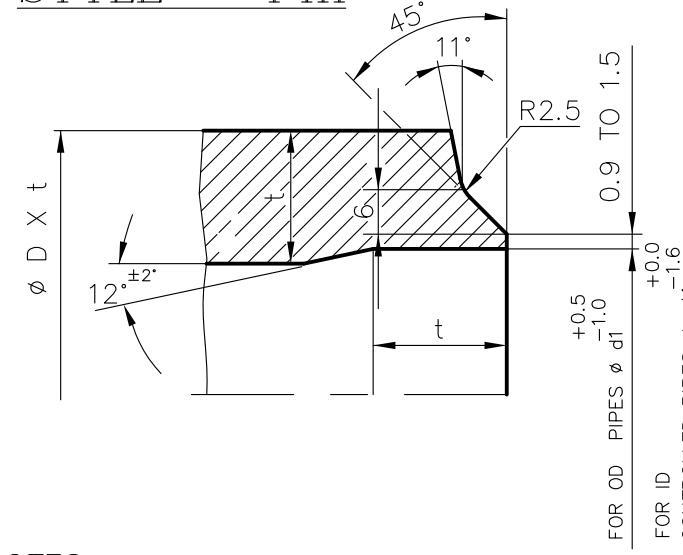
*All other Terms and Conditions of NIT remains unchanged.*

Participation in **NIT** by Vendor shall be construed as acceptance to all T&Cs including above corrigendum.

<p>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 DEDIMENTAL TO THE INTEREST OF THE COMPANY</p> <p>DRAWING NO. 3-80-300-19825</p> <p>NOTES: - 01. APPLICABLE FOR P91/P92            i) STRAIGHT WITH STRAIGHT/FITTING            ii) BEND WITH BEND/FITTING            02. FOR OD MISMATCH, REFER FIGURE-Xa            03. REFER STYLE-DL FOR THICKNESS &lt;14.2mm (FOR ALL OD/ID)            04. REFER STYLE-PL            i) WHEN THICKNESS IS <math>\geq</math> 14.2 mm &amp; <math>&lt;</math> 20mm (FOR ALL OD/ID)            ii) WHEN THICKNESS <math>\geq</math> 20mm &amp; OD <math>&lt;</math> 219.1mm.            05. <math>\alpha = 6^\circ</math> FOR WALL THICKNESS <math>\geq</math> 20MM AND <math>\leq</math> 30 mm            06. <math>\alpha = 10^\circ</math> FOR WALL THICKNESS <math>&gt;</math> 30 mm</p> <p>FIGURE - X</p>	<p><b>MATCHING EDGE PREPARATION</b></p> <p>02 FOR MISMATCH OD APPLICABLE FOR BENDS/FITTINGS OF P91/P92 MATERIALS 03</p> <p>NOTES: -</p> <p>01. OD OF STRAIGHT TO BE PHYSICALLY MEASURED/VERIFIED.</p> <p>02. t = THK OF CONNECTING PIPE (STRAIGHT)</p> <p>FIGURE - Xa</p>	<p><b>MATCHING EDGE PREPARATION FOR MISMATCH OD DIAMETRICALLY GREATER THAN 8 mm</b></p> <p>(ie OD1 - OD2 <math>&gt;</math> 8mm) APPLICABLE FOR BENDS/FITTINGS OTHER THAN P91/P92 MATERIALS</p> <p>NOTES: -</p> <p>01. OD OF STRAIGHT TO BE PHYSICALLY MEASURED/VERIFIED.</p> <p>02. WHEN t &lt; 65, S+A = 65 Min. &amp; t &gt; 65, S = 65 Min. WHERE t = THK OF CONN.PIPE(STRAIGHT).</p> <p>FIGURE - Pa</p>	<p><b>MATCHING EDGE PREPARATION FOR MISMATCH OD DIAMETRICALLY GREATER THAN 8 mm</b></p> <p>(ie OD1 - OD2 <math>&gt;</math> 8mm) APPLICABLE FOR ELBOWS OTHER THAN P91/P92 MATERIALS</p> <p>NOTES: -</p> <p>01. OD = OUTSIDE DIA OF CONN. PIPE (STRAIGHT) TO BE PHYSICALLY MEASURED/VERIFIED.</p> <p>02. t = THK OF CONN.PIPE (STRAIGHT)</p> <p>03. t = THK OF CONN.PIPE (STRAIGHT)</p> <p>FIGURE - Z</p>																																																																							
	<p><b>NOTES: - 01. APPLICABLE FOR P91/P92 ZERO ARM PIPEBEND WELDED WITH P91/P92 STRAIGHT PIPE</b></p> <p>02. FOR OD MISMATCH, REFER FIGURE-Xa</p> <p>03. REFER STYLE-DL FOR THICKNESS &lt;14.2mm (FOR ALL OD/ID)</p> <p>04. REFER STYLE-PL</p> <p>i) WHEN THICKNESS IS <math>\geq</math> 14.2 mm AND <math>&lt;</math> 20 mm FOR ALL OD/ID.            ii) WHEN THICKNESS <math>\geq</math> 20mm AND OD <math>&lt;</math> 219.1 mm.            05. <math>\alpha = 6^\circ</math> FOR WALL THICKNESS <math>\geq</math> 20MM AND <math>\leq</math> 30 mm            06. <math>\alpha = 10^\circ</math> FOR WALL THICKNESS <math>&gt;</math> 30 mm</p> <p>FIGURE - Xb</p> <p>(BEND END) 03</p>	<p>FIGURE - Xc</p> <p>(STRAIGHT END) 03</p>	<p><b>STYLE - P</b></p> <p>NOTES: -</p> <p>04 01. USE WHEN t <math>\geq</math> 14.2 mm AND <math>&lt;</math> 70mm.            04 02. FOR t <math>\geq</math> 70.0 mm REF. STYLE-Pm            03. FOR OD MISMATCHING REF. STYLE-Pa</p> <p>FIGURE - P</p>																																																																							
	<p><b>NOTES: -</b></p> <p>01. USE WHEN t <math>&lt;</math> 14.2 mm.</p> <p>FIGURE - D</p>	<p><b>TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT</b></p> <p>01 STANDARD</p>	<p>BHARAT HEAVY ELECTRICALS LTD., PIPING CENTRE, MADRAS</p> <table border="1"> <tr> <td>DRN</td><td>NAME</td><td>K.B.RAGUNATH</td><td>SIGN</td><td>DATE</td><td>11.10.01</td> </tr> <tr> <td>CHD</td><td>NAME</td><td>M.C.SEKARAN</td><td>SIGN</td><td>DATE</td><td>11.10.01</td> </tr> <tr> <td>APPD</td><td>NAME</td><td>A.VELAYUTHAM</td><td>SIGN</td><td>DATE</td><td>11.10.01</td> </tr> </table>	DRN	NAME	K.B.RAGUNATH	SIGN	DATE	11.10.01	CHD	NAME	M.C.SEKARAN	SIGN	DATE	11.10.01	APPD	NAME	A.VELAYUTHAM	SIGN	DATE	11.10.01																																																					
DRN	NAME	K.B.RAGUNATH	SIGN	DATE	11.10.01																																																																					
CHD	NAME	M.C.SEKARAN	SIGN	DATE	11.10.01																																																																					
APPD	NAME	A.VELAYUTHAM	SIGN	DATE	11.10.01																																																																					
<p><b>GENERAL NOTES :</b></p> <p>01. THE MINIMUM THICKNESS AT WELD END SHALL NOT BE LESS THAN            a) 0.875 TIMES t NOM. FOR OD PIPES.            b) t MIN. FOR ID CONTROLLED PIPES.</p> <p>02. t NOM &amp; t MIN SHALL BE AS PER SPECIFIED PIPE SIZE.</p> <p>03. SHARP CORNERS SHALL BE ROUNDED OFF WHEREVER 'R' IS INDICATED. 02</p> <p><b>NOTES FOR WELDING:</b></p> <p>01. WELD REINFORCEMENT TO BE FLUSH GROUND AND MERGED WITH PARENT METAL WITHOUT ANY UNEVENNESS.</p>	<table border="1"> <tr> <td>REV 04</td><td>DATE 07.12.16</td><td>ALTERED: P SURESH</td><td>APPROVED: R SESHAGIRI</td><td>CODE</td><td>GRADE OF UN TOL DIM C/M/F</td><td>SCALE</td><td>WEIGHT (KG)</td><td>NAME OF ORIGINAL ORGANISATION</td> </tr> <tr> <td>ZONE</td><td colspan="7">SHEET 2 OF 2 IS ADDED. NOTES ADDED, MODIFIED AND DELETED IN FIGURE-X, Xa, Xb, Xc AND STYLE-P.</td><td></td> </tr> <tr> <td>REV 03</td><td>DATE 10.04.13</td><td>ALTERED: M.R.K</td><td>APPROVED: C.K.N</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>ZONE</td><td colspan="7">FIG.Xb AND FIG.Xc ADDED. IN FIG.X, NOTE 01 MODIFIED. IN FIG.Xa, FIG.Xb, FIG.Z, P92 MATERIAL ADDED</td><td></td> </tr> <tr> <td>REV 02</td><td>DATE 10.01.13</td><td>ALTERED: M.R.K</td><td>APPROVED: C.K.N</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>ZONE</td><td colspan="7">IN FIG.Xa, NOTE 04 ADDED. GENERAL NOTES 03 ADDED. IN FIG.Xa, 8MM OD MISMATCH IS REMOVED</td><td></td> </tr> <tr> <td>REV 01</td><td>DATE 11.05.04</td><td>ALTERED: R SENDHIL</td><td>APPROVED: A VELAYUTHAM</td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>ZONE</td><td colspan="7">PROJECT NAME REMOVED AND STANDARD INCORPORATED IN TITLE BLOCK</td><td></td> </tr> </table> <p><b>TITLE</b></p> <p>EDGE PREPARATION DETAILS</p>	REV 04	DATE 07.12.16	ALTERED: P SURESH	APPROVED: R SESHAGIRI	CODE	GRADE OF UN TOL DIM C/M/F	SCALE	WEIGHT (KG)	NAME OF ORIGINAL ORGANISATION	ZONE	SHEET 2 OF 2 IS ADDED. NOTES ADDED, MODIFIED AND DELETED IN FIGURE-X, Xa, Xb, Xc AND STYLE-P.								REV 03	DATE 10.04.13	ALTERED: M.R.K	APPROVED: C.K.N						ZONE	FIG.Xb AND FIG.Xc ADDED. IN FIG.X, NOTE 01 MODIFIED. IN FIG.Xa, FIG.Xb, FIG.Z, P92 MATERIAL ADDED								REV 02	DATE 10.01.13	ALTERED: M.R.K	APPROVED: C.K.N						ZONE	IN FIG.Xa, NOTE 04 ADDED. GENERAL NOTES 03 ADDED. IN FIG.Xa, 8MM OD MISMATCH IS REMOVED								REV 01	DATE 11.05.04	ALTERED: R SENDHIL	APPROVED: A VELAYUTHAM						ZONE	PROJECT NAME REMOVED AND STANDARD INCORPORATED IN TITLE BLOCK								<p>CARD CODE U 01</p> <p>DRAWING No. 3-80-300-19825</p> <p>SHEET 1 OF 2</p>
REV 04	DATE 07.12.16	ALTERED: P SURESH	APPROVED: R SESHAGIRI	CODE	GRADE OF UN TOL DIM C/M/F	SCALE	WEIGHT (KG)	NAME OF ORIGINAL ORGANISATION																																																																		
ZONE	SHEET 2 OF 2 IS ADDED. NOTES ADDED, MODIFIED AND DELETED IN FIGURE-X, Xa, Xb, Xc AND STYLE-P.																																																																									
REV 03	DATE 10.04.13	ALTERED: M.R.K	APPROVED: C.K.N																																																																							
ZONE	FIG.Xb AND FIG.Xc ADDED. IN FIG.X, NOTE 01 MODIFIED. IN FIG.Xa, FIG.Xb, FIG.Z, P92 MATERIAL ADDED																																																																									
REV 02	DATE 10.01.13	ALTERED: M.R.K	APPROVED: C.K.N																																																																							
ZONE	IN FIG.Xa, NOTE 04 ADDED. GENERAL NOTES 03 ADDED. IN FIG.Xa, 8MM OD MISMATCH IS REMOVED																																																																									
REV 01	DATE 11.05.04	ALTERED: R SENDHIL	APPROVED: A VELAYUTHAM																																																																							
ZONE	PROJECT NAME REMOVED AND STANDARD INCORPORATED IN TITLE BLOCK																																																																									
<p>REV 04</p>	<p>DEPT.</p> <p>CODE</p>	<p>NAME</p> <p>SIGN</p> <p>DATE</p>	<p>NO OF ITEMS</p>																																																																							
<p>ITEM No.</p>																																																																										
<p>SIZE A3</p>																																																																										

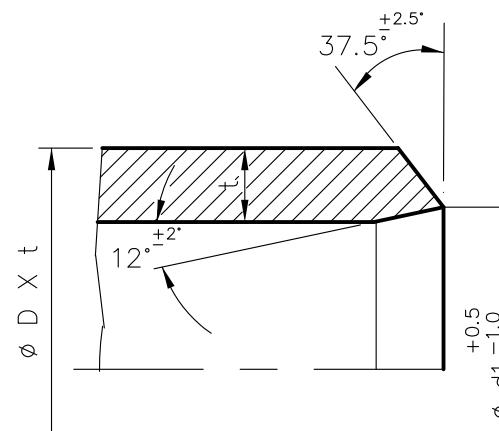
3-80-300-19825  
DRAWING No.

STYLE - Pm



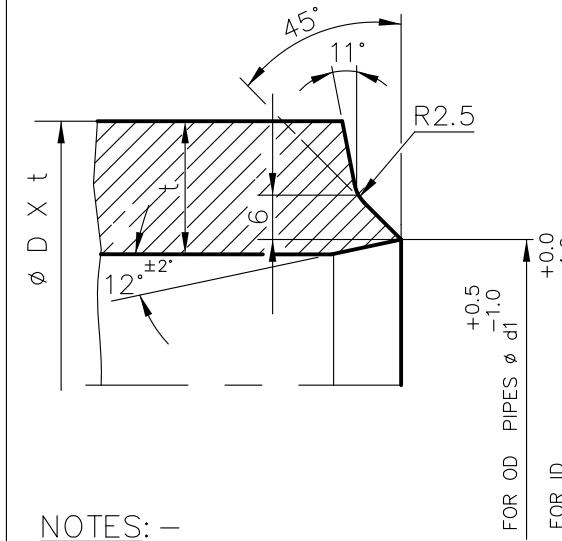
## NOTES: -

01. USE FOR SA106GRC PIPES WHEN  $t \geq 70.0$  mm.
02. FOR OD MISMATCHING REF. FIGURE-Pa
03. FOR FITTINGS USE STYLE-P.

STYLE - D<sub>L</sub>

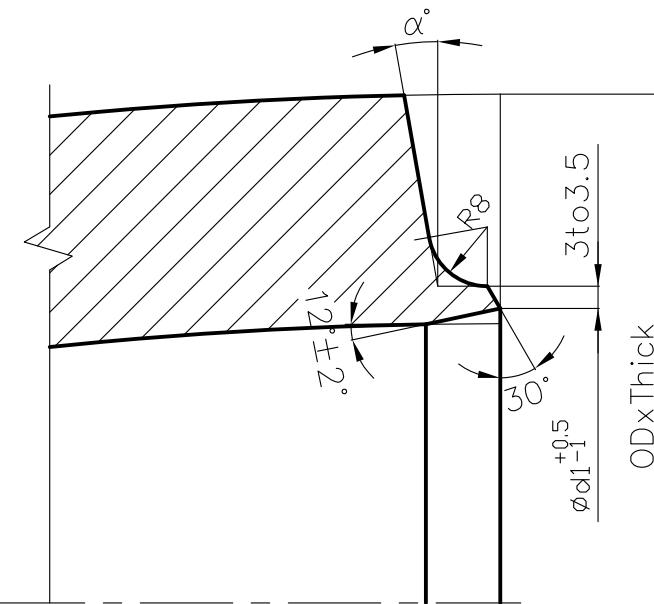
## NOTES: -

01. USE FOR P91 / P92 PIPES AND FITTINGS WHEN  $t < 14.2$  mm (ALL OD/ID).

STYLE - P<sub>L</sub>

## NOTES: -

01. USE FOR P91 / P92 PIPES AND FITTINGS
  - WHEN THICKNESS IS  $\geq 14.2$  mm AND  $< 20$  mm FOR ALL OD/ID.
  - WHEN THICKNESS  $\geq 20$  mm AND OD  $< 219.1$  mm.
02. FOR OD MISMATCHING REF. FIGURE-Pa



01. USE FOR P91 / P92 FITTINGS
02. REFER STYLE-D<sub>L</sub> FOR THICKNESS  $< 14.2$  mm FOR ALL OD/ID.
03. REFER STYLE-P<sub>L</sub>
  - WHEN THICKNESS IS  $\geq 14.2$  mm AND  $< 20$  mm FOR ALL OD/ID.
  - WHEN THICKNESS  $\geq 20$  mm AND OD  $< 219.1$  mm.
04.  $\alpha = 6^\circ$  FOR WALL THICKNESS  $\geq 20$  mm AND  $\leq 30$  mm
05.  $\alpha = 10^\circ$  FOR WALL THICKNESS  $> 30$  mm.
06. FIGURE-Xf IS APPLICABLE FOR ALL BUTT WELDED FITTINGS NOT COVERED IN NOTES 02 & 03

FIGURE-Xf

## NOTE :

01. FOR GENERAL NOTES AND NOTES FOR WELDING REFER SHEET 1 OF 2.

STANDARD								
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		Bharat Heavy Electricals Ltd., Piping Centre, Madras				NAME	DATE	NO OF ITEMS
DEPT.	GRADE OF UN TOL DIM	SCALE	WEIGHT (KG)	NAME OF ORIGINAL ORGANISATION			ITEM No.	
CODE	C/M/F							
TITLE	EDGE PREPARATION DETAILS			CARD CODE	DRAWING No.			REV
	3-80-300-19825			U 01	SHEET 2 OF 2			04