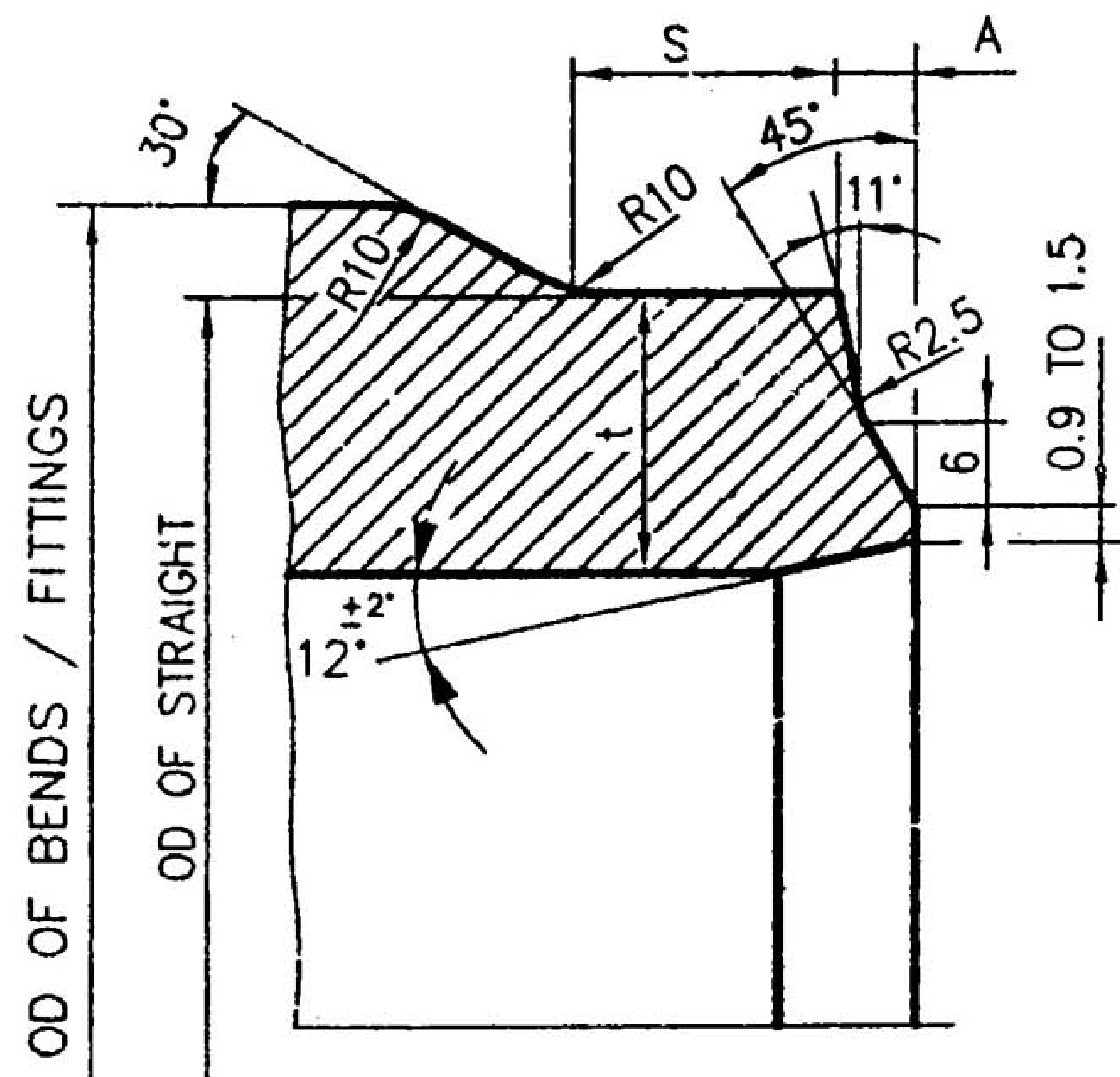




STYLE — P

Q2. WHEN $t < 65$ $S + A = 65$ Min. & $t > 65, S = 65$ Min.
WHERE $t = \text{THK OF CONN. PIPE (STRAIGHT)}$.



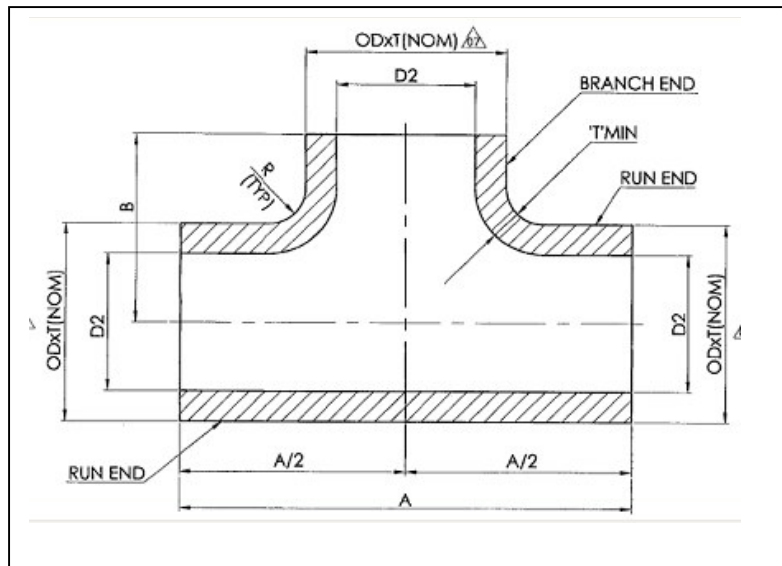
STYLE — Pa

ANNEXURE - 2

PIPE SIZES

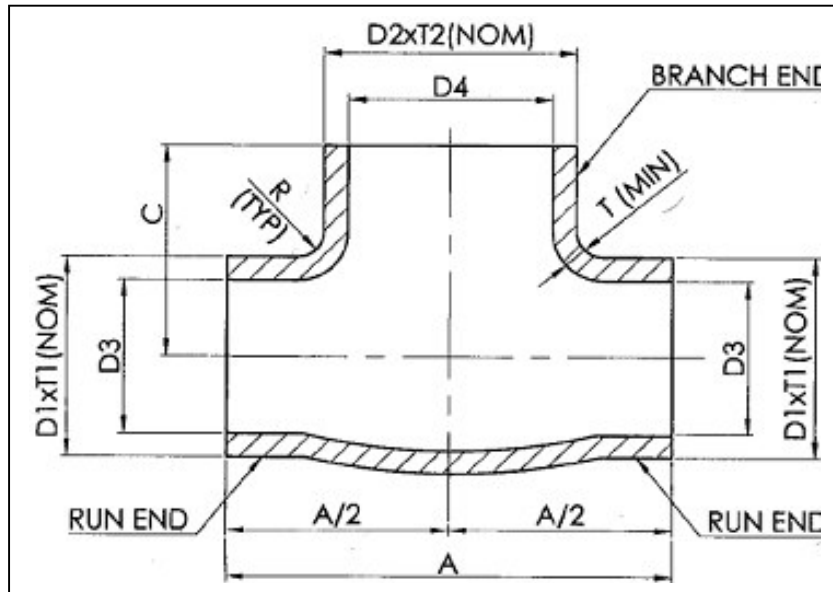
Sl. No.	Pipe Size (Outer Diameter) in 'mm'	Pipe Wall Thickness [Range in 'mm']
01	219.1	6.32 to 24.0
02	273.0	6.35 to 25.0
03	323.0	6.4 to 50.0
04	355.6	40.0
05	457	12.7 to 45
06	508	6.0 to 71.0
07	558	6.35 to 72.0
08	609.6	14.27 / 20 / 30
09	660	14.2 to 45
10	711	20 to 45

FITTINGS : ‘ T ’ ees



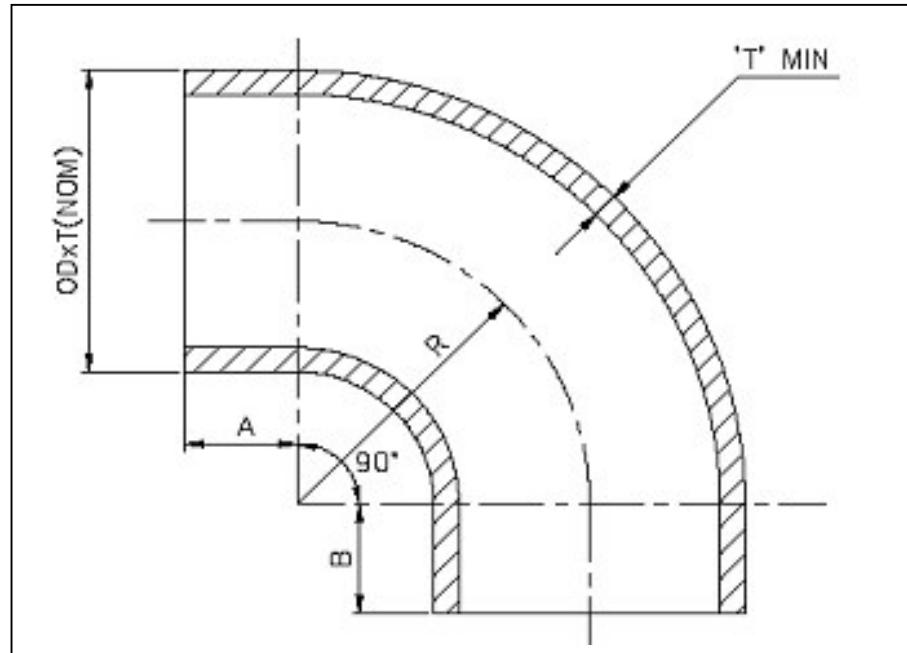
Sl. No	OD, mm	T (Nom) Thickness, mm	(A) Length, in mm	B in mm
1	219.1	18.2, 28.5, 32, 36, 40	340	170
2	244.5	42.2	600	200
3	273	32, 36, 36.5, 40, 45, 45.7	635	215
4	323.9	36, 36.5, 37.1, 38.8, 40, 45.7	710	255
5	355.6	45.7, 59	760	280
6	368	28.5, 54.85, 59, 60.57, 68.57	760, 820	280
7	406.4	51.4, 62.85, 74.2, 85.7	870	305
8	457.2	25, 80	1090	338
9	508	28, 40, 71, 137.1	1090, 1100	385
10	558.8	28, 40	1100	425

Fittings : ‘T’ees



Sl.No	D1/D2 in mm	T1 & T2 (Nom) Thickness in mm	(A) Length, in mm	C in mm
1	219.1/273	34.2	990	216
2	273/323.9	34.8, 36.5	990	254
3	323.9/368	57, 68.5	790	280
4	323.9/406.4	51, 68.5, 80	870	310
5	368/406.4	62.5	870	310
6	406.4/508	68.5, 74, 85.7	1100	385
7	406.4/457.2	68.5	1090	338
8	457.2/508	80	1200	381
9	457.2/558.8	28.5	1230	415
10	508/558.8	28.5	1230	425

FITTINGS : ELBOWS



Sl.No	OD, In mm	T (Nom) Thick, in mm
1	219.1	18,28,22.85,25,28,30,32,40
2	273	32,35.4,36,36.5,40,45
3	323.9	29.14,34.28,36,40,42.28,45.7,51.42
4	355.6	35,40,50,55
5	368	36.57,40,41.14,48,50,51.42,59
6	406.4	25,32.5,45.7,51.42,57.14,62.85,68.57
7	457.2	25,45.7,51.42,57.1,65.1
8	508	25,62.85,71
9	558.8	28,40
10	609.6	30,40

ANNEXURE - 1
Drg No. CABS-1-16-02
BHEL, Tiruchirappalli

NOTES: -

01. APPLICABLE FOR P91 MATERIAL
02. FOR OD MISMATCHING REF. FIGURE-Xa.
03. $\alpha = 6^\circ$ FOR WALL THICKNESS ≤ 30 mm
04. $\alpha = 10^\circ$ FOR WALL THICKNESS > 30 mm

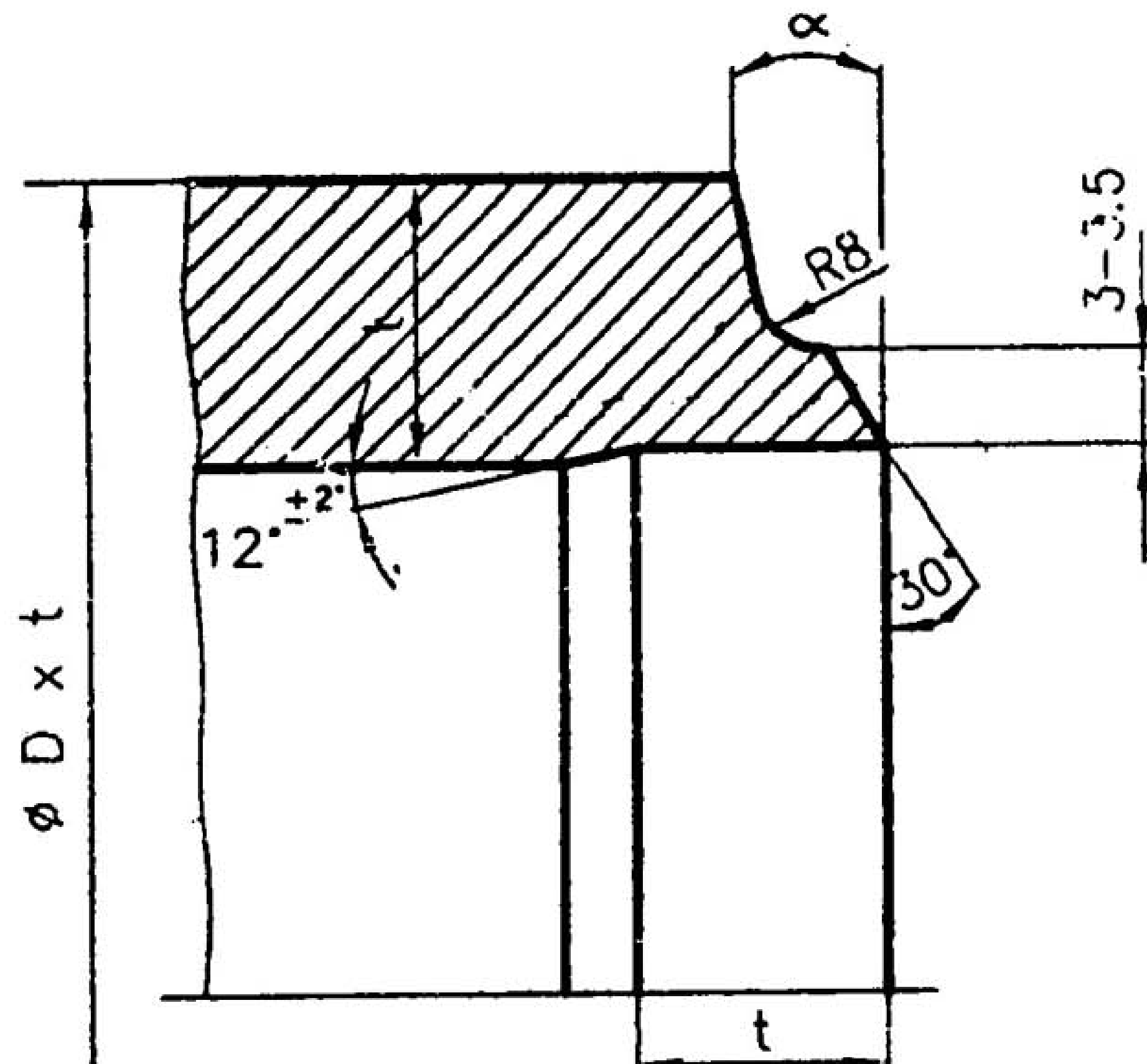


FIGURE - X

NOTES: -

01. OD OF STRAIGHT TO BE PHYSICALLY MEASURED/VERIFIED
02. $\alpha = 6^\circ$ FOR WALL THICKNESS ≤ 30 mm
03. $\alpha = 10^\circ$ FOR WALL THICKNESS > 30 mm

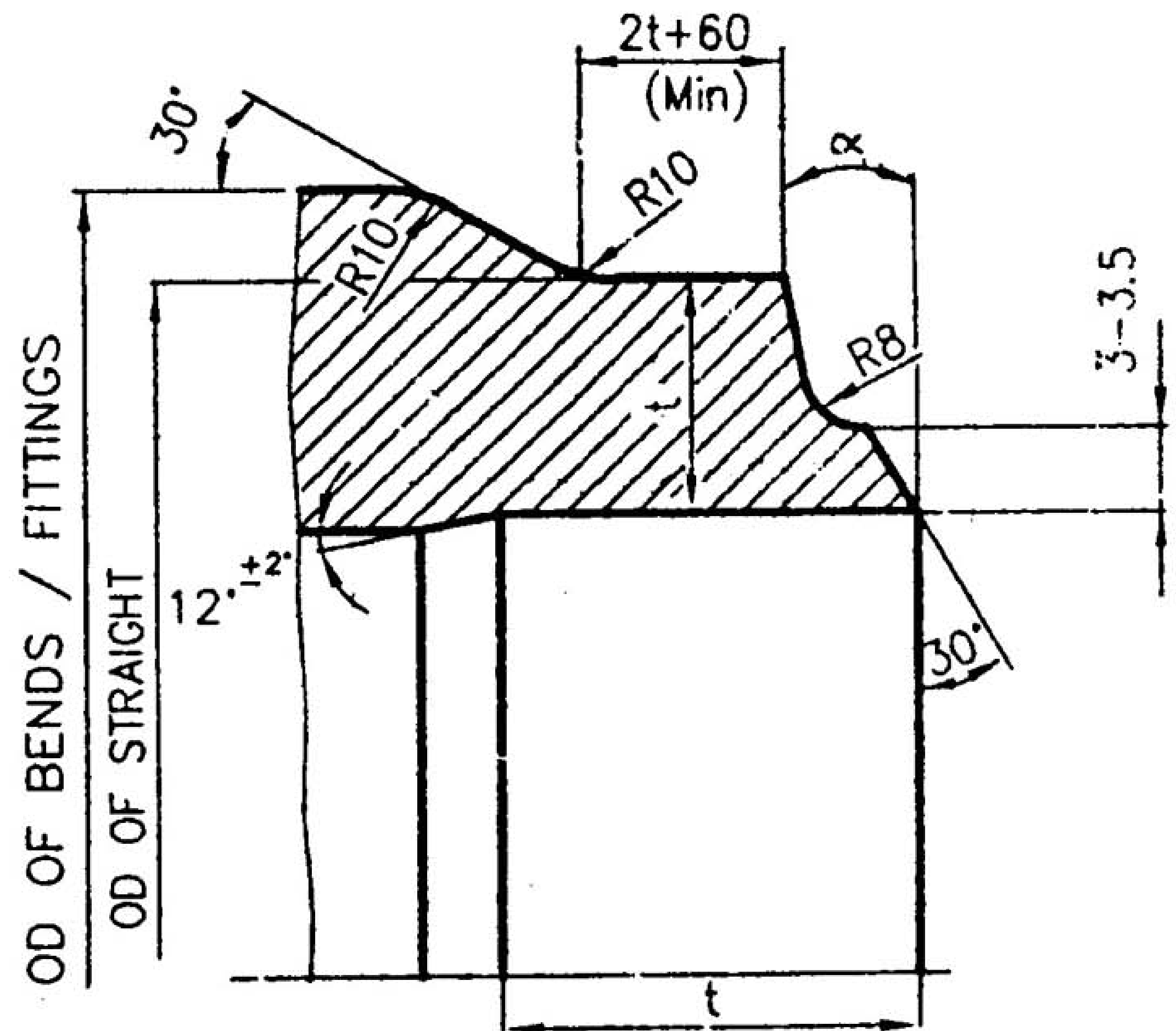


FIGURE - Xa

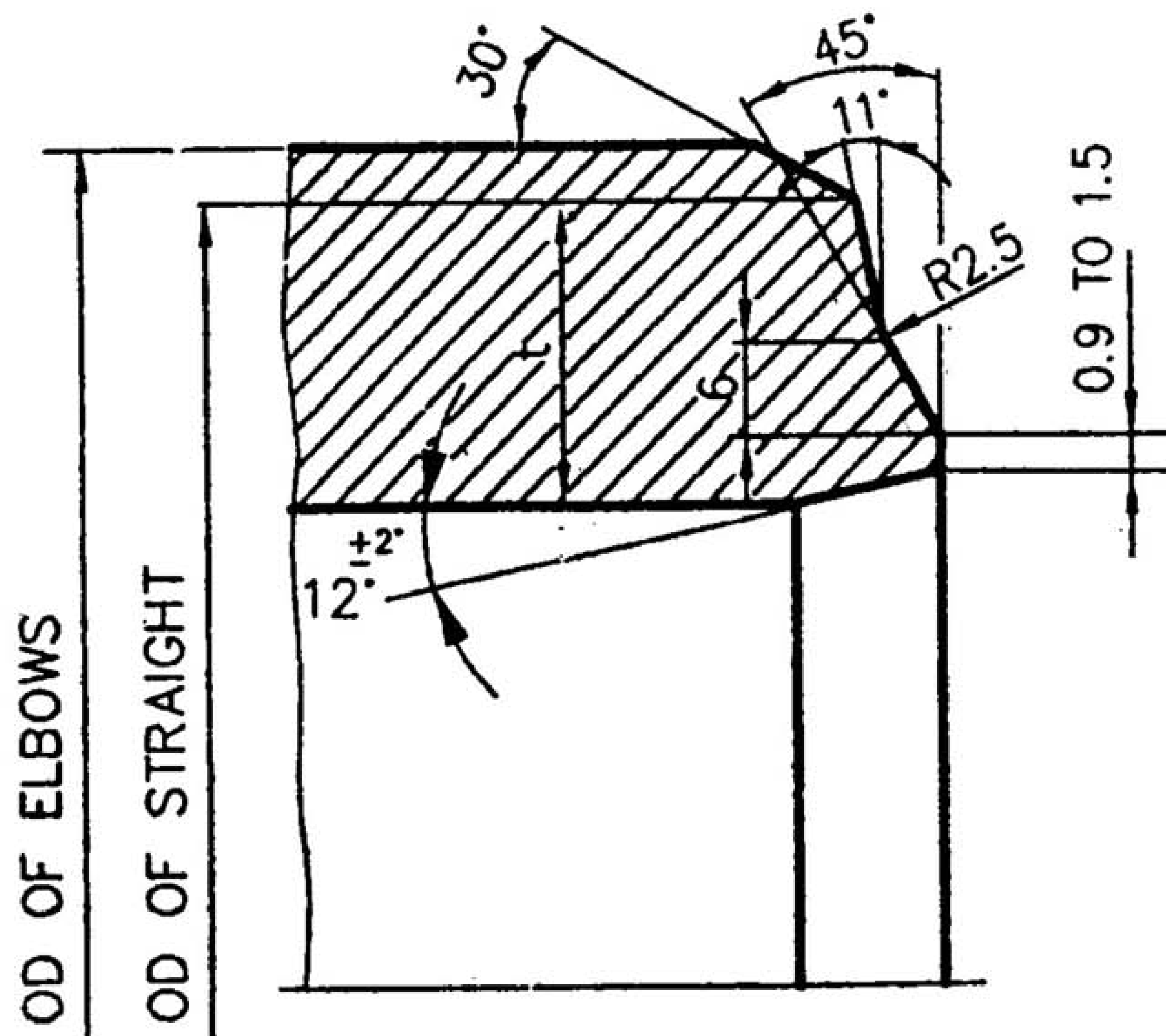
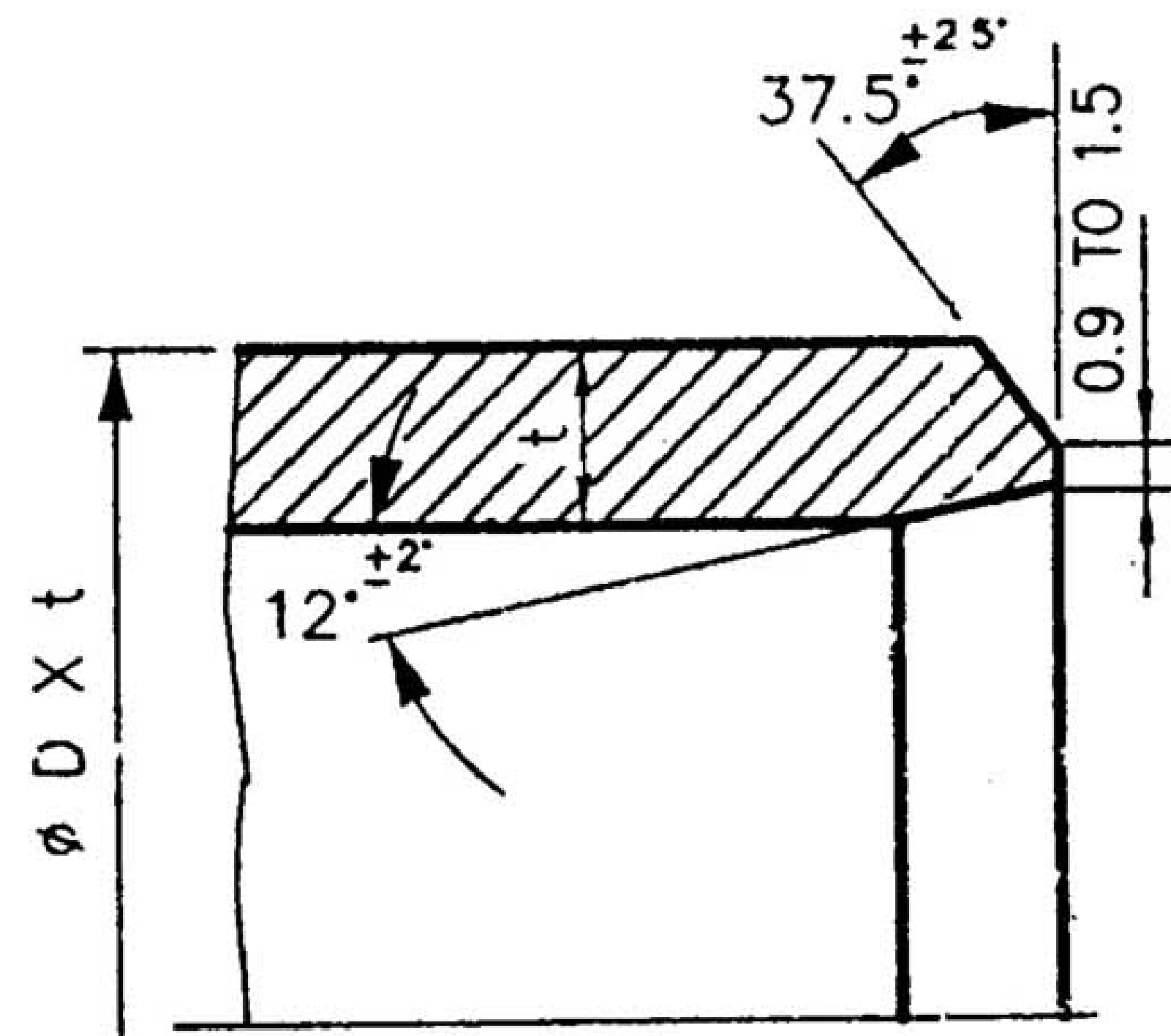


FIGURE - Z



STYLE - D

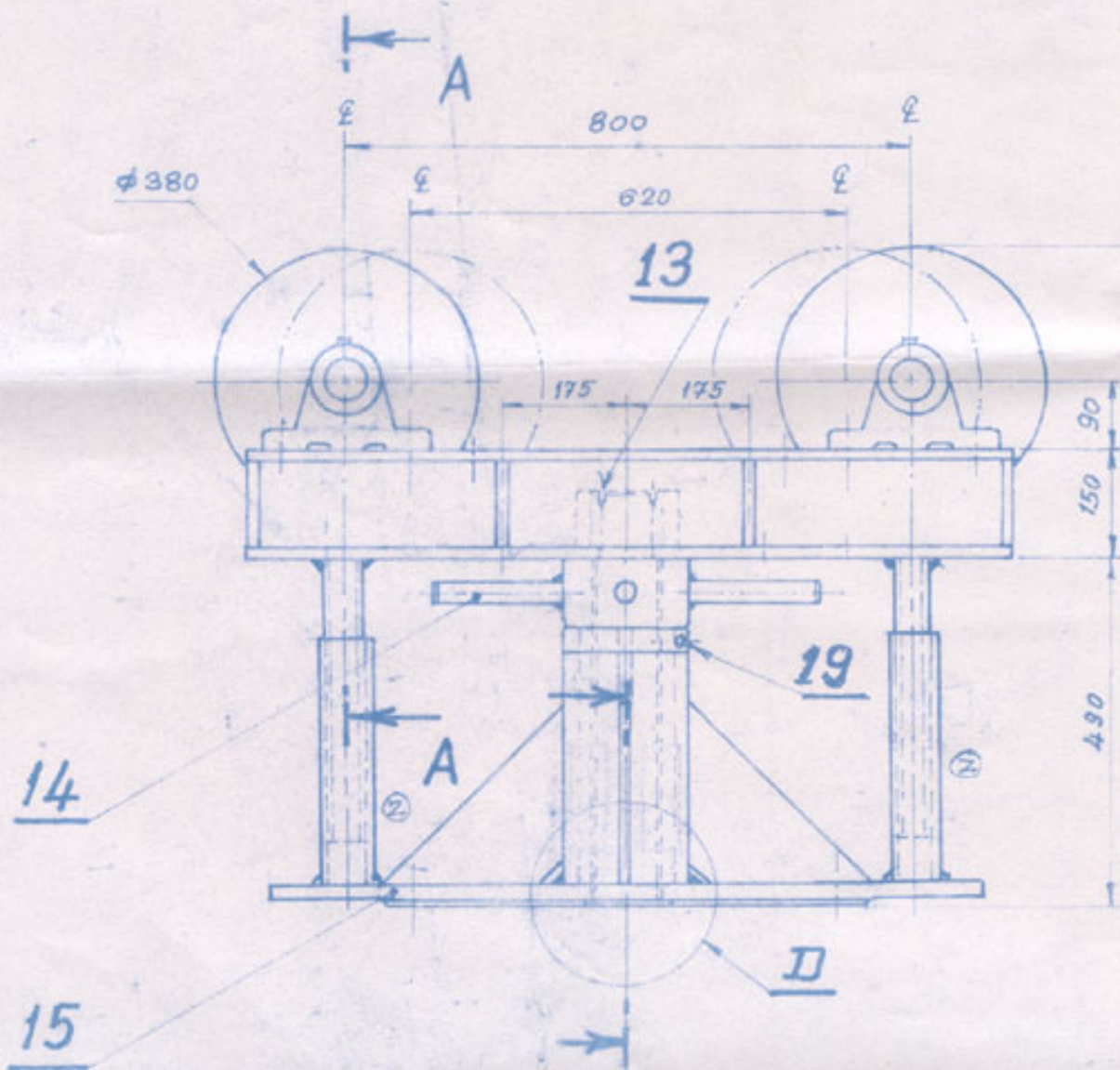
NOTES: -

01. USE WHEN $t < 14.2$ mm.

ANNEXURE - 1

Drg No CABS-1-16 - 03

BHEL, Tiruchirappalli

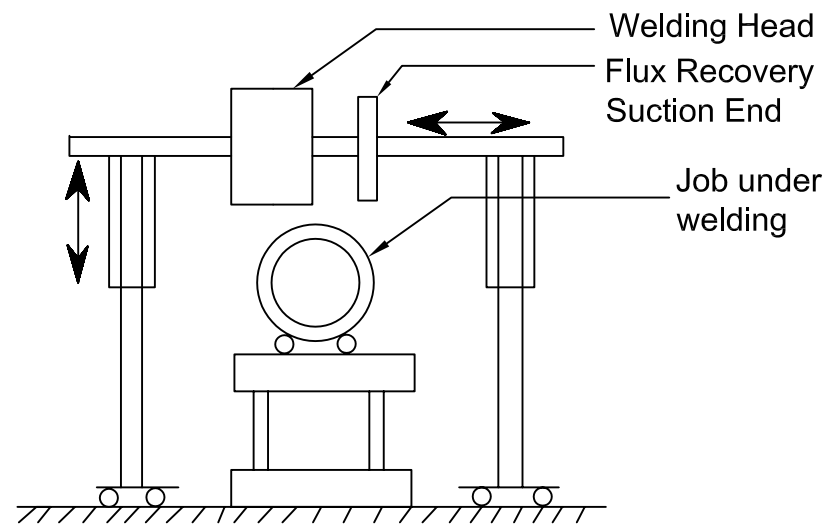


ANNEXURE - 5

LIST OF SPARES & CONSUMABLES

S.No.	DESCRIPTION	QTY.	S.No.	DESCRIPTION	QTY.
AA POWERSOURCE SPARES					
1.	O/P Terminal Board Assembly	1 No.	6.	Receptacles – All Types	1 Sets in each
2.	I/P Terminal Board Assembly	1 No.	7.	Cooling Fan Assembly	1 No.
3.	All types of Printed Circuit Board (PCB) – with part no and description	1 No in each.	8.	Diodes –make and type no	2 no
4.	Voltmeter	1 No	9.	Indicator Lamps	10 Nos.
5.	Ammeter	1 No.	10.	SCR module -make and type no	3 Nos
BB TRACTOR/WELDING HEAD /CONTROL PANEL SPARES					
11.	D.C. Motor with make and type no	1 No.	24.	Contact Tip 5.00 mm	12 Nos.
12.	Pressure Roller Assembly	1 No.	25.	Wire Feed Nozzle (of Copper)	3 Nos.
13.	Straightening Roller Assembly	1 No.	26.	Switches	1 Set
14.	Guide Roller Assembly	1 No.	27.	Ammeter	1 No.
15.	Tightening Knob Assembly	3 Nos.	28.	Voltmeter	1 No.
16.	Wire Guide House with Spiral	3 Nos.	29.	Carriage Speed Motor with make and type no	1 No.
17.	Wire Guide Tube with Spiral	3 Nos.	30.	Sockets – All Types	1 Set
18.	Wirefeed Roll (3.15 mm dia. Wire)	3 Nos	31.	Speed Control PCB Assembly	2 Nos.
19.	Wirefeed Roll (4.00 mm dia. Wire)	6 Nos	32.	Sequence Control PCB Assly	2 Nos.
20.	Wirefeed Roll (4.80 mm dia. Wire)	6 Nos	33.	Control Transformer with ratings	1 No.
21.	Wirefeed Roll (5.00 mm dia. Wire)	6 Nos	34.	Relays	1 set
22.	Contact Tip 3.15 mm	6 Nos.	35.	Main power supply PCB	1 No.
23.	Contact Tip 4.00 mm	12 Nos.	36.	Wire Spool Holder (25 kgs.)	3 Nos.

SUPPORT STRUCTURE FOR WELDING HEAD



ANNEXURE-6