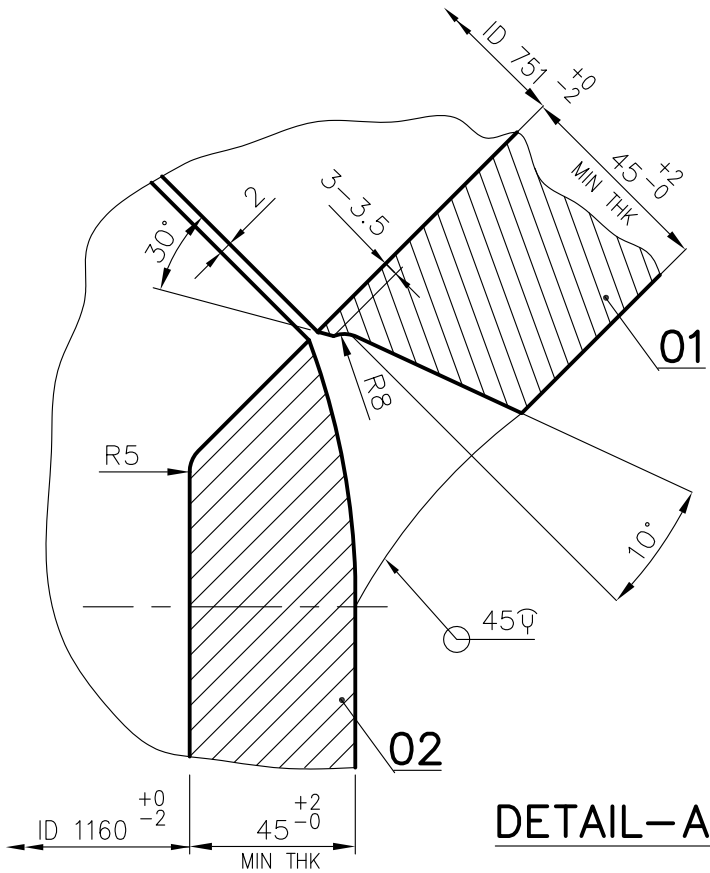
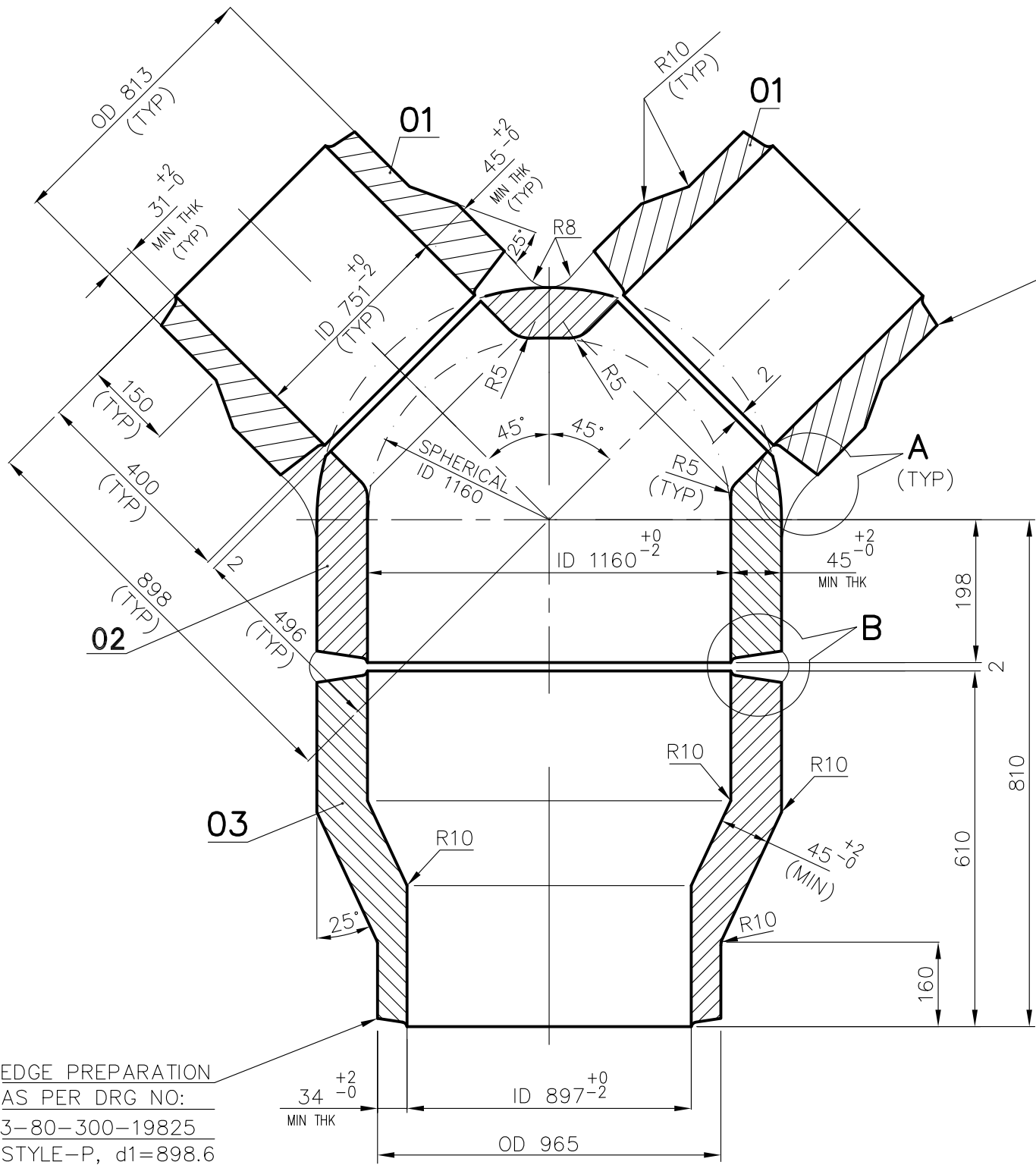
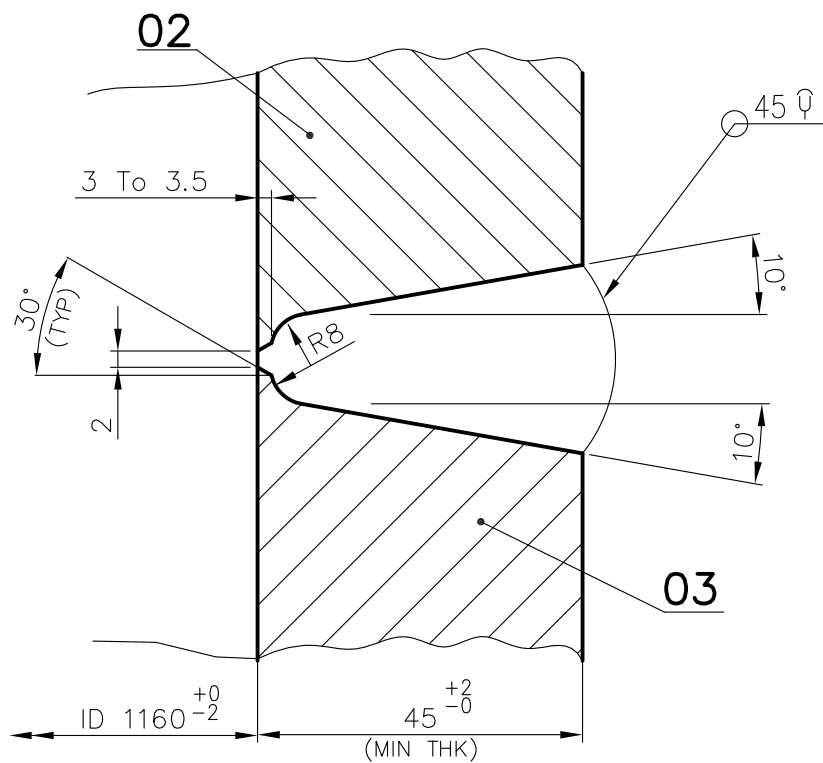


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2-80-320-10813



DETAIL-A



DETAIL-B

EDGE PREPARATION
AS PER DRG NO:
3-80-300-19825
STYLE-P, d1=753.7
(TYP)

EDGE PREPARATION
AS PER DRG NO:
3-80-300-19825
STYLE-P, d1=898.6

NOTES

01. DESIGN PRESSURE : **73.5** Kg/Cm²(g)
02. DESIGN TEMPERATURE : **370** °C
03. FOLLOW TDC No. : TDG-108 (LATEST REVISION)
04. PIPE SA106GRC(A) CAN ALSO BE USED IN PLACE OF 'SA 105'(A)
05. THE FINISHED MATERIAL SPECIFICATION IS 'SA 105'(A)
06. THE FINISHED MATERIAL CODE IS '92 505 995 0000'

VAR NO	ITEM NO	DESCRIPTION	DRAWING NO	MATERIAL CODE	MATERIAL SPECN	UNIT WEIGHT	QUANTITY
	03	OUTLET FORGING ID 1160 x THK 45 MIN / ID 897 x THK 34 min	2-80-320-10813	- SA 105	A	845 000	1
	02	BODY FORGING ID 1160 x THK 45 MIN	2-80-320-10813	- SA 105	A	1565 000	1
	01	INLET FORGING ID 751 x THK 45 MIN	2-80-320-10813	- SA 105	A	310 000	2

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE,
CHENNAI 600 017

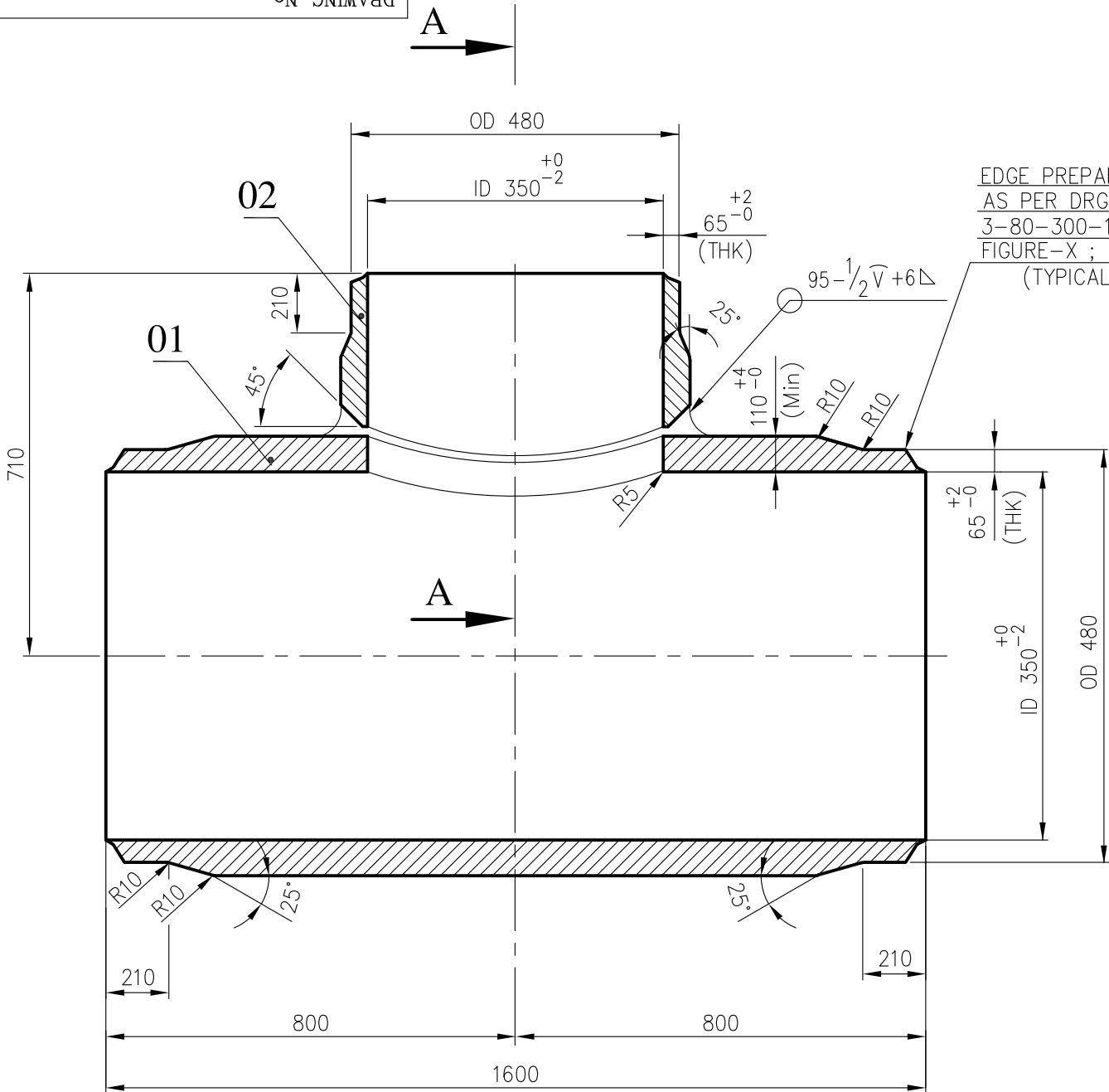
DEPT.	GRADE OF UN TOL. DIM	SCALE	WEIGHT (Kg).	BHEL PO REF. NO.	ITEM No.
CODE	C/M/F	N.T.S.	2720.000	-	-
TITLE	FABRICATED Y-PIECE (OD965x34/OD813x31)	CARD CODE U 01	MSE DRAWING NO. 2-80-320-10813	REV 01	

REV 01	DATE 24.09.2012	ALTD : POONGKODI.V APPD : PANDA.S
DESIGN PARAMETER REVISED. REVISION MARKED AS 01		

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3-80-301-32156

DRAWING No

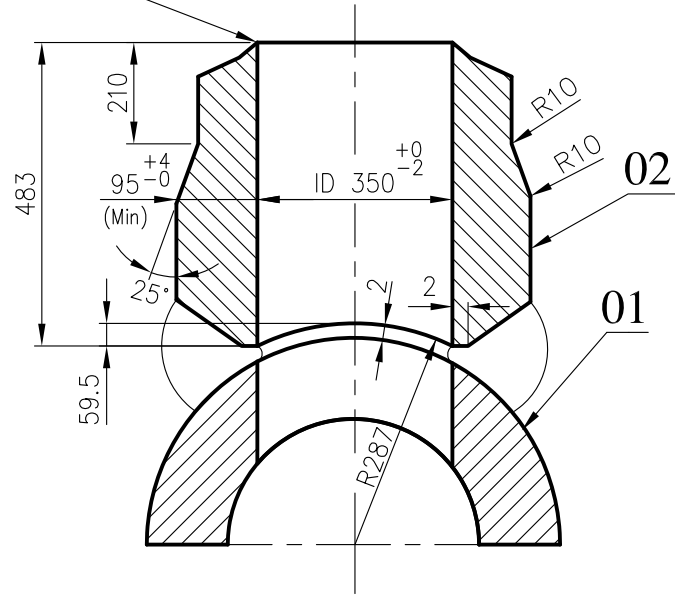


EDGE PREPARATION
AS PER DRG No.:
3-80-300-19825
FIGURE-X ; d1=350
(TYPICAL)

EDGE PREPARATION
AS PER DRG No.:
3-80-300-19825
FIGURE-X; d1=350

NOTES :-

- DESIGN PRESSURE : 271 Kg/Sq.Cm (g)
- DESIGN TEMPERATURE : 573° C
- FOLLOW TDG : 108 LATEST
- ELECTRODES TO BE USED ARE,
a) GTAW : ER90S-B9 (A)
b) SMAW : E9015-B9 (A)
ELECTRODES GIVEN ABOVE ARE INDICATIVE. VENDOR TO GIVE WPS FOR BHEL's APPROVAL.
- PIPE SA335P91(A) CAN ALSO BE USED IN PLACE OF SA182F91(A).
- WEIGHT INDICATED IS FOR FINISHED EQUAL TEE.
- FINISHED MATERIAL CODE FOR EQT IS 92 505 036 0000.



SECTION-AA

02	BRANCH NOZZLE L=483 ID 350.0 x Thk 95.0 Min	3-80-301-32156		SA 182 F91	A	413,000
						1
01	BASE PIPE L = 1600 ID 350.0 x Thk 110.0 Min	3-80-301-32156		SA 182 F91	A	1627,000
						1
ITEM NO.	DESCRIPTION	DRAWING NO.	ITEM NO.	MATERIAL CODE	A	UNIT WT.
			VAR NO.	MATERIAL SPEC.	C	QTY.

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE,
CHENNAI 600 017

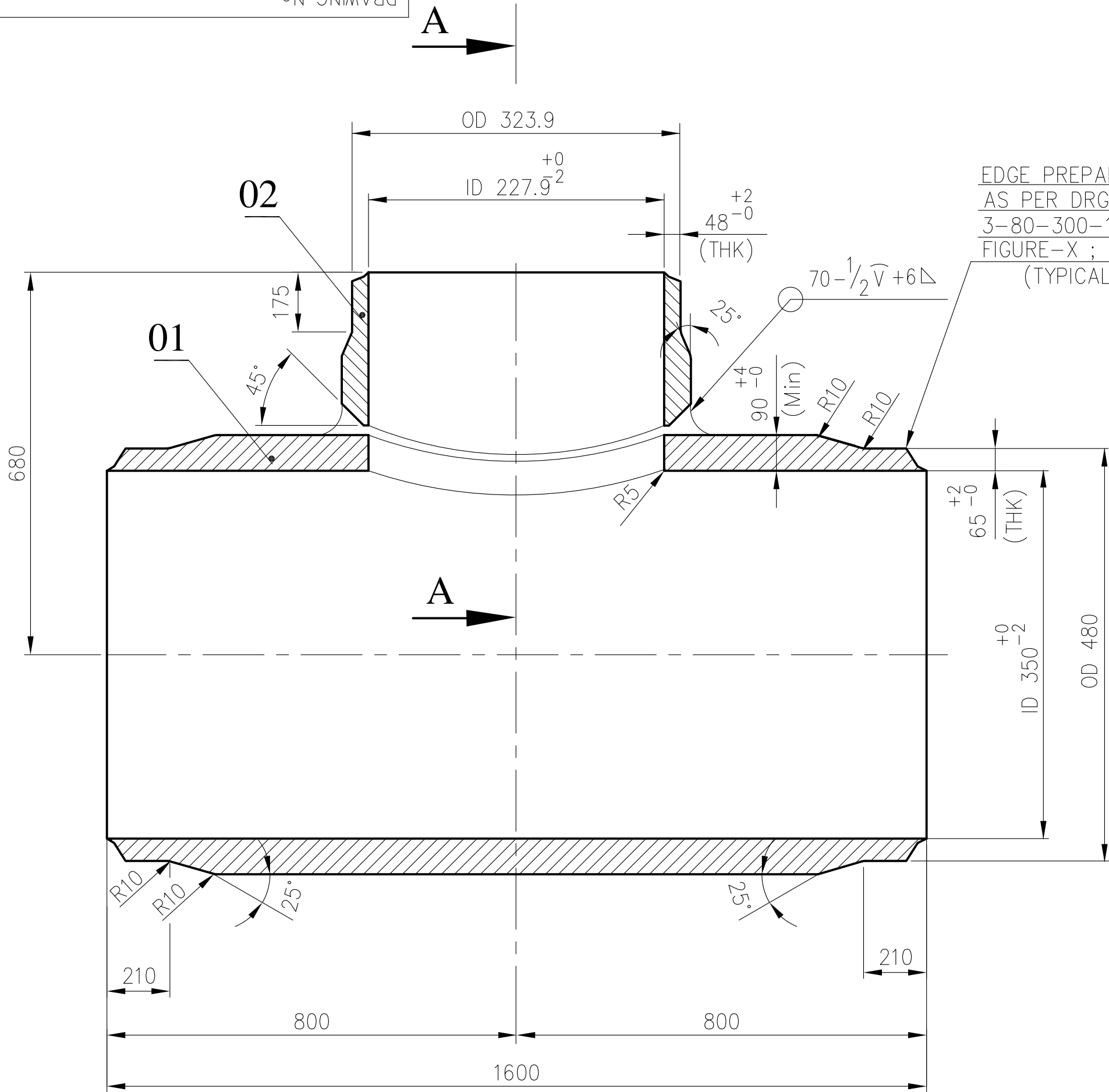
DRN	NAME I.BISWAS	SIGN Sd/-	DATE 02.05.15	NO OF ITEMS
CHD	I.BISWAS	Sd/-	02.05.15	
APPD	S.RAMAMURTHY	Sd/-	02.05.15	

REV 01	DATE	ALTD
ZONE		APPD

DEPT.	GRADE OF UN TOL. DIM		SCALE	WEIGHT (Kg).	BHEL PO REF.NO:	ITEM No.
CODE	C/M/F		N.T.S.	2040.000		
TITLE				CARD CODE	DRAWING No.	REV
FABRICATED EQUAL TEE ID 350 x 60 SA182 F91				U 01	3-80-301-32156	00

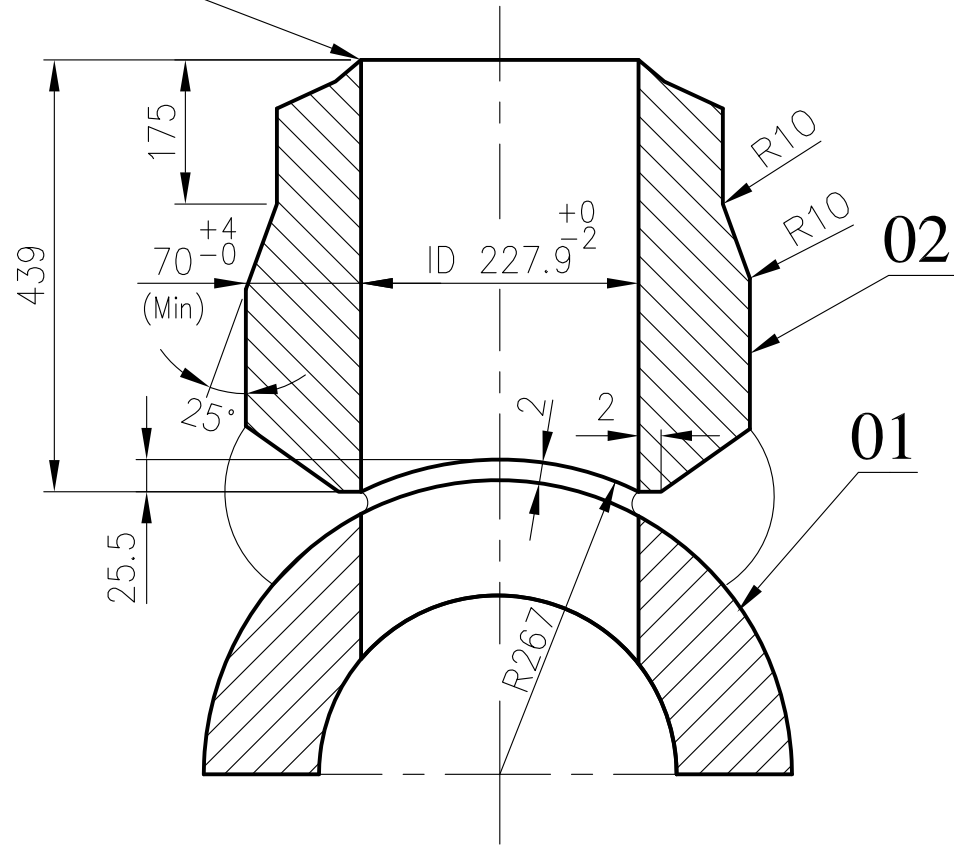
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3-80-301-32309
DRAWING No



EDGE PREPARATION
AS PER DRG No.:
3-80-300-19825
FIGURE-X ; d1=350
(TYPICAL)

EDGE PREPARATION
AS PER DRG No.:
3-80-300-19825
FIGURE-X; d1=231.3



NOTES :-

- DESIGN PRESSURE : 271 Kg/Sq.Cm (g)
- DESIGN TEMPERATURE : 573° C
- FOLLOW TDG : 108 (LATEST REVISION)
- ELECTRODES TO BE USED ARE,
a) GTAW : ER90S-B9 (A)
b) SMAW : E9015-B9 (A)
ELECTRODES GIVEN ABOVE ARE INDICATIVE. VENDOR TO GIVE WPS FOR BHEL's APPROVAL.
- PIPE SA335P91(A) CAN ALSO BE USED IN PLACE OF SA182F91(A).
- WEIGHT INDICATED IS FOR FINISHED UNEQUAL TEE.
- FINISHED MATERIAL CODE FOR UNEQT IS 92 505 127 0000.

12.5

02	BRANCH NOZZLE L=439 ID 227.9 x Thk 70 Min	3-80-301-32309	ITEM NO.	SA 182 F91	A	188,000
			VAR NO.			1
01	BASE PIPE L = 1600 ID 350 x Thk 90 Min	3-80-301-32309	ITEM NO.	SA 182 F91	A	1383,000
			VAR NO.			1
ITEM NO.	DESCRIPTION	DRAWING NO.	MATERIAL CODE	MATERIAL SPEC.	A C	UNIT WT.
						QTY.

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE,
CHENNAI 600 017

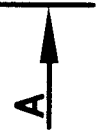
DRN	NAME R.MANDAL	SIGN Sd/-	DATE 23.02.16	NO OF ITEMS
CHD	I.BISWAS	Sd/-	23.02.16	
APPD	S.RAMAMURTHY	Sd/-	23.02.16	

REV 01	DATE	ALTD
ZONE	APPD	

DEPT.	GRADE OF UN TOL. DIM		SCALE	WEIGHT (Kg).	BHEL PO REF.NO:	ITEM No.
CODE	C/M/F		N.T.S.	1571.000		
TITLE				CARD CODE	DRAWING No.	REV
FABRICATED UNEQUAL TEE ID350x60/OD323.9x48 SA182F91				U 01	3-80-301-32309	00

86976-666-08-3

ON DRAWING

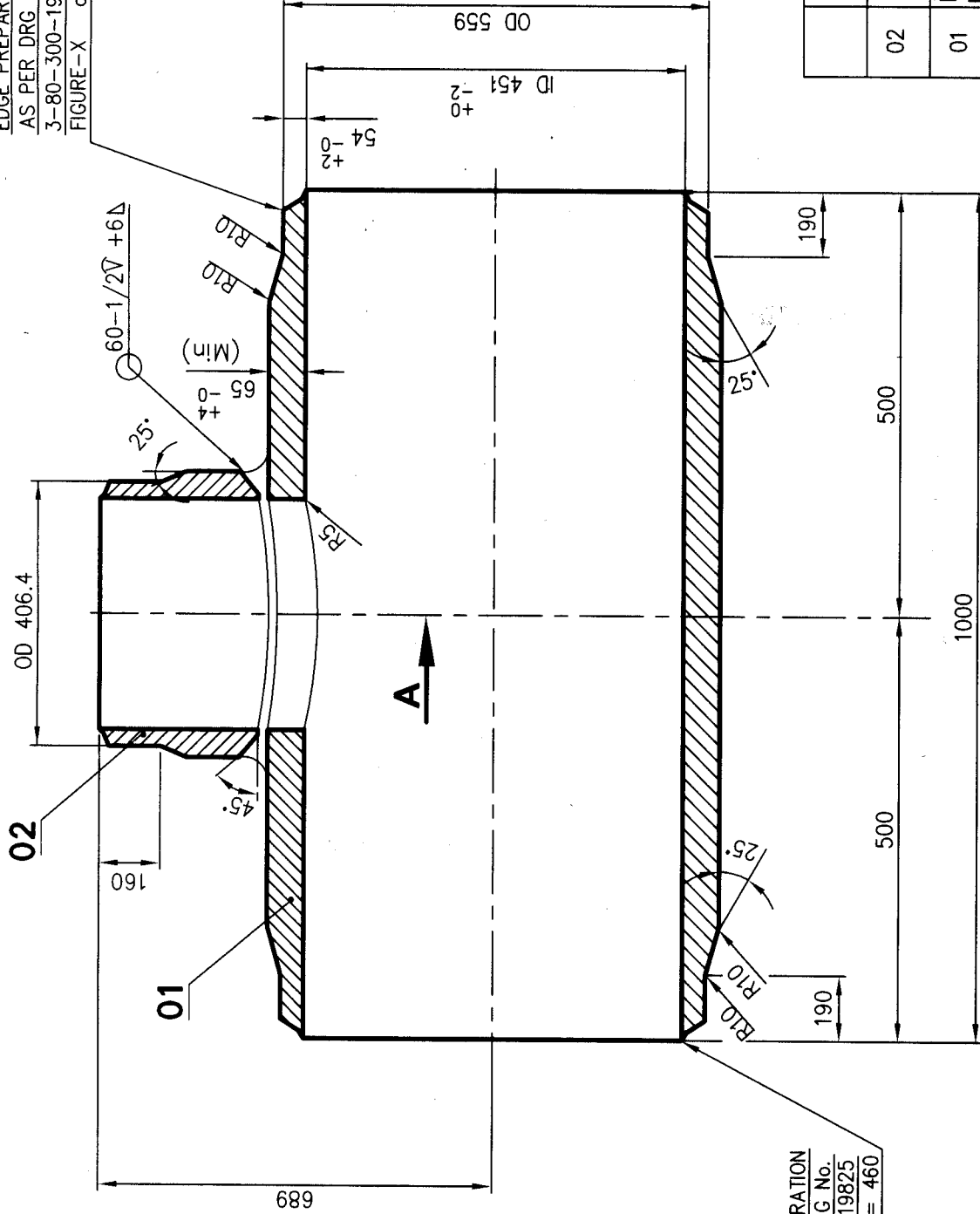


12.5/

NOTES :-

- DESIGN PRESSURE : 188.5 Kg/Sq.Cm (g)
- DESIGN TEMPERATURE : 540° C
- FOLLOW TDG : 108
- ELECTRODES TO BE USED ARE,
a) GTAW : ER90S-B9 (A)
b) SMAW : E9015-B9 (A)
- ELECTRODES GIVEN ABOVE ARE INDICATIVE. VENDOR TO GIVE WPS FOR BHEL'S APPROVAL.
- PIPE SA335P91(A) CAN ALSO BE USED IN PLACE OF SA182F91(A).

EDGE PREPARATION
AS PER DRG No.
3-80-300-19825
FIGURE-X d₁ = 460



EDGE PREPARATION
AS PER DRG No.
3-80-300-19825
FIGURE-X d₁ = 460

SECTION-AA

STANDARD

ITEM NO.	DESCRIPTION	DRAWING NO.	ITEM NO.	VAR NO.	MATERIAL CODE	UNIT WT.	QTY.
02	BRANCH NOZZLE L=447 ID 330.0 x Thk 60.0 Min	3-80-999-97698			SA 182 F91	A	265.400
01	BASE PIPE L = 1000 ID 451.0 x Thk 65.0 Min	3-80-999-97698			SA 182 F91	A	843.600

TYPE OF PRODUCT
OR NAME OF
CUSTOMER/PROJECT



BHARAT HEAVY ELECTRICALS LTD.,
PIPING CENTRE,
CHENNAI 600 017

NAME	SIGN	DATE	NO OF ITEMS
UBAITHULLAH	<i>Ubaithullah</i>	07.02.08	
R. ANANTH	<i>R. Ananth</i>	07.02.08	
S. JAYAKUMAR	<i>S. Jayakumar</i>	07.02.08	

DEPT.	GRADE OF UN TOL DIM C/M/F	SCALE	WEIGHT (Kg)	BHEL PO REF. NO.	ITEM No.
		N.T.S.	1109.000	3-80-301-23658/00	

TITLE	CARD CODE	DRAWING No.	REV
FABRICATED UNEQUAL TEE (OD559.0x54.0/OD406.4x38.0)	U 01	3-80-999-97698	00

SIZE A3