

PART LIST -WBS BOM

H.Material	WBS Element No	BOM St	Plant	Header Desc	Base Qty(EA)
03310700026-00	P-1043000400-33107	05	P001	FABRICATED CASING ASSEMBLY	1

Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drng No	Drng Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCLI008+HNK 40/56-3	03310700026-00	00	

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)	Drng no			Drng Rev			
Spec No	SRev	Matl.Std	Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from		
Engineering Remarks						Technology Remarks					
1	0001	33107003	23310700046-00	HALB	F30	CASING ENVELOPE WITH ROUNDED BOTTOMS					
			1.000	EA	19,400.000	23310700046-00			00		
						1	MA	x	06.12.2014		
2	0001	33107004	23310700045-00	HALB	F30	CASING ENVELOPE					
			1.000	EA	8,800.000	23310700045-00			00		
						1	MA	x	06.12.2014		
3	0001	33107005	HY1041898215	ZROH	F70	PLT BQ 63 (SA516 GR70)					
RECTANGLE :5,100.000 X1,850.000											
MM	2.000	9,332.158	KG	4,666.079							
HY10498-SA516GR70	01	SA516GR70				MA			06.12.2014		
3	0002	33107006	HY1041898215	ZROH	F70	PLT BQ 63 (SA516 GR70)					
SEMI-CIRCLE :D=300.000											
MM	6.000	104.874	KG	17.479							
HY10498-SA516GR70	01	SA516GR70				MA			06.12.2014		
3	0003	33107007	AA1012708039	ZROH	F70	CHANNEL 100X50 IS2062GRE250 QLTY-A					
LENGTH =1,350.000											
MM	18.000	223.560	KG	12.420							
AA10108	11					MA			06.12.2014		
2	0002	33107008	33310700081-00	HALB	F30	ROUNDED BOTTOM MACHINED					
			2.000	EA	5,266.000	33310700081-00			00		
						1	MA	x	06.12.2014		

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Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drq No	Drq Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3	03310700026-00	00	

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drq no			Drq Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
3	0001	33107009	TC9710593013	ZSUD	F	ROUNDED BOTTOM					
			2.000	EA	5,400.000	33310720005-00			00		
		TC32026-04	03				MA			06.12.2014	
1	0002	33107010	03310700024-00	HALB	F30	DMCL1008 - FAB.CASING - TB SIDE DETAILS					
			1.000	EA	2,810.000	03310700024-00			01		
						1	MA	x		06.12.2014	
2	0001	33107011	33310700075-00	HALB	F30	UPPER END COVER - TB & OTB SIDE					
			1.000	EA	770.000	33310700075-00			00		
						1	MA	x		06.12.2014	
3	0001	33107023	TC9416450030	ZSUD	F	FORGING HALF RING UPPER - DE & NDE SIDE					
			1.000	EA	2,125.000	43310720007-01			00		
		HY19364	02				MA			06.12.2014	
2	0002	33107013	33310701011-00	HALB	E	BEARING COVER - TB SIDE					
			1.000	EA	235.000	33310701011-00			00		
		HY19364	02			1	MA			06.12.2014	
3	0001	33107014	TC9416450065	ZSUD	F	FORGING HALF RING BRG UPPER - NDE SIDE					
			1.000	EA	625.000	43310720007-04			00		
		HY19364	02				MA			06.12.2014	

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Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drng No	Drng Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3	03310700026-00	00	

Lv	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drng no			Drng Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
2	0003	33107015	33310700076-00	HALB	F30	LOWER END COVER - TB SIDE					
			1.000	EA	1,800.000	33310700076-00			00		
						1	MA	x		06.12.2014	
3	0001	33107016	TC9416450049	ZSUD	F	FORGING HALF RING LOWER - NDE SIDE					
			1.000	EA	3,450.000	43310720007-02			00		
		HY19364	02				MA			06.12.2014	
2	0004	33107017	TC92024-05	HALB	F30	GAS PLUG DIA 1 1/4"					
			2.000	EA	0.270	TC92024-05			01		
						1	MA	x		06.12.2014	
3	0001	33107029	AA1070221180	ZROH	F70	ROUND 50 SS H&T GR.X20CR13					
LENGTH =55.000											
MM	2.000	1.728	KG	1.000							
	AA10721	07		A1			MA			06.12.2014	
2	0005	33107019	TC92024-06	HALB	F30	PLUG DIA 1 1/2 " GAS					
			4.000	EA	0.420	TC92024-06			01		
						1	MA	x		06.12.2014	
3	0001	33107031	AA1070221201	ZROH	F70	ROUND 63 SS H&T GR.X20CR13					
LENGTH =45.000											
MM	4.000	4.488	KG	1.122							
	AA10721	07		A1			MA			06.12.2014	

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Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drg No	Drg Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3	03310700026-00	00	

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drg no			Drg Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
1	0005	33107021	03310700025-00	HALB	F30	DMCL1008 - FAB.CASING - OTB SIDE DETAILS					
			1.000		EA	2,180.000	03310700025-00			01	
							1	MA	x	06.12.2014	
2	0001	33107022	33310700075-00	HALB	F30	UPPER END COVER - TB & OTB SIDE					
			1.000		EA	770.000	33310700075-00			00	
							1	MA	x	06.12.2014	
3	0001	33107023	TC9416450030	ZSUD	F	FORGING HALF RING UPPER - DE & NDE SIDE					
			1.000		EA	2,125.000	43310720007-01			00	
		HY19364	02					MA		06.12.2014	
2	0002	33107024	33310701002-00	HALB	E	BEARING COVER - OTB SIDE					
			1.000		EA	104.000	33310701002-00			00	
		HY19364	02				1	MA		06.12.2014	
3	0001	33107025	TC9416450073	ZSUD	F	FORGING HALF RING BRG UPPER - DE SIDE					
			1.000		EA	280.000	43310720007-05			00	
		HY19364	02					MA		06.12.2014	
2	0003	33107026	33310700078-00	HALB	F30	LOWER END COVER - OTB SIDE					
			1.000		EA	1,300.000	33310700078-00			00	
							1	MA	x	06.12.2014	

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03310700026-00	P-1043000400-33107	05	P001	FABRICATED CASING ASSEMBLY	1

Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drq No	Drq Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3	03310700026-00	00	

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drq no			Drq Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
3	0001	33107027	TC9416450057	ZSUD	F	FORGING HALF RING LOWER - DE SIDE					
			1.000	EA		3,050.000	43310720007-03			00	
		HY19364	02					MA		06.12.2014	
2	0004	33107028	TC92024-05	HALB	F30	GAS PLUG DIA 1 1/4"					
			2.000	EA		0.270	TC92024-05			01	
								1	MA	x	06.12.2014
3	0001	33107029	AA1070221180	ZROH	F70	ROUND 50 SS H&T GR.X20CR13					
			LENGTH =55.000								
MM	2.000	1.728	KG	1.000							
		AA10721	07		A1			MA		06.12.2014	
2	0005	33107030	TC92024-06	HALB	F30	PLUG DIA 1 1/2 " GAS					
			4.000	EA		0.420	TC92024-06			01	
								1	MA	x	06.12.2014
3	0001	33107031	AA1070221201	ZROH	F70	ROUND 63 SS H&T GR.X20CR13					
			LENGTH =45.000								
MM	4.000	4.488	KG	1.122							
		AA10721	07		A1			MA		06.12.2014	
1	0009	33107032	13310700022-00	HALB	F30	PARTING PLANE - LOWER - DMCL1008					
			2.000	EA		2,665.000	13310700022-00			00	
								1	MA	x	06.12.2014

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Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drg No	Drg Rev	Part Number
ESSAR PROJECTS (I) LIMITED	Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3	03310700026-00	00	

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drg no			Drg Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
2	0001	33107033	TC9216246014	ZSUD	F	PARTING PLANE LOWER					
			2.000	EA	2,780.000	13310710002-00			02		
		HY19562-NA	02				MA			06.12.2014	
1	0010	33107034	13310700021-00	HALB	F30	PARTING PLANE - UPPER - DMCL1008					
			2.000	EA	2,385.000	13310700021-00			00		
						1	MA	x		06.12.2014	
2	0001	33107035	TC9216246006	ZSUD	F	PARTING PLANE UPPER					
			2.000	EA	2,500.000	13310710001-00			02		
		HY19562-NA	02				MA			06.12.2014	
1	0011	33107036	13310700019-00	HALB	F30	SUCTION NOZZLE - DIA 44 - 300#					
			2.000	EA	1,870.000	13310700019-00			00		
						1	MA	x		06.12.2014	
2	0001	33107037	TC9416415103	ZSUD	F	NOZZLE FLANGE FORG DIA 44"-300# (10KSC)					
			2.000	EA	529.000	TC32056-16			01		
		HY19364	02				MA			06.12.2014	
2	0002	33107038	33310700079-00	HALB	F30	HALF PIPE FOR DIA 44" NOZZLE					
			4.000	EA	590.000	33310700079-00			00		
						1	MA	x		06.12.2014	

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H.Material WBS Element No BOM Plant Header Desc Base Qty(EA)
 03310700026-00 P-1043000400-33107 05 P001 FABRICATED CASING ASSEMBLY 1

Req Qt Des No Net Weight Created by Created on Changed on
 1 43,020.000 TCCCM03 06.12.2014 15.12.2014

Customer Name Project Name Drg No Drg Rev Part Number
 ESSAR PROJECTS (I) LIMITED Turbo blower for SAIL RSP-DMCL1008+HNK 40/56-3 03310700026-00 00 00

Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)	Drg no			Drg Rev			
Spec No	SRev	Matl.Std	Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from		
Engineering Remarks						Technology Remarks					
3	0001	33107039	HY1041870159	ZROH	F70	PLT BQ 25 MM (SA516 GR70)					
RECTANGLE :1,800.000 X1,860.000											
MM	4.000	2,628.180	KG	657.045							
HY10470-SA516GR70	09	SA516GR70				MA			06.12.2014		
2	0003	33107040	43310700110-00	HALB	F30	RIB FOR DIA 44" NOZZLE					
		2.000	EA	155.000	43310700110-00	00					
						1	MA	x	06.12.2014		
3	0001	33107041	HY1041870159	ZROH	F70	PLT BQ 25 MM (SA516 GR70)					
RECTANGLE :1,100.000 X1,250.000											
MM	2.000	539.688	KG	264.447							
HY10470-SA516GR70	09	SA516GR70				MA			06.12.2014		
1	0012	33107042	13310700020-00	HALB	F30	DISCHARGE NOZZLE 38" 300#					
		1.000	EA	1,150.000	13310700020-00	00					
						1	MA	x	06.12.2014		
2	0001	33107043	TC9416415090	ZSUD	F	NOZZLE FLANGE FORG DIA 38"-300# (10KSC)					
		1.000	EA	451.000	TC32056-14	01					
		HY19364	02			MA			06.12.2014		
2	0002	33107044	TC9216242299	ZSUD	F	DICHARGE NOZZLE CASTING DIA 38" 300 CL					
		1.000	EA	700.000	33310710001-00	00					
		HY19562-NA	02			MA			06.12.2014		

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Customer Name	Project Name	Drng No	Drng Rev	Part Number
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Ly	Pos No	Part No	Item Material No	Mattyp	SPK	Description					
RM SIZE											
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drng no			Drng Rev		
Spec No	SRev	Matl.Std		Insp agency	Des No	Bas eqt	DU	Ph	Spr Ind	Valid from	
Engineering Remarks						Technology Remarks					
1	0013	33107045	43310700111-00	HALB	F30	INLET RIB ON SUCTION SIDE					
			2.000	EA	110.000	43310700111-00			00		
						1	MA	x		06.12.2014	
2	0001	33107046	HY1041870183	ZROH	F70	PLT BQ 36 (SA516 GR70)					
RECTANGLE :800.000 X1,000.000											
MM	2.000	452.160	KG	192.168							
HY10470-SA516GR70	09	SA516GR70					MA			06.12.2014	
1	0018	33107047	43310700112-00	HALB	F30	GUIDE BLOCK - SUCTION SIDE					
			2.000	EA	34.000	43310700112-00			00		
						1	MA	x		06.12.2014	
2	0001	33107048	HY1041898231	ZROH	F70	PLT BQ 80 (SA516 GR70)					
SQUARE= 300.000 X 300.000											
MM	2.000	113.040	KG	56.520							
HY10498-SA516GR70	01	SA516GR70					MA			06.12.2014	
1	0020	33107049	33310700082-00	HALB	F30	HALF RING FOR COUNTER CASING FIXING					
			4.000	EA	3,000.000	33310700082-00			00		
						1	MA	x		06.12.2014	
2	0001	33107050	43310700113-00	HALB	F30	HALF RING FOR COUNTER CASING FIXING					
			4.000	EA	1,410.000	43310700113-00			00		
						1	MA	x		06.12.2014	

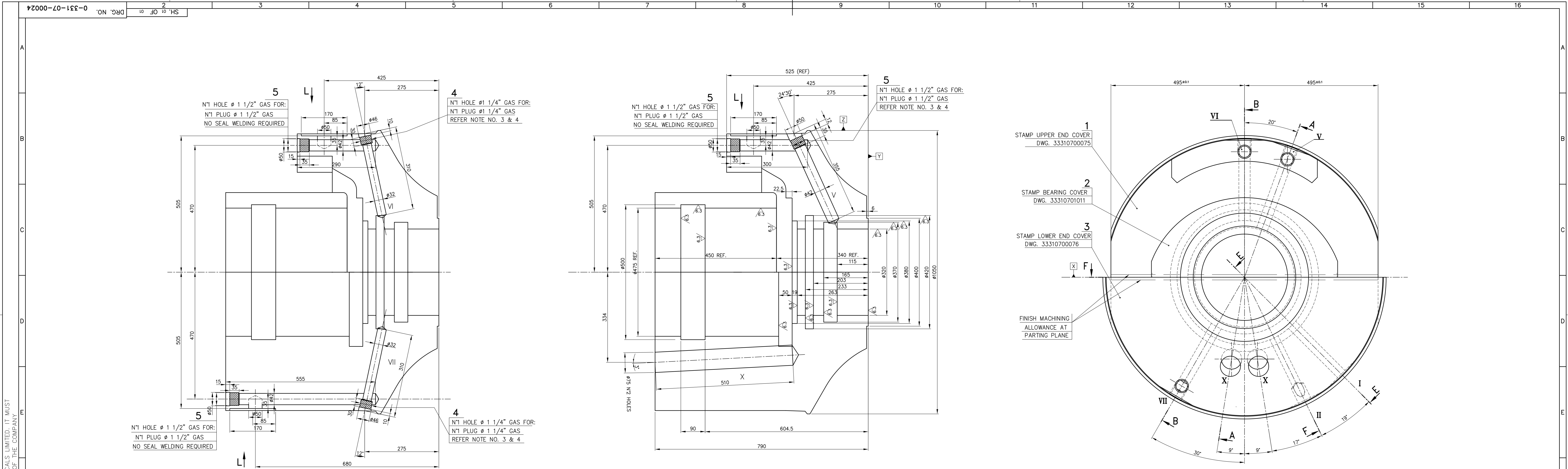
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H.Material	WBS Element No	BOM St	Plant	Header Desc	Base Qty(EA)
03310700026-00	P-1043000400-33107	05	P001	FABRICATED CASING ASSEMBLY	1

Req Qt	Des No	Net Weight	Created by	Created on	Changed on
1		43,020.000	TCCCM03	06.12.2014	15.12.2014

Customer Name	Project Name	Drg No	Drg Rev	Part Number
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Lv	Pos No	Part No	Item Material No	Matl typ	SPK	Description
RM SIZE						
RMS unit	RM pieces	Qty in MU	Qty Unit	Net Wt(kg)		Drg no
Spec No		SRev	Matl.Std	Insp agency	Des No	Bas eqt DU Ph Spr Ind Valid from
Engineering Remarks				Technology Remarks		
3	0001	33107055	HY1041898231	ZROH	F70	PLT BQ 80 (SA516 GR70)
HALF RING: D =3,020.000 /1,860.000 ,PP ALW=15.000						
MM	4.000	5,671.572	KG	1,417.893		
HY10498-SA516GR70		01	SA516GR70			MA x 06.12.2014
REINFORCEMENT PLATE						
2	0002	33107052	33310700082-00P2	HALB	F30	
48.000 EA 48.000 33310700082-00 00						
1 MA x 06.12.2014						
3	0001	33107053	HY1041870175	ZROH	F70	PLT BQ 32 MM (SA516 GR70)
RECTANGLE :425.000 X160.000						
MM	48.000	819.936	KG	15.637		
HY10470-SA516GR70		09	SA516GR70			MA x 06.12.2014
2	0003	33107054	43310700113-00	HALB	F30	HALF RING FOR COUNTER CASING FIXING
4.000 EA 1,410.000 43310700113-00 00						
1 MA x 06.12.2014						
3	0001	33107055	HY1041898231	ZROH	F70	PLT BQ 80 (SA516 GR70)
HALF RING: D =3,020.000 /1,860.000 ,PP ALW=15.000						
MM	4.000	5,671.572	KG	1,417.893		
HY10498-SA516GR70		01	SA516GR70			MA x 06.12.2014

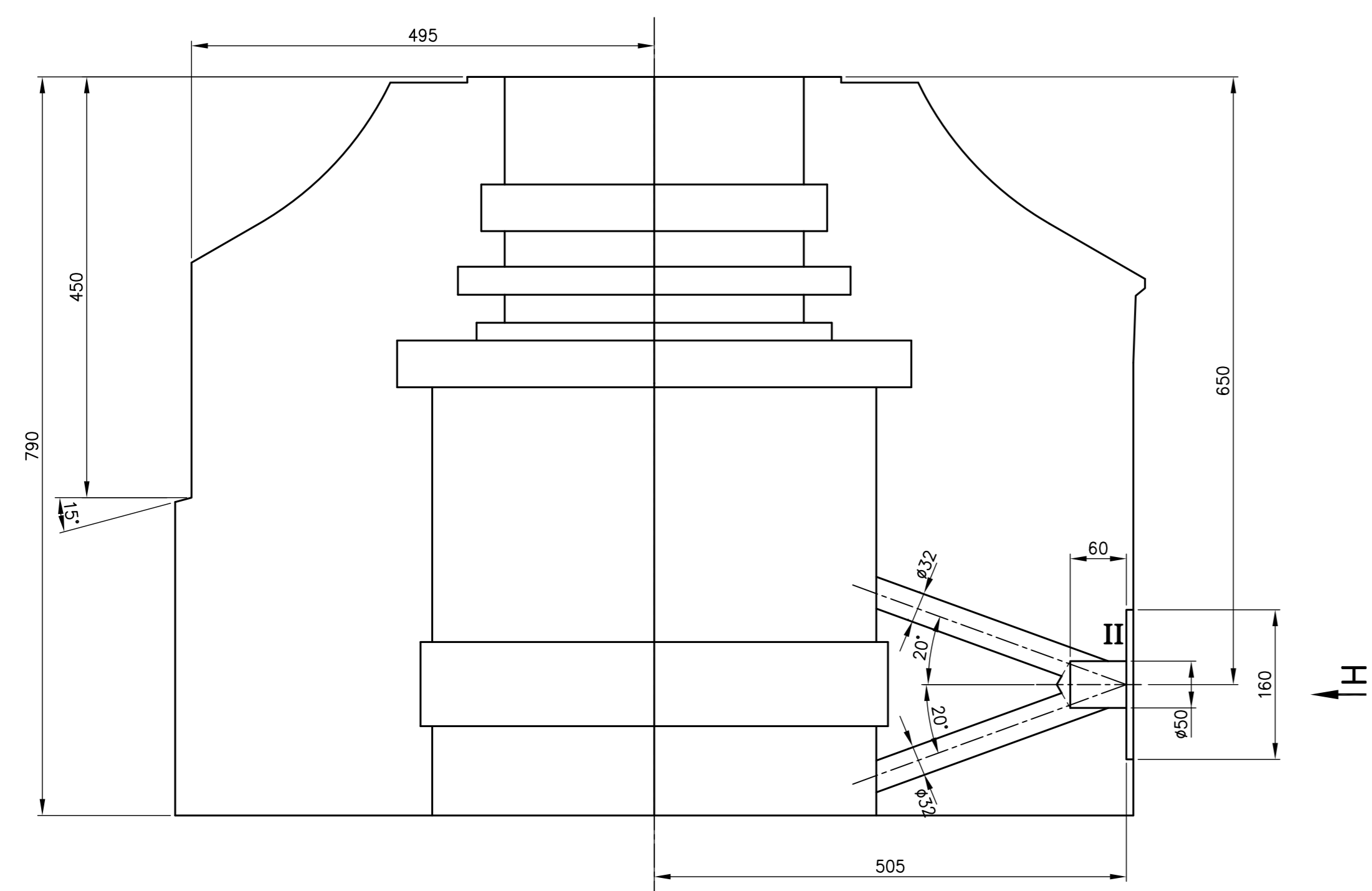


SECTION-B-B

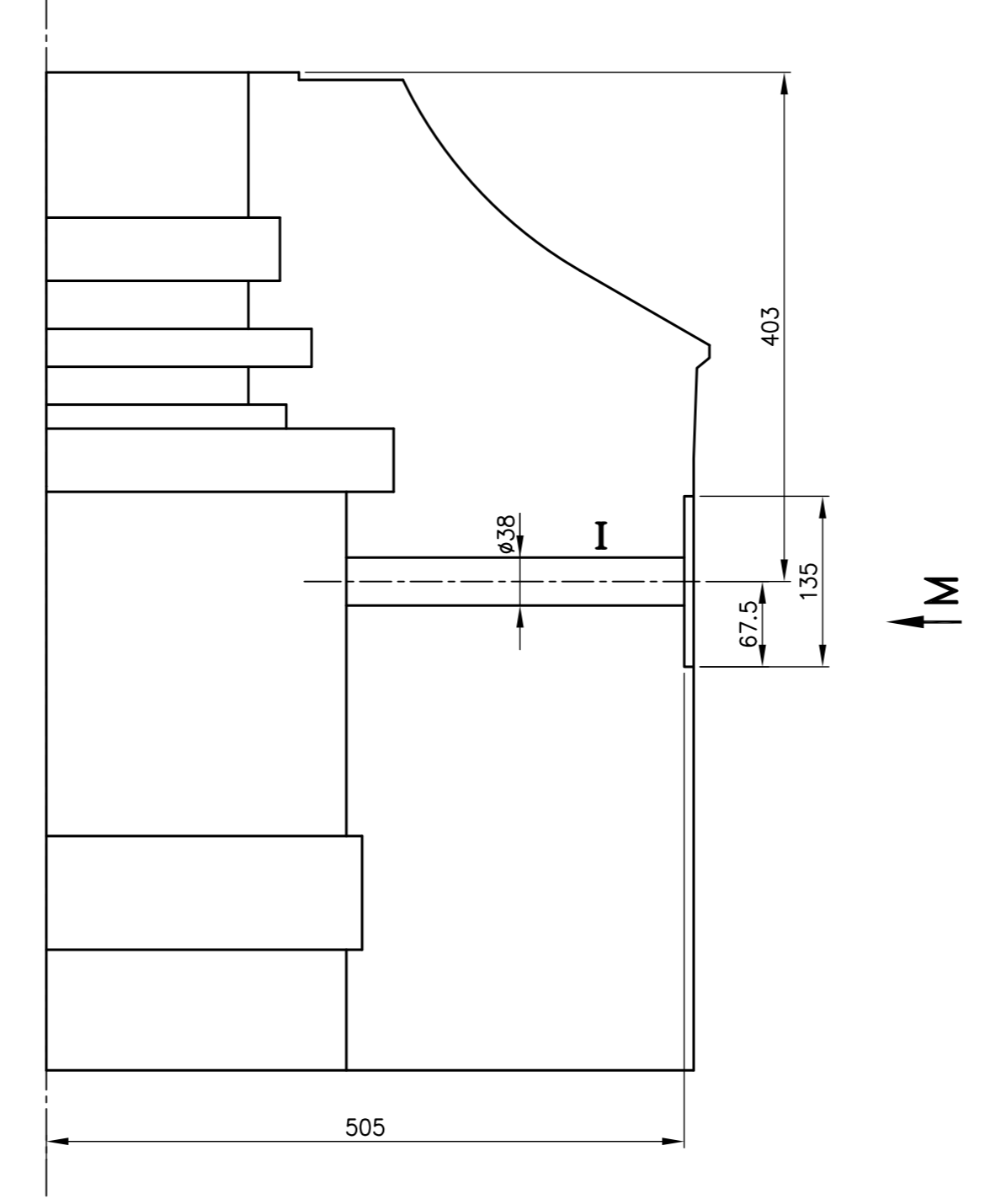
SECTION-A-A

- 1 STAMP UPPER END COVER
DWG. 33310700075
- 2 STAMP BEARING COVER
DWG. 33310701011
- 3 STAMP LOWER END COVER
DWG. 33310700076
- FINISH MACHINING ALLOWANCE AT PARTING PLANE

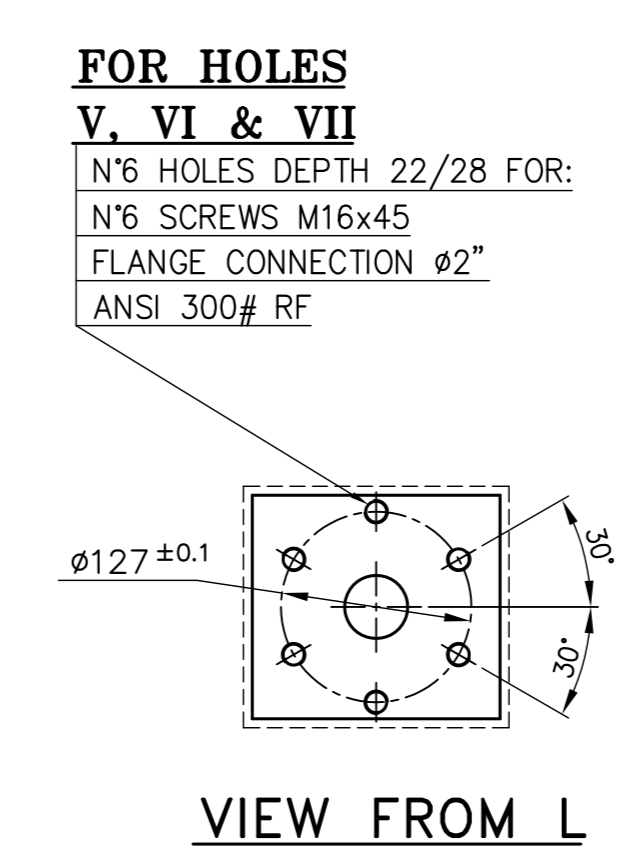
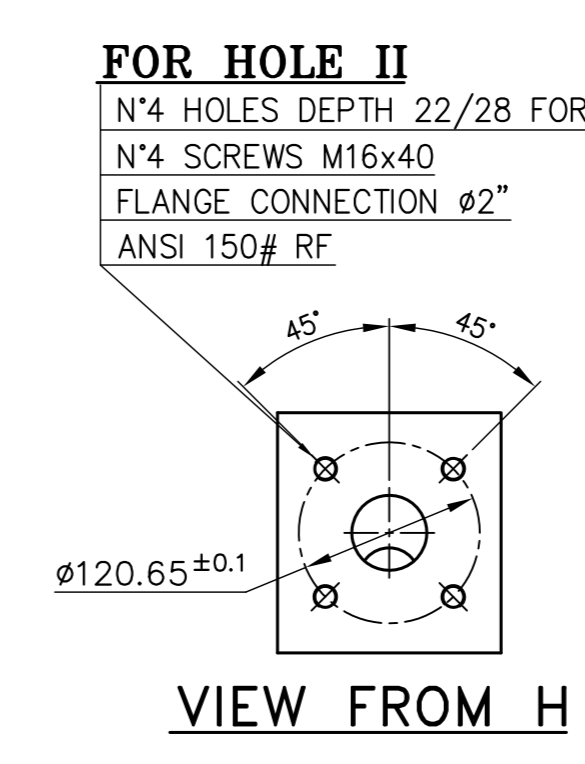
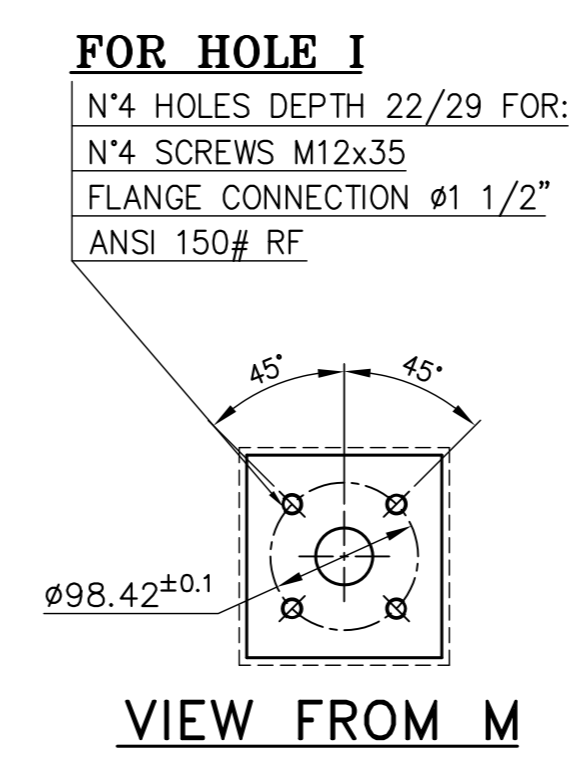
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 GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HYD30261



SECTION-F-F



SECTION-E-E



NOTES AND DOCUMENTS MENTIONED:

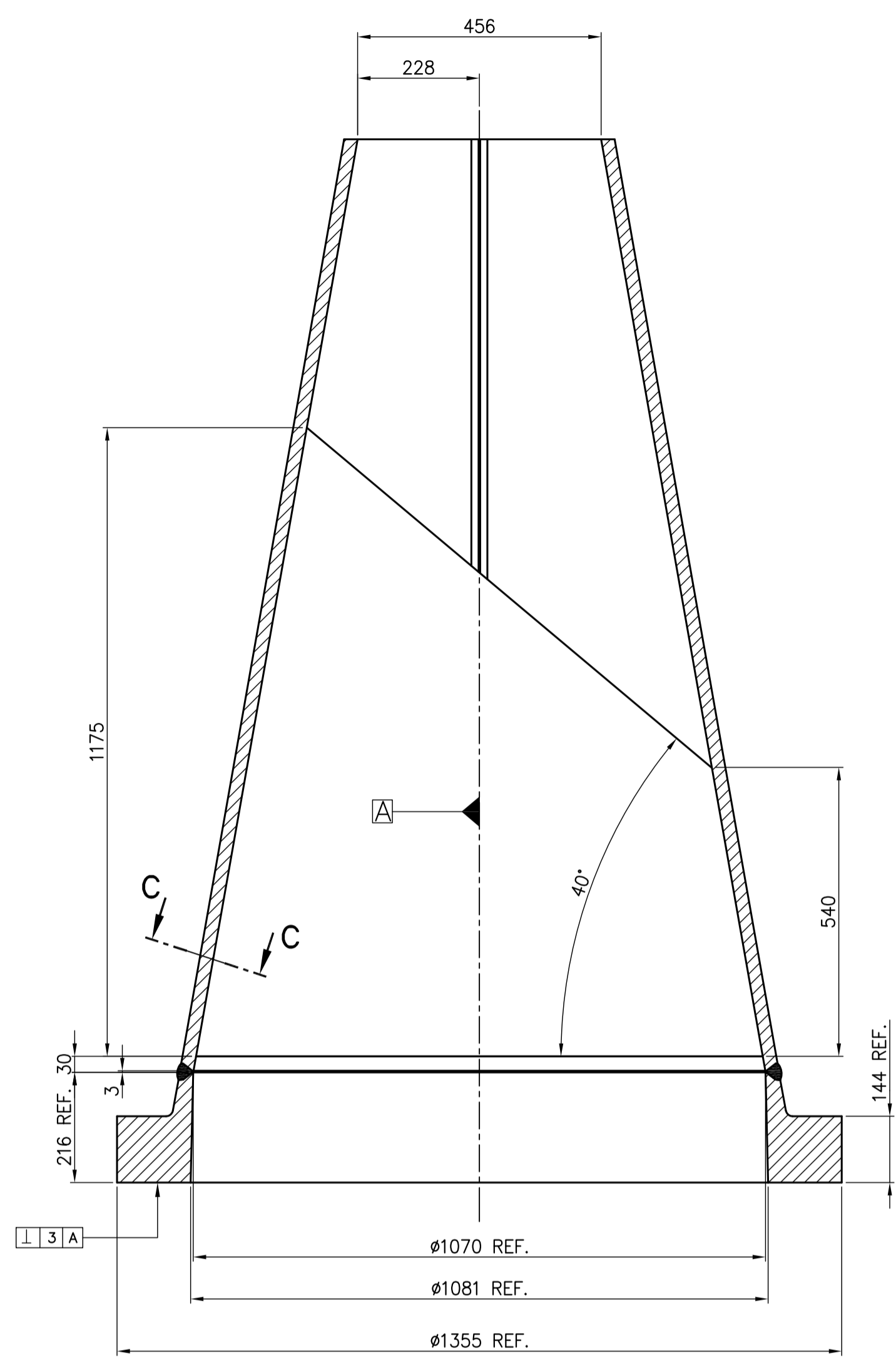
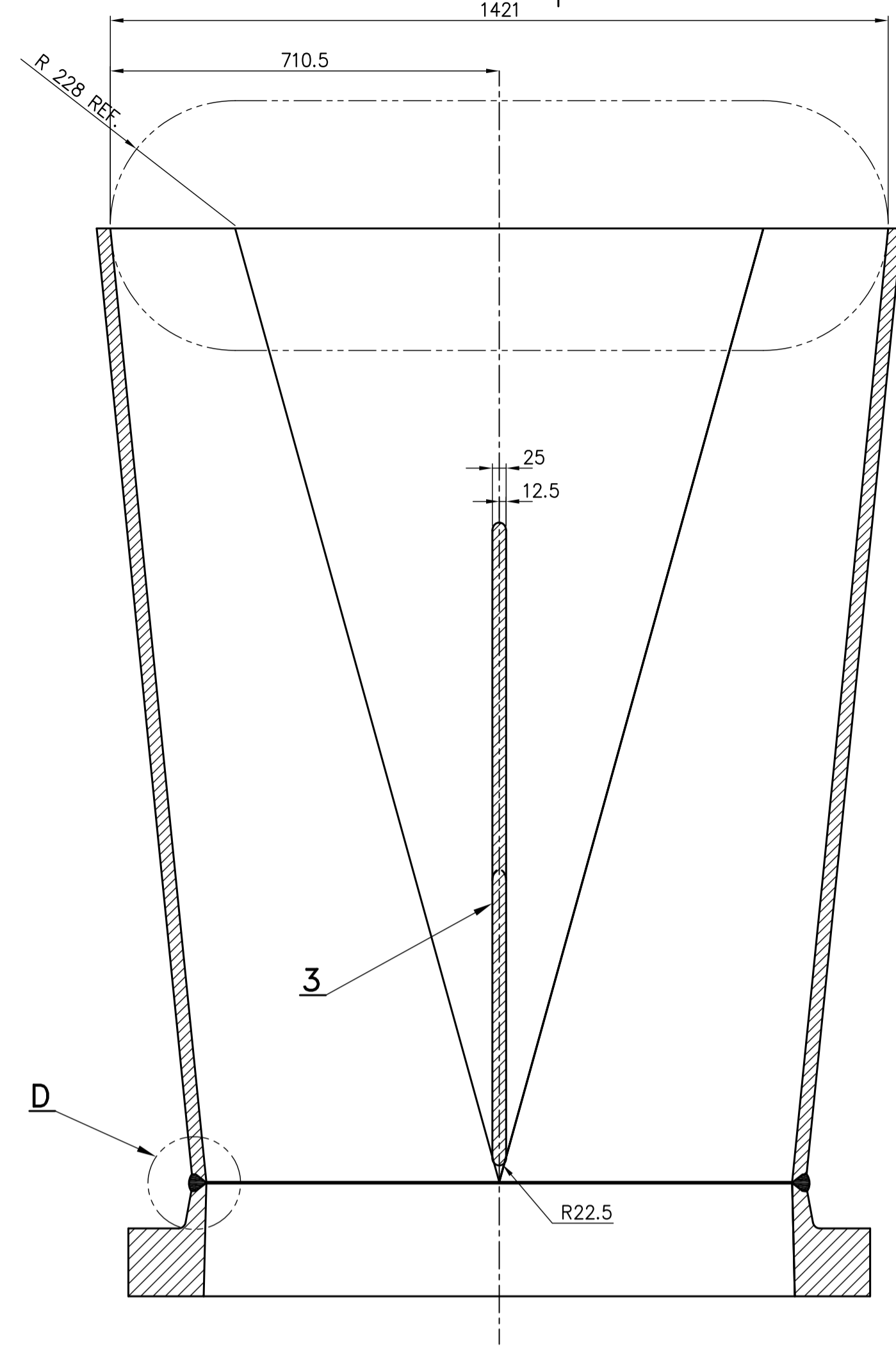
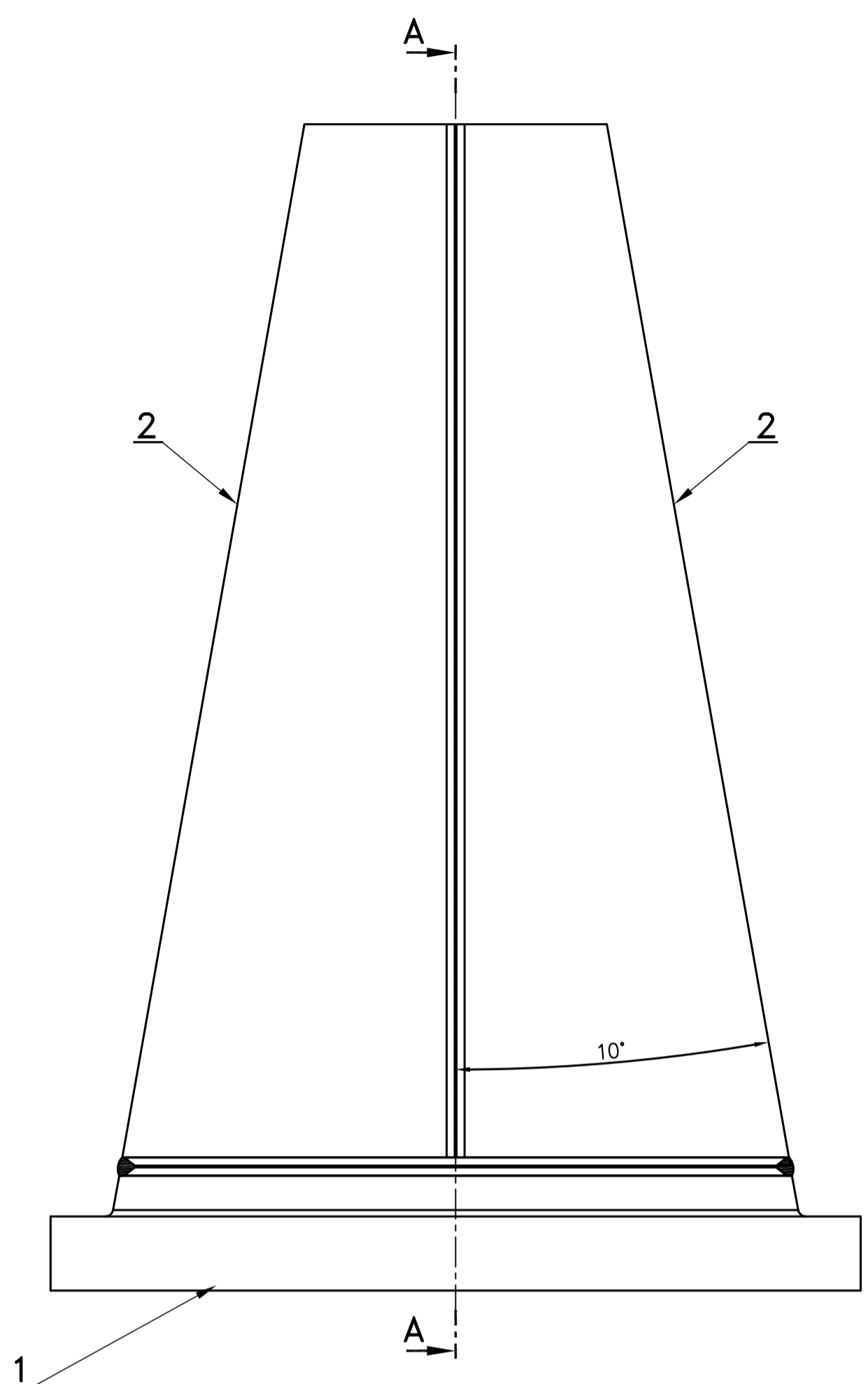
1. TOLERANCES OF POSITION ON ALL THE HOLES $\oplus \ominus \delta 1 \quad X \quad Y \quad Z$
2. $6.3 \sqrt{R}$ ROUGHNESS MACHINING FOR ALL THE HOLES
3. FILL WELDING BEFORE EXECUTING THE HORIZONTAL DRILLING
4. EXECUTE HOLES AFTER WELDING PLUG INDICATED WITH HOLES

CAUTION
 DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10 mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.

REFERENCE DRAWINGS:-
 0 331 07 00025 - FABRICATED CASING (OTB SIDE DETAILS)
 3 331 07 00075 - UPPER END COVER (TB & OTB SIDE)
 3 331 07 00076 - LOWER END COVER (TB SIDE)
 3 331 07 01011 - BEARING COVER (TB SIDE)

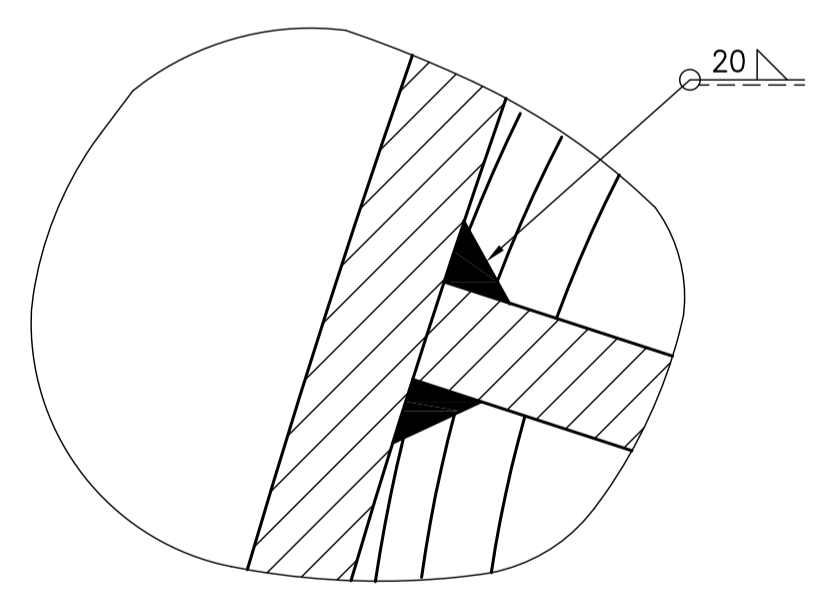
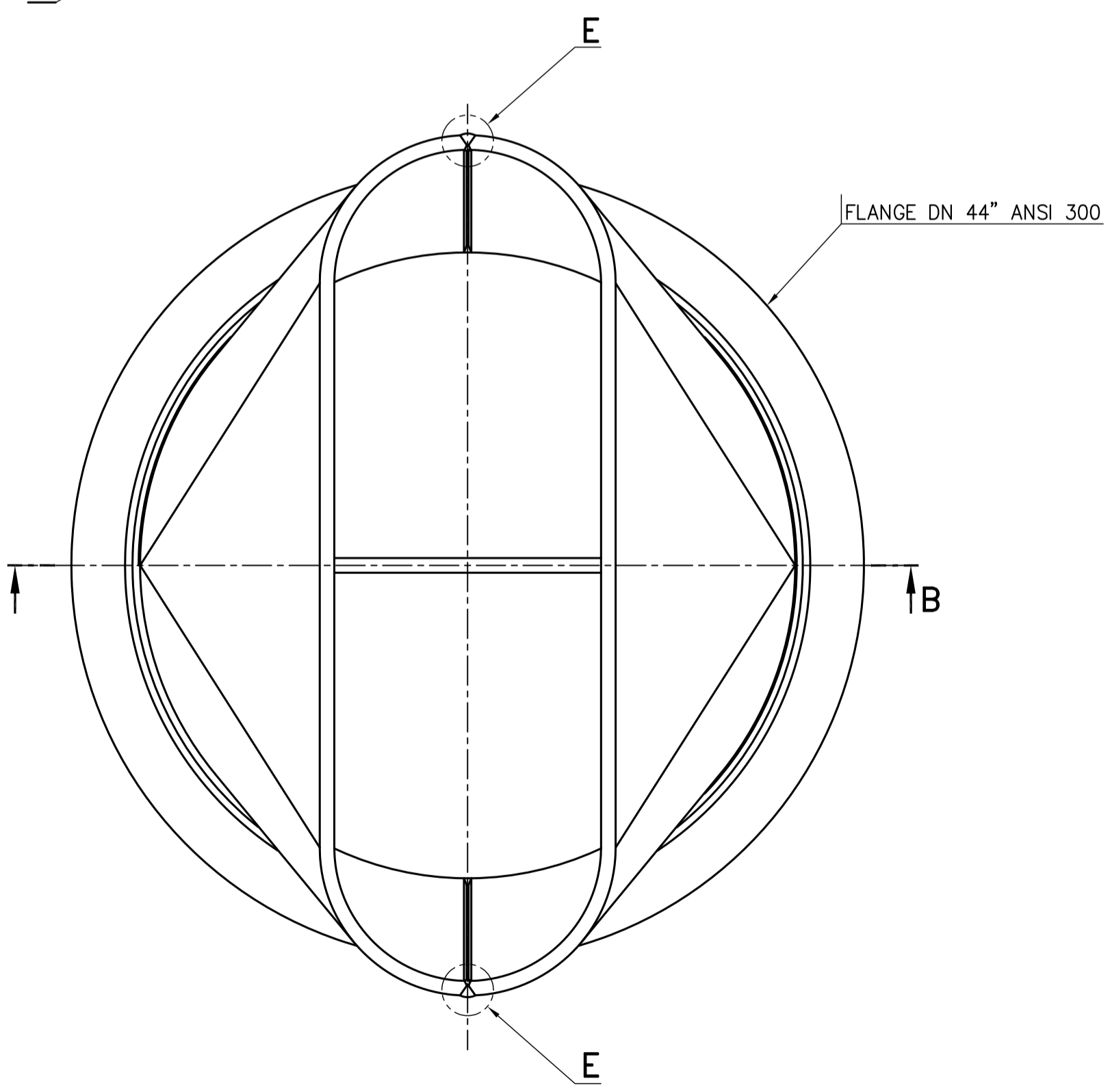
DESCRIPTION	CONNECTION NO.	CONNECTION
OIL INLET TO JOURNAL BEARING	I	1 1/2"-150# HOLE DIA. 38
OIL INLET TO THRUST BEARING	II	2"-150# HOLE DIA. 50-32
INSTRUMENT AIR INJECTION	V	2"-300# HOLE DIA. 50-42
VENT	VI	2"-300# HOLE DIA. 50-42-32
DRAIN	VII	2"-300# HOLE DIA. 50-42-32
OIL DRAIN	X	N° 2 HOLE DIA. 75

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008	
DEPT. CODE	UNITS. DIMS.	SCALE	WEIGHT (KG)
091214	Ø/1/1	N.T.S	2775
DRN. REETA	CHD. RAGHU	APPD. SDR	REV. DATE
25.10.14	25.10.14	27.10.14	NO. OF ITEMS
			NO. OF SHEETS
TITLE		DRAWING NO.	
FABRICATED CASING (TB SIDE DETAILS)		0-331-07-00024 01	
SHT. No 01		I. NO. OF SHT. 01	

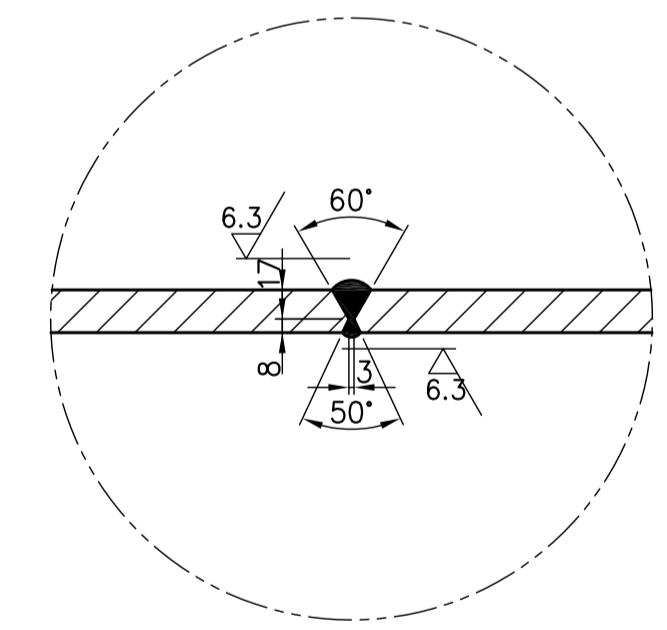


SECTION A-A

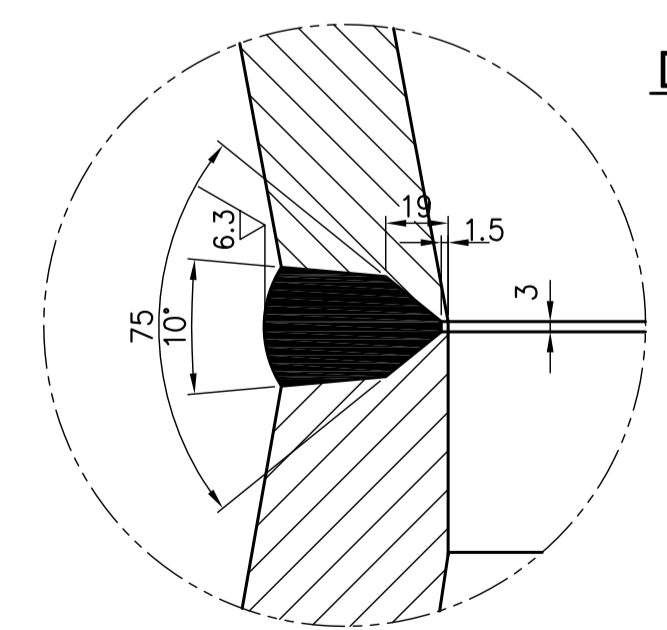
SECTION B-B



SECTION C-C



DETAIL-E



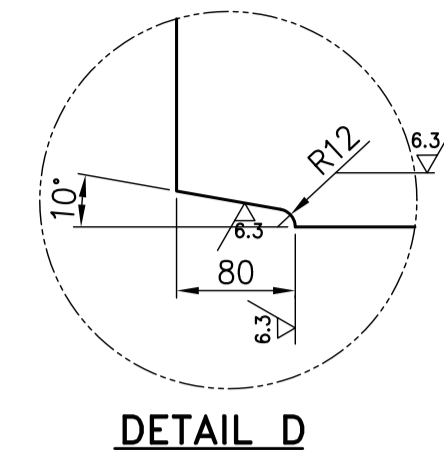
DETAIL-D

NOTES AND DOCUMENTS MENTIONED:

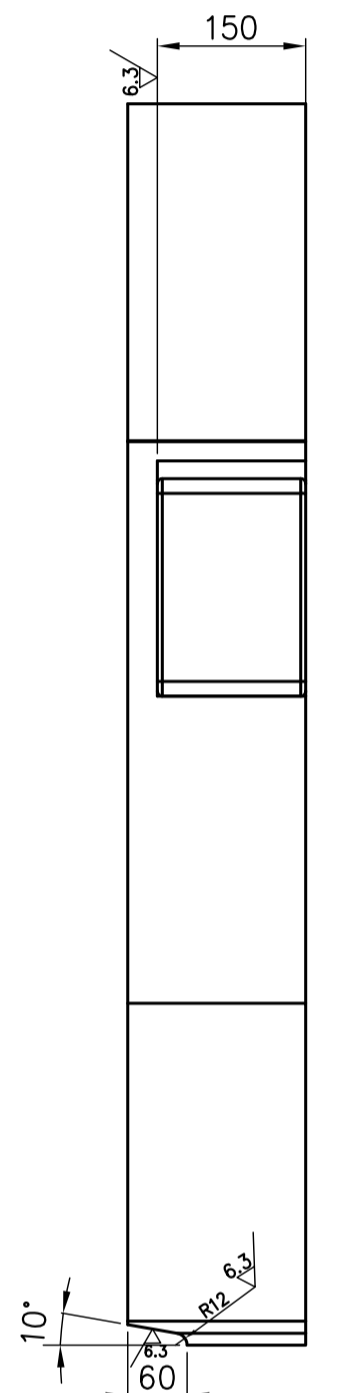
1. THE VALUES OF THE GEOMETRICAL TOLERANCES ARE THE MAX READING ON THE GAUGE (F.I.R.).
2. CARRY OUT WELDING AS PER WPS - WE001.
3. SEQUENCE OF WELDING SHALL BE FOLLOWED AS SPECIFIED IN TECHNOLOGICAL PROCESS.
4. USE ONLY QUALIFIED WELDERS.
5. ALL WELDS SHALL BE CHECKED FOR 100% RADIOGRAPHY AS PER TC 72062.
6. WHEREEVER 100% RADIOGRAPHY IS NOT FEASIBLE ALL WELDS SHALL BE SUBJECTED TO 100% UT AS PER TC 72063.
7. 100% MPI AS PER TC 72060.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAI RSP DMCL 1008			
DEPT. CODE	UNTO. DIMS. GR. G/M/F	SCALE	WEIGHT (KG)	REF. TO GENP. DRG.	ITEM NO. NO. OF ITEMS
420		NTS	1870	-	-N.A.-
TITLE		CARD CODE	DRAWING NO.		
SUCTION NOZZLE		N.A.	1-331-07-00019 00		
		SHT. No 01		NO. OF SHT. 01	

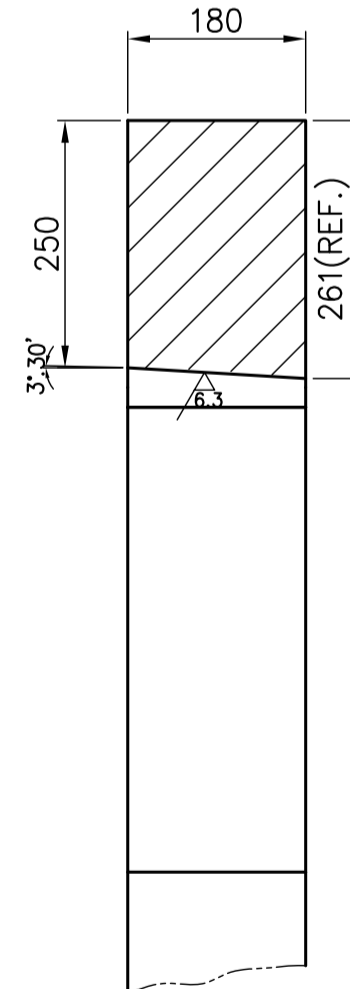
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.
 INVENTORY NO. JCS
 SIGN. AND DATE
 REF. DRG. NO.
 COMPUTER FILE NAME
 GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



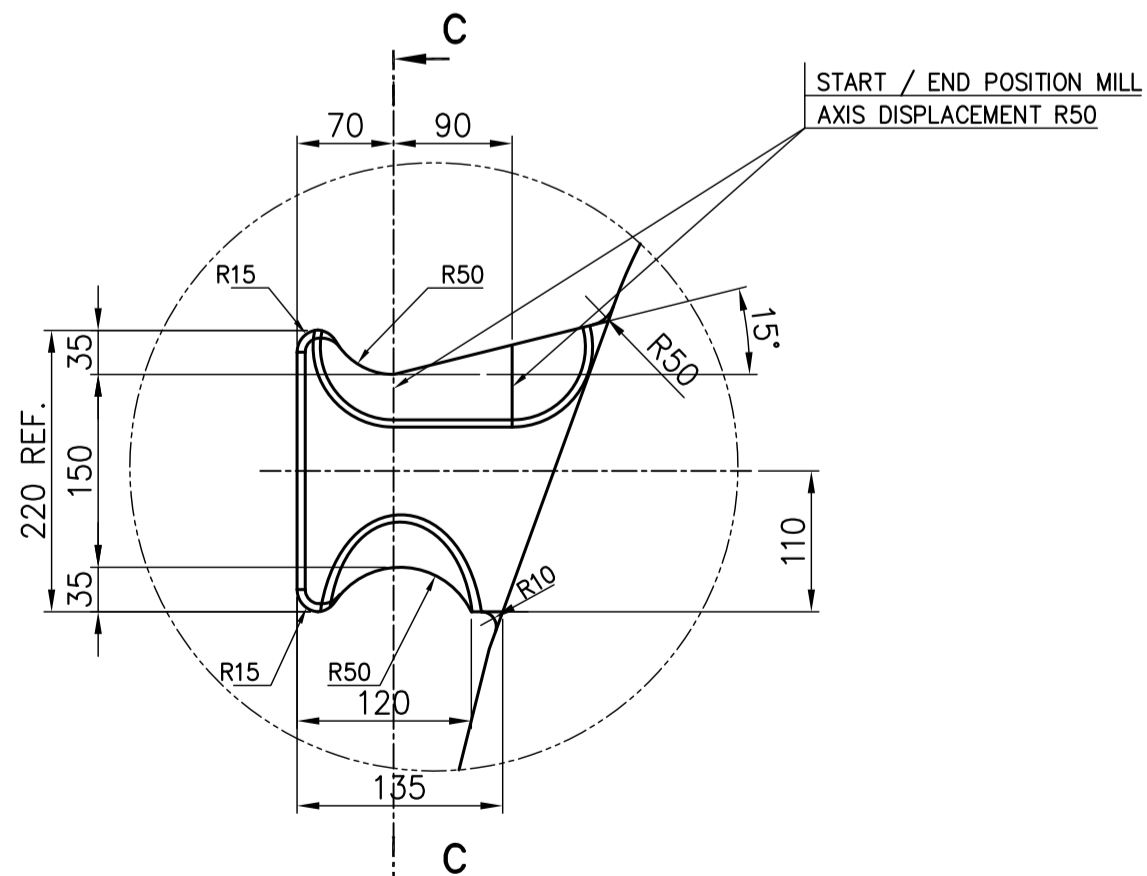
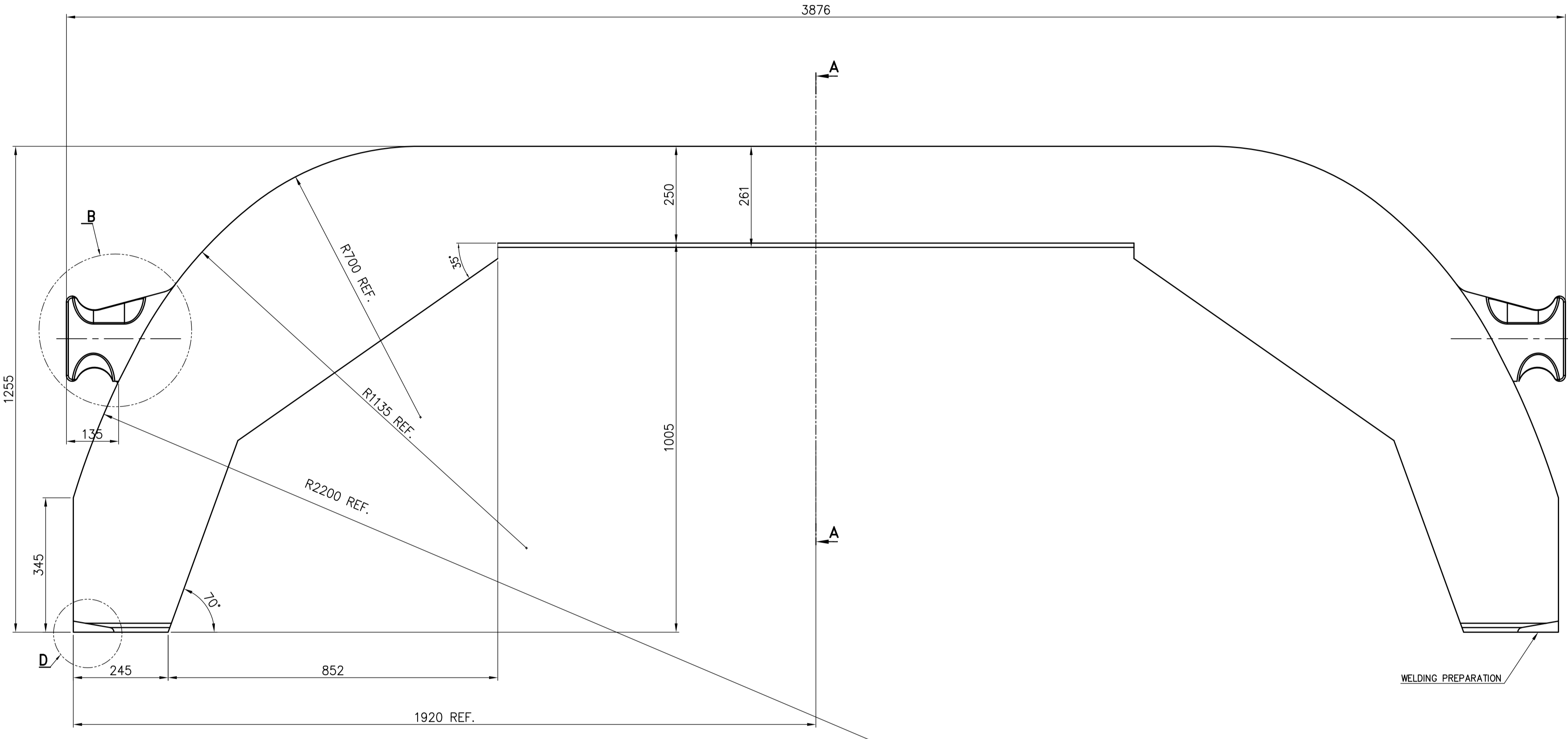
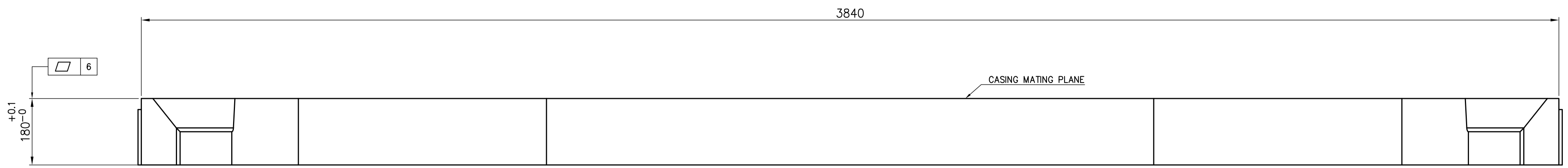
DETAIL D



SECTION A-A



SECTION C-C



DETAIL-B

- NOTES AND DOCUMENTS RECALLED:**
- CONTROL WITH DYE-PENETRANTS THE WELDING PREPARATIONS MACHINING ACCORDING TO TC72061 (ITN02192) ACC. CLASS 3
 - THE PARTING PLANE IS SYMMETRIC REGARD TO THE AXIS IDENTIFIED FROM LINE OF SECTION A-A

CASTING DRAWING NUMBER : 1331071001

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
DEPT. COMPR CODE	UNTO. DIMS. GR. G/M/F	SCALE NTS	WEIGHT (KG) 2385	REF. TO GENP. DRG.	ITEM NO. NO. OF ITEMS
TITLE		DRAWING NO.		REV.	
PARTING PLANE MACHINING UPPER		1-331-07-00021		00	
SHT. No 01		NO. OF SHT. 01			

THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

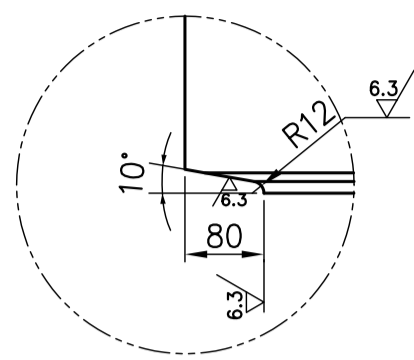
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

REV.	DATE	CHD/APPD	ZONE	REV.	DATE	CHD/APPD	ZONE	REV.	DATE	CHD/APPD	ZONE	REV.	DATE	CHD/APPD	ZONE	REV.	DATE	CHD/APPD	ZONE	REV.	DATE	CHD/APPD	ZONE

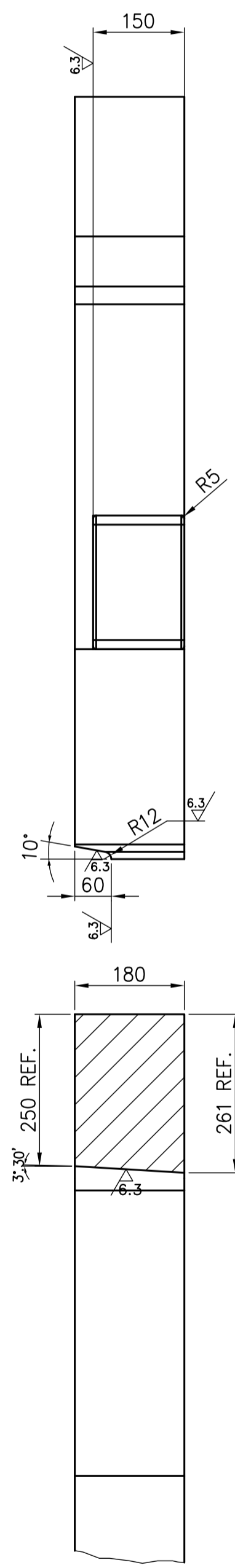
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

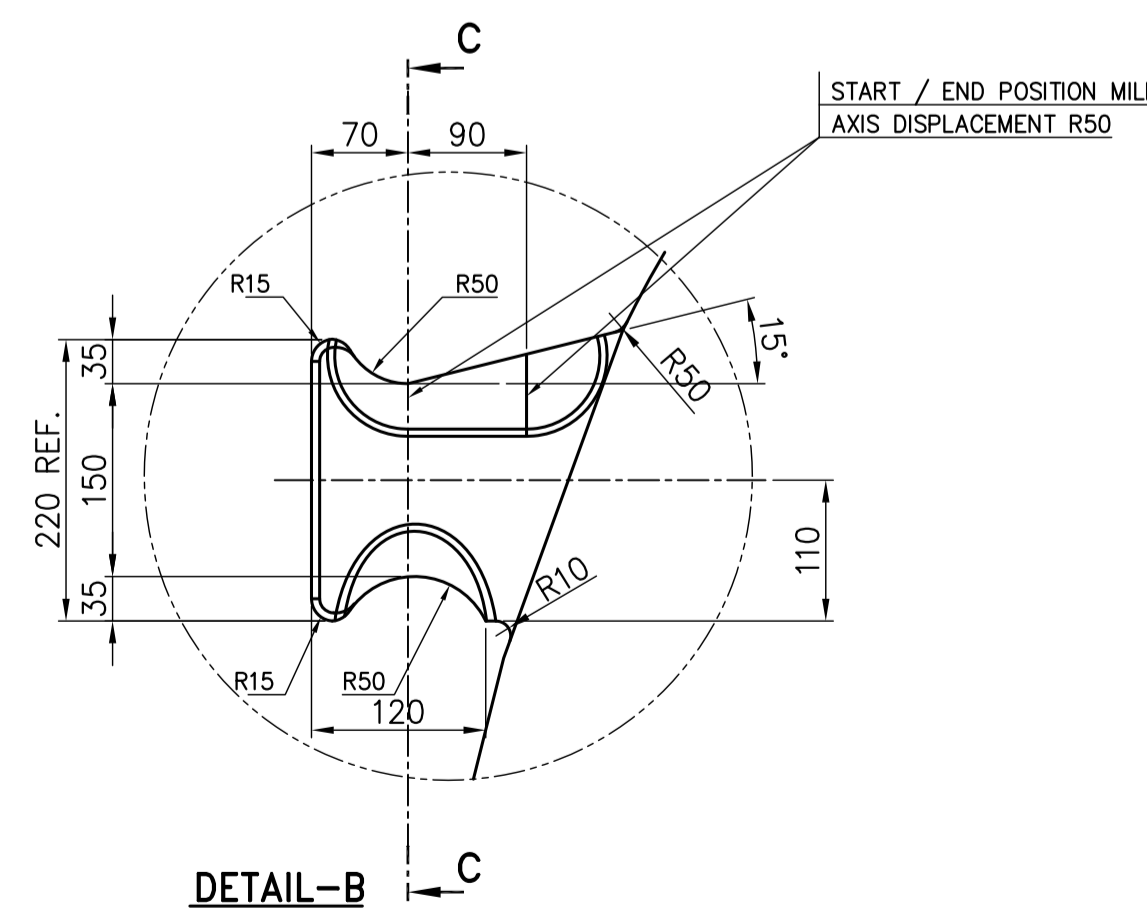
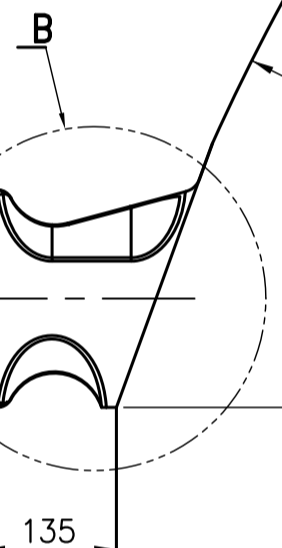
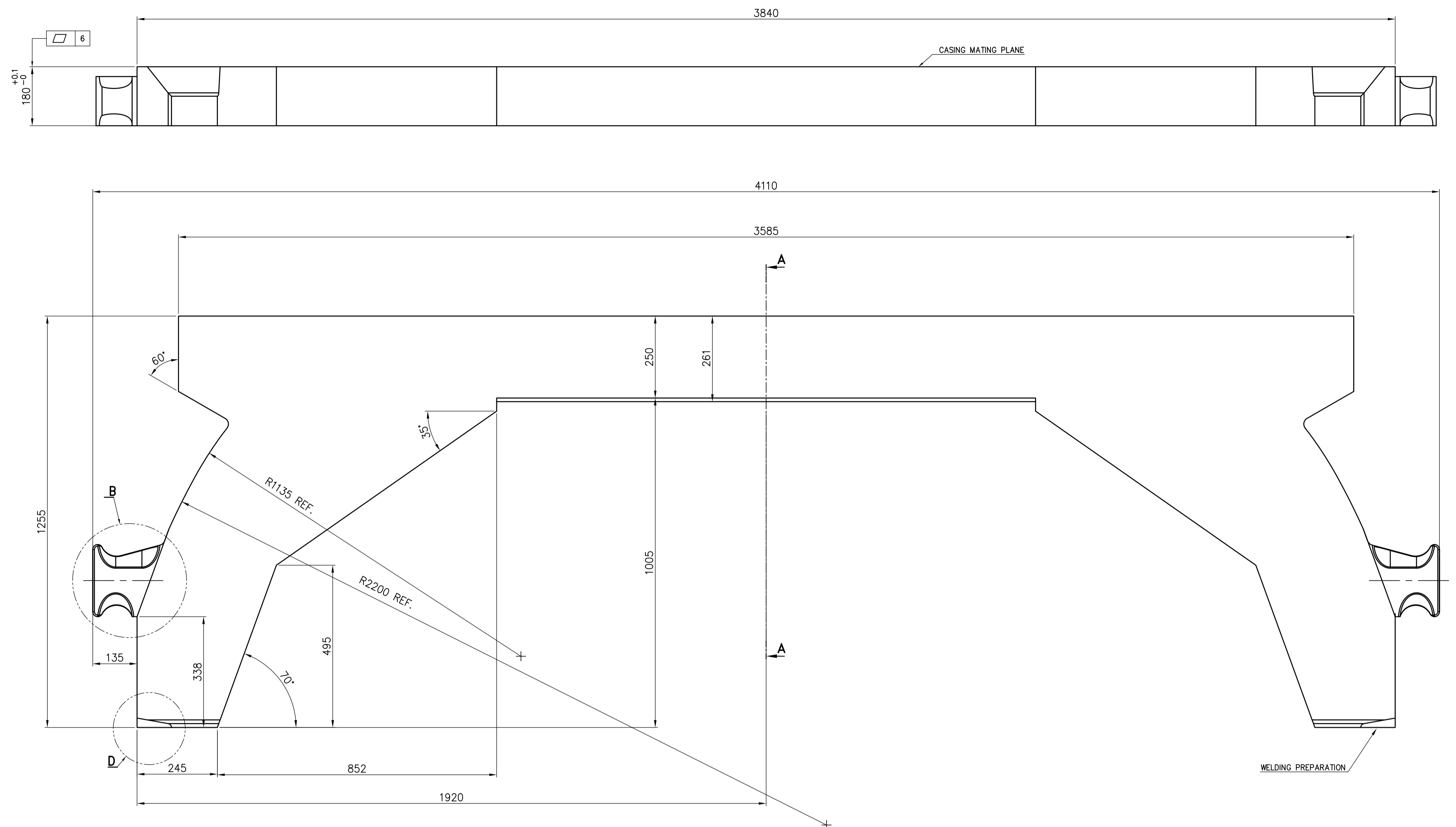
INVENTORY NO. SIGN. AND DATE REF. DRG. NO. COMPUTER FILE NAME



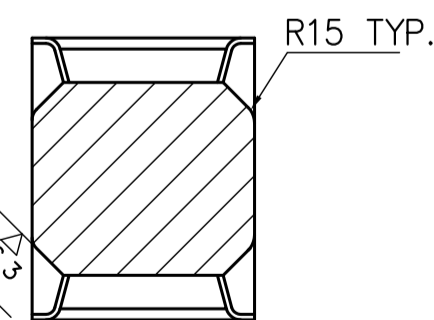
DETAIL-D



SECTION A-A



DETAIL-B



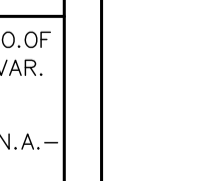
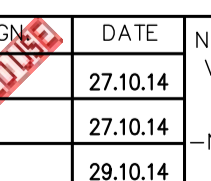
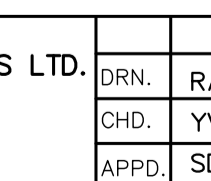
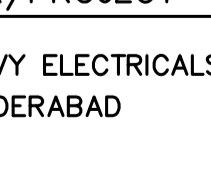
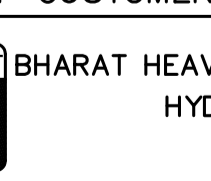
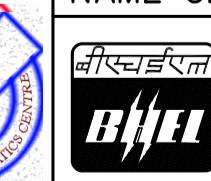
SECTION C-C

NOTES AND DOCUMENTS RECALLED:

- CONTROL WITH DYE-PENETRANTS THE WELDING PREPARATIONS MACHINING ACCORDING TO TC72061 (ITN02192) ACC. CLASS 3
- THE PARTING PLANE IS SYMMETRIC REGARD TO THE AXIS IDENTIFIED FROM LINE OF SECTION A-A

CASTING DRAWING NUMBER : 1331071002

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		NAME	SIGN.	DATE	NO. OF VAR.
RAGHU				27.10.14	
YVRL		CHD.	YVRL	27.10.14	-N.A.-
SDR		APPD.	SDR	29.10.14	-N.A.-
DEPT. CODE	UNTO. DIMS. GR. G/M/F	SCALE	WEIGHT (KG)	REF. TO GENP. DRG.	ITEM NO. NO. OF ITEMS
420		NTS	2665		-N.A.-
TITLE		CARD CODE	DRAWING NO.		REV.
PARTING PLANE MACHINING LOWER		N.A.	1-331-07-00022		00
		SHT. No	01	NO. OF SHT.	01



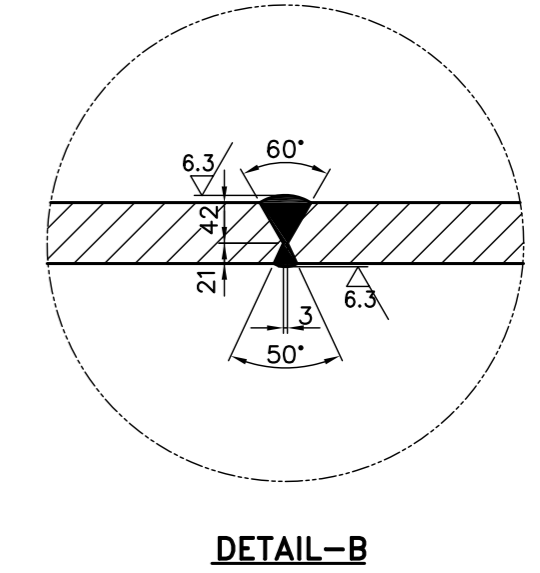
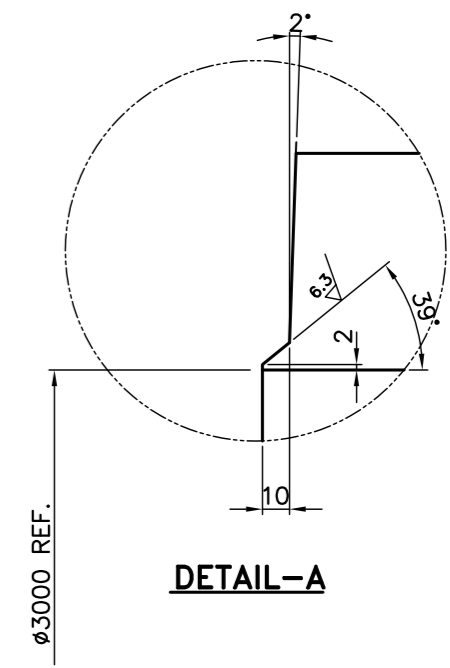
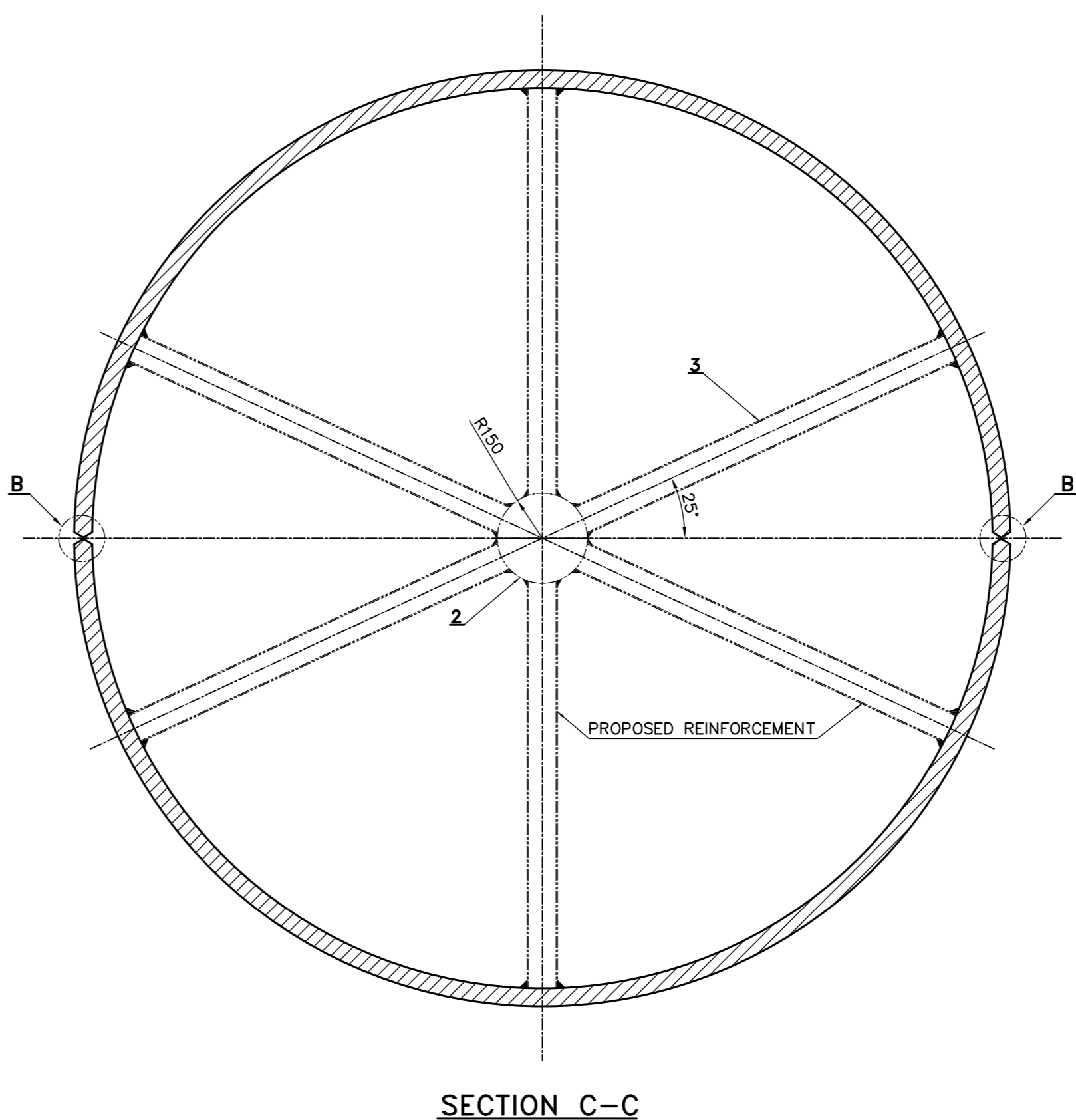
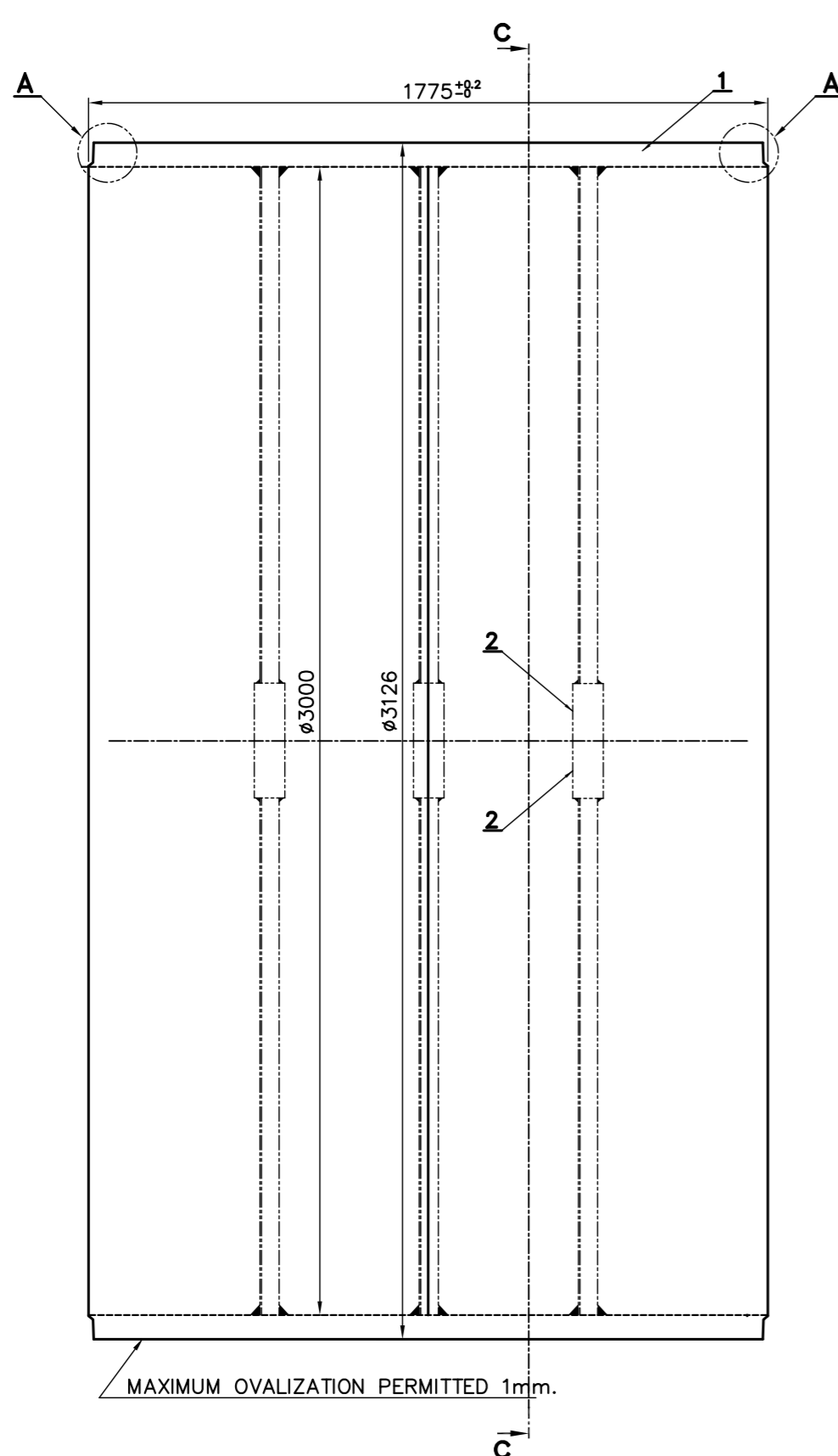
DRG. NO. 2-331-07-00045

SH. 01 OF 01

6.3

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GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



NOTES AND DOCUMENTS MENTIONED:

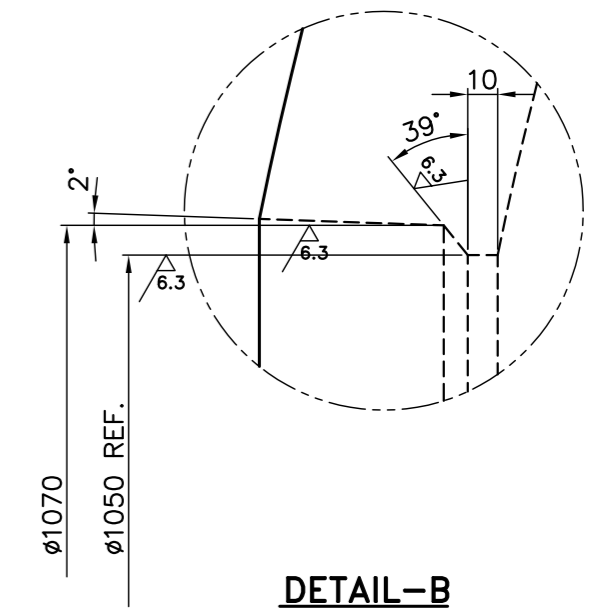
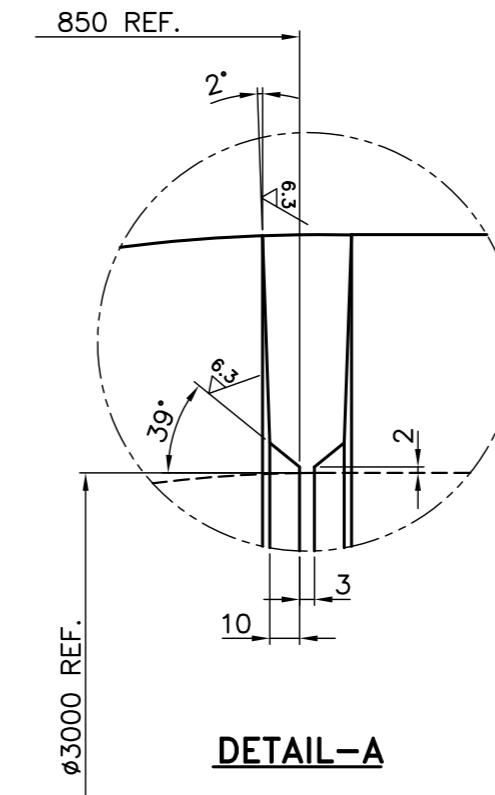
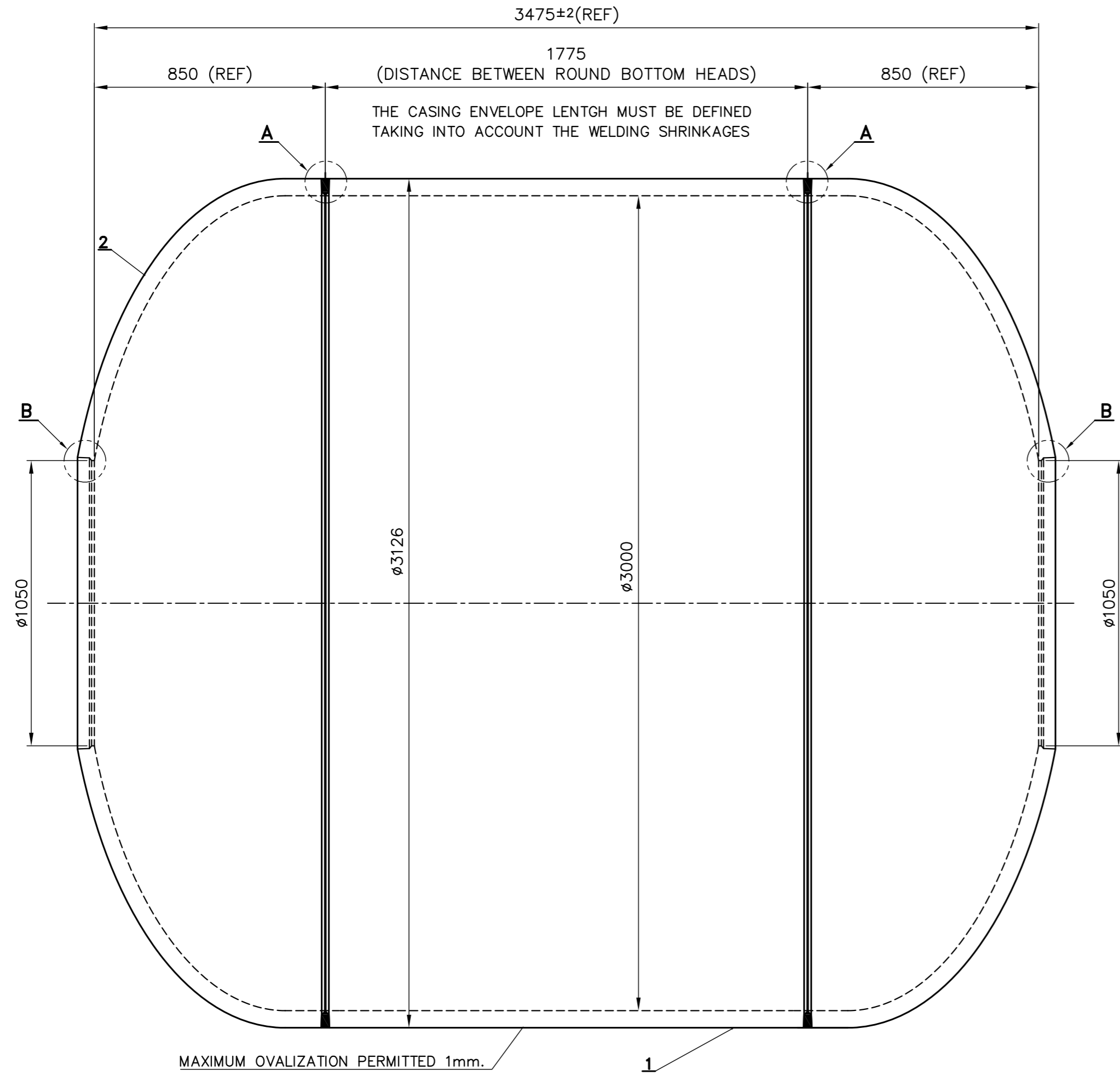
1. THE VALUES OF THE GEOMETRICAL TOLERANCES ARE THE MAX. READING ON THE GAUGE(F.I.R)
2. CARRY OUT WELDING AS PER WPS – WE001
3. USE ONLY QUALIFIED WELDERS
4. TWO PLATES ISSUED SHALL BE WELDED FIRST TO FORM A SINGLE PLATE AND CASING ENVELOPE SHALL BE ROLLED OUT OF THAT SINGLE PLATE,
5. CHANNELS & PLATES FOR REINFORCEMENT OF CASING ENVELOPE IS PROVIDED AS INDICATED. TECHNOLOGY MAY DECIDE THE SAME SUITABLY
6. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/A435M BEFORE CUTTING.
7. ALL WELDS SHALL BE CHECKED FOR 100% RADIGRAPHY AS PER TC 72062.
8. WHEREVER 100% RADIOGRAPHY IS NOT FEASIBLE ALL WELDS SHALL BE SUBJECTED TO 100% UT AS PER TC 72063.
9. 100% MPI AS PER TC 72060.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
DEPT. CODE	UNTOL. DIMS. GR. C/M/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.
		N T S	8800	-N.A.-	-N.A.-
TITLE		CARD CODE	DRAWING NO.	REV.	
CASING ENVELOPE		N.A.	2-331-07-00045	00	
		SHT. No	NO. OF SHT.		
		01	01		



BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

NAME	SIGN.	DATE	NO. OF VAR.
DRN. RAGHU		28.10.14	N.A
CHD. YVRL		28.10.14	N.A
APPD. SDR		28.10.14	N.A



NOTES AND DOCUMENTS MENTIONED:

1. THE VALUES OF THE GEOMETRICAL TOLERANCES ARE THE MAX READING ON THE GAUGE (F.I.R.)
2. CARRY OUR WELDING AS PER WPS - WE001
3. SEQUENCE OF WELDING SHALL BE FOLLOWED AS SPECIFIED IN TECHNOLOGICAL PROCESS
4. USE ONLY QUALIFIED WELDERS
5. CASING ENVELOPE SHALL BE WELDED TO ROUNDED BOTTOMS AS PER THIS DRG
6. THE CASING ENVELOPE & ROUNDED BOTTOMS SHALL BE CUT INTO TWO HALVES AS PER CASING ASSEMBLY DRAWING No. 03310700026
7. ALL WELDS SHALL BE CHECKED FOR 100% RADIOGRAPHY AS PER TC 72062.
8. WHEREVER 100% RADIOGRAPHY IS NOT FEASIBLE ALL WELDS SHALL BE SUBJECTED TO 100% UT AS PER TC 72063.
9. 100% MPI AS PER TC 72060.

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 COMPUTER FILE NAME
 REF. DRG. NO.
 SIGN. AND DATE
 INVENTORY NO.

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
DEPT. COMPR. CODE	UNTOL. DIMS. GR. G/M/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.
420		N T S	19400		-N.A.-
TITLE		CARD CODE	DRAWING NO.	REV.	
CASING ENVELOPE WITH ROUNDED BOTTOMS		N.A.	2-331-07-00046	00	
		SHT. No 01	NO. OF SHT. 01		



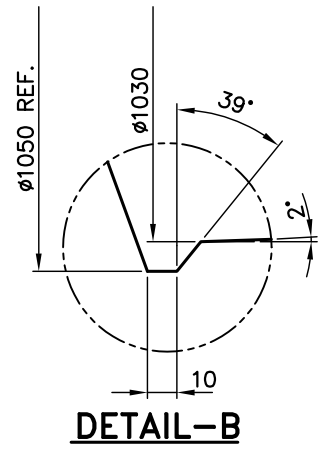
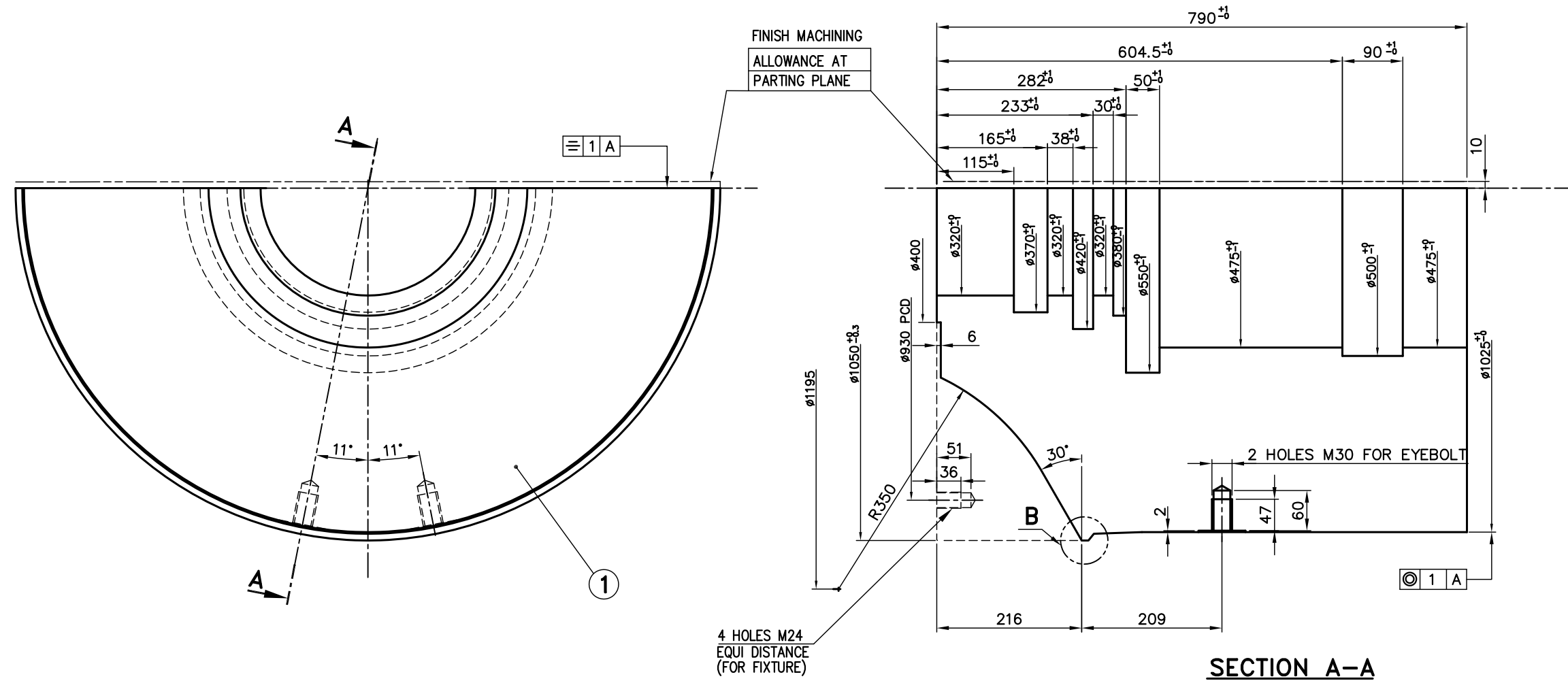
BHARAT HEAVY ELECTRICALS LTD.
HYDERABAD

NAME	SIGN.	DATE	NO. OF VAR.
DRN. RAGHU		28.10.14	
CHD. Y V R L		28.10.14	N.A
APPD. S D R		28.10.14	

DRG. NO. 3-331-07-00076 SH. 01 OF 01

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 COMPUTER FILE NAME
 SIGN. AND DATE
 REF. DRG. NO.
 INVENTORY NO.

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



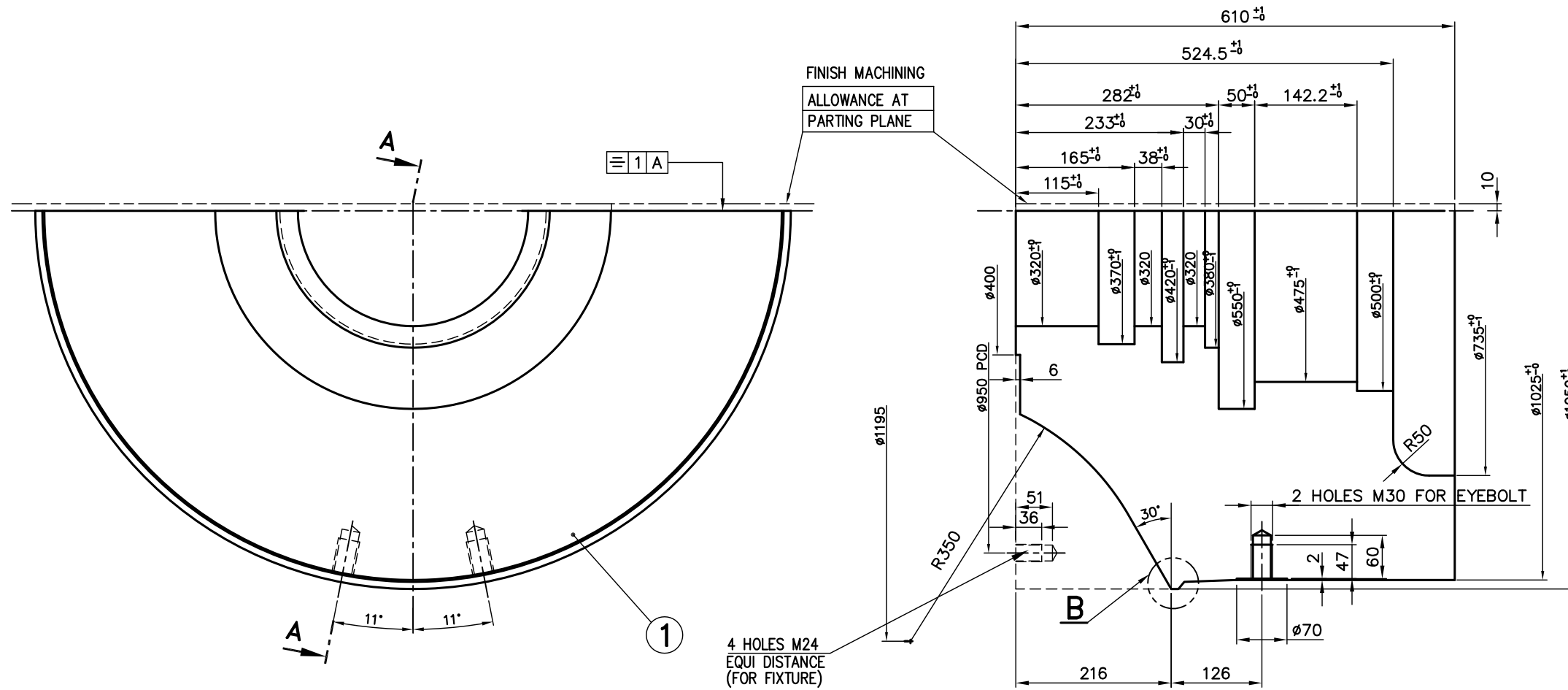
CAUTION
 DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD	DRN.	RAGHU	SIGN.	DATE	NO. OF VAR.
	CHD.	YVRL		21.10.14	-N.A.-
	APPD.	SDR		22.10.14	-N.A.-
DEPT. COMP. CODE	UNTOL. DIMS. GR. C/M/F	SCALE	WEIGHT (KG)	REF. ASSY. DRG.	ITEM NO.
420		NTS	1800		-N.A.-
TITLE		CARD CODE	DRAWING NO.		REV.
LOWER END COVER TB SIDE		N.A.	3-331-07-00076 00		00
		SHT. No 01		NO. OF SHT. 01	

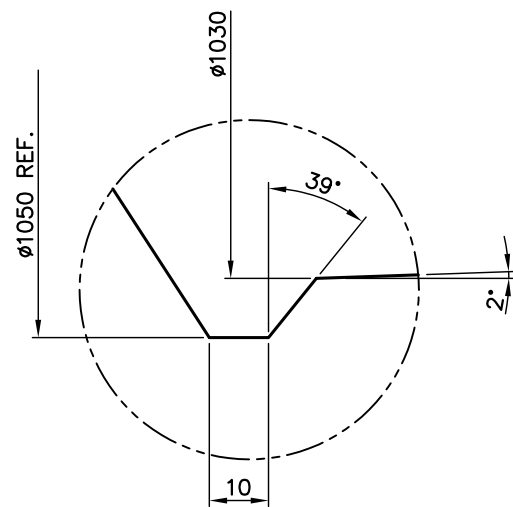
DRG. NO. 3-331-07-00078 SH. 01 OF 01

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 SIGN. AND DATE REF. DRG. NO. COMPUTER FILE NAME
 INVENTORY NO.

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



SECTION A-A



DETAIL-B

CAUTION

DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10 mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT **SAIL RSP DMCL 1008**

BHARAT HEAVY ELECTRICALS LTD. HYDERABAD	NAME	SIGN.	DATE	NO. OF VAR.
	DRN. RAGHU		27.10.14	
	CHD. YVRL		28.10.14	-N.A.-
APPD. SDR		31.10.14		

DEPT. COMP. CODE 420	UNTOL. DIMS. GR. G/M/F	SCALE NTS	WEIGHT (KG) 1300	REF. GENP. DRG. SW4586417	ITEM NO. -N.A.-	NO. OF ITEMS -N.A.-
----------------------	------------------------	-----------	------------------	---------------------------	-----------------	---------------------

TITLE LOWER END COVER OTB SIDE	CARD CODE N.A.	DRAWING NO. 3-331-07-00078	REV. 00
		SHT. No 01	NO. OF SHT. 01

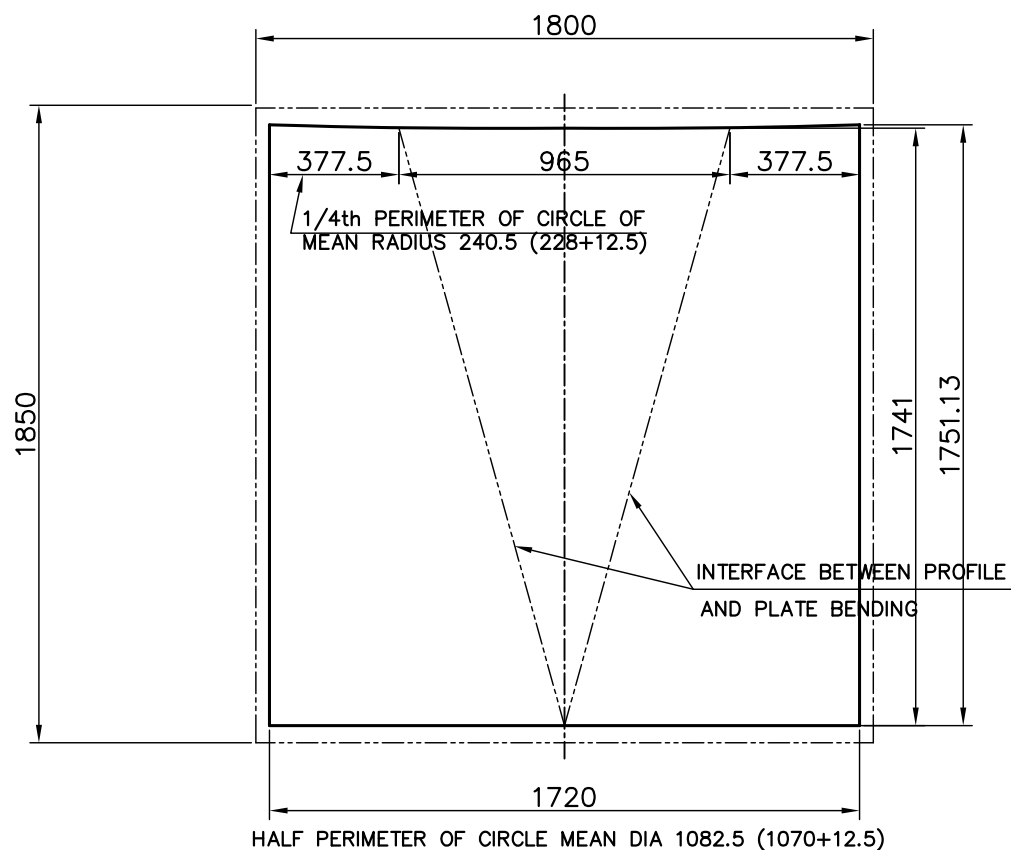


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 COMPUTER FILE NAME
 SIGN. AND DATE
 REF. DRG. NO.
 INVENTORY NO

DRG. NO. 3-331-07-00079

SHT. 1 OF 1

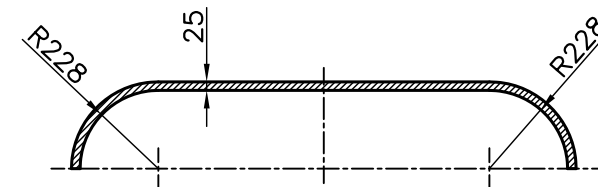
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



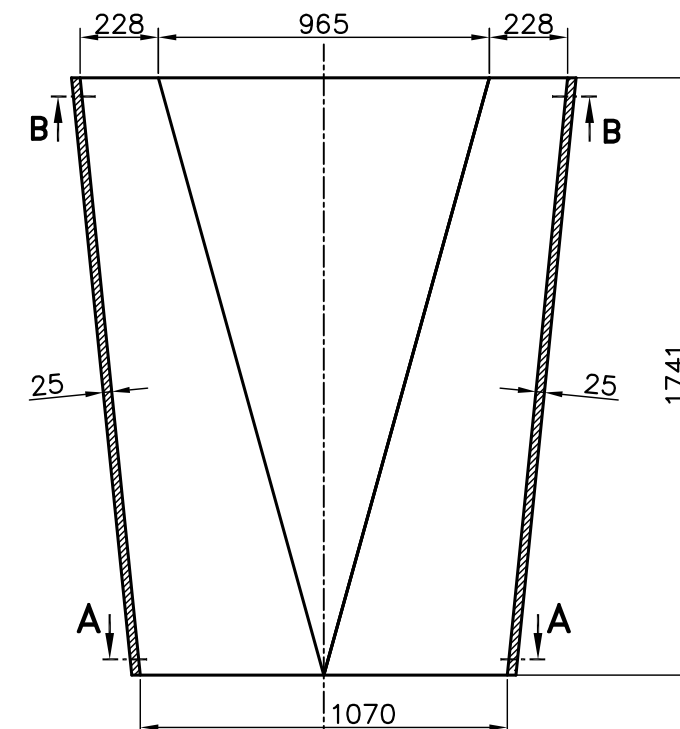
DEVELOPED PLATE FOR FABRICATION

NOTE:

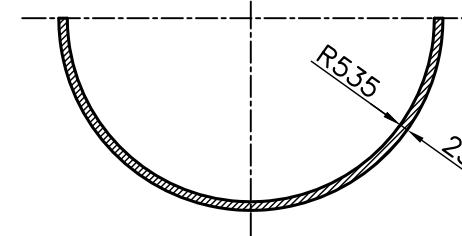
1. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.
2. TENTATIVE DEVELOPED PLATE REQUIREMENT IS INDICATED ABOVE. TECHNOLOGY TO PROVIDE PROCESS INSTRUCTIONS TO ENSURE THAT ADEQUATE MATERIAL IS PROVIDED TO MEET THE FABRICATION OF THE ITEM AS PER THE REFERRED ASSEMBLY DRAWING.



SECTION B-B



SECTION A-A



TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		NAME	SIGN.	DATE	NO. OF VAR.
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	RAGHU	25.10.14	NA
		CHD.	Y.V.R.L	30.10.14	
		APPD.	S.D.R	01.11.14	
DEPT. CODE	UNTOL. DIMS. GR. ϕ /M/f	SCALE NTS	WEIGHT (KG) 590	REF. TO ASSY. DRG. 1-331-07-00019	ITEM NO. NA
TITLE		CARD CODE	DRAWING NO.		REV.
HALF PIPE FOR DIA 44" NOZZLE		NA	3-331-07-00079		00
		SHT. No 01		NO. OF SHT. 01	

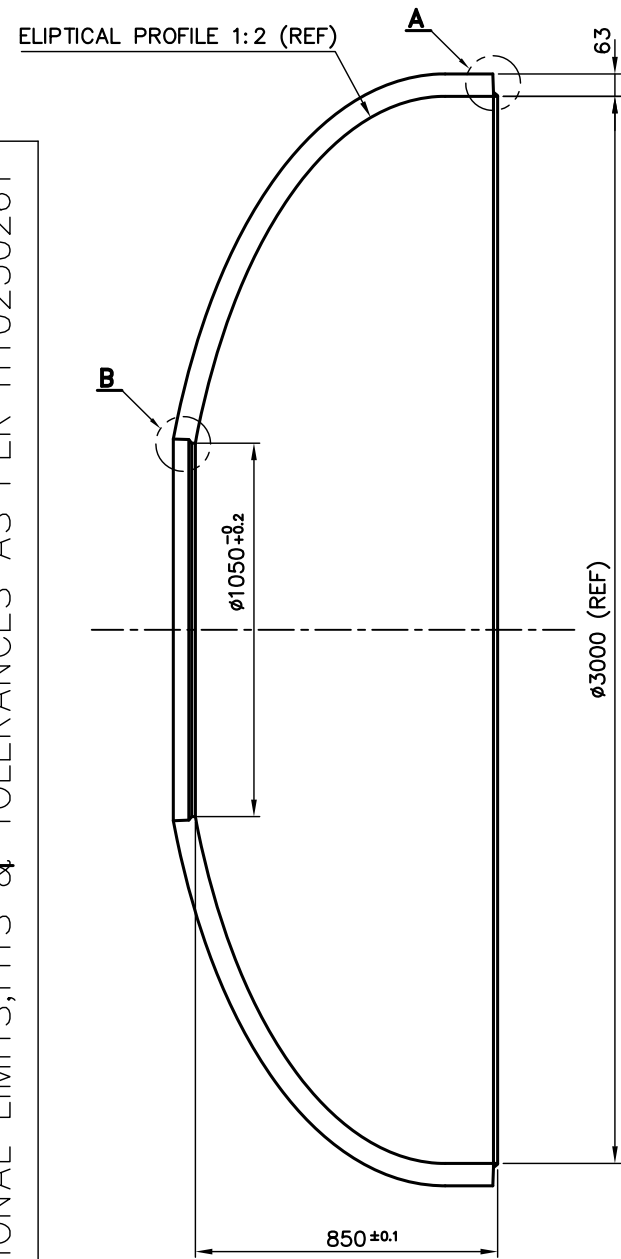
SIGN. AND DATE REF. DRG. NO. COMPUTER FILE NAME THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

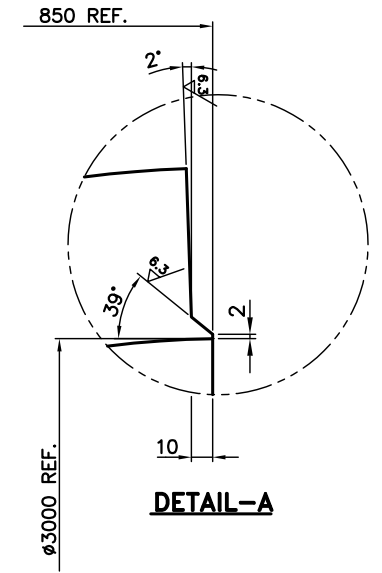
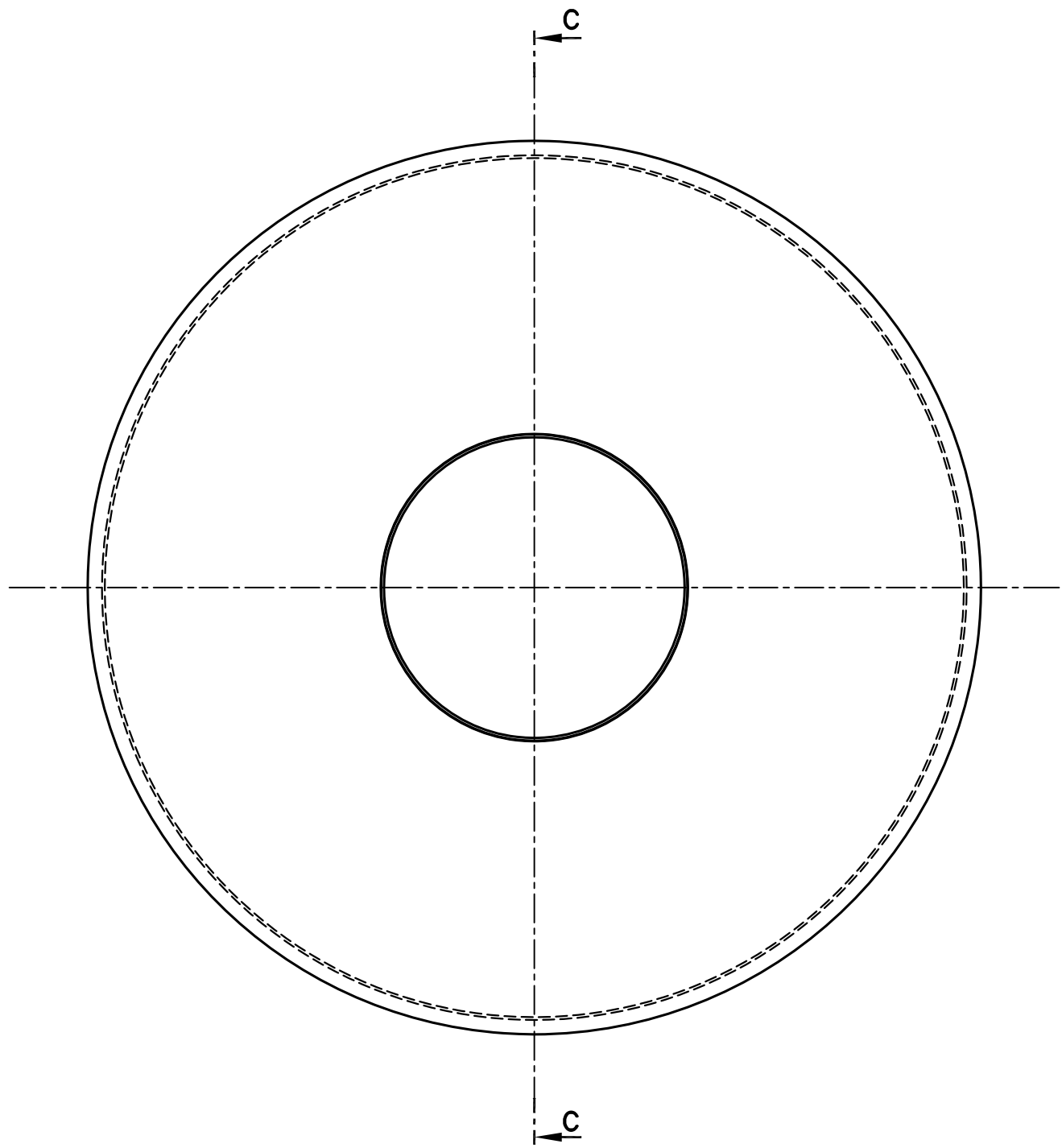
DRG. NO. 3-331-07-00081

SH. 01 OF 01

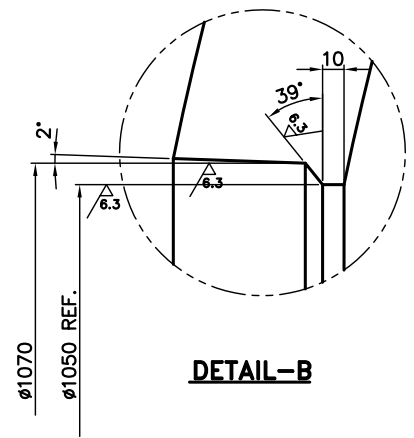
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SECTION C-C



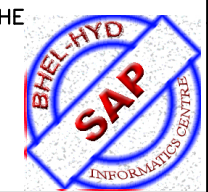
DETAIL-A



DETAIL-B

NOTES AND DOCUMENTS MENTIONED:

1. THE VALUES OF THE GEOMETRICAL TOLERANCES ARE THE MAX READING ON THE GAUGE (F.I.R.)



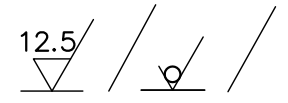
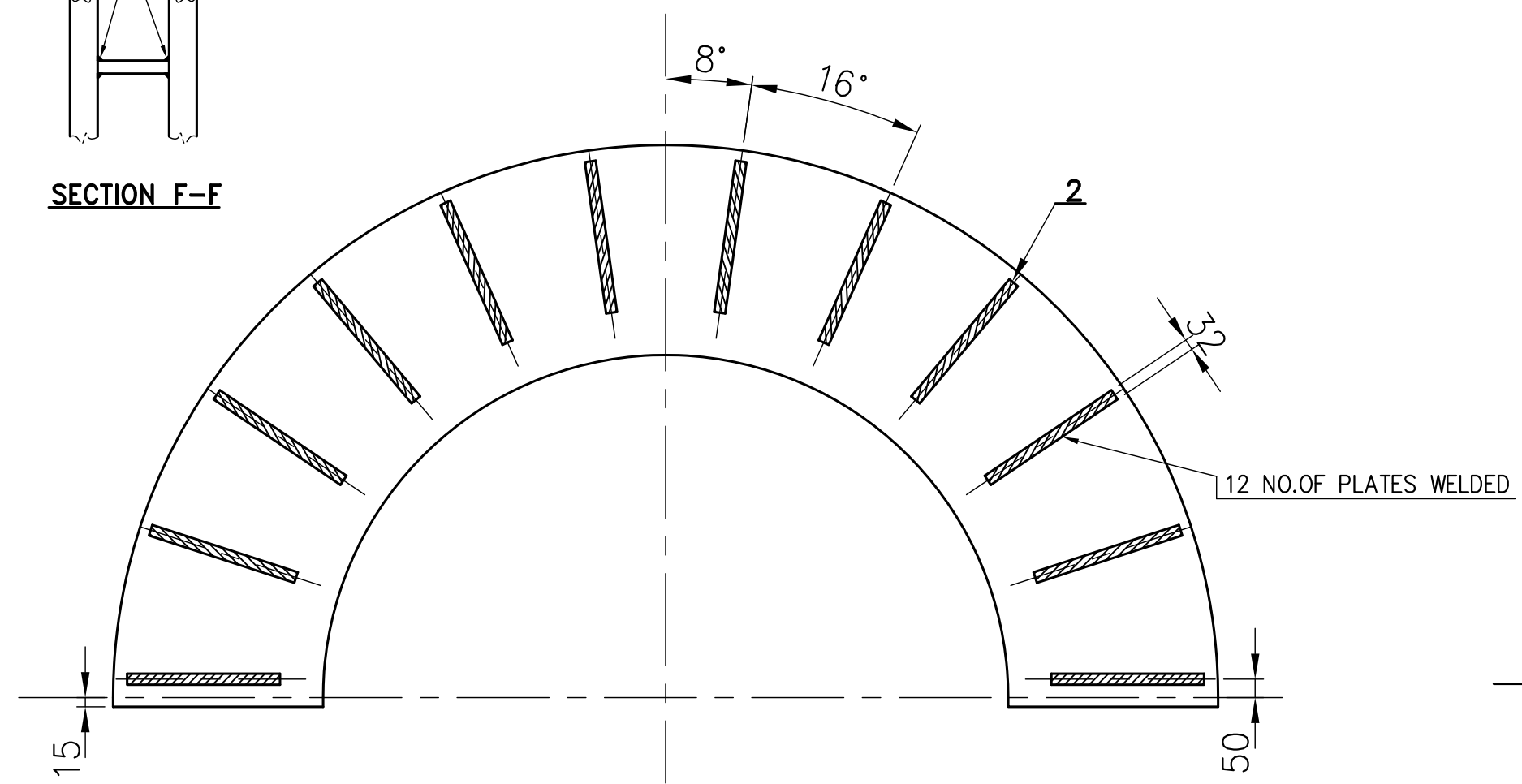
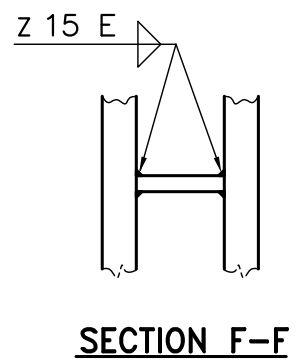
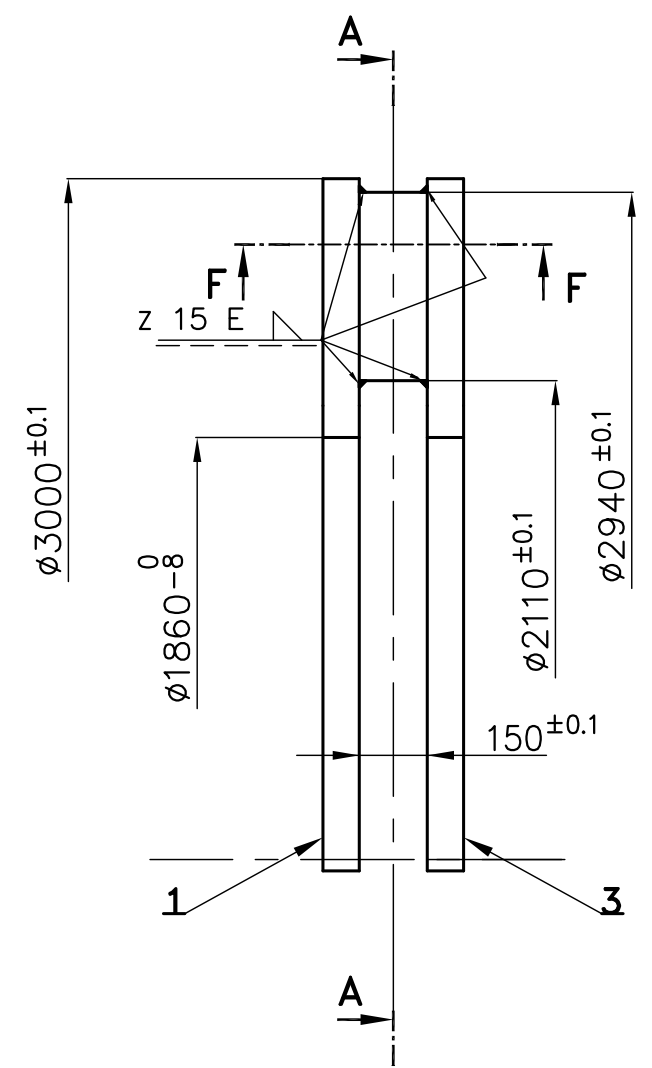
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008				
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	NAME	SIGN.	DATE	NO. OF VAR.
DEPT. COMP. CODE 420		CHD.	RAGHU		28.10.14	
		APPD.	YRVL		28.10.14	-N.A.-
		APPD.	SDR		28.10.14	-N.A.-
UNTOL. DIMS. GR. G/M/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEMS	
	N.T.S	5266	-N.A.-	-N.A.-	-N.A.-	
TITLE		CARD CODE	DRAWING NO.		REV.	
ROUNDED BOTTOM MACHINED		N.A.	3-331-07-00081		00	
			SHT. No 01	NO. OF SHT. 01		

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DRG. NO. 3-331-07-00082



SHT. 01 OF 01

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



NOTE:

1. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.
2. ALL WELDS SHALL BE CHECKED FOR 100% RADIGRAPHY AS PER TC 72062.
3. WHEREVER 100% RADIOGRAPHY IS NOT FEASIBLE ALL WELDS SHALL BE SUBJECTED TO 100% UT AS PER TC 72063.
4. 100% MPI AS PER TC 72060.

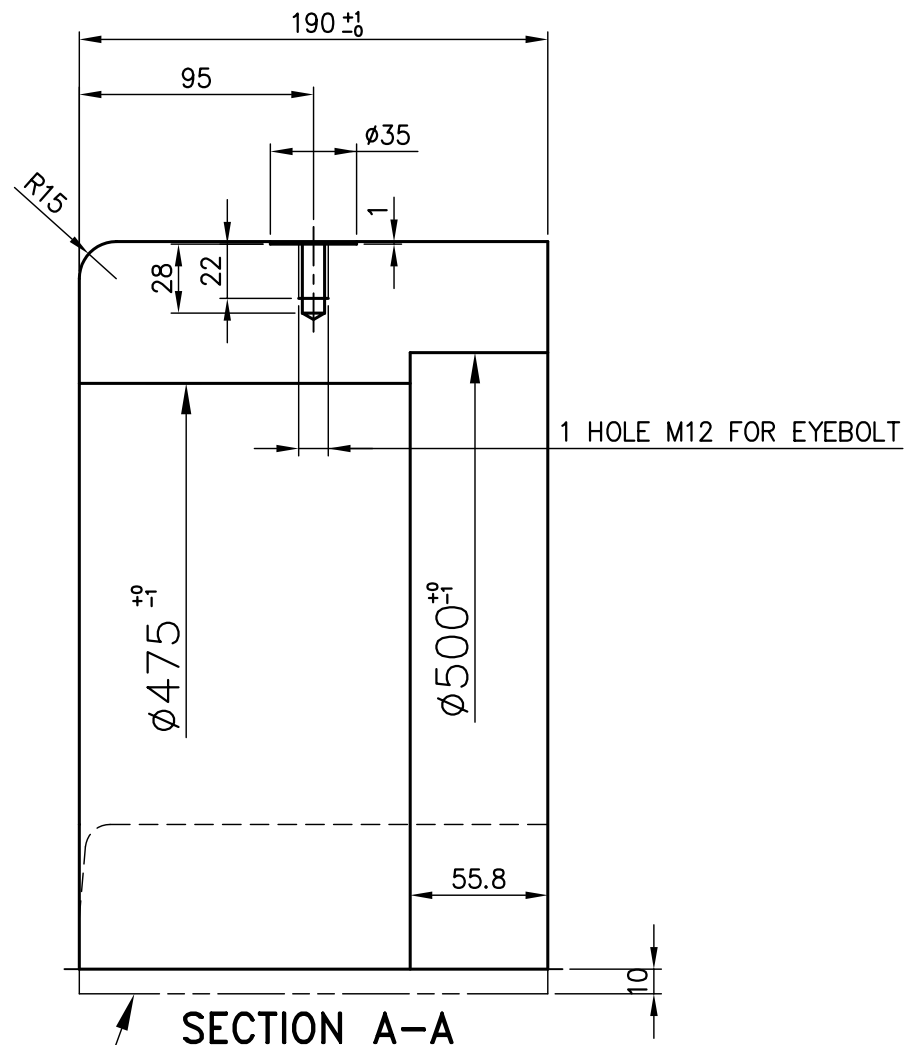
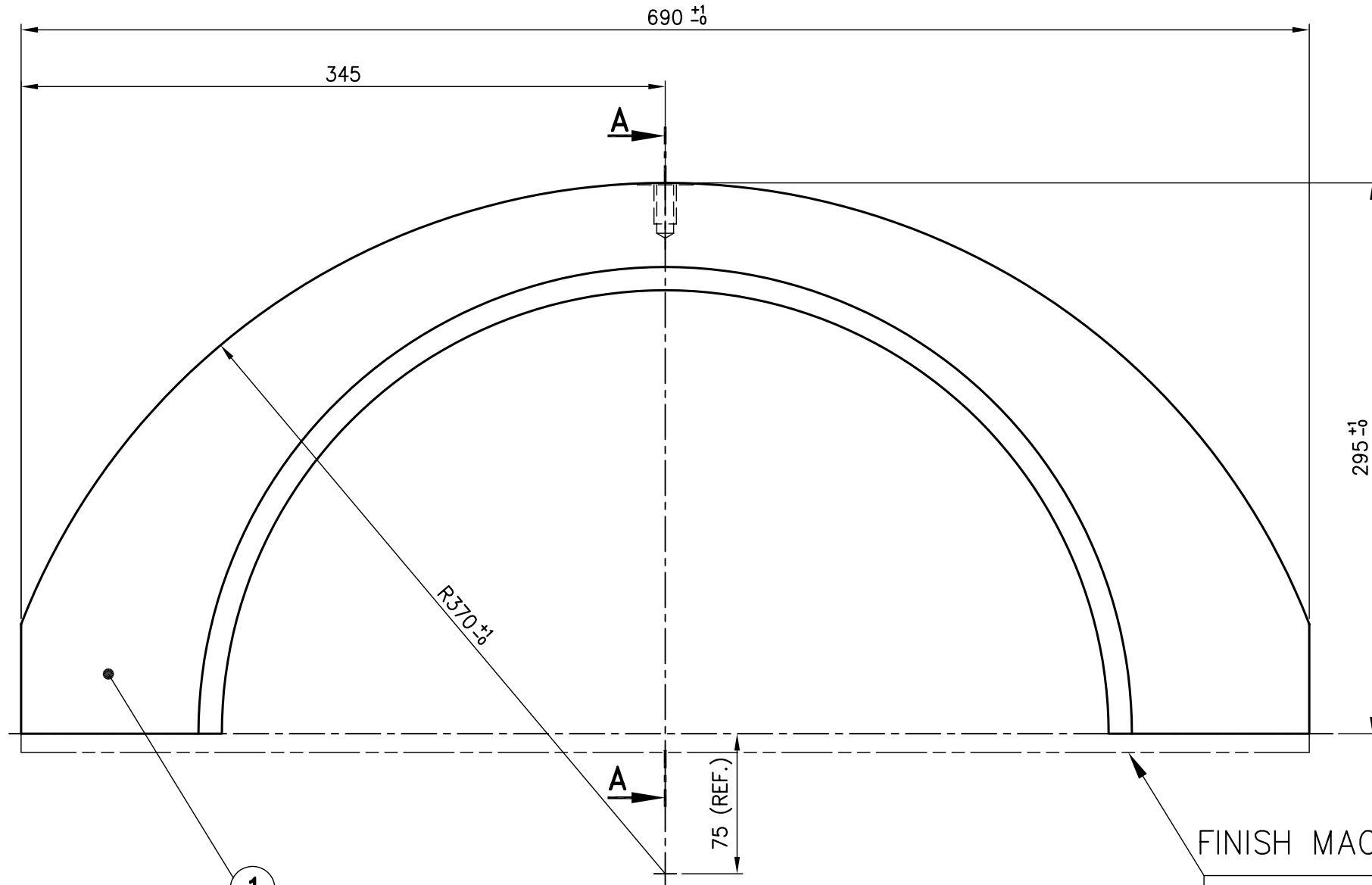
TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		SAIL RSP DMCL 1008			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	NAME	SIGN.	DATE
 		CHD.	RAGHU		30.10.14
		APPD.	YVRL		30.10.14
		SDR			30.10.14
DEPT. CODE	UNTOL. DIMS. GR. ϕ /M/f	SCALE NTS	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.
			3000	0-331-07-00026	NA
TITLE HALF RING FOR COUNTER CASING FIXING			CARD CODE	DRAWING NO.	REV.
			NA	3-331-07-00082	00
		SHT. No	01	NO. OF SHT.	01

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 COMPUTER FILE NAME
 SIGN. AND DATE
 REF. DRG. NO.
 INVENTORY NO.

DRG. NO. 3-331-07-01002

SH. 01 OF 01

6.3



FINISH MACHINING
ALLOWANCE AT
PARTING PLANE

CAUTION
 DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10 mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		2MCL 1007				
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	J.C.S	SIGN.	DATE	NO.OF VAR.
		CHD.	SDR		01.06.10	-N.A.-
		APPD.	PNR		03.06.10	-N.A.-
DEPT. COMP. CODE 420	UNTOL. DIMS. GR. C/M/F	SCALE N.T.S	WEIGHT (KG) 104	REF. GENP. DRG. SW 4586417	ITEM NO. -N.A.-	NO.OF ITEMS -N.A.-
TITLE BEARING COVER OTB SIDE			CARD CODE N.A.	DRAWING NO. 3-331-07-01002 00		REV. 00
			SHT. No 01		NO. OF SHT. 01	



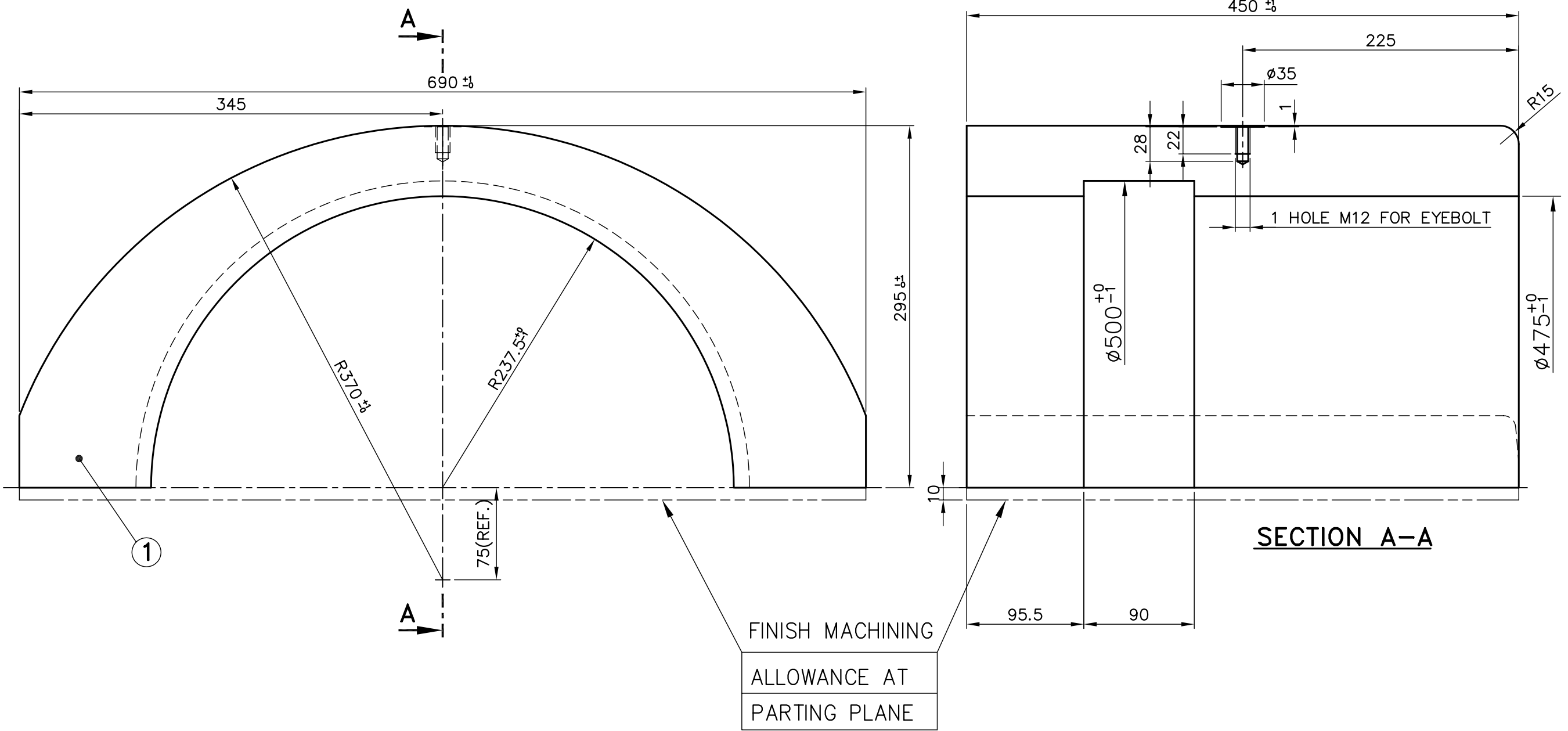
REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED

DRG. NO. 3-331-07-01011 SH. 01 OF 01

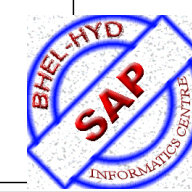
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 COMPUTER FILE NAME
 REF. DRG. NO.
 SIGN. AND DATE
 INVENTORY NO

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



CAUTION
 DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.



TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		2MCL 1007			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	J.C.S	SIGN.	DATE
DEPT. COMP. CODE 420 UNTOL. DIMS. GR. G/M/F SCALE N.T.S WEIGHT (KG) 235 REF. GENP. DRG. SW 4586416 ITEM NO. -N.A.- NO.OF ITEMS -N.A.-		CHD.	SDR	28.05.10	NO.OF VAR.
		APPD.	PNR	01.06.10	-N.A.-
TITLE		DRAWING NO.		REV.	
BEARING COVER TB SIDE		3-331-07-01011		00	
		SHT. No 01		NO. OF SHT. 01	

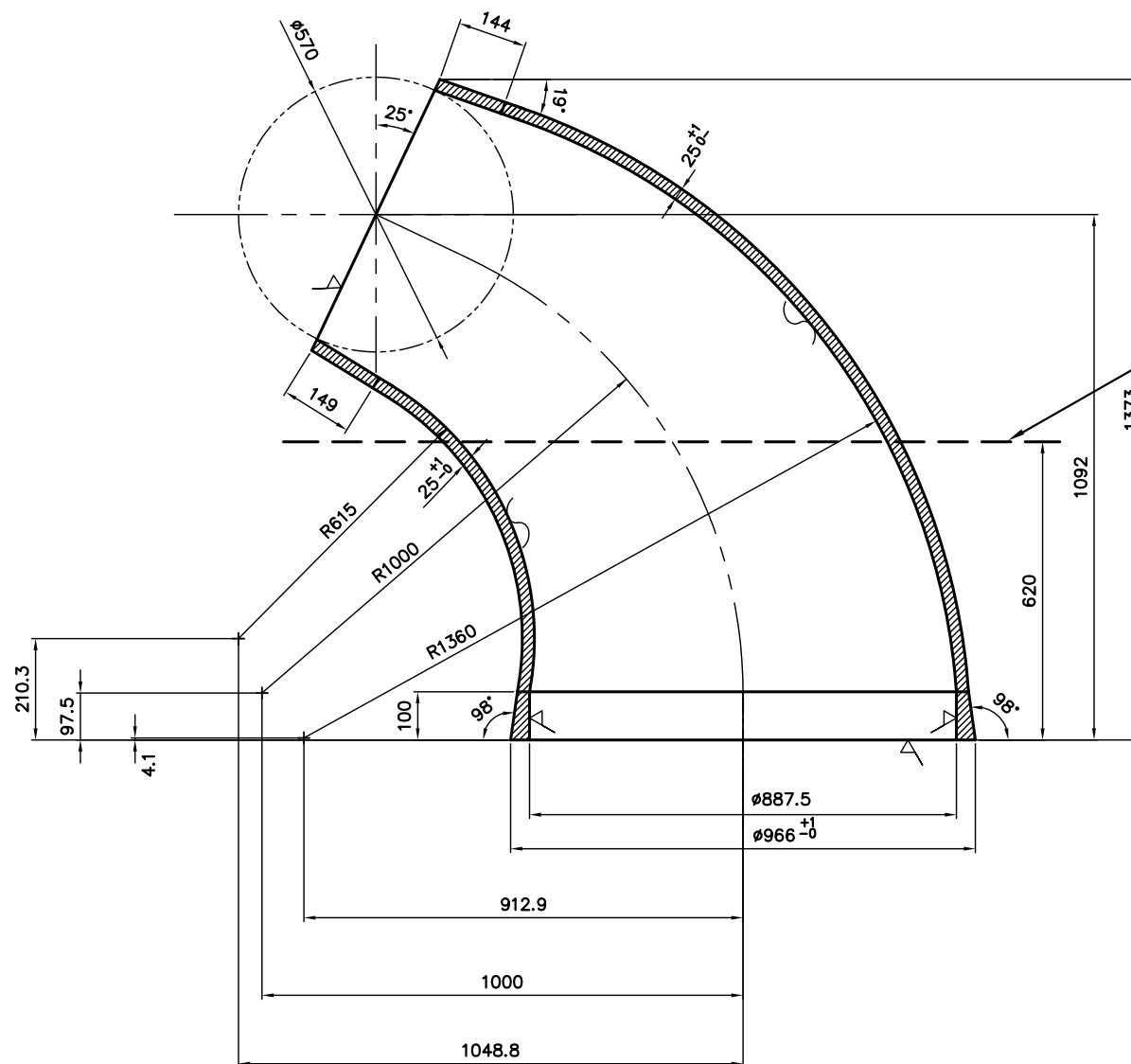
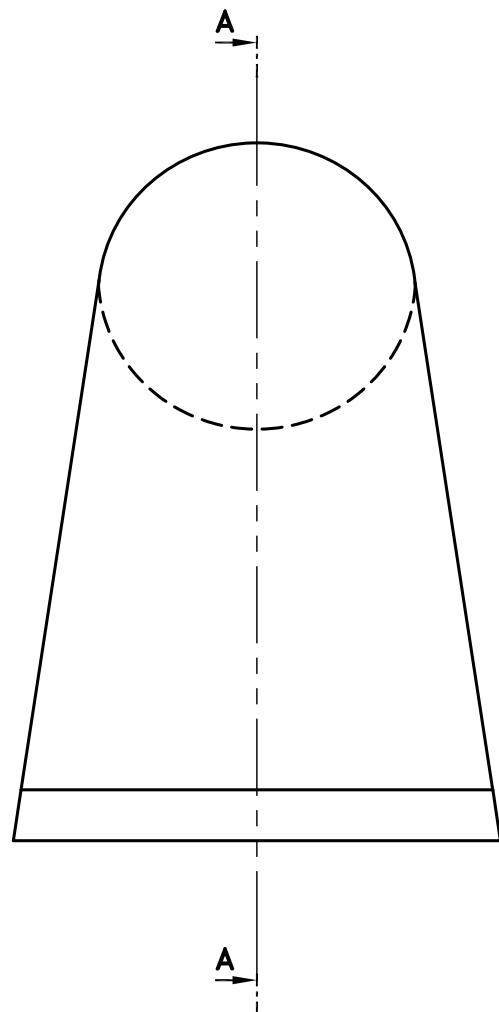
RESTRICTED USE

DRG. NO. 3-331-07-10001

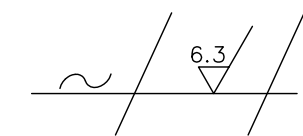
SHT. OF

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GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



ZONE ABOVE THIS LINE IS SUBJECTED TO RADIGRAPHIC TEST. REF. NOTE NO.7



NOTES:-

- 1) MATERIAL HY19562
 - 2) TECHNICAL DELIVERY CONDITIONS AS PER HY19562
 - 3) CAST SURFACE, INCLUDING PARTING PLANE SURFACE, MUST BE CLEANED PERFECTLY AND SHALL BE HAND GROUND TO BE FREE FROM PROJECTIONS.
 - 4) ALL SURFACES MARKED ✓ SHALL BE SUPPLIED IN ROUGH MACHINED CONDITION WITH 5 ±0.2 mm ALLOWANCE FOR FINISH MACHINING AT BHEL WORKS.
 - 5) STRESS RELIEVING SHALL BE CARRIED OUT AFTER ROUGH MACHINING.
 - 6) SURFACES USED "AS CAST" ARE SHOWN WITH '~'.
 - 7) ACCEPTABILITY ACC. TO ASME E 446 OR ASTM E 186 IN RELATION TO THICKNESS EXAMINED
- CATEGORY A DEFECTS - ACCEPTABLE MAX. LEVEL 3
 CATEGORY B DEFECTS - ACCEPTABLE MAX. LEVEL 4
 CATEGORY C DEFECTS - ACCEPTABLE MAX. LEVEL 3
 CATEGORY D,E,F,G DEFECTS NOT ACCEPTABLE

SECTION A-A

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT
SAIL RSP DMCL 1008



BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		NAME	SIGN.	DATE	NO. OF VAR.
DRN.		RAGHU		27.10.14	NA
CHD.		YVRL		27.10.14	
APPD.		SDR		30.10.14	

DEPT. CODE	UNTOL. DIMS. GR. Ø/M/f	SCALE NTS	WEIGHT (KG) 700	REF. TO ASSY. DRG. 1-331-07-00020	ITEM NO. NA	NO. OF ITEMS NA
TITLE DISCHARGE NOZZLE DN 38" ANSI 300			CARD CODE NA	DRAWING NO. 3-331-07-10001 00		REV. 00
			SHT. No 01	NO. OF SHT. 01		

INVENTORY NO	ZONE	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED
				CHD/APPD			CHD/APPD			CHD/APPD

SIGN. AND DATE

COMPUTER FILE NAME

REF. DRG. NO.

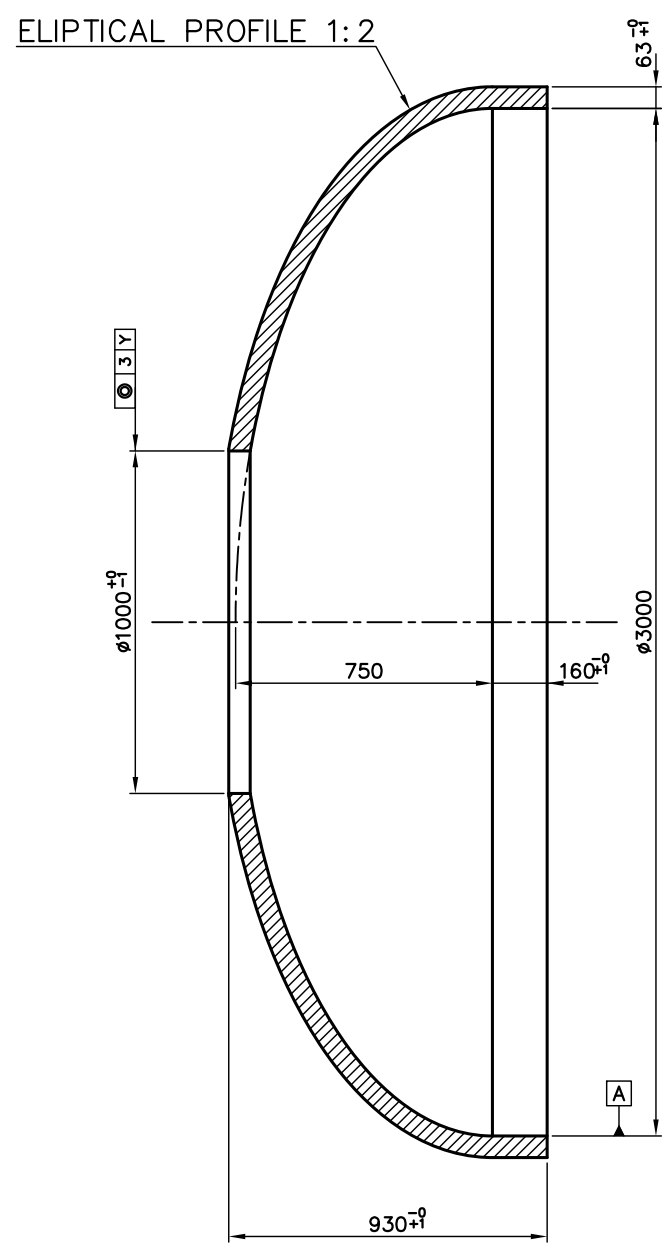
INVENTORY NO

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

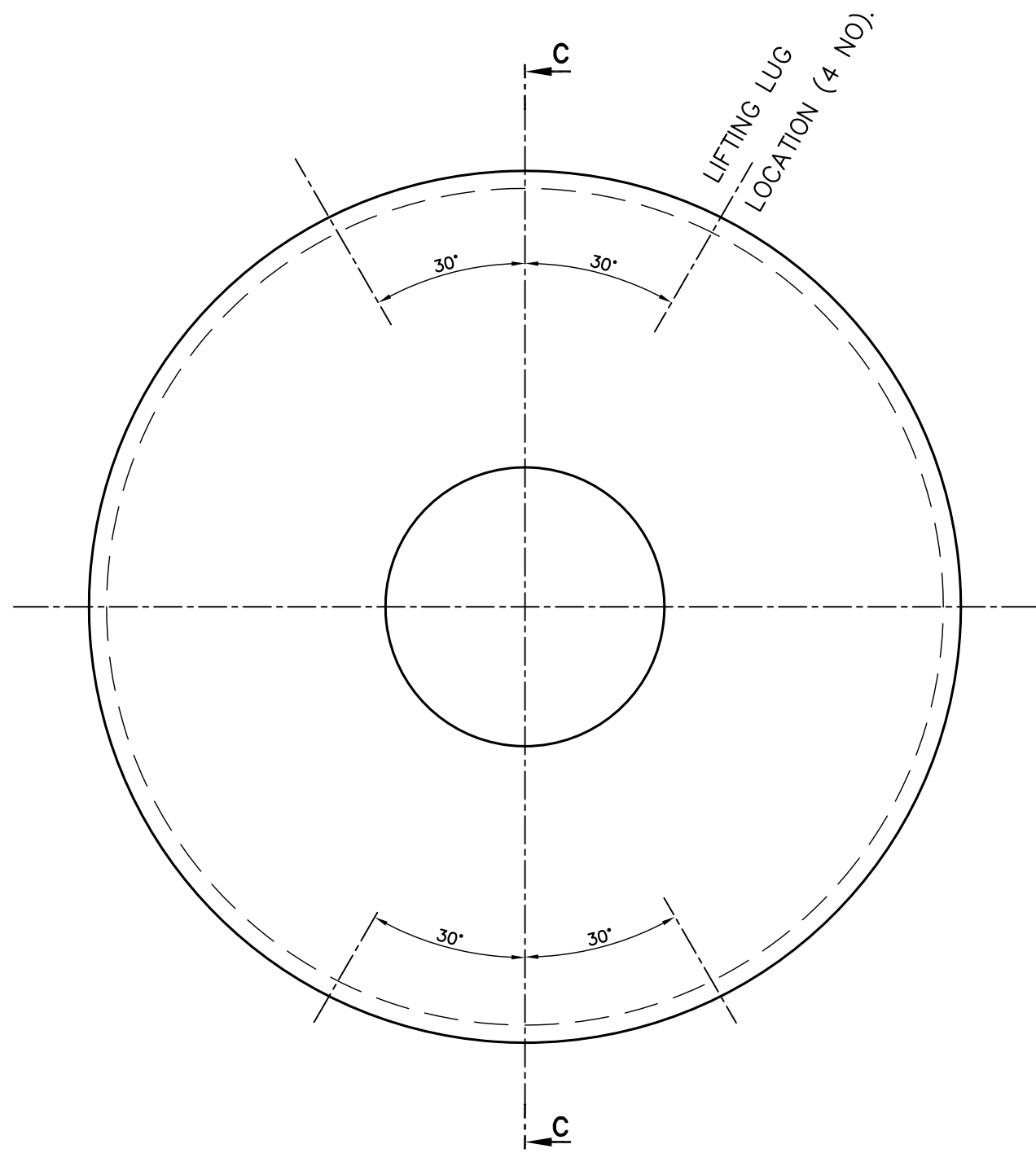
DRG. NO. 3-331-07-20005

SH. 01 OF 01

6.3/




SECTION C-C



NOTES :

- MATERIAL STATE OF SUPPLY ACCORDING TO: TC32026

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT									
 BHARAT HEAVY ELECTRICALS LTD. HYDERABAD					NAME	SIGN.	DATE	NO. OF VAR.	
					DRN.	RAGHU	27.10.14		
					CHD.	YVRL	27.10.14	-N.A.-	
APPD.	SDR	28.10.14	-N.A.-						
DEPT. COMP. CODE	UNTOL. DIMS. GR. G/M/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEMS			
420		N.T.S	5400	-N.A.-	-N.A.-	-N.A.-			
TITLE					CARD CODE	DRAWING NO.	REV.		
ROUNDED BOTTOM FORGING					N.A.	3-331-07-20005	00		
					SHT. No 01	NO. OF SHT. 01			



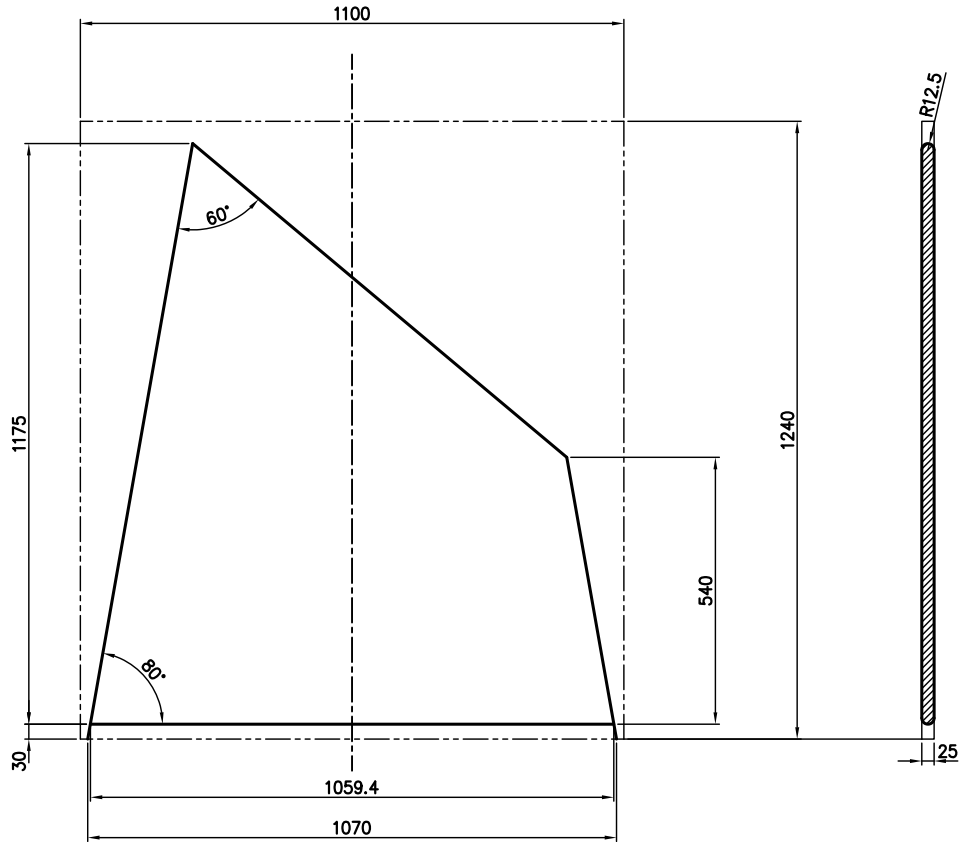
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FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED

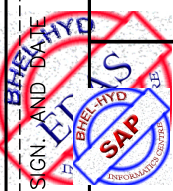
GEN. DIM. LIMITS , FITS , & TOLERANCES AS PER P.S :- HY0230261



NOTE:

1. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.
2. TENTATIVE DEVELOPED PLATE REQUIREMENT IS INDICATED ABOVE. TECHNOLOGY TO PROVIDE PROCESS INSTRUCTIONS TO ENSURE THAT ADEQUATE MATERIAL IS PROVIDED TO MEET THE FABRICATION OF THE ITEM AS PER THE REFERRED ASSEMBLY DRAWING.

REMARKS	ITEM NO	DESCRIPTION	STD	MATL. CODE	A/C	UNIT	UNIT Wt.
				MATL. SPEN.			QTY.



	BHARAT HEAVY ELECTRICALS LTD.		DRN.	RAGHU	DATE	25.10.14	NO. OF VAR.
	HYDERABAD		CHD.	Y.V.R.L	DATE	30.10.14	
			APPD.	S.D.R	DATE	01.11.14	

DEPT. COMP. DEPT. CODE 420	UNTOL. DIM. GR. C/M/F		SCALE NTS	WEIGHT (KG) 155	REF. TO ASSY DRG. 1-331-07-00019	ITEM NO. NA	NO. OF ITEMS NA
----------------------------	-----------------------	--	-----------	-----------------	----------------------------------	-------------	-----------------

TITLE	CARD CODE	DRAWING NO.	REV.
RIB FOR DIA 44" NOZZLE	NA	4-331-07-00110	00
		SHT No. 01	NO OF SHT. 01

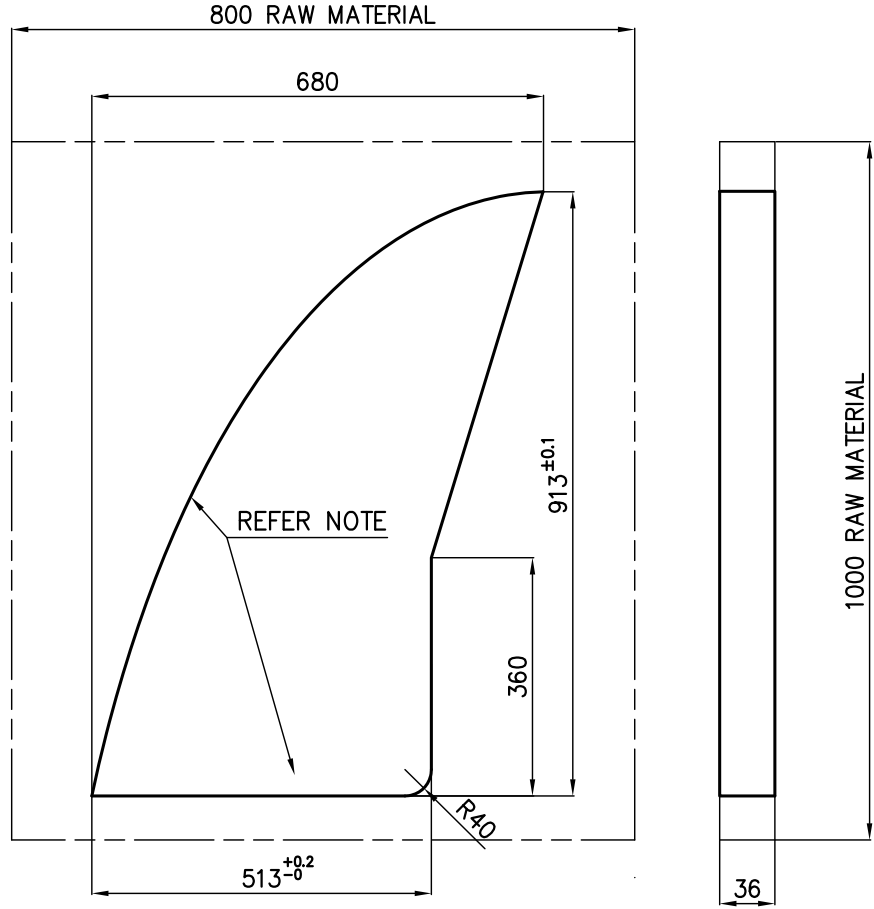
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FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

GEN. DIM. LIMITS, FITS, & TOLERANCES AS PER P.S. :- HY0230261

REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED



NOTE:

1. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.
2. THESE PROFILES AND DIMENSIONS SHALL BE MATCHED WITH THE PROFILE OF THE THE FABRICATED CASING AS PER DRG NO. 03310700026. THE PROFILE CAN BE CUT USING A TEMPLATE MADE FROM CASING PROFILE

REMARKS	ITEM NO	DESCRIPTION	STD	MATL. CODE	A/C	UNIT	UNIT Wt.
				MATL. SPEN.			QTY.



	BHARAT HEAVY ELECTRICALS LTD.		NAME	SIGN.	DATE	NO. OF VAR.
	HYDERABAD		DRN.	RAGHU	26.10.14	
			CHD.	YVRL	28.10.14	
			APPD.	SDR	30.10.14	

DEPT. COMP. DEPT. CODE 420	UNTOL. DIM. GR. C/M/F		SCALE NTS	WEIGHT (KG) 110	REF. TO ASSY DRG. 0-331-07-00026	ITEM NO.	NO. OF ITEMS
TITLE INLET RIB ON SUCTION SIDE				CARD CODE	DRAWING NO. 4-331-07-00111	REV. 00	
				SHT No. 1	NO OF SHT. 1		

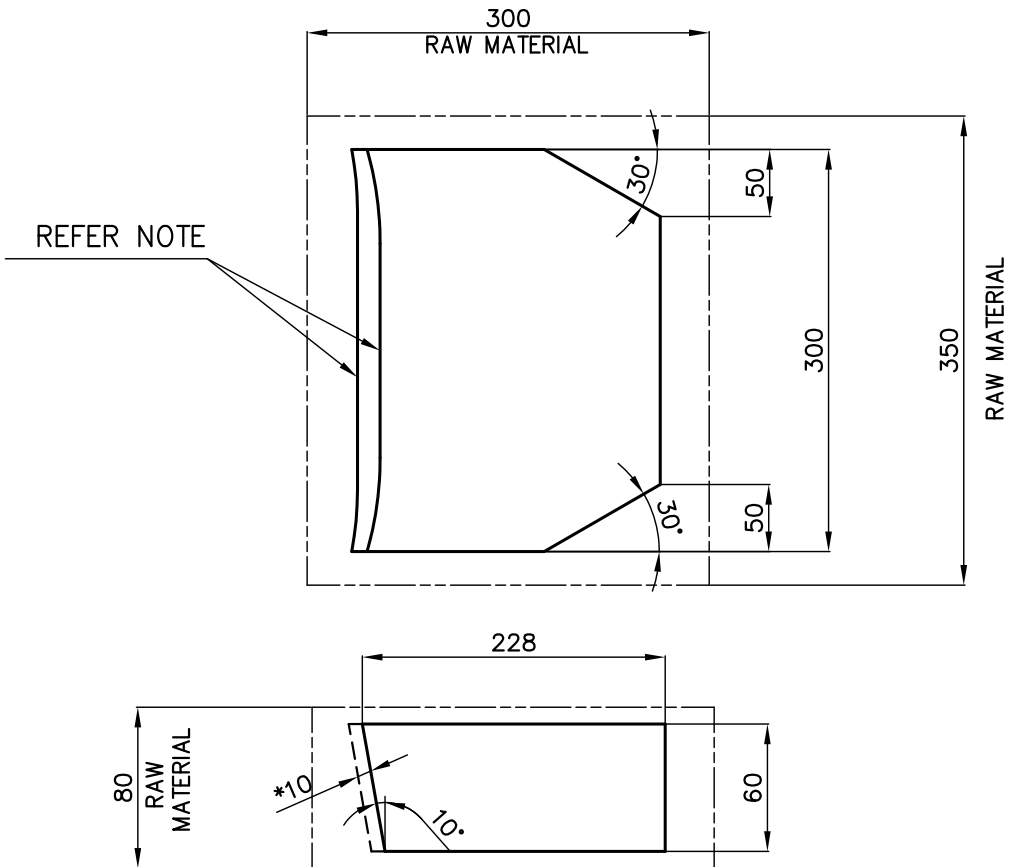
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FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED

GEN. DIM. LIMITS , FITS , & TOLERANCES AS PER P.S :- HY0230261



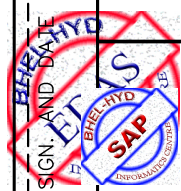
NOTE:

1. ALL PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.
2. THESE PROFILES SHALL BE MACHINED TO MATCH THE PROFILE OF THE SECOND SUCTION NOZZLE DIMENSIONS INDICATED ARE FINAL MACHINED VALUE. NECESSARY ALLOWANCE SHALL BE PROVIDED TO MATCH THE PROFILE OF THE NOZZLE

REMARKS	ITEM NO	DESCRIPTION	STD	MATL. CODE	A/C	UNIT	UNIT Wt.
				MATL. SPEN.			QTY.



BHARAT HEAVY ELECTRICALS LTD.
HYDERABAD



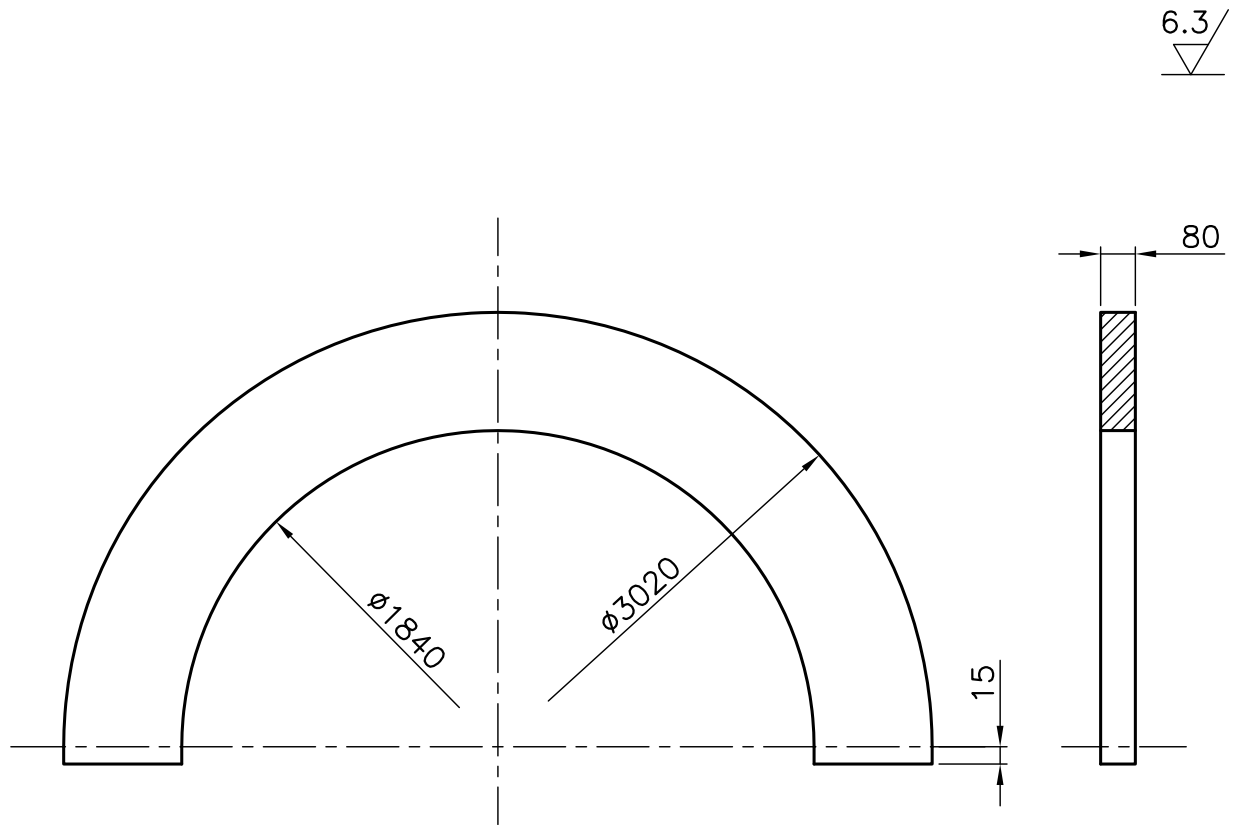
DRN.	REETA	SIGN.	DATE	NO. OF VAR.
CHD.	RAGHU		01.11.14	NA
APPD.	SDR		01.11.14	

DEPT. COMP.	UNTOL. DIM. GR.	SCALE	WEIGHT (KG)	REF. DRG	ITEM NO.	NO. OF ITEMS
DEPT. CODE 420	ε/M/F	NTS	34	0-331-07-00016	-	-

TITLE	CARD CODE	DRAWING NO.	REV.
GUIDE BLOCK SUCTION SIDE		4-331-07-00112	00
SHT No. 1		NO OF SHT. 1	

REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED			CHECKED
		APPROVED			APPROVED			APPROVED

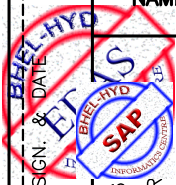
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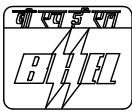



NOTE:

1. ALL THE PLATES SHALL BE CHECKED FOR 100% UT AS PER A435/ A435M BEFORE CUTTING.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT



 BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		NAME	SIGN	DATE	NO. OF VAR. 00		
DRN.	REETA	RESTRICTED USE	04.11.14				
CKD.	KVS		04.11.14				
APPD.	SDR		04.11.14				
DEPT. COMP. CODE 420	UNTOL. DIMS. GR. ø/M/F		SCALE NTS	WEIGHT(K.G.) 1410	REF. TO ASSY.DRG. -NA-	ITEM NO. -NA-	NO. OF ITEM -NA-
TITLE HALF RING FOR COUNTER CASING FIXING					DRAWING NO. 4-331-07-00113		REV. 00
REF. TO HY023026 UNSPECIFIED TOLER					SHT.NO. 01	NO. OF SHT. 01	

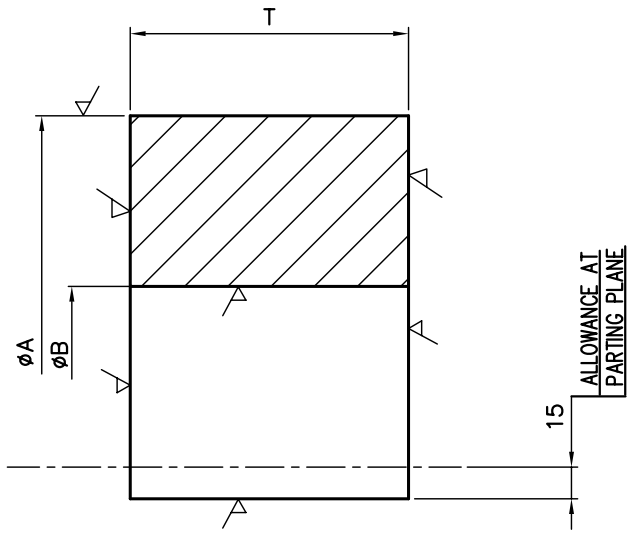
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FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

REV.	DATE	ALTERED	REV.	DATE	ALTERED
		CHECKED			CHECKED

GEN. DIM. LIMITS, FITS, & TOLERANCES AS PER P.S. :- HY0230261

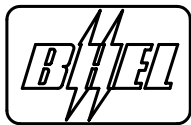


VAR. NO.	ϕA	ϕB	T	WT. (in Kgs)	Remarks
01	1160	280	530	2125	FORGING RING UPPER DE. & NDE. SIDE.
02	1160	280	860	3450	FORGING RING LOWER NDE. SIDE
03	1160	280	760	3050	FORGING RING LOWER DE. SIDE
04	760	400	470	625	FORGING RING BEARING UPPER NDE. SIDE
05	760	400	210	280	FORGING RING BEARING UPPER DE. SIDE

REMARKS:

- MATERIAL AND DELIVERY CONDITION AS PER - HY19364
- FORGING SHALL BE PROOF MACHINED AS PER THE DIMENSIONS INDICATED AND SHALL BE SUPPLIED IN NORMALISED AND TEMPERED CONDITION.

DATE	COMPUTER FILE NAME	REMARKS	ITEM NO	DESCRIPTION	STD	MATL. CODE	A/C	UNIT	UNIT Wt.
						MATL. SPEN.			QTY.



BHARAT HEAVY ELECTRICALS LTD.
HYDERABAD

NAME	SIGN.	DATE	NO. OF VAR.
DRN. JCS/K		07.12.09	
CHD. SDR		07.12.09	—
APPD. PNR		07.12.09	

DEPT. COMP.	UNTOL. DIM. GR.	SCALE	WEIGHT (KG) AS SHOWN IN TABLE	REF. TO ASSY DRG.	ITEM NO.	NO. OF ITEMS
DEPT. CODE 420	c/M/F	NTS		NA	—	—
TITLE CS. FORGINGS FOR 2MCL1007 CASING.				DRAWING NO.	REV.	
				4-331-07-20007	00	
				SHT No. 1	NO OF SHT. 1	

RESTRICTED USE

TD-106-1
Rev.3

Form No.



PRODUCT STANDARD
TURBINES & COMPRESSORS
HYDERABAD

TC 3 2056

Rev. No. 01

PAGE 1 OF 3

NOZZLE FLANGE FORGINGS
(DESIGN PR 10 KG/CM²)

DESIGNATION : NOZZLE FLANGE FORGINGS VAR NO.XX TC 3 2056
ORDERING DETAILS : TC 3 2056
MATERIAL i) HY 193 64 (ASTM A 350 Gr LF2)
 ii) MATERIAL ATTEST
SIZE : VAR NO.XX

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6.3

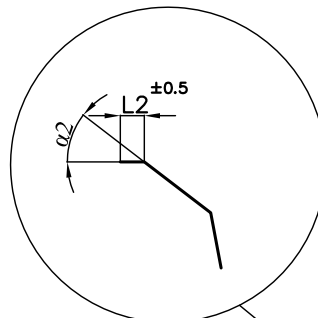


FIG 1

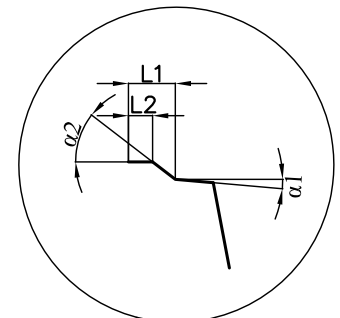
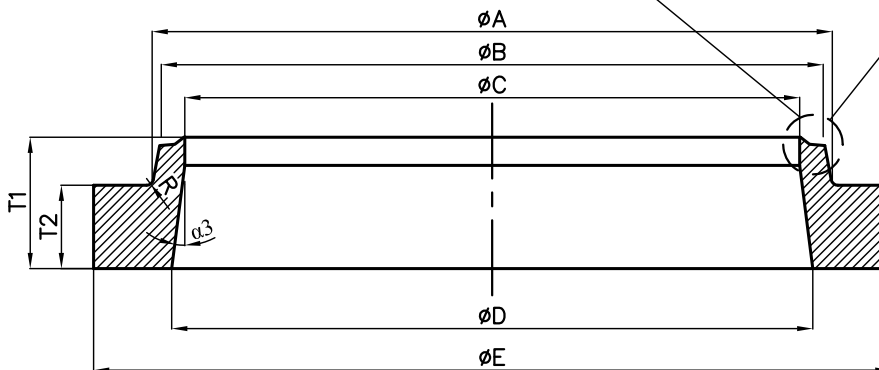


FIG 2



ALL DIMENSIONS ARE IN 'mm'

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TURBINES & COMPRESSORS
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TC 3 2056

Rev. No. 01

PAGE 2 OF 3

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VAR.NO.	ØA	ØB	ØC	ØD	ØE	T1	T2	R	L1	L2	⁰¹ (in ³)	⁰² (in ³)	⁰³ (in ³)	FIGURE	WEIGHT (in Kgs)	REMARKS	MATERIAL CODE
01	146	114	92	104	254	96	52	5	-	2	-	30'	5'	FIG 1	12	Ø4" #300	
02	206	168	146	155	318	108	57	5	-	2	-	30'	3'30'	FIG 1	21	Ø6" #300	
03	261	220	195	204	381	121	61	5	-	2	-	30'	2'30'	FIG 1	33	Ø8" #300	
04	321	273	248	250	445	127	68	5	-	2	-	30'	0'30'	FIG 1	47	Ø10" #300	
05	375	324	300	304	521	140	71	8	19	1.5	5'	37'30'	1'	FIG 1	66	Ø12" #300	
06	426	356	328	337	584	153	74	10	19	1.5	5'	37'30'	2'	FIG 1	93	Ø14" #300	
07	482.5	406.5	382	388	648	156	77	10	19	1.5	5'	37'30'	1'30'	FIG 1	114	Ø16" #300	
08	533	457	433	445	711	169	80	10	19	1.5	5'	37'30'	2'30'	FIG 1	137	Ø18" #300	
09	587	508	484	491	775	172	84	10	19	1.5	5'	37'30'	1'30'	FIG 1	169	Ø20" #300	
10	702	610	580	591	914.5	178	90	10	19	1.5	5'	37'30'	2'	FIG 1	248	Ø24" #300	
11	825	762	722	741	1090	220	112	11	19	1.5	5'	37'30'	3'	FIG 2	406	Ø30" #300	
12	880	813	773	791	1150	232	118.5	11	19	1.5	5'	37'30'	3'	FIG 2	471	Ø32" #300	
13	990	915	875	891	1270	251	125	13	19	1.5	5'	37'30'	2'	FIG 1	575	Ø36" #300	
14	995	965	915	932	1170	190	128	13	19	1.5	5'	37'30'	3'	FIG 2	451	Ø38" #300	TC9416415090
15	1050	1016	966	981	1240	204	134	13	19	1.5	5'	37'30'	2'30'	FIG 2	432	Ø40" #300	
16	1150	1120	1070	1081	1355	216	144	13	19	1.5	5'	37'30'	1'30'	FIG 2	529	Ø44" #300	TC9416415103
17	1255	1220	1168	1191	1465	234	153	13	19	1.5	5'	37'30'	3'30'	FIG 2	636	Ø48" #300	

TD-106-1

Rev.5

Form No.



PRODUCT STANDARD
TURBINES & COMPRESSORS
HYDERABAD

TC 9 2024

Rev. No. 01

PAGE 1 OF 3

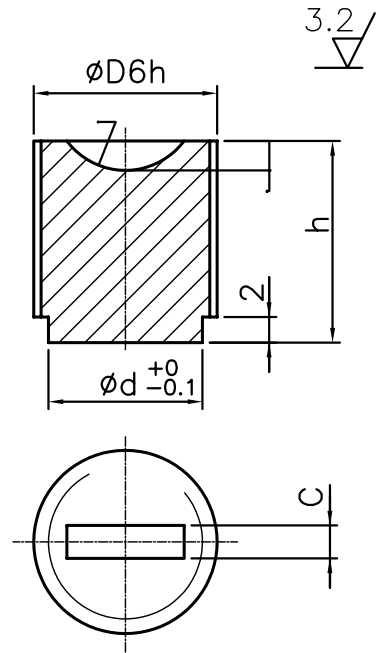
GAS PLUG

DESIGNATION : PLUG 'D' TC 9 2024

ORDERING DETAILS: TC 9 2024

MATERIAL : i) AA 107 21
(IS 6603 Gr20 Cr13(H&T))
ii) MATERIAL ATTEST

SIZE : 'D'



ALL DIMENSIONS ARE IN 'MM'

VAR. NO.	D	d	h	a	c	r	WT./ PC. Kgs	COMPONENT CODE	
								12 DIGIT CODE	
								10 DIGIT CODE	
01	G 3/8"	13.5	16	3	3	8	0.025	TC 96 92024 01 6	
02	G 1/2"	17	20	4	5	10	0.05	TC 96 92024 02 4	945 41 13 180
03	G 3/4"	23	22	5	5	15	0.07	TC 96 92024 03 2	945 41 13 190
04	G 1"	30	25	5	5	20	0.14	TC 96 92024 04 0	945 41 13 200
05	G 1 1/4"	38	30	6	6	24	0.27	TC 96 92024 05 9	945 41 13 210
06	G 1 1/2"	44	35	8	6	30	0.42	TC 96 92024 06 7	945 41 13 220
07									
08									
09	G 1/8"	5.9	12	2	2	6	0.01	TC 96 92024 09 1	
10									

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Cl: TC

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TD-106-1

Rev.5

Form No.



PRODUCT STANDARD
TURBINES & COMPRESSORS
HYDERABAD

TC 9 2024

Rev. No. 01

PAGE 2 OF 3

GAS PLUG

VAR. NO.	D	RAW MAT. SIZE	RAW MAT. CODE		SUPERSEDED DRAWING
			NEW 12 DIGIT CODE		
			OLD 10 DIGIT CODE		
01	G 3/8"	∅ 32X25			4C-45-0844 (FIG.A) mat.s.s.
02	G 1/2"	∅ 32X30	HY 107 02 21 147 105 05 54 011		
03	G 3/4"	∅ 32X32			
04	G 1"	∅ 50X35	HY 107 02 21 180 105 05 63 015		
05	G1 1/4"	∅ 50X40	HY 107 02 21 201 105 05 63 041		
06	G1 1/2"	∅ 63X45			
07					
08					
09	G 1/8"	∅16X20	HY 107 02 21 082		
10					

RAW MATERIAL : AS PER PLANT RATIONALISED SIZES.

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