

- NOTES AND DOCUMENTS MENTIONED:**
- TOLERANCES OF POSITION ON ALL THE HOLES  $\phi$   $\phi$  1 X Y Z
  - $\sqrt{}$  ROUGHNESS MACHINING FOR ALL THE HOLES
  - MACHINING AND CHECKING RULES ACCORDING TO TC72059
  - DEVIATIONS FOR DIMENSIONS WITHOUT INDICATION OF TOLERANCE ACCORDING TO TC72066
  - FILL WELDING BEFORE EXECUTING THE HORIZONTAL DRILLING
  - 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.

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: **NRL MAB DMCL 1008**

NAME OF CUSTOMER/PROJECT: **HYDERABAD**

DEPT. CODE: 420	UNITS: 420	DIMS: 420	SCALE: N.T.S	WEIGHT (KG): 3000
-----------------	------------	-----------	--------------	-------------------

TITLE: **FABRICATED CASING (TB SIDE DETAILS)**

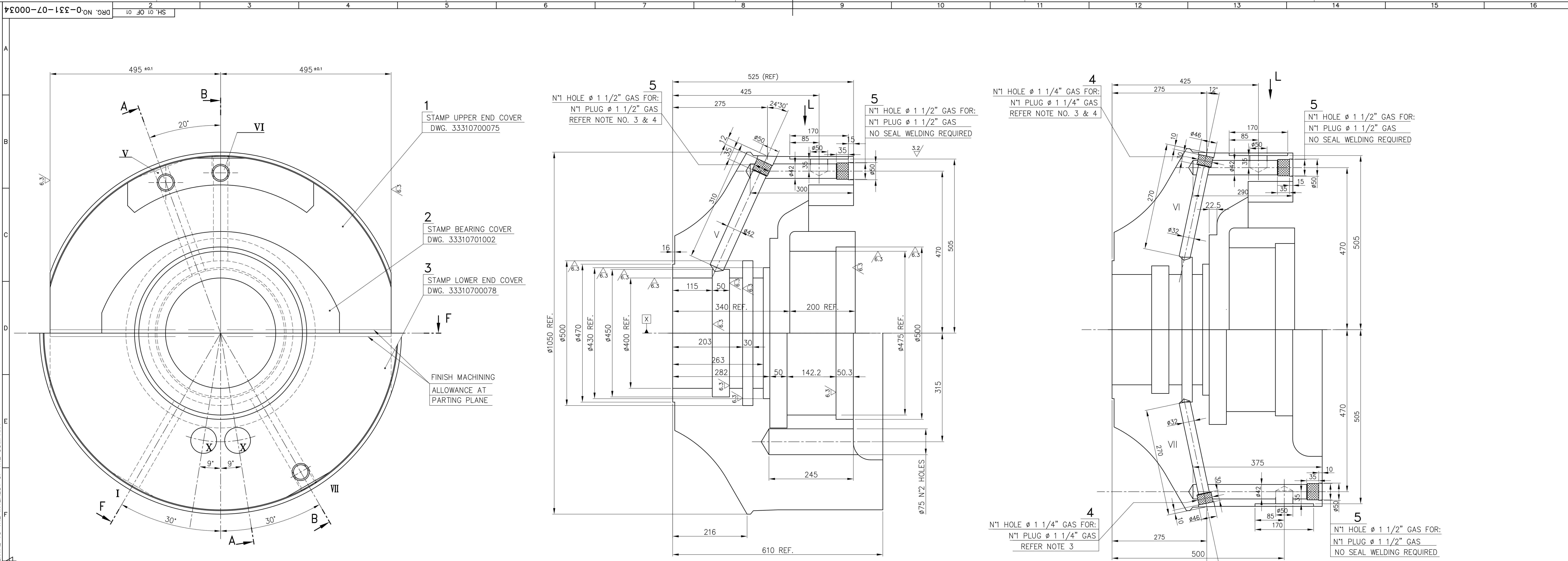
DRAWING NO.: **0-331-07-00033 00**

DATE: 31.10.22

BY: RAGHU

CHECKED: NEMA

APPROVED: YVRL

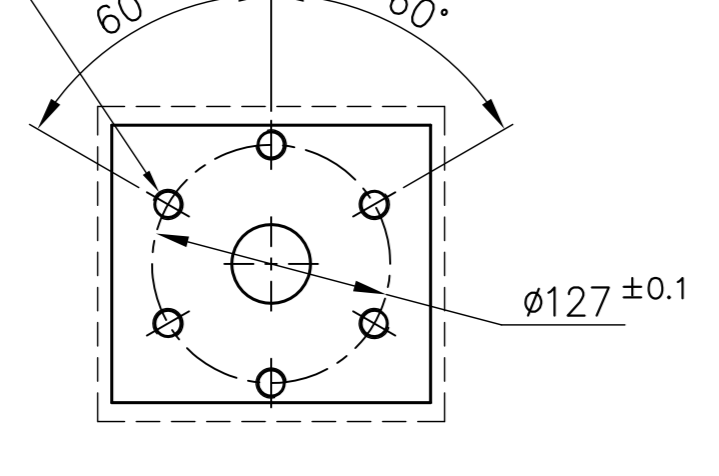
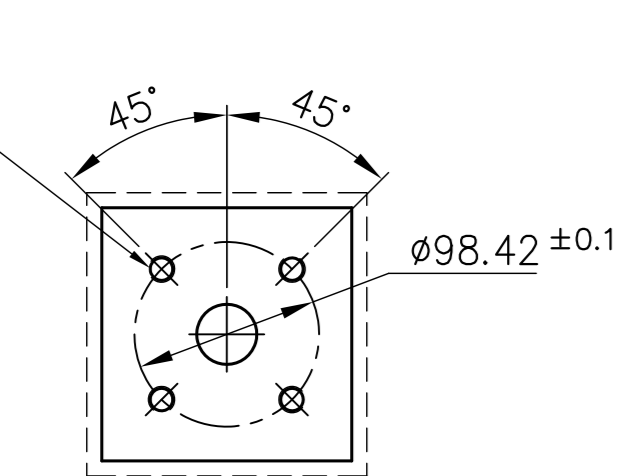


SECTION A-A

SECTION B-B

**FOR HOLES I**  
 N°4 HOLES DEPTH 20/29 FOR:  
 N°4 SCREWS M12x35  
 FLANGE CONNECTION Ø1-1/2"  
 ANSI 150# RF

**FOR HOLES V, VI, VII**  
 N°6 HOLES DEPTH 22/28 FOR:  
 N°6 SCREWS M16x45  
 FLANGE CONNECTION Ø2"  
 ANSI 300# RF



VIEW FROM M

VIEW FROM L

**NOTES AND DOCUMENTS MENTIONED:**

- TOLERANCES OF POSITION ON ALL THE HOLES  $\phi \pm 0.1 \ X \ Y \ Z$
- $\sqrt{6.3}$  ROUGHNESS MACHINING FOR ALL THE HOLES
- FILL WELDING BEFORE EXECUTING THE HORIZONTAL DRILLING
- EXECUTE HOLES AFTER WELDING PLUG INDICATED WITH HOLES

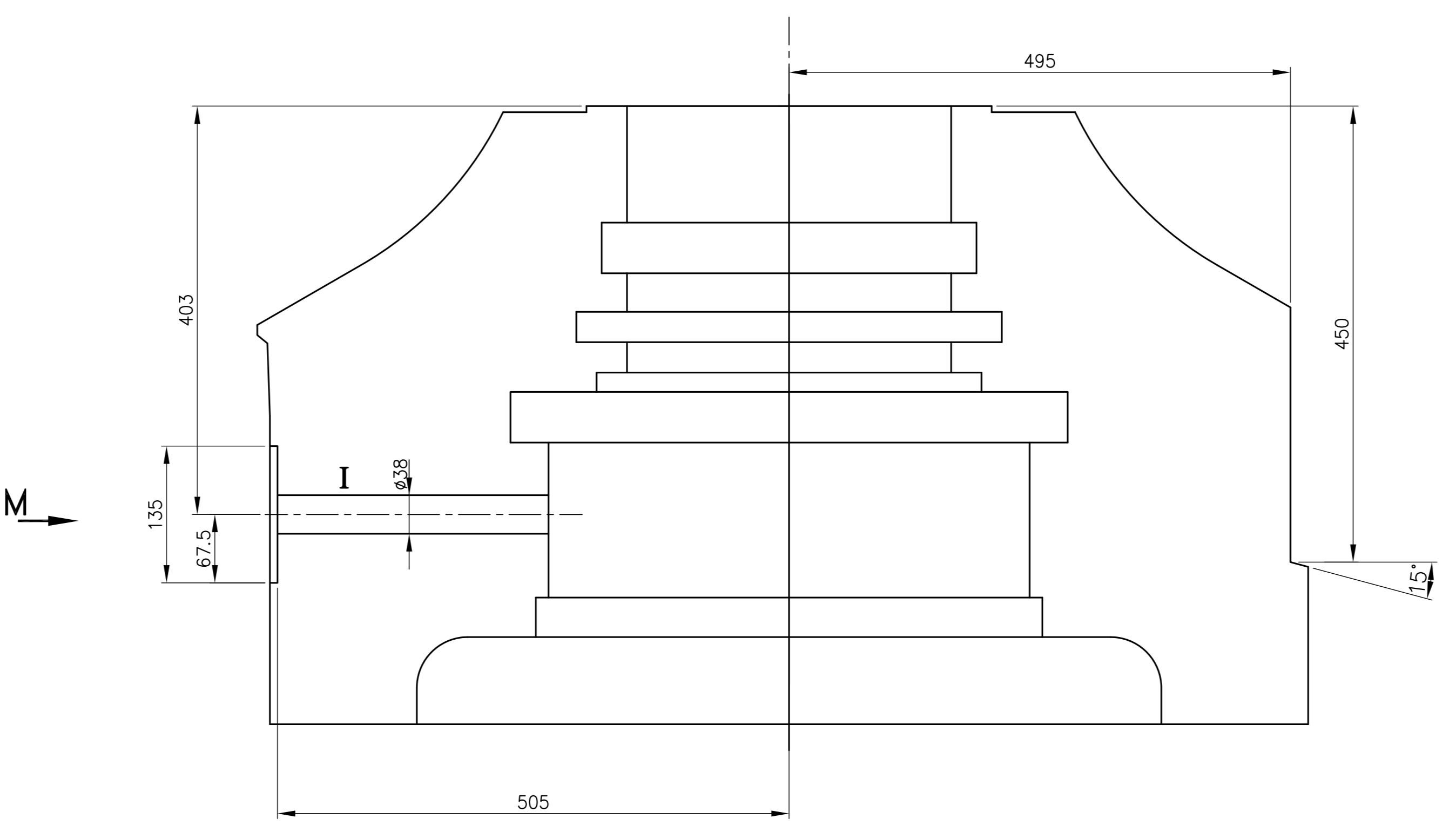
**CAUTION**

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 00034 - FABRICATED CASING (TB SIDE DETAILS)
- 3 331 07 00075 - UPPER END COVER (TB & OTB SIDE)
- 3 331 07 00103 - LOWER END COVER (OTB SIDE)
- 3 331 07 01021 - BEARING COVER (OTB SIDE)

DESCRIPTION	CONNECTION NO.	CONNECTION
OIL INLET TO JOURNAL BEARING	I	1 1/2"-150# HOLE DIA. 38
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



SECTION F-F

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		NRL MAB DMCL 1008 HYDERABAD	
DEPT. CODE	UNTO. OR. CODE	SCALE	WEIGHT (KG)
420	8/24/1	N.T.S	2160
DATE	DATE	DATE	DATE
31.10.22	05.11.22	05.11.22	05.11.22
NAME	DATE	NO. OF	VAR.
RAGHU	31.10.22		
CHD	NEMA	05.11.22	N.A.
APPD	YVRL	05.11.22	N.A.
DRAWING NO. 0-331-07-00034.00		REV.	
SHT. NO. 01		NO. OF SHTS. 01	

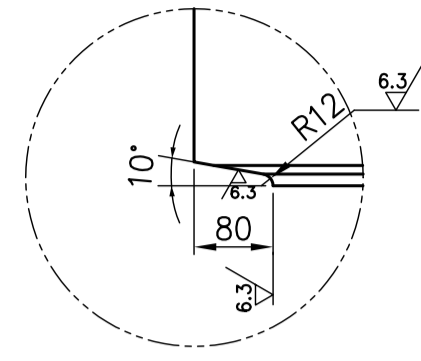


DRG. NO. 1-331-07-00030

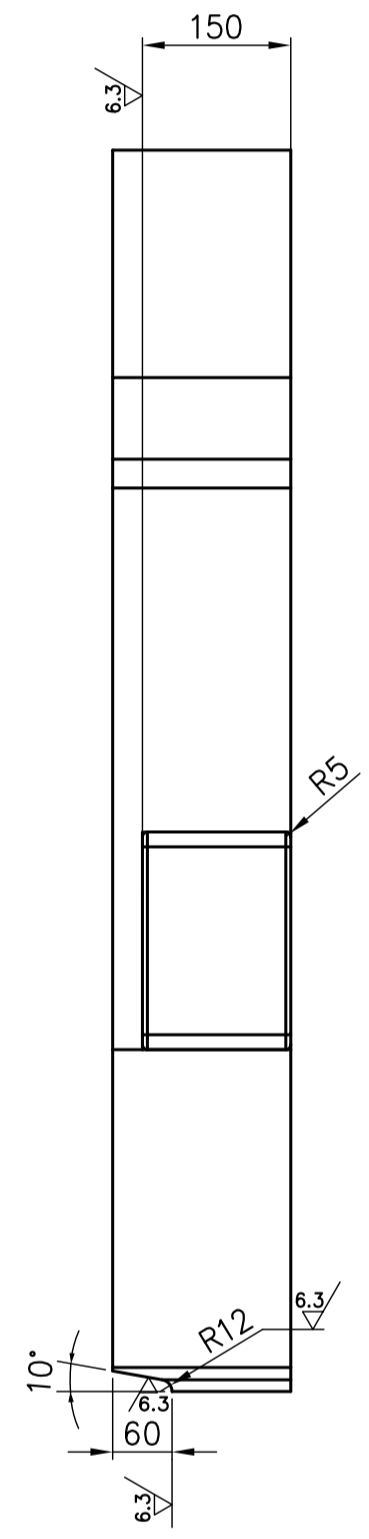
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

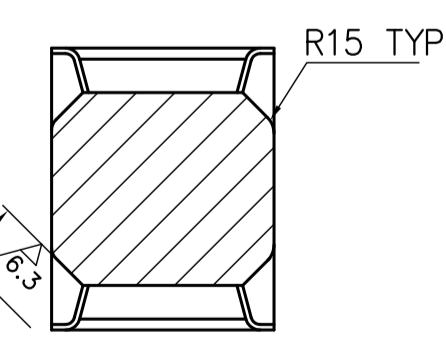
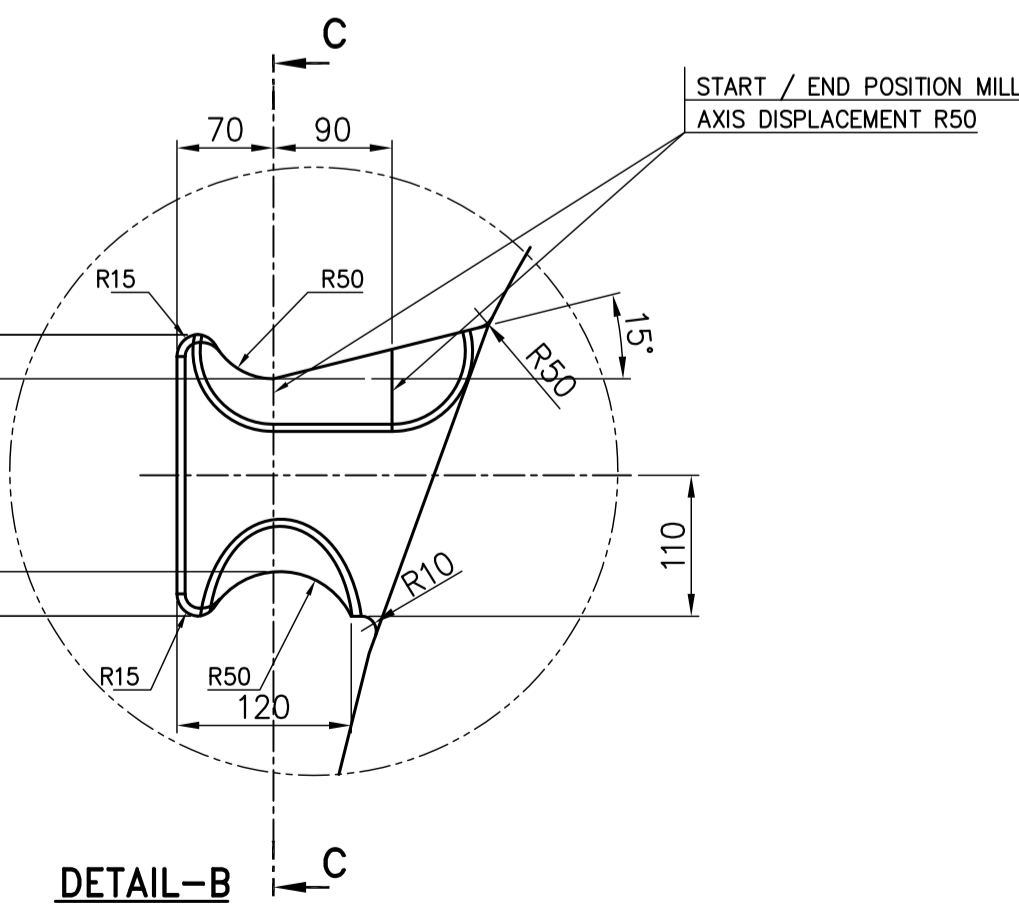
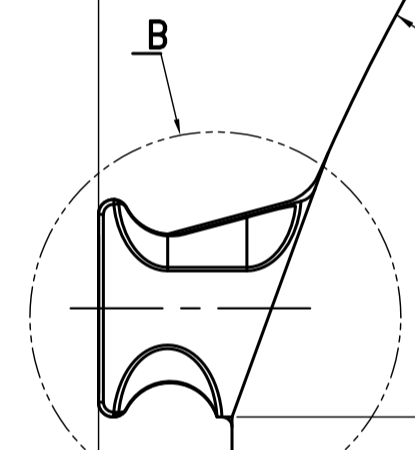
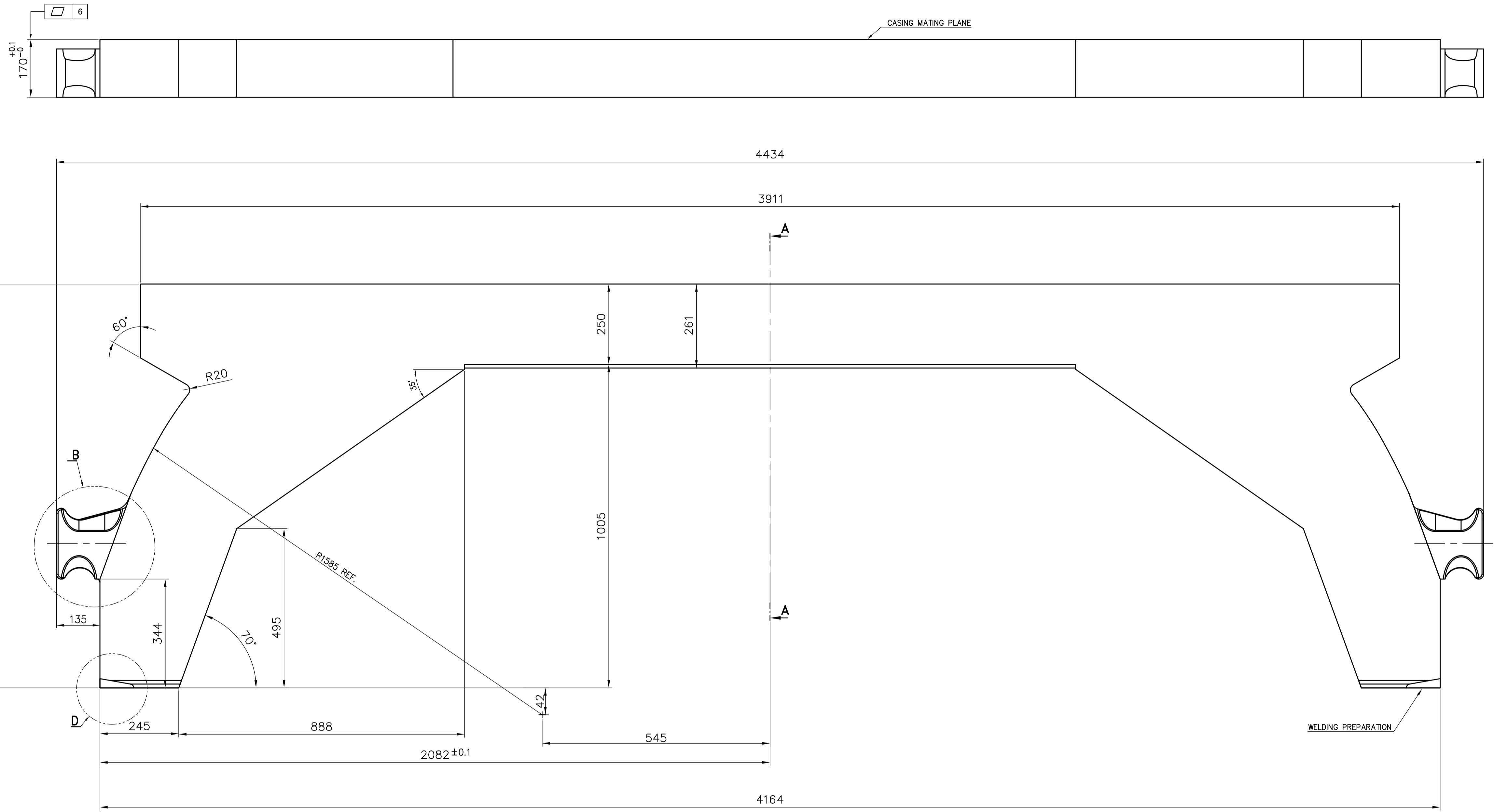
INVENTORY NO. SIGN. AND DATE REF. DRG. NO. COMPUTER FILE NAME



DETAIL-D



SECTION A-A



SECTION C-C

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

CASTING DRAWING NUMBER : 1331071008

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		NRL MAB DMCL 1008			
DEPT. COMPR CODE	UNTO. DIMS. GR. G/M/F	SCALE NTS	WEIGHT (KG)	REF. TO GENR. DRG.	ITEM NO. NO. OF ITEMS
420			2800		
TITLE		DRAWING NO. 1-331-07-00030 00			
PARTING PLANE MACHINING LOWER		SHT. No 01 NO. OF SHT. 01			

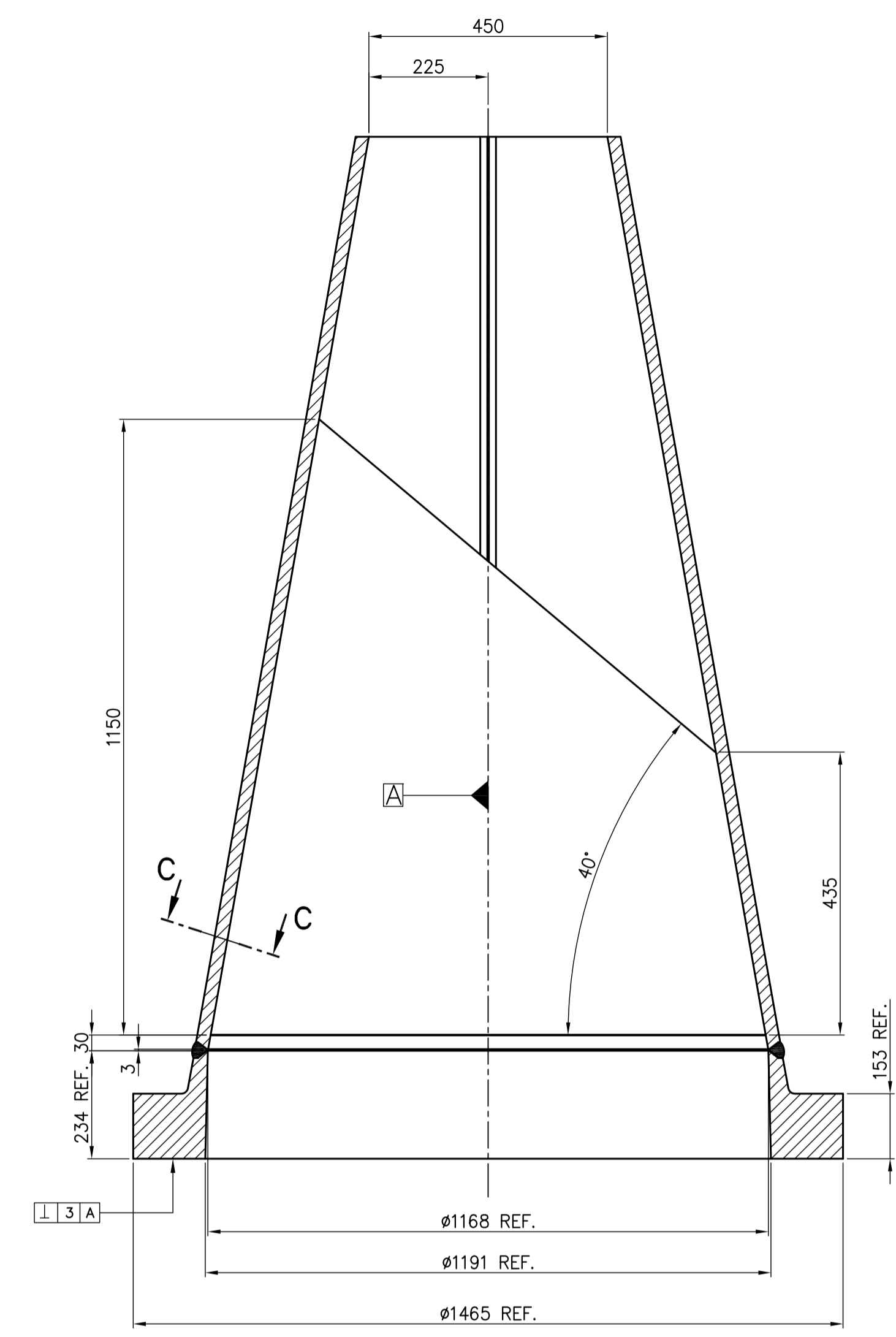
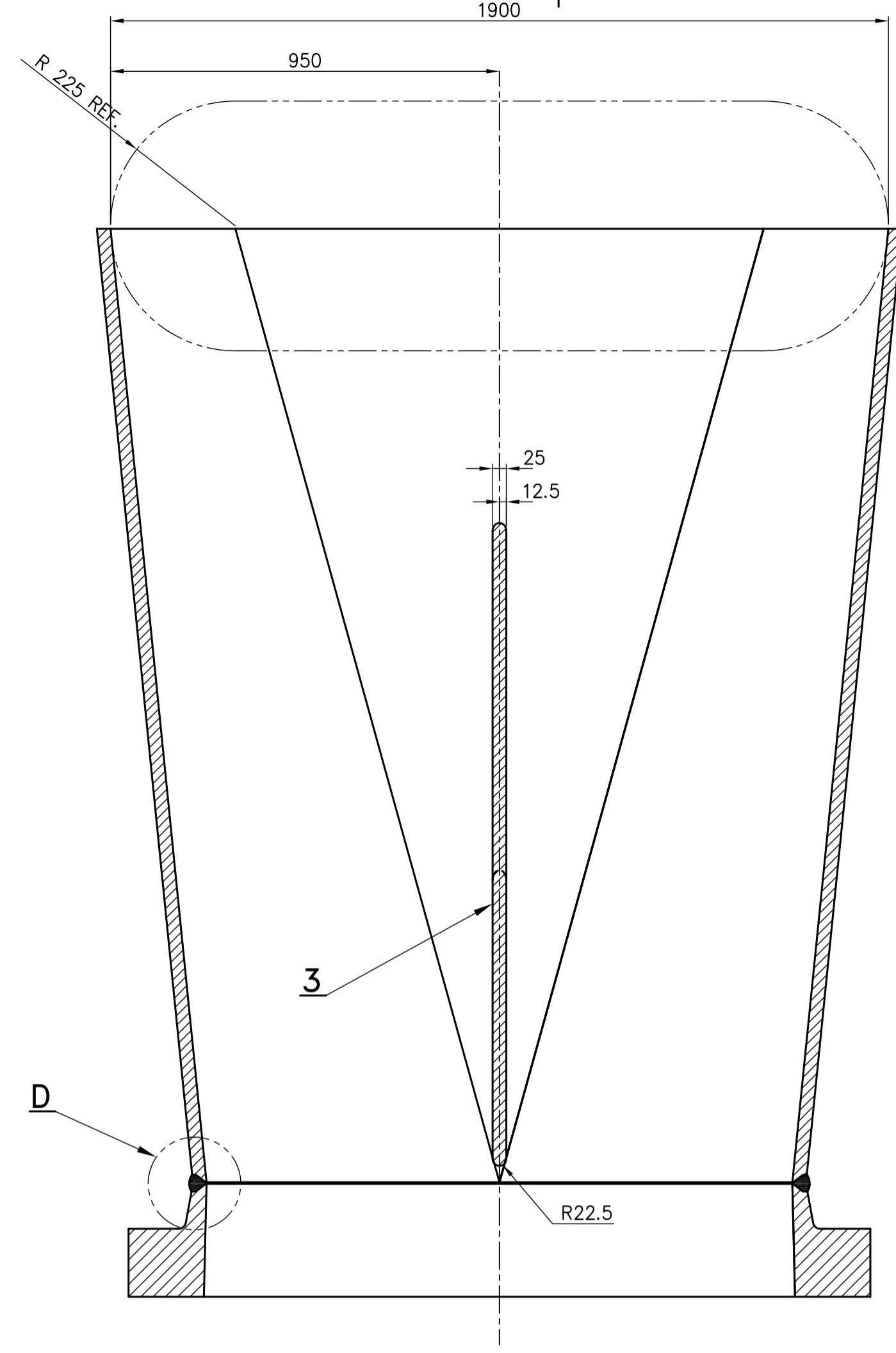
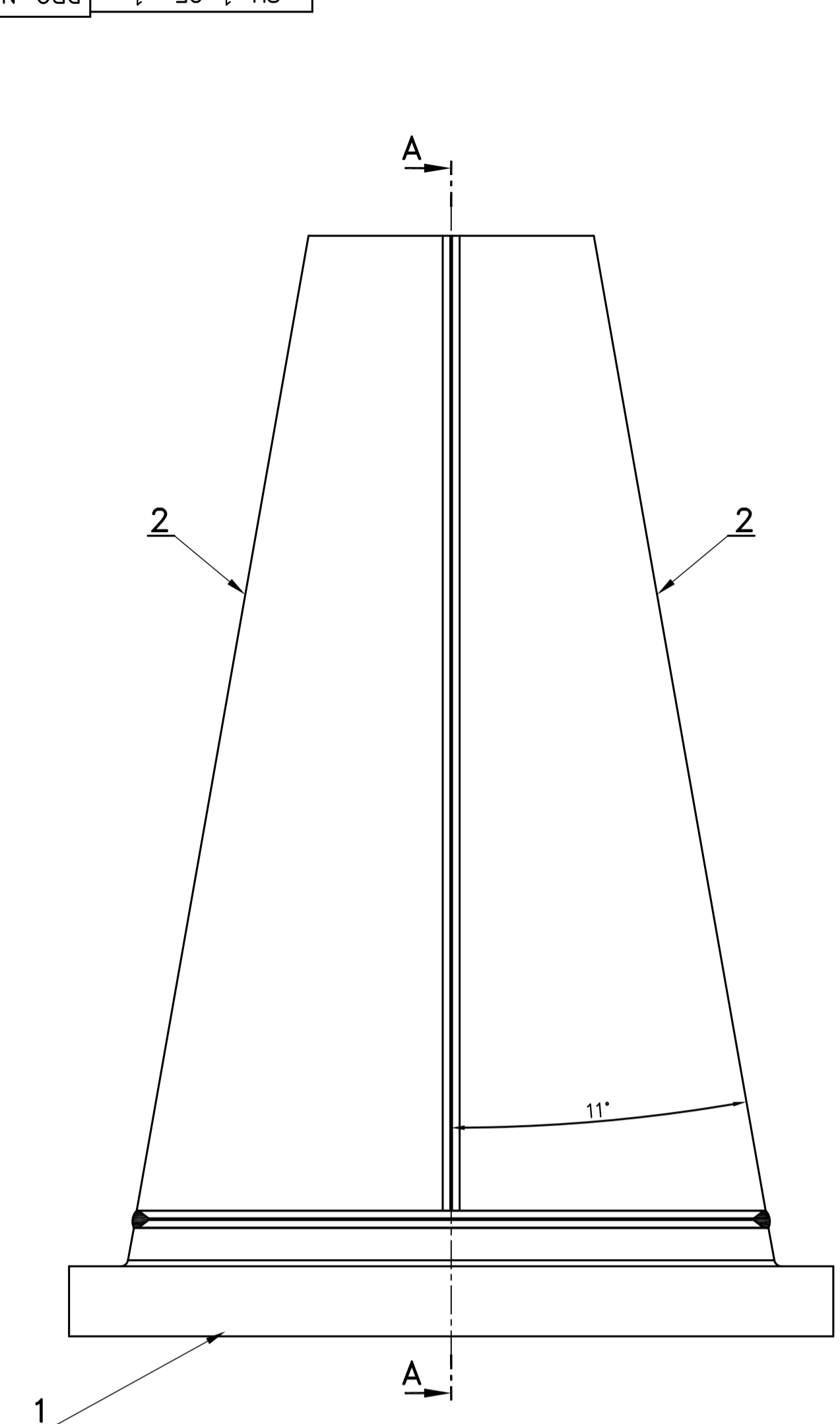


NAME	SIGN.	DATE	NO. OF VAR.
RAGHU		10.10.22	
DILEEP		12.10.22	-N.A.-
YVRL		12.10.22	-N.A.-

DRG. NO. 1-331-07-00031

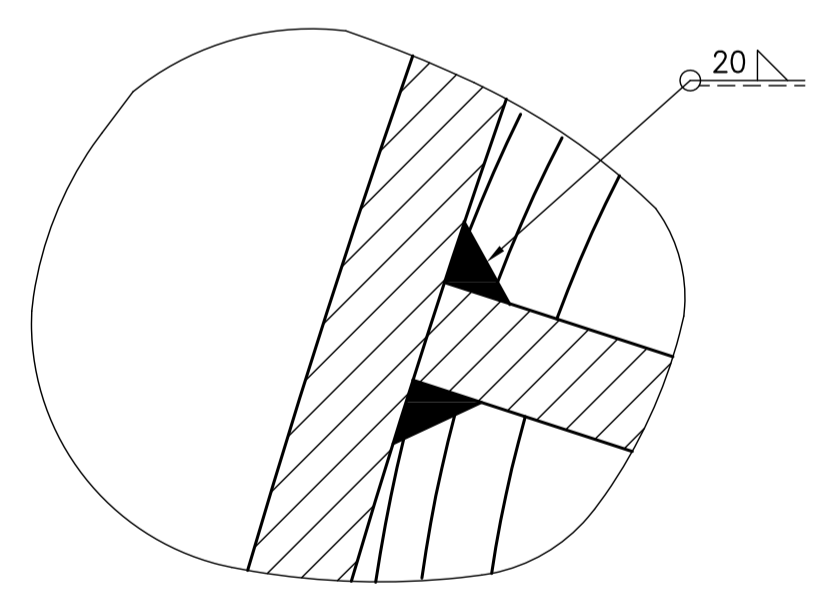
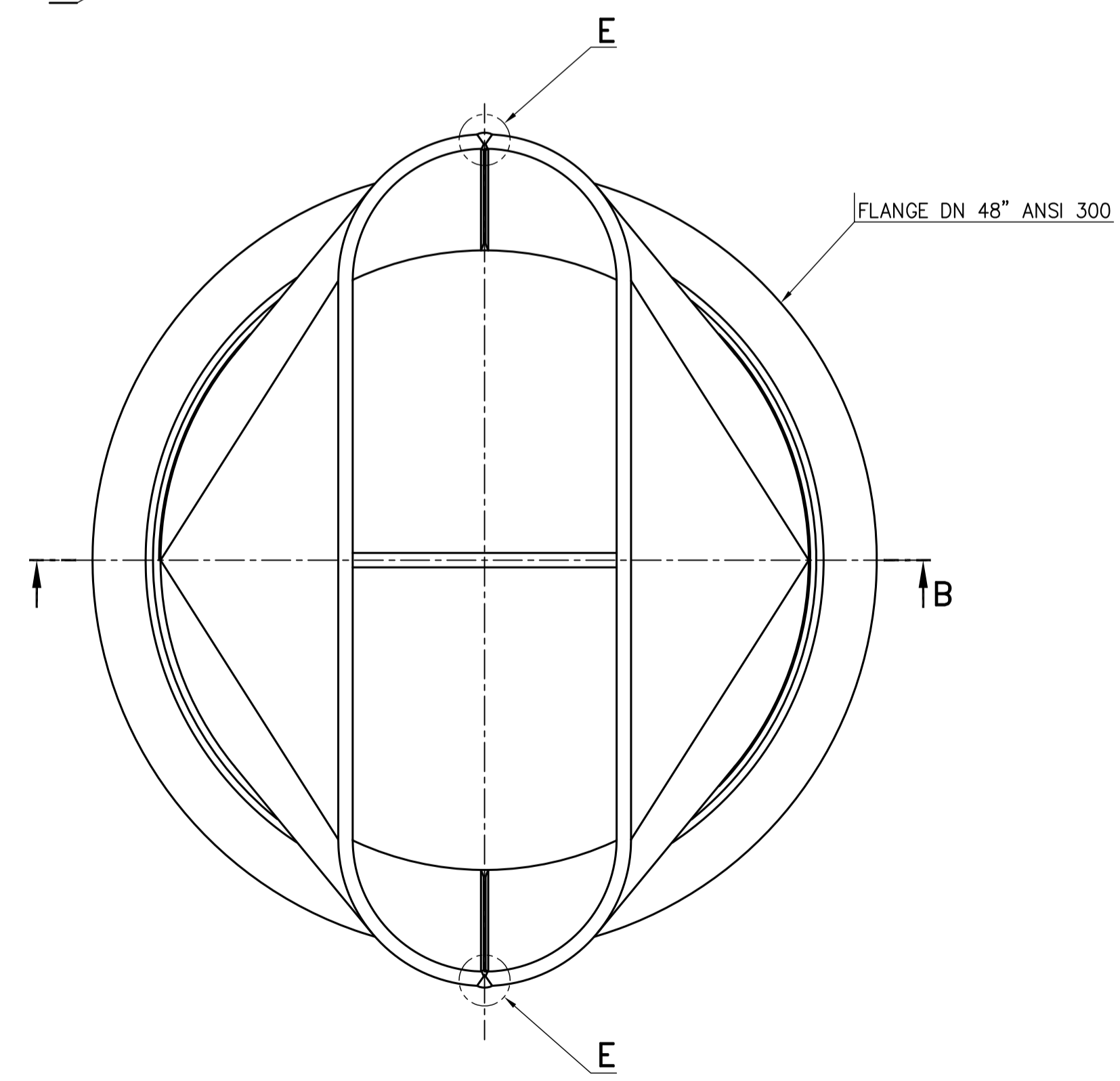
SH. 1 OF 1

(6.3)

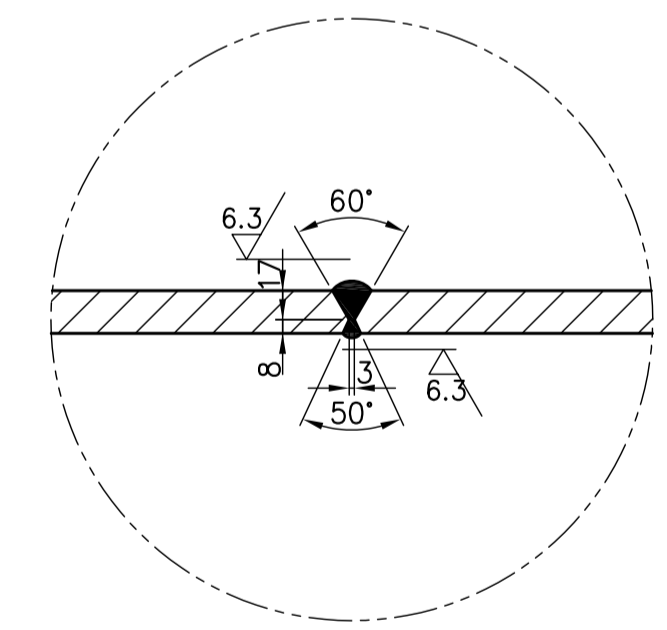


SECTION A-A

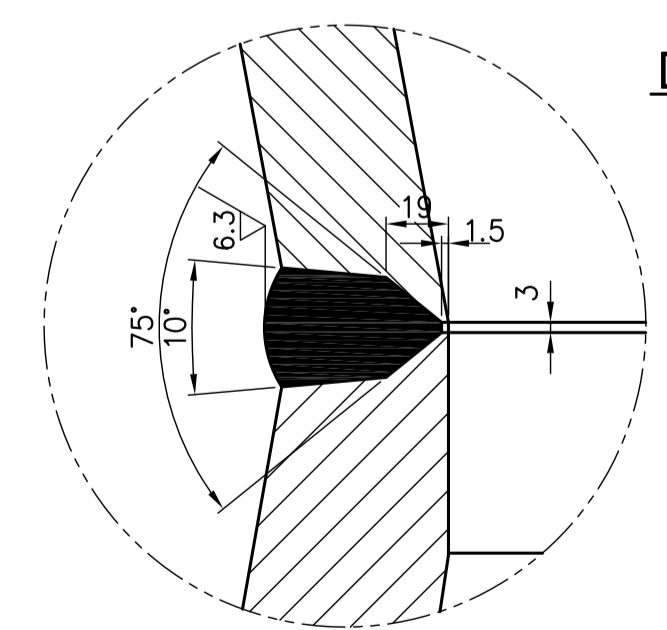
SECTION B-B



SECTION C-C



DETAIL-E



DETAIL-D

NOTES AND DOCUMENTS MENTIONED:

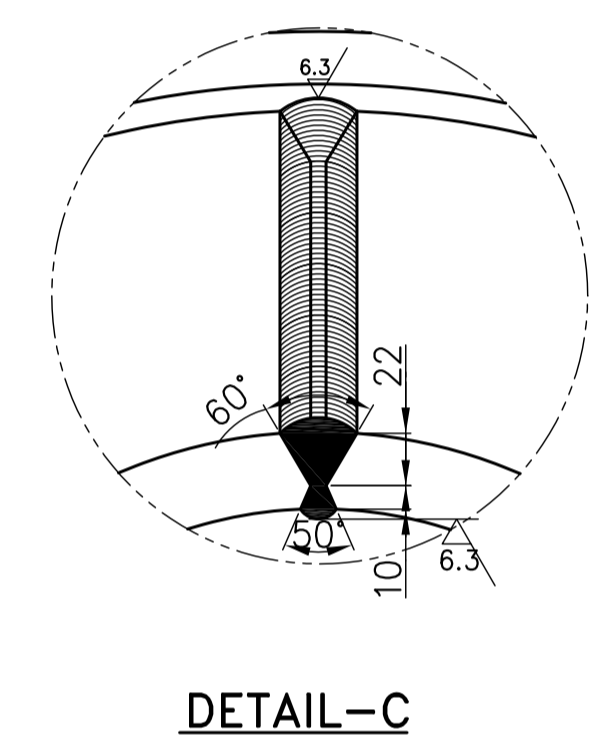
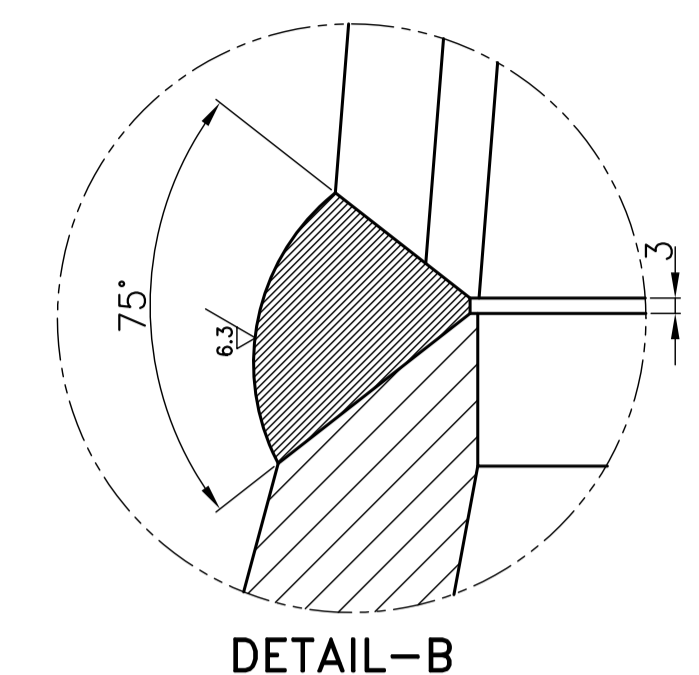
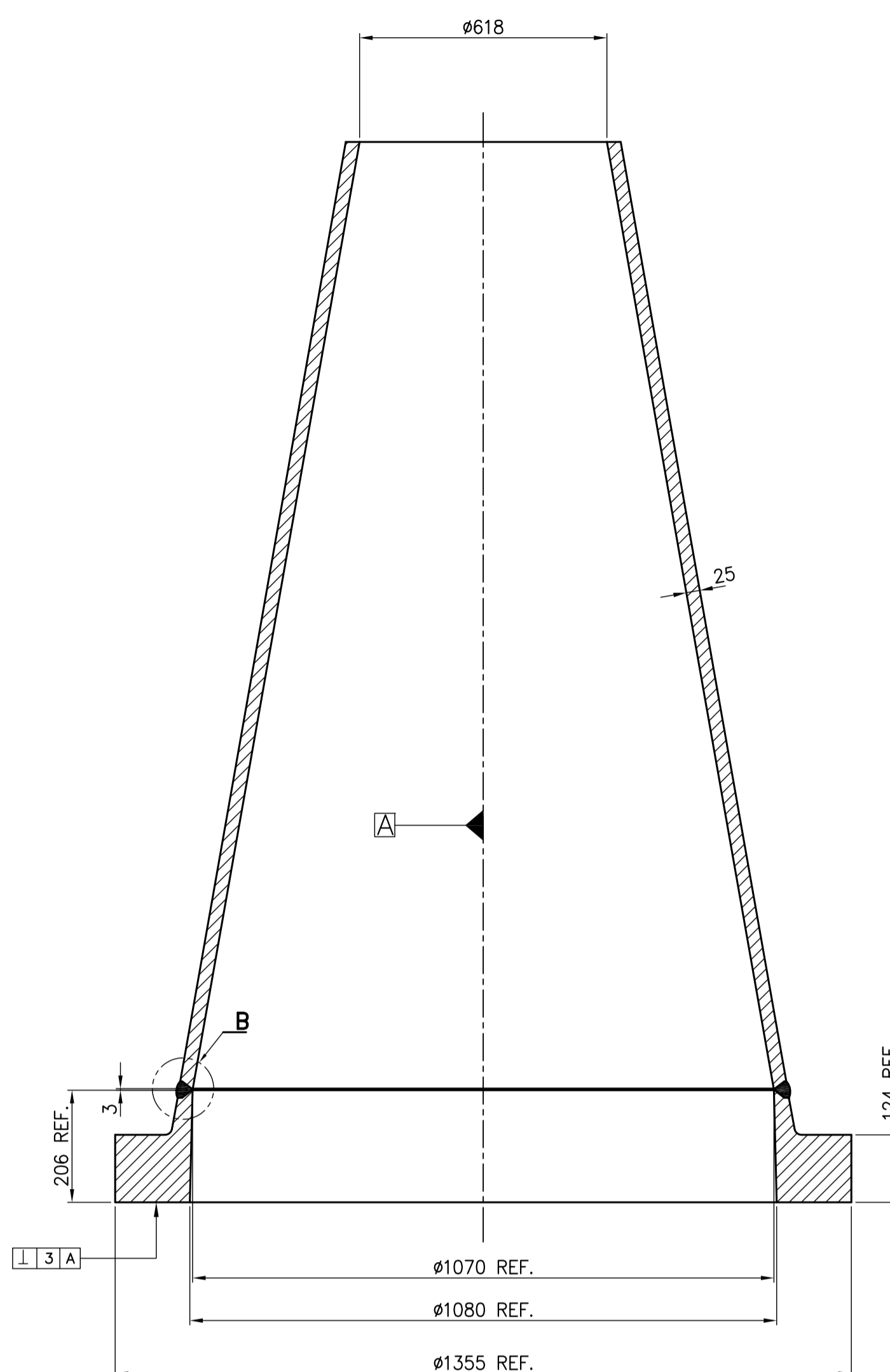
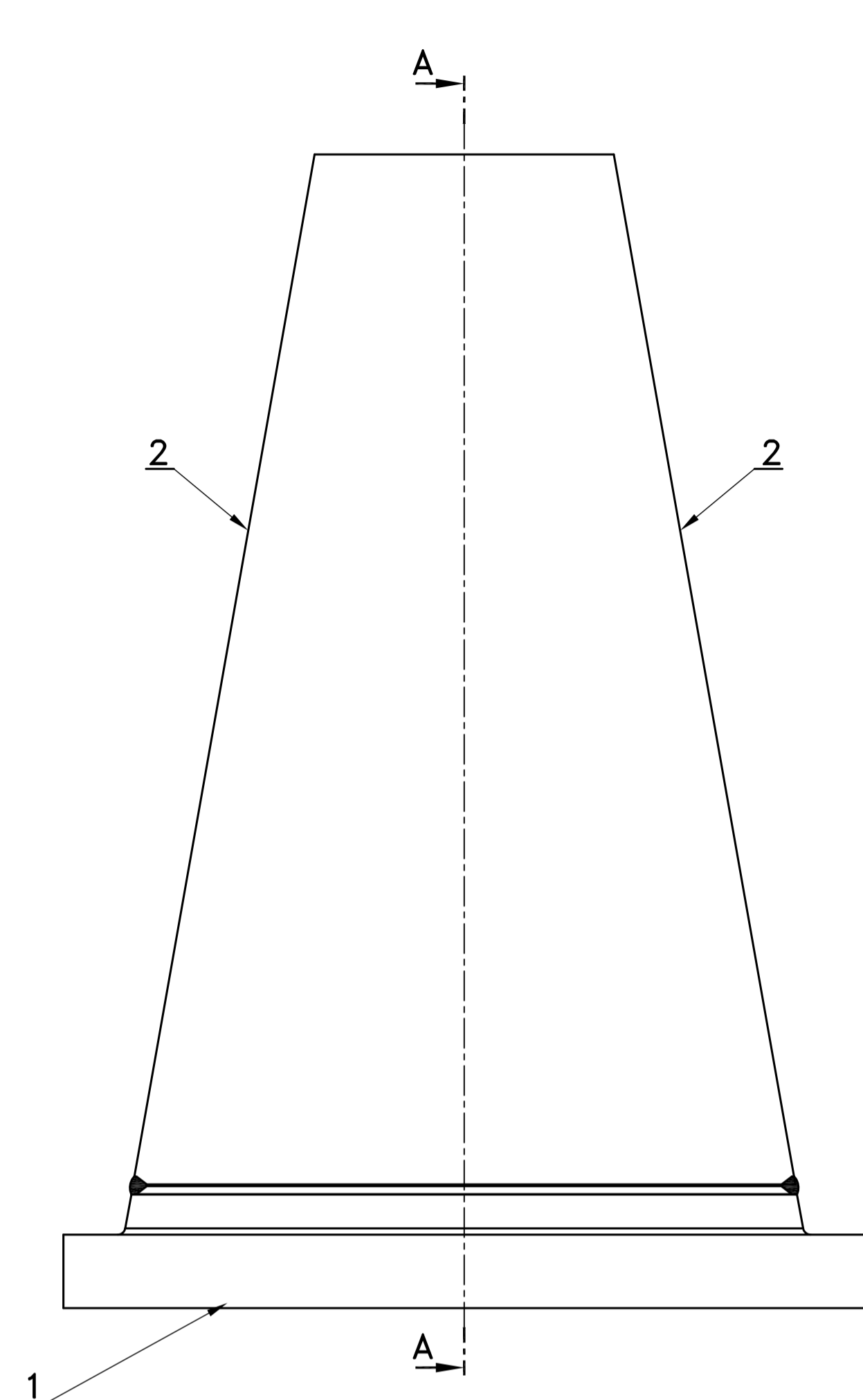
1. THE VALUES OF THE GEOMETRICAL TOLERANCES ARE THE MAX READING ON THE GAUGE (F.I.R.).
2. CARRY OUT WELDING AS PER WPS - WE001.
3. SEQUENCE OF WELDING SHALL BE FOLLOWED AS SPECIFIED IN TECHNOLOGICAL PROCESS.
4. USE ONLY QUALIFIED WELDERS.
5. ALL WELDS SHALL BE CHECKED FOR 100% RADIOGRAPHY AS PER TC 72062.
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.

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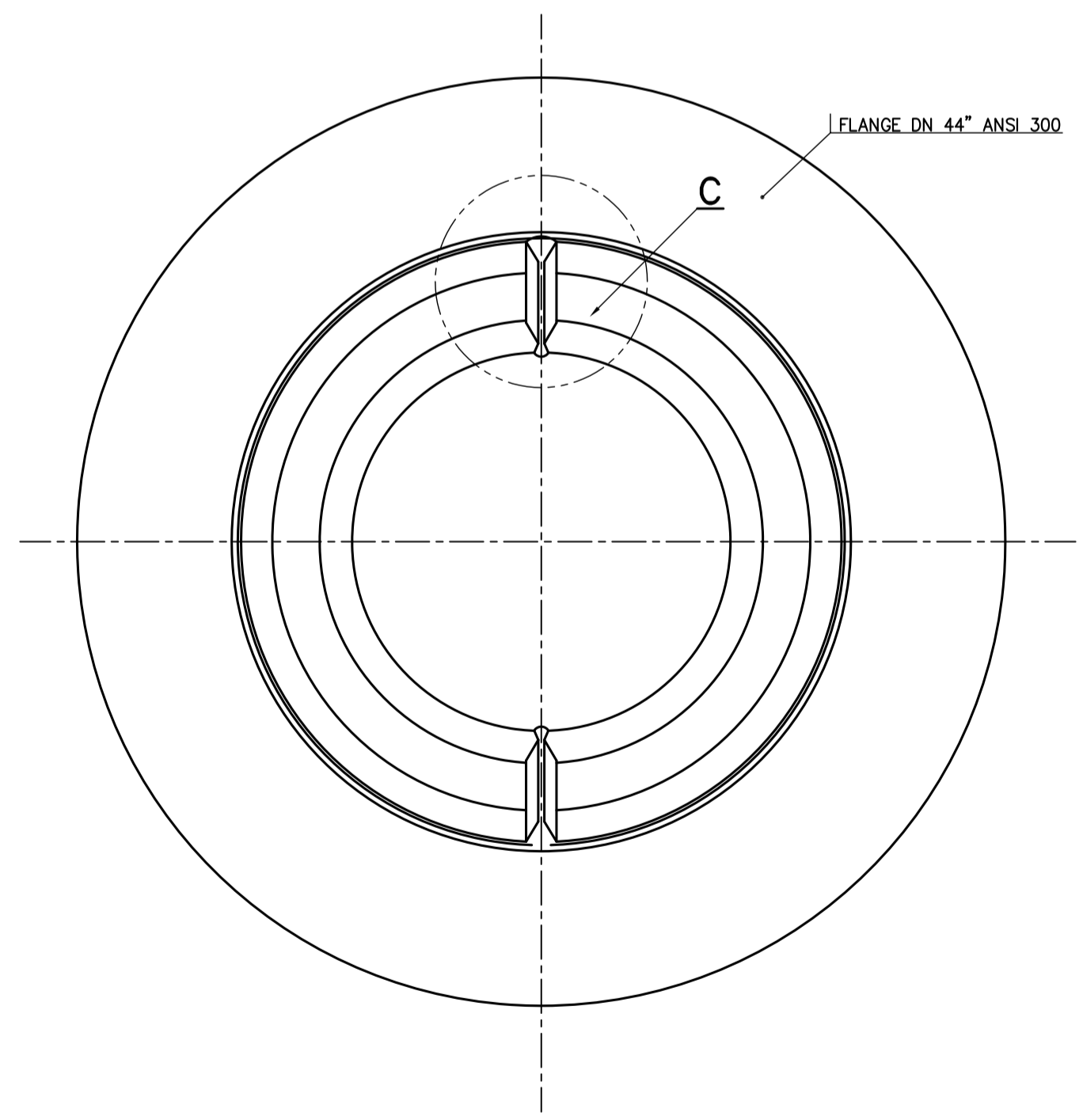
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261

REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	
CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	CHD/APPD		CHD/APPD	

TYPE OF PRODUCT		NRL MAB DMCL 1008			
OR		NAME OF CUSTOMER/PROJECT			
DEPT.	UNTO L.	DIMS.	GR.	SCALE	WEIGHT (KG)
COMPR	420			NTS	1870
CODE					
Bharat Heavy Electricals Ltd.		DRN.	RAGHU	SIGN.	DATE
HYDERABAD		CHD.	NEMA		28.10.22
		APPD.	YVRL		30.10.22
TITLE		SUCTION NOZZLE		CARD CODE	NO. OF
DN 48" - ANSI 300		DRAWING NO.			VAR.
		1-331-07-00031			
		REV.			
		01			



SECTION A-A



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		NRL MAB DMCL 1008			
OR		NAME OF CUSTOMER/PROJECT			
DRN.	NAME	SIGN.	DATE	NO. OF	
CHD.	BHARAT HEAVY ELECTRICALS LTD.	RAGHU	28.10.22	VAR.	
APPD.	HYDERABAD	NEMA	30.10.22	-N.A.-	
		YVRL	30.10.22	-N.A.-	
DEPT. CODE.	UNTO. DIMS. GR.	SCALE	WEIGHT (KG)	REF. TO GENP. DRG.	ITEM NO.
420	G/M/F	NTS	1760	-	-N.A.-
TITLE		CARD CODE	DRAWING NO.	REV.	
DISCHARGE NOZZLE		N.A.	1-331-07-00038	00	
DN 44" - ANSI 300			SHT. No 01	NO. OF SHT. 01	

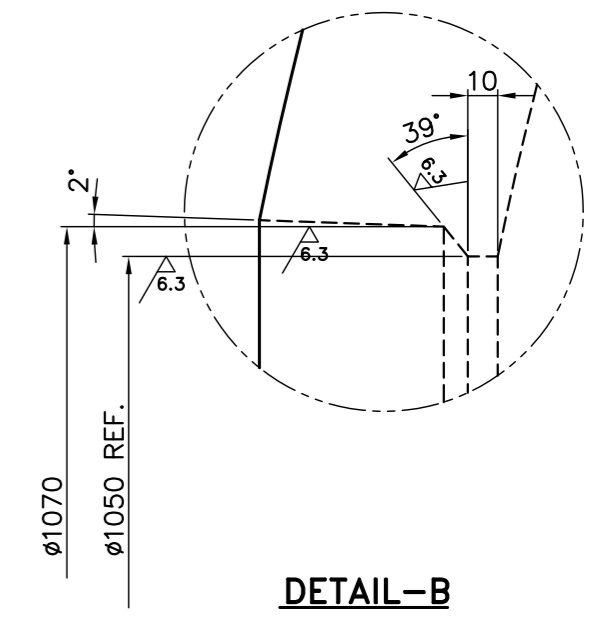
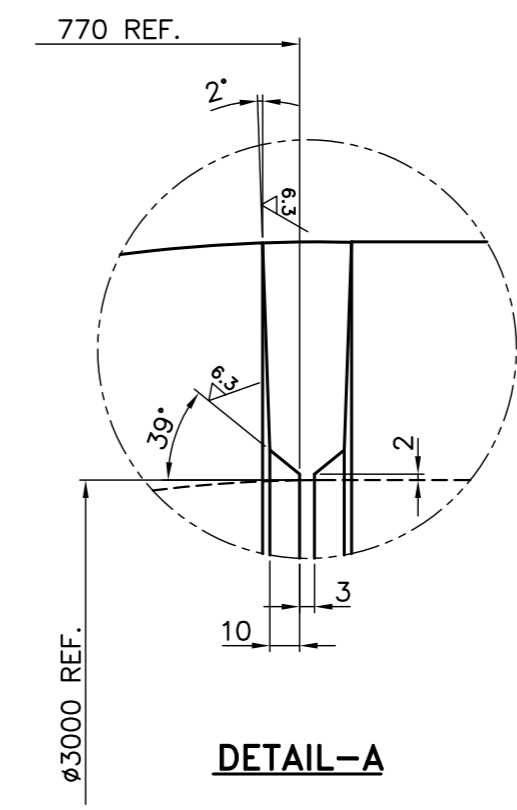
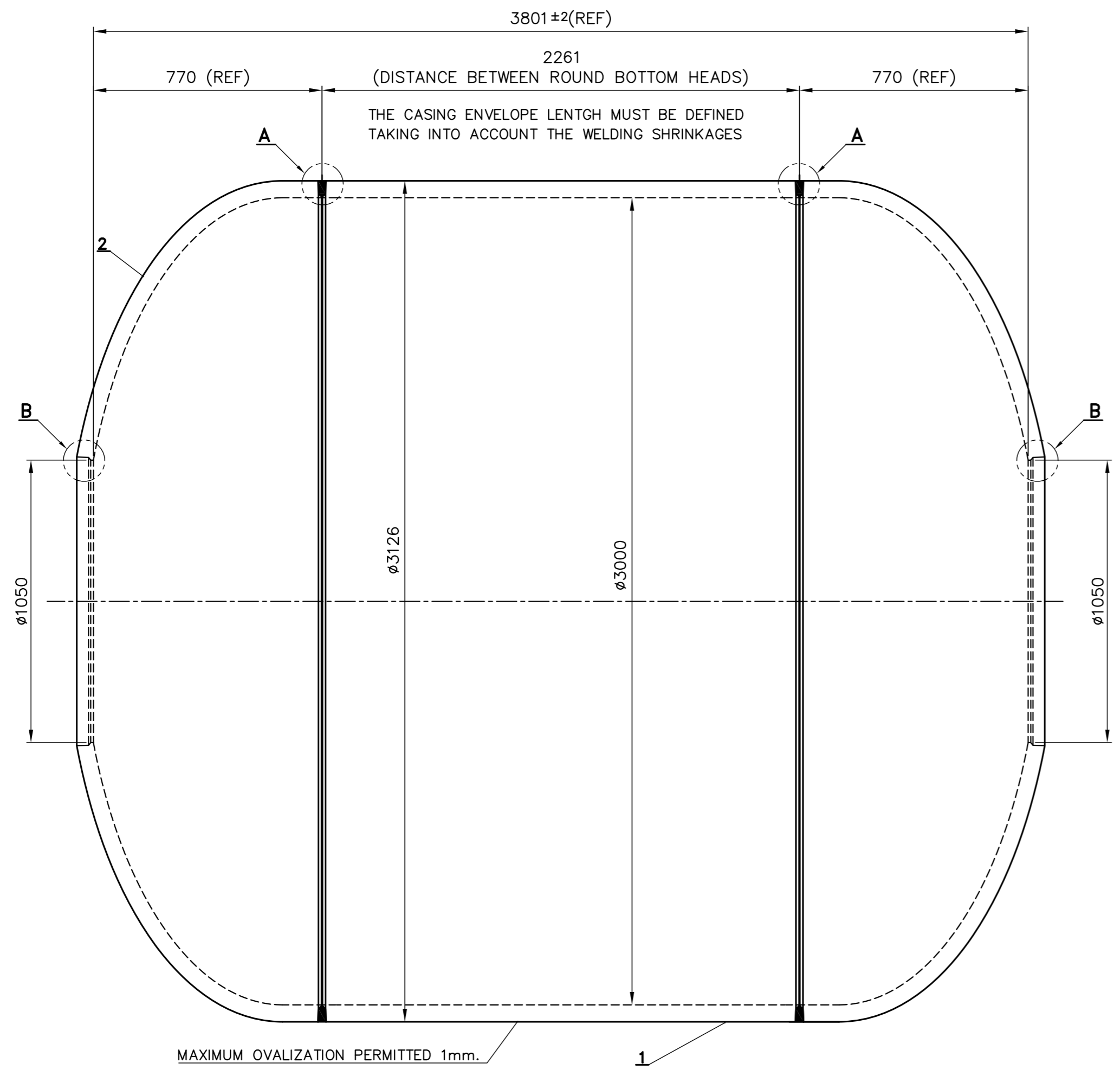
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.  
 GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261  
 INVENTORY NO. \_\_\_\_\_ SIGN. AND DATE \_\_\_\_\_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

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

DRG. NO. 2-331-07-00051

SH.01 OF 01

6.3



**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. 03310700030
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.

INVENTORY NO. 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

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		NRL MAB DMCL 1008					
DEPT. COMPR. CODE	UNTOL. DIMS. GR. C/M/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.		
				420	N T S	20600	-N.A.-
				DRAWING NO. 2-331-07-00051		REV. 00	
TITLE		CARD CODE		SHT. No 01			
CASING ENVELOPE WITH ROUNDED BOTTOMS		N.A.		NO. OF SHT. 01			



BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

NAME	SIGN.	DATE	NO. OF VAR.
DRN. RAGHU		28.10.22	
CHD. NEMA		28.10.22	N.A
APPD. YVRL		28.10.22	

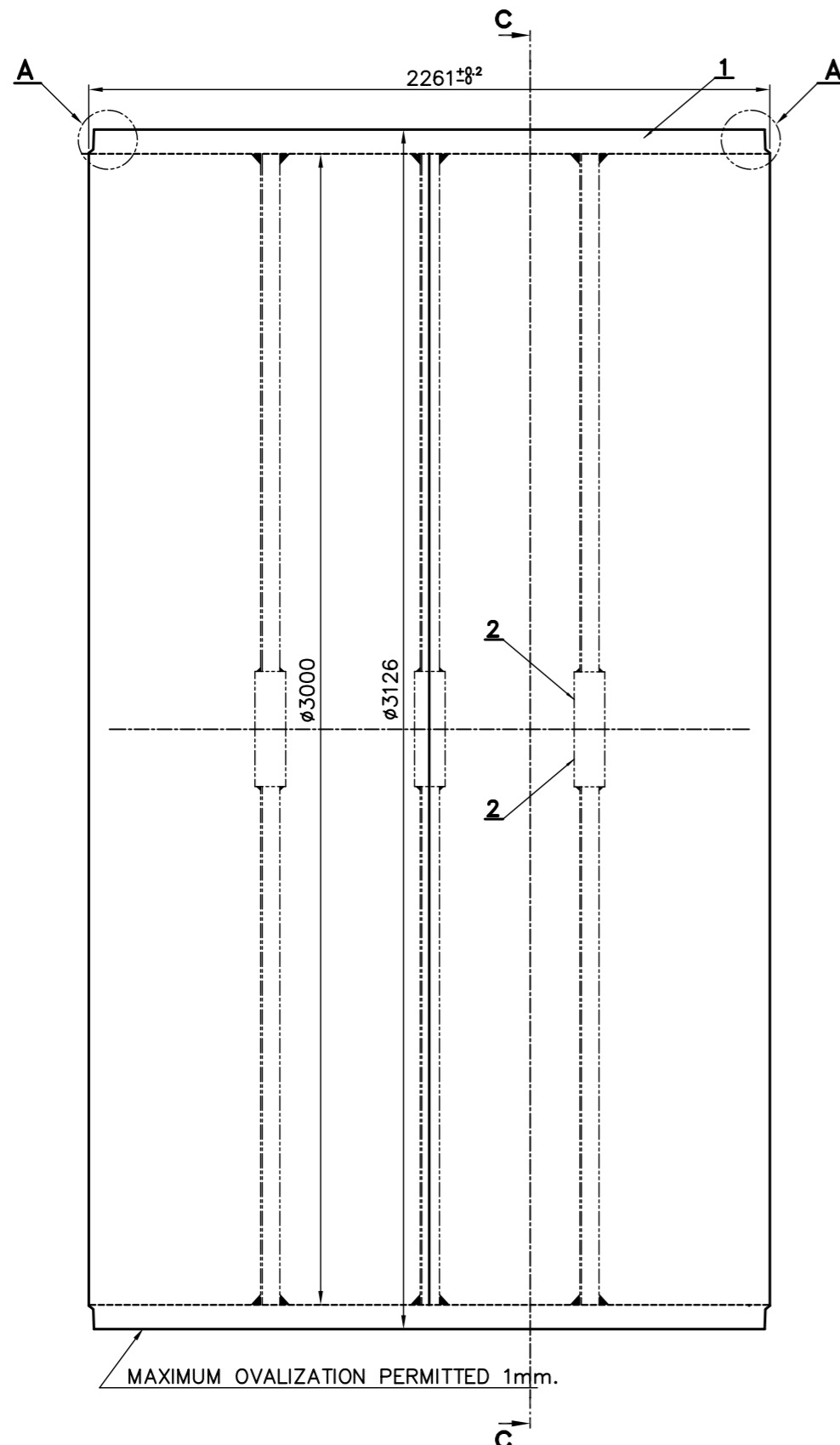
DRG. NO. 2-331-07-00052

SH. 01 OF 01

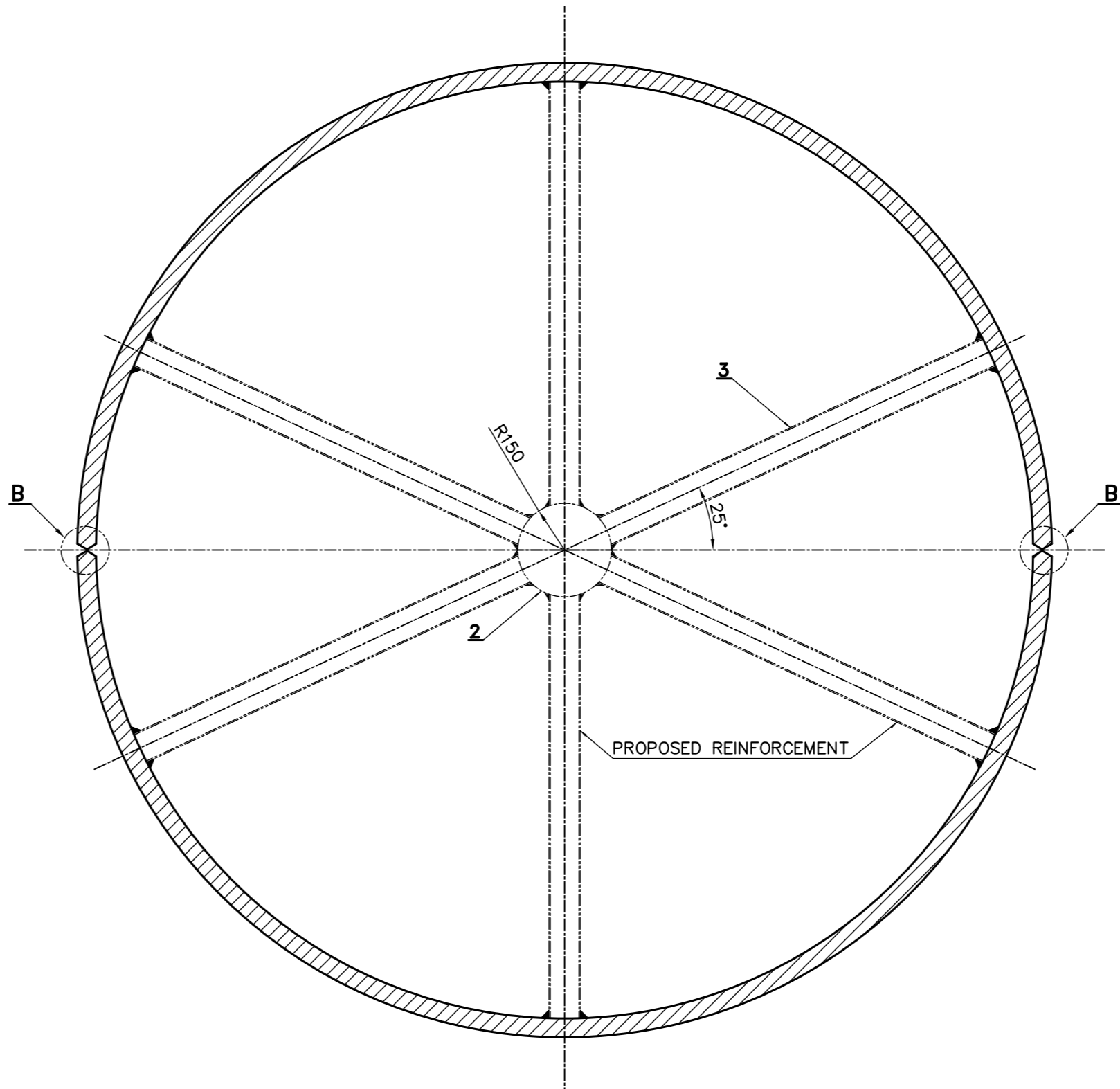
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THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY

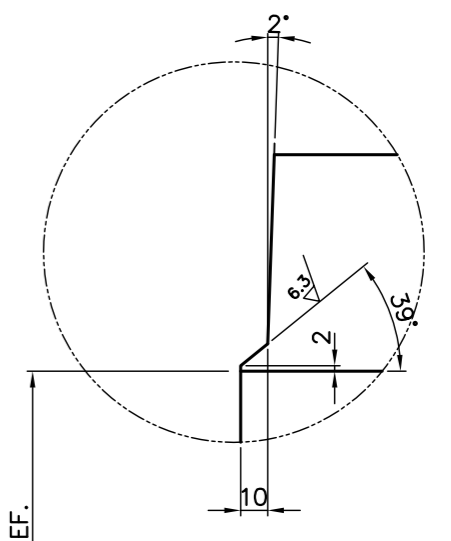
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



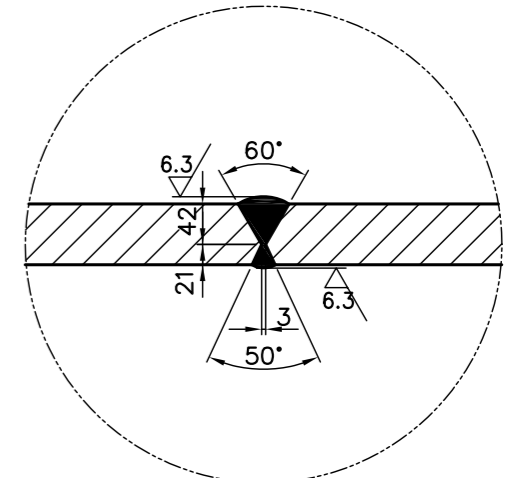
MAXIMUM OVALIZATION PERMITTED 1mm.



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)
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		NRL MAB DMCL 1008			
DEPT. CODE	UNTO. DIMS. GR. C/A/F	SCALE	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.
		N T S	10800	-N.A.-	-N.A.-
TITLE		CARD CODE	DRAWING NO.	REV.	
CASING ENVELOPE		N.A.	2-331-07-00052	00	
		SHT. No	NO. OF SHT.		
		01	01		



BHARAT HEAVY ELECTRICALS LTD. HYDERABAD

NAME	SIGN.	DATE	NO. OF VAR.
DRN. RAGHU		28.10.22	N.A
CHD. NEMA		28.10.22	
APPD. YVRL		28.10.22	

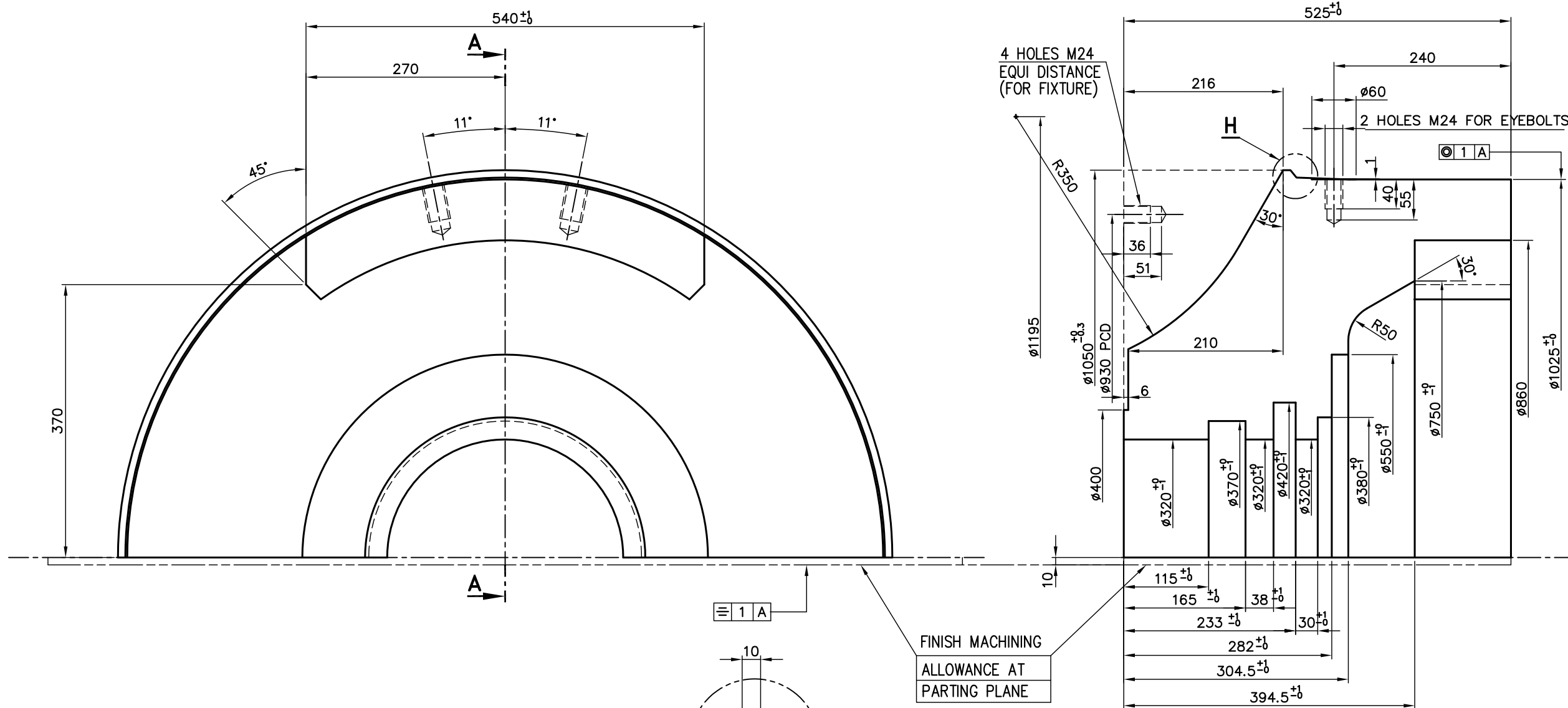
DRG. NO. 3-331-07-00075

SH. 01 OF 01

6.3/

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



SECTION A-A

DETAIL-H

**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.	NAME	SIGN.	DATE	NO. OF VAR.
	CHD.	RAGHU		21.10.14	
	APPD.	Y V R L		21.10.14	-N.A.-
		S D R		22.10.14	

DEPT. COMP. CODE 420	UNTOL. DIMS. GR. G/M/F	SCALE N.T.S	WEIGHT (KG) 770	REF. GENP DRG.	ITEM NO. -N.A.-	NO. OF ITEMS -N.A.-
----------------------	------------------------	-------------	-----------------	----------------	-----------------	---------------------

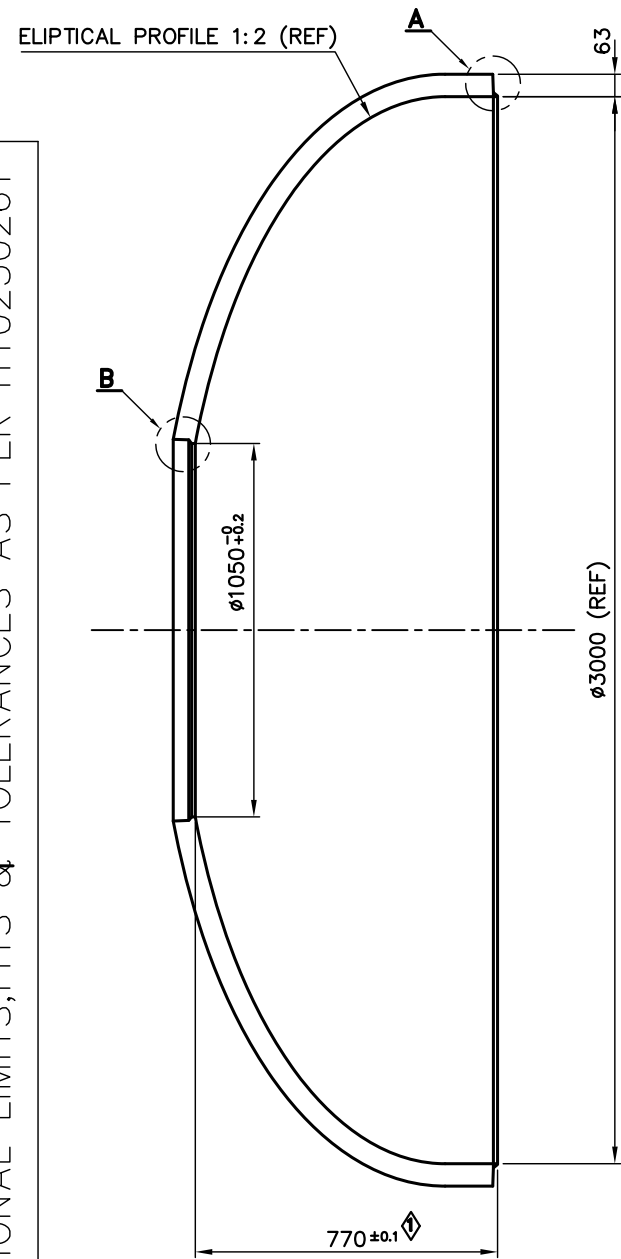
TITLE	CARD CODE	DRAWING NO.	REV.
UPPER END COVER TB & OTB SIDE	N.A.	3-331-07-00075	00
		SHT. No 01	NO. OF SH. 01

DRG. NO. 3-331-07-00081 SH. 01 OF 01

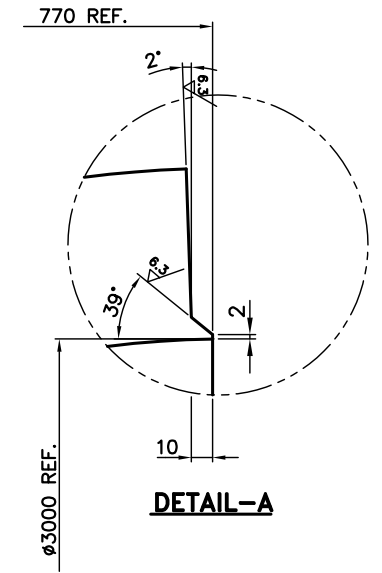
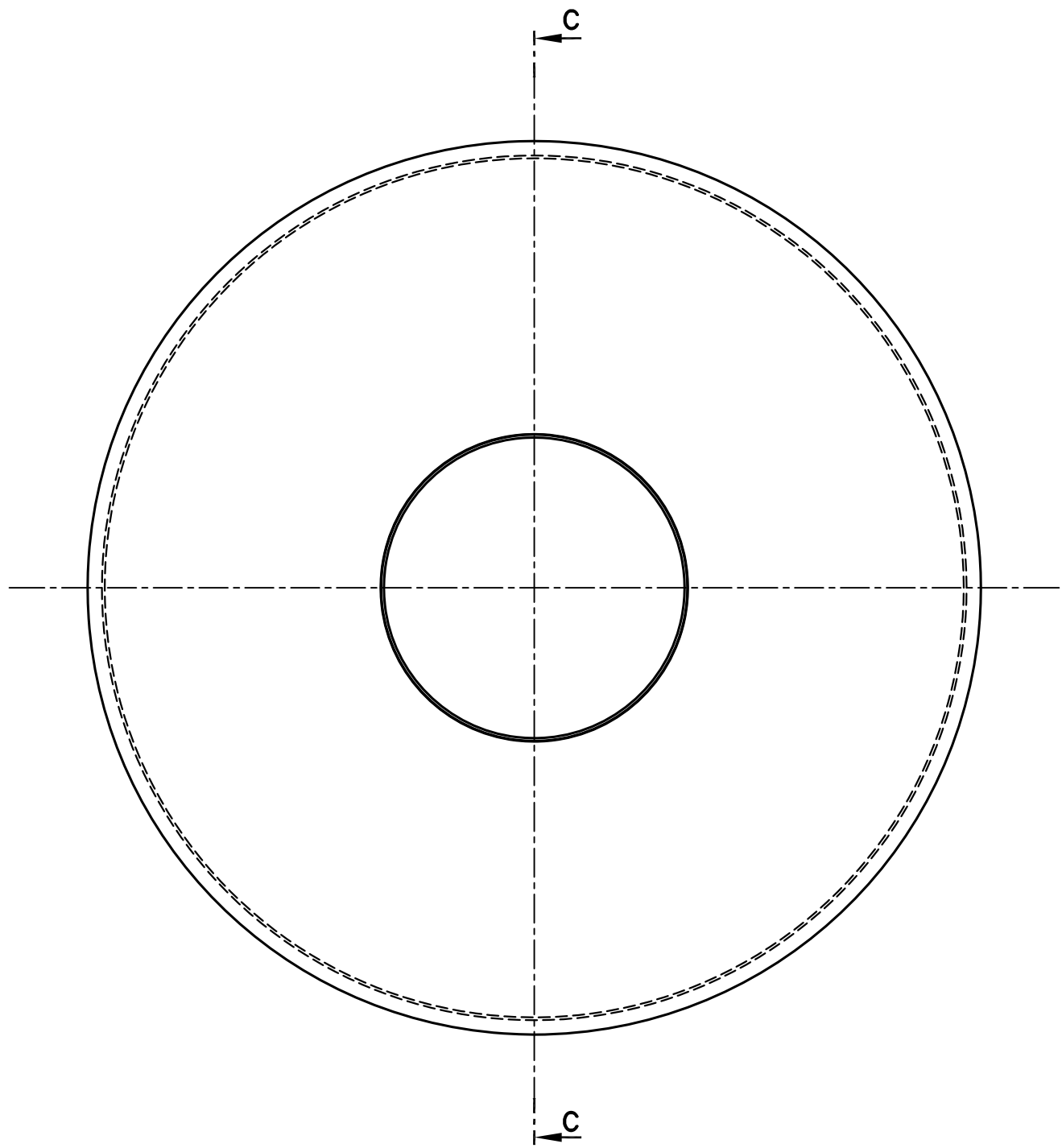
6.3

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

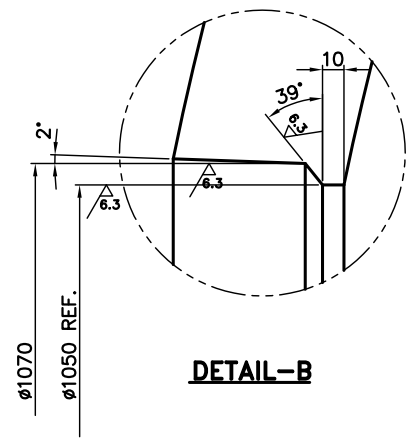
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



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.	RAGHU	SIGN.	DATE	NO. OF VAR.
		CHD.	YRVL		28.10.14	-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	4886	-N.A.-	-N.A.-	-N.A.-
TITLE		DRAWING NO.		REV.		
ROUNDED BOTTOM MACHINED		3-331-07-00081		01		
		SHT. No 01		NO. OF SHT. 01		

REV.	DATE	ALTERED	REV.	DATE	ALTERED
01	27.07.15	RAGHU CHD/APPD YVRL/SDR			
		LENGTH OF THE DISHED END CHANGED FROM 850 770 AS INDICATED.			

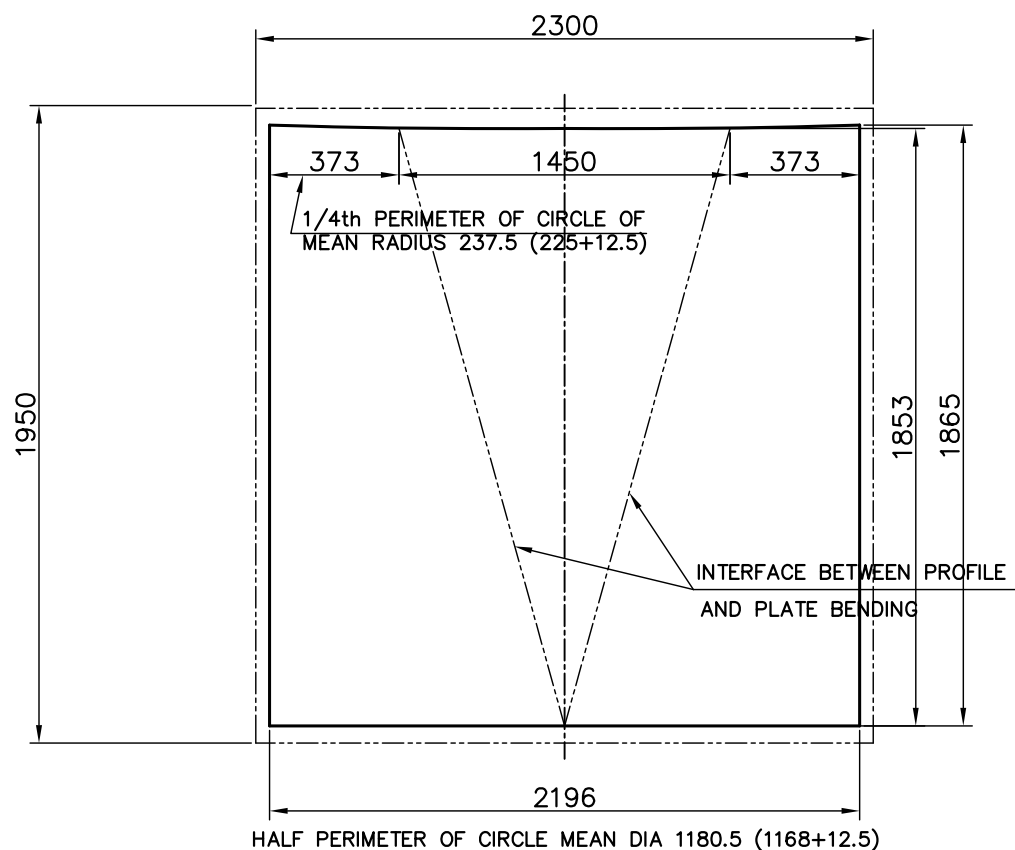
3-331-07-00091

DRG. NO.

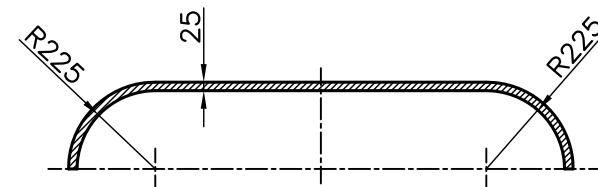
SHT. 1 OF 1

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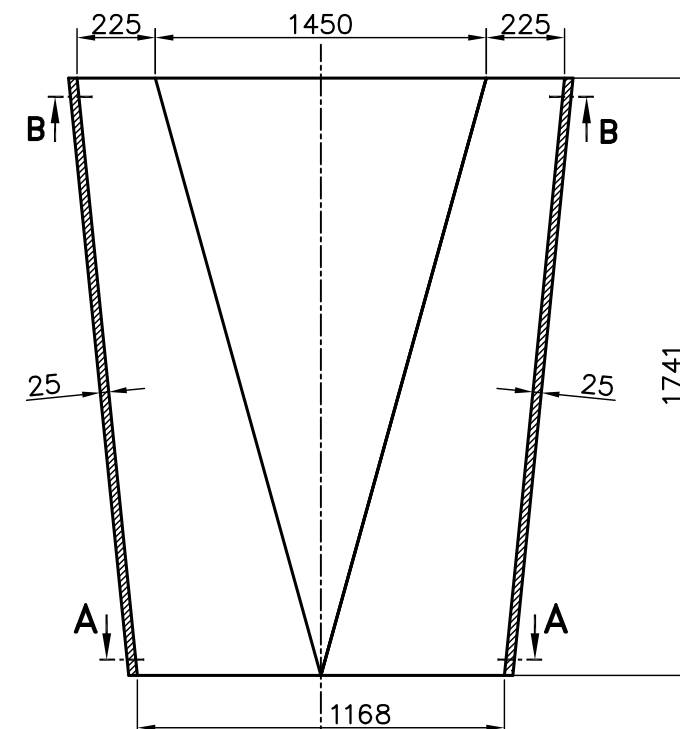
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



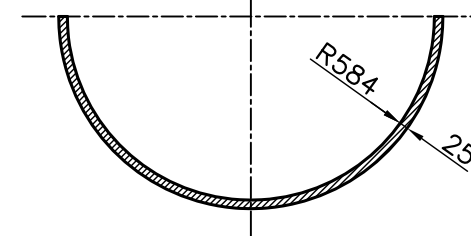
DEVELOPED PLATE FOR FABRICATION



SECTION B-B



SECTION A-A



**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.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT  
**NRL MAB DMCL 1008**



**BHARAT HEAVY ELECTRICALS LTD.**  
**HYDERABAD**

	NAME	SIGN.	DATE	NO. OF VAR.
DRN.	RAGHU		28.10.22	
CHD.	NEMA		30.10.22	NA
APPD.	YVRL		30.11.22	

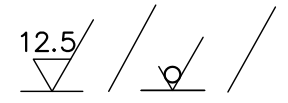
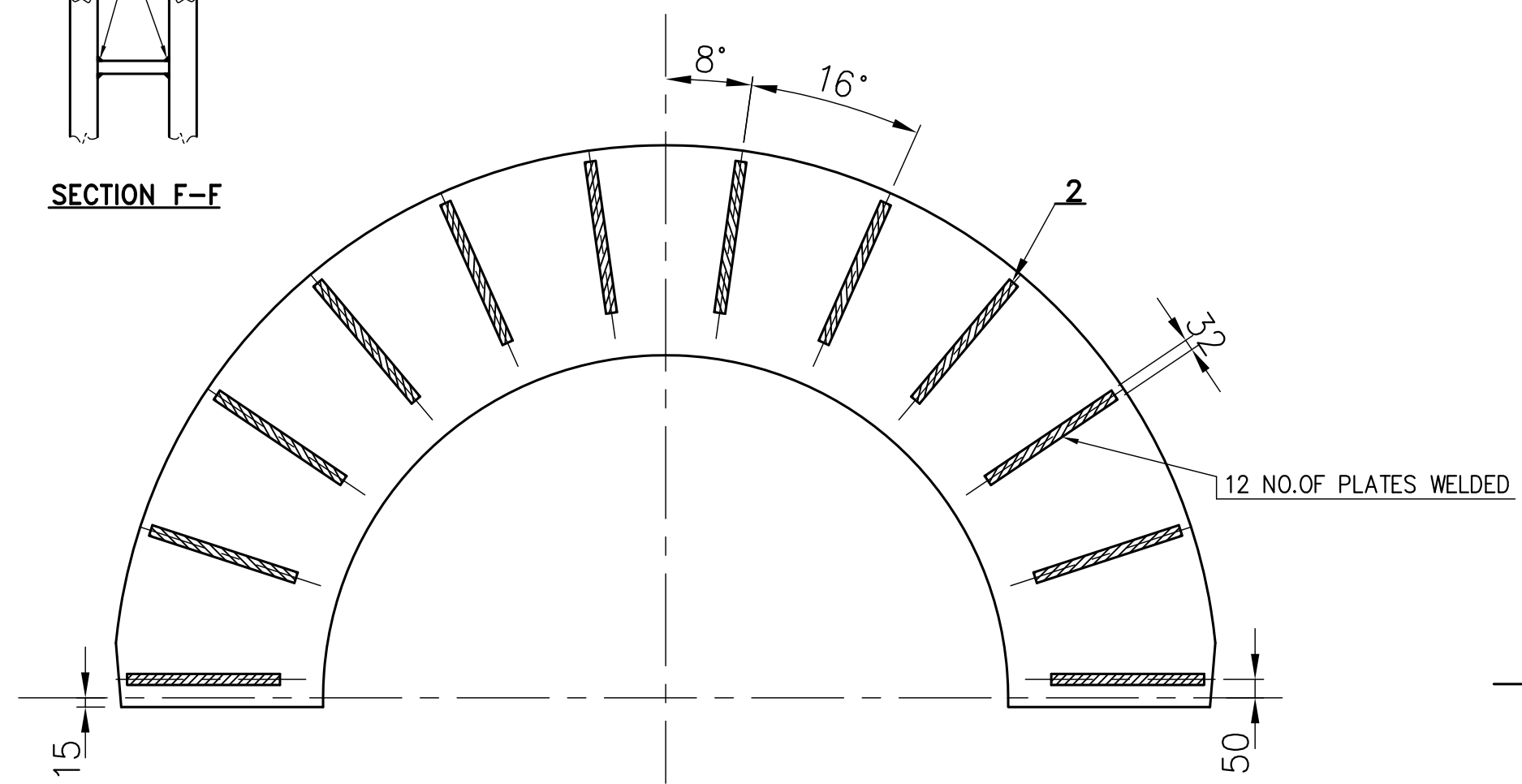
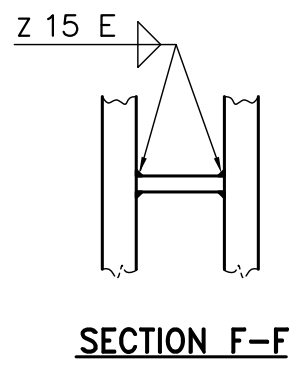
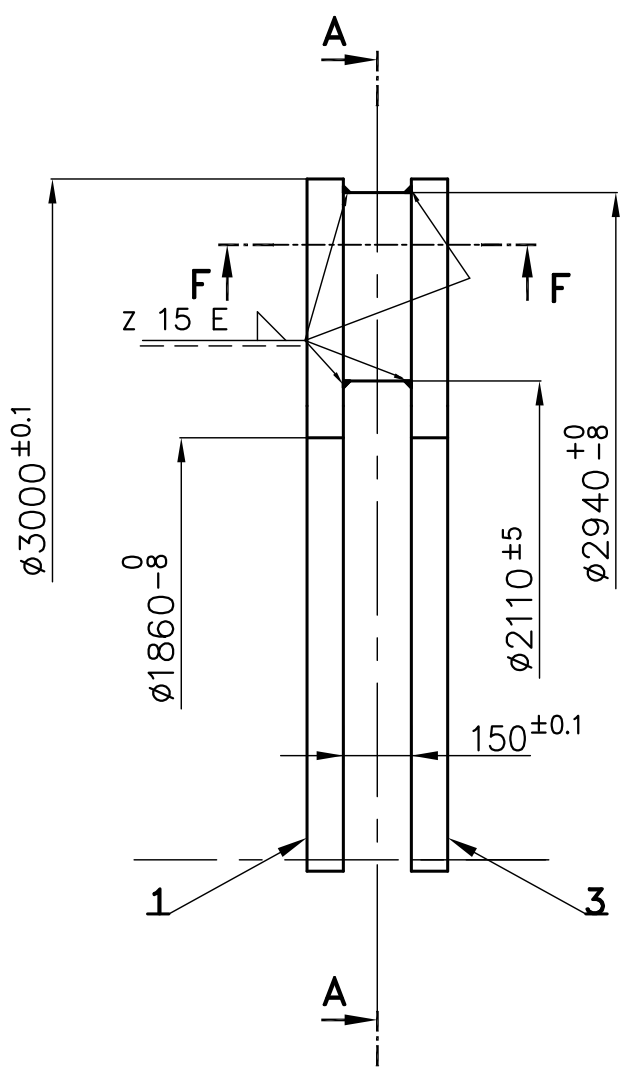
DEPT.	UNTOL. DIMS. GR. $\phi$ /M/f	SCALE NTS	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.	NO. OF ITEMS
			750	1-331-07-00031	NA	NA
TITLE			CARD CODE	DRAWING NO.		REV.
HALF PIPE FOR DIA 48" NOZZLE			NA	3-331-07-00091		00
				SHT. No	01	NO. OF SHT.
						01

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

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

DRG. NO. 3-331-07-00093 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	NO.OF VAR.
CHD.	RAGHU		29.10.22	NA
APPD.	NEMA		30.10.22	
	YVRL		30.10.22	

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

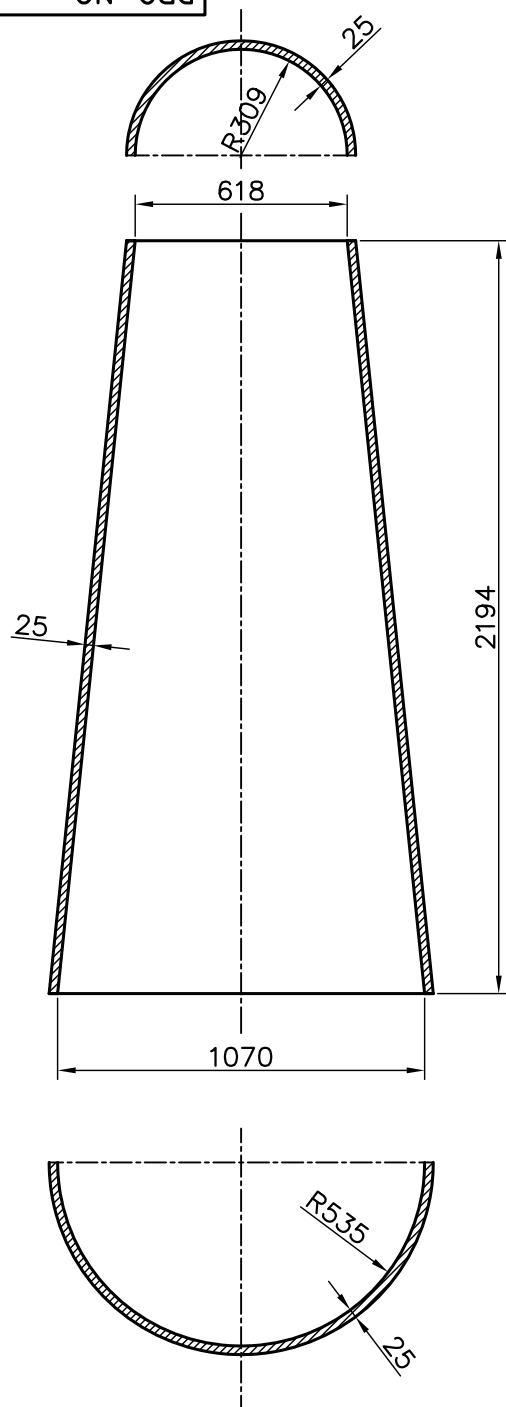
DEPT.	UNTOL. DIMS. GR. $\varnothing/M/f$	SCALE NTS	WEIGHT (KG)	REF. TO ASSY. DRG.	ITEM NO.	NO.OF ITEMS
			3000	0-331-07-00030	NA	NA
TITLE			CARD CODE	DRAWING NO.		REV.
<b>HALF RING FOR COUNTER CASING FIXING</b>			NA	<b>3-331-07-00093 00</b>		00
			SHT. No	01	NO. OF SHT.	01

DRG. NO. 3-331-07-00101

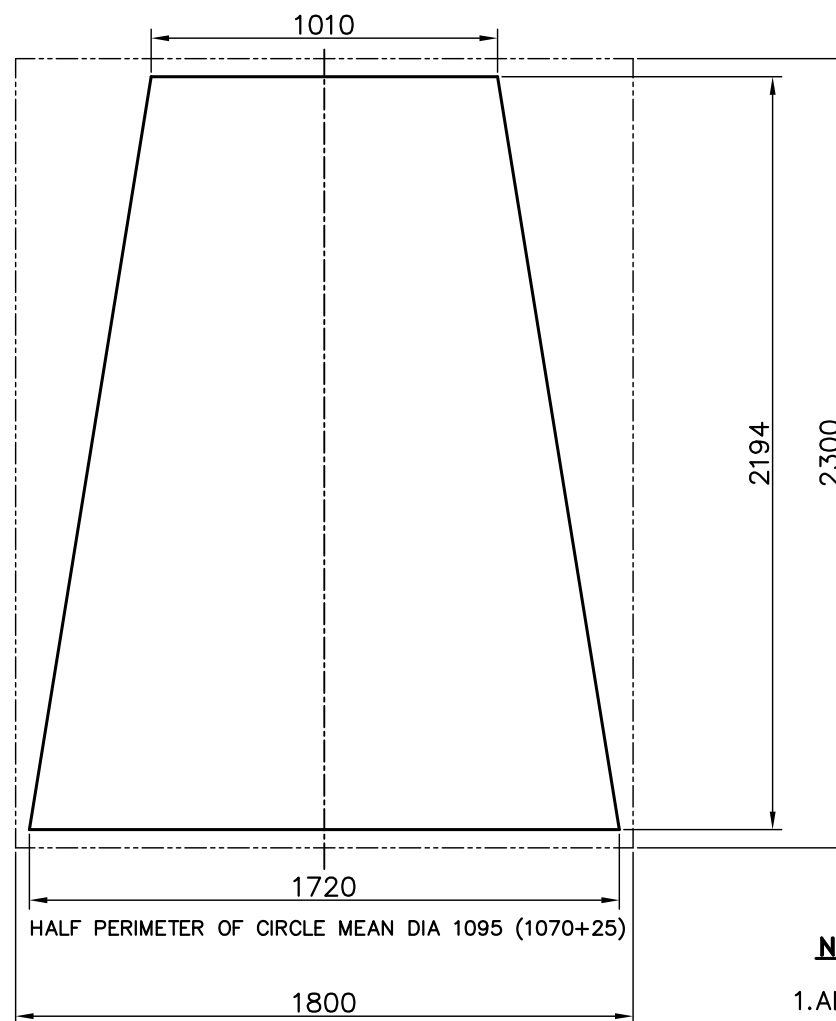
SHT. 1 OF 1

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GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261



HALF PERIMETER OF CIRCLE MEAN DIA 643 (618+25)



**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.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT **NRL MAB DMCL 1008**



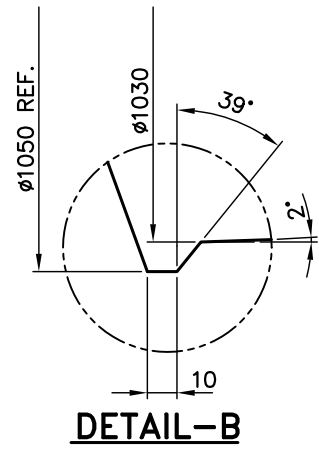
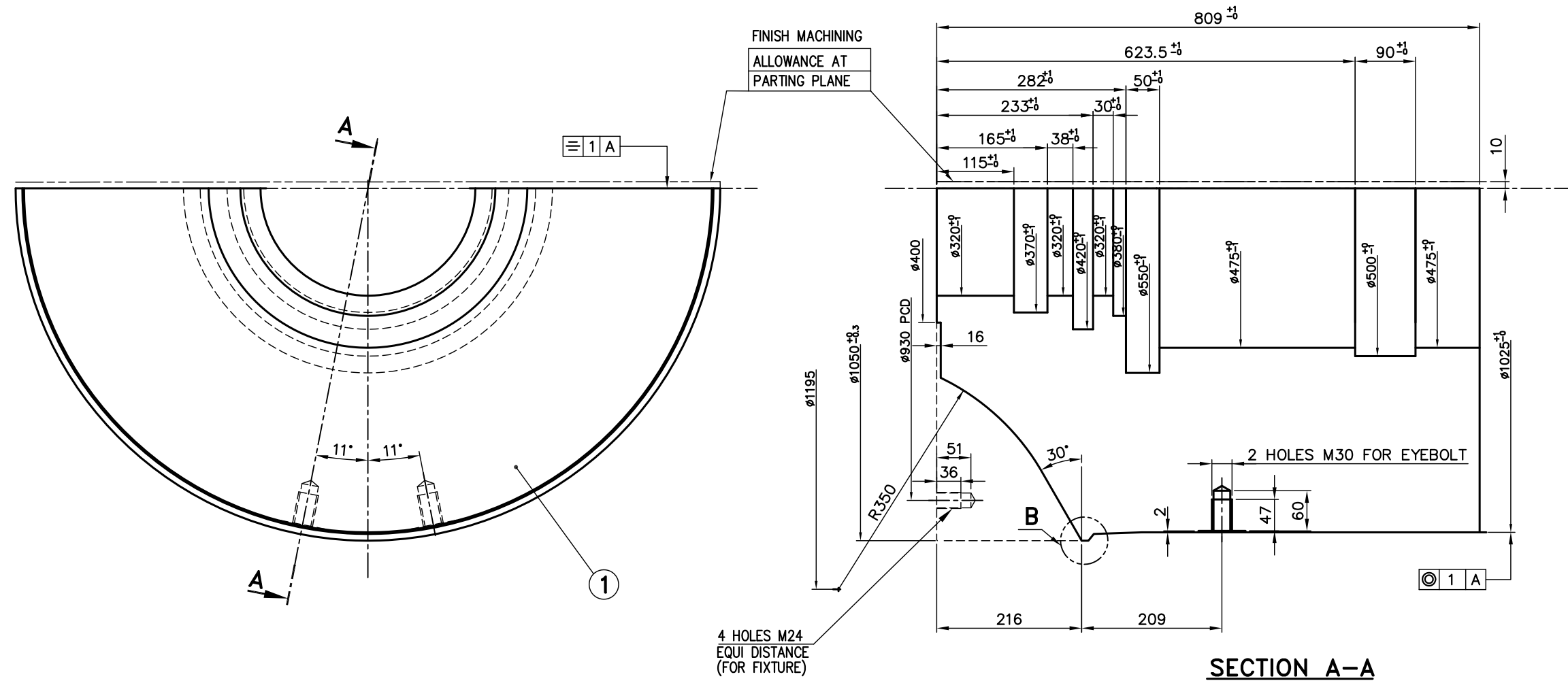
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		NAME	SIGN.	DATE	NO. OF VAR.
DRN.	RAGHU			28.10.22	
CHD.	NEMA			30.10.22	NA
APPD.	YVRL			30.11.22	

DEPT. CODE	UNTOL. DIMS. GR. $\phi$ /M/f	SCALE NTS	WEIGHT (KG) 1230	REF. TO ASSY. DRG. 1-331-07-00038	ITEM NO. NA	NO. OF ITEMS NA
TITLE <b>HALF PIPE FOR DIA 44" NOZZLE</b>			CARD CODE NA	DRAWING NO. <b>3-331-07-00101</b>		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

DRG. NO. 3-331-07-00102 SH. 01 OF 01

INVENTORY NO. JCS  
SIGN. AND DATE  
REF. DRG. NO.  
COMPUTER FILE NAME  
GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HY0230261  
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



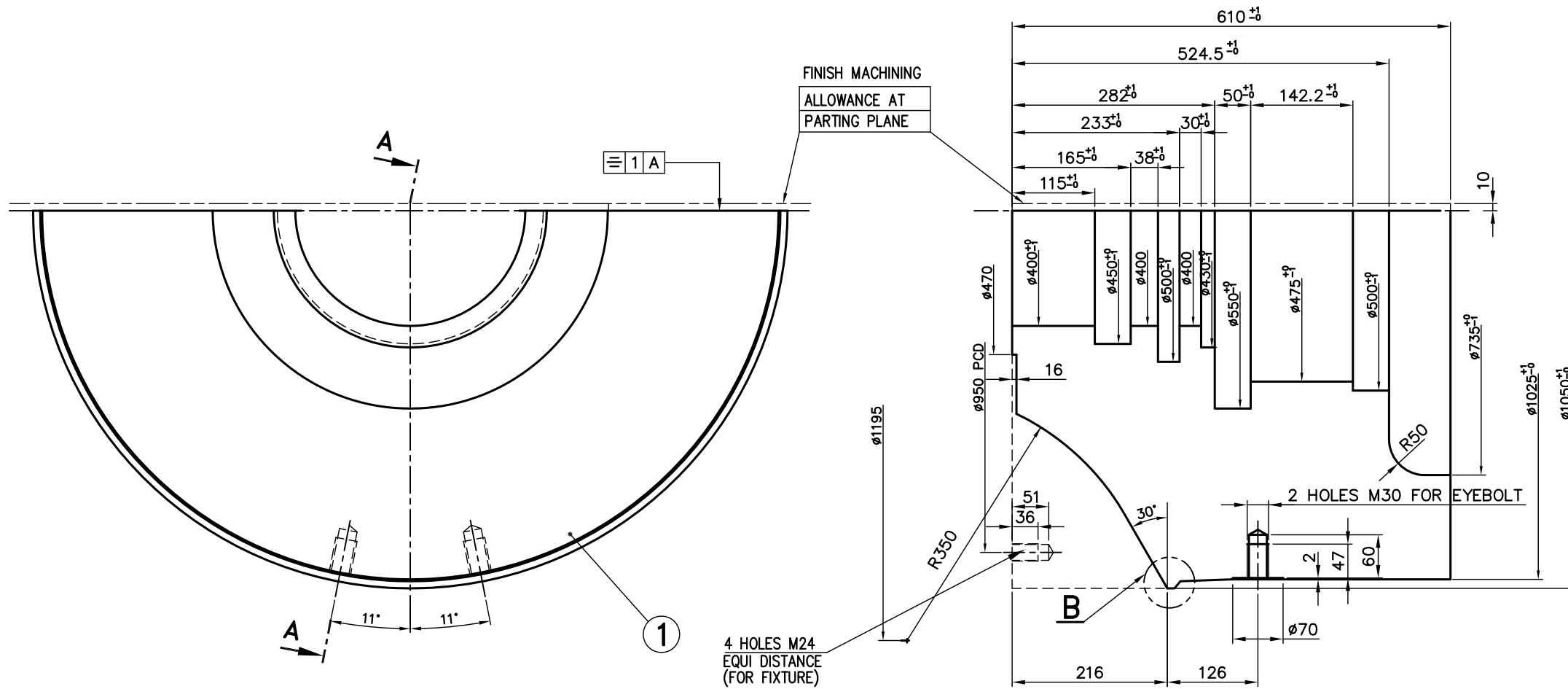
**CAUTION**  
DIMENSIONS INDICATED ARE WITHOUT CONSIDERING FINISH MACHINING ALLOWANCE AT THE PARTING PLANE. FINISH MACHINING ALLOWANCE OF 10mm AT ALL PARTING PLANES SHALL BE ENSURED DURING MACHINING STAGE.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		NRL MAB DMCL 1008			
BHARAT HEAVY ELECTRICALS LTD. HYDERABAD		DRN.	RAGHU	SIGN.	DATE
DEPT. COMP. CODE 420		CHD.	YVRL		31.10.22
		APPD.	SDR		04.11.22
UNTOL. DIMS. GR. C/M/F	SCALE NTS	WEIGHT (KG)	REF. ASSY. DRG.	ITEM NO.	NO.OF VAR.
		1955		-N.A.-	-N.A.-
TITLE		CARD CODE	DRAWING NO.		REV.
LOWER END COVER TB SIDE		N.A.	3-331-07-00102 00		00
		SHT. No 01		NO. OF SHT. 01	

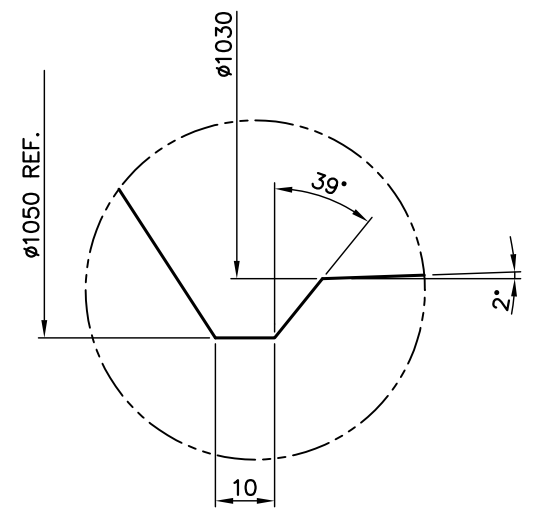
DRG. NO. 3-331-07-00103 SH. 01 OF 01

INVENTORY NO. 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



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 **NRL MAB DMCL 1008**

BHARAT HEAVY ELECTRICALS LTD. HYDERABAD	NAME	SIGN.	DATE	NO. OF VAR.
	DRN. RAGHU		31.10.22	
	CHD. NEMA		04.11.22	-N.A.-
APPD. YVRL		04.11.22		

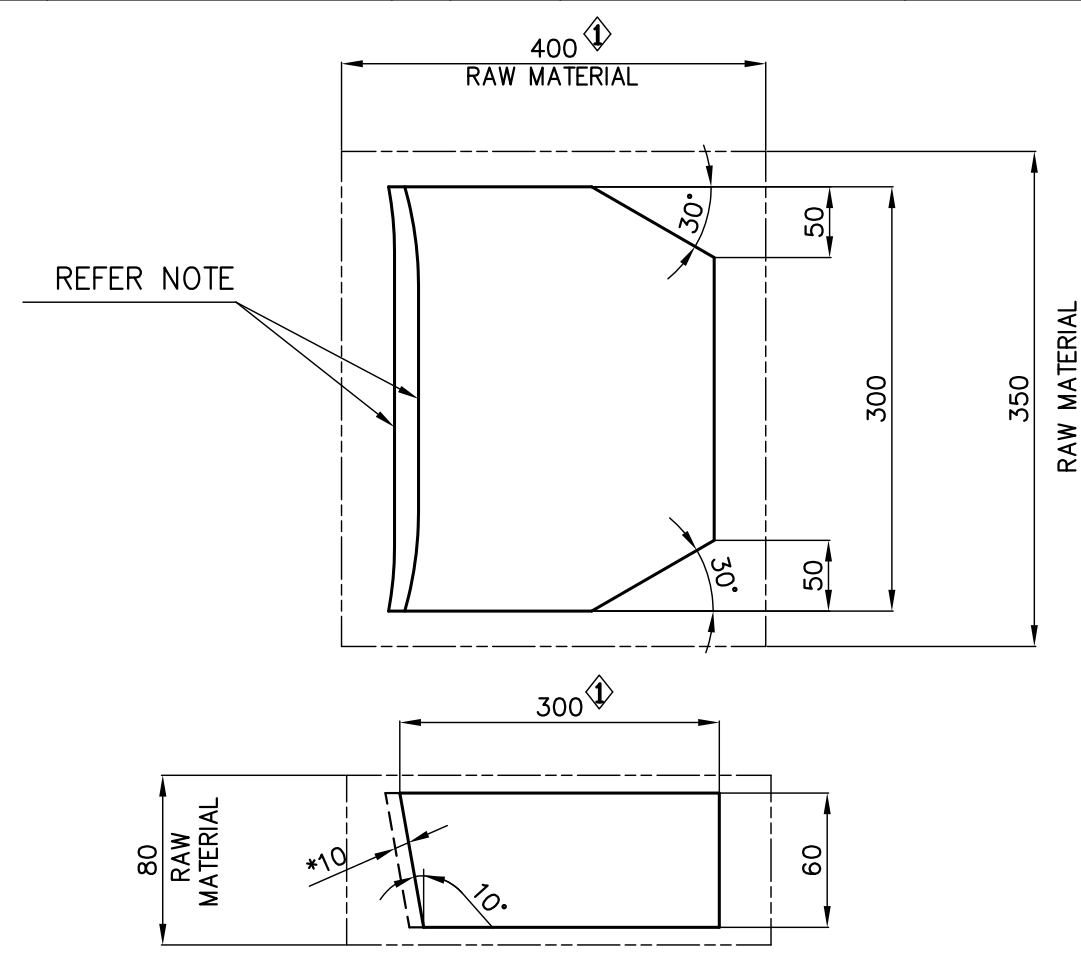
DEPT. COMP. CODE 420	UNTOL. DIMS. GR. G/M/F	SCALE NTS	WEIGHT (KG) 1300	REF. GENP. DRG.	ITEM NO. -N.A.-	NO. OF ITEMS -N.A.-
----------------------	------------------------	-----------	------------------	-----------------	-----------------	---------------------

TITLE <b>LOWER END COVER OTB SIDE</b>	CARD CODE N.A.	DRAWING NO. <b>3-331-07-00103</b>	REV. <b>00</b>
		SHT. No 01	NO. OF SHT. 01

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 GEN. DIM. LIMITS, FITS, & TOLERANCES AS PER P.S. :- HY0230261  
 COMPUTER FILE NAME  
 SIGN. AND DATE  
 INVENTORY NO

FIRST ANGLE PROJECTION (ALL DIMENSIONS ARE IN mm)

REV. 01	DATE 05.06.15	ALTERED RAGHU	REV.	DATE	ALTERED
		CHECKED YVRL			CHECKED
		RAW MATERIAL SIZE & FINISH MACHINED SIZE CHANGED AS INDICATED			



**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.

	DRN.	REETA	SIGN.	DATE	NO. OF VAR.
	CHD.	RAGHU		01.11.14	NA
	APPD.	SDR		01.11.14	
	<b>RESISTED USE</b>				

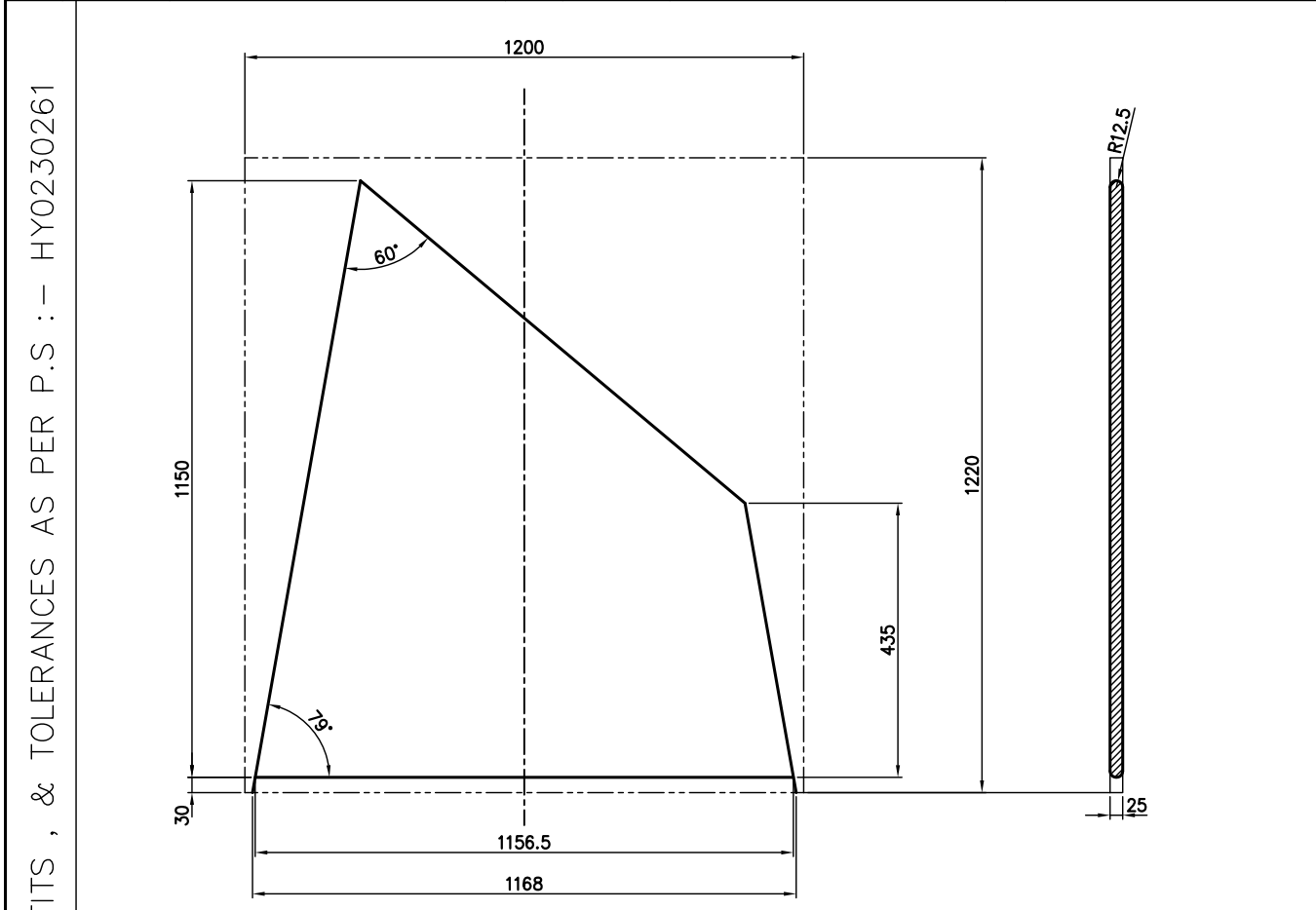
DEPT. COMP.	UNTOL. DIM. GR.	SCALE	WEIGHT (KG)	REF. DRG	ITEM NO.	NO. OF ITEMS
DEPT. CODE 420	C/M/F	NTS	34	0-331-07-00016	-	-
TITLE				CARD CODE	DRAWING NO.	REV.
<b>GUIDE BLOCK SUCTION SIDE</b>					<b>4-331-07-00112</b>	<b>01</b>
SHT No.			NO OF SHT.			
1			1			

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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. 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.

SIGN. AND DATE  
COMPUTER FILE NAME  
INVENTORY NO

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		28.10.22	
			CHD. NEMA		30.10.22	
			APPD. YVRL		30.10.22	NA

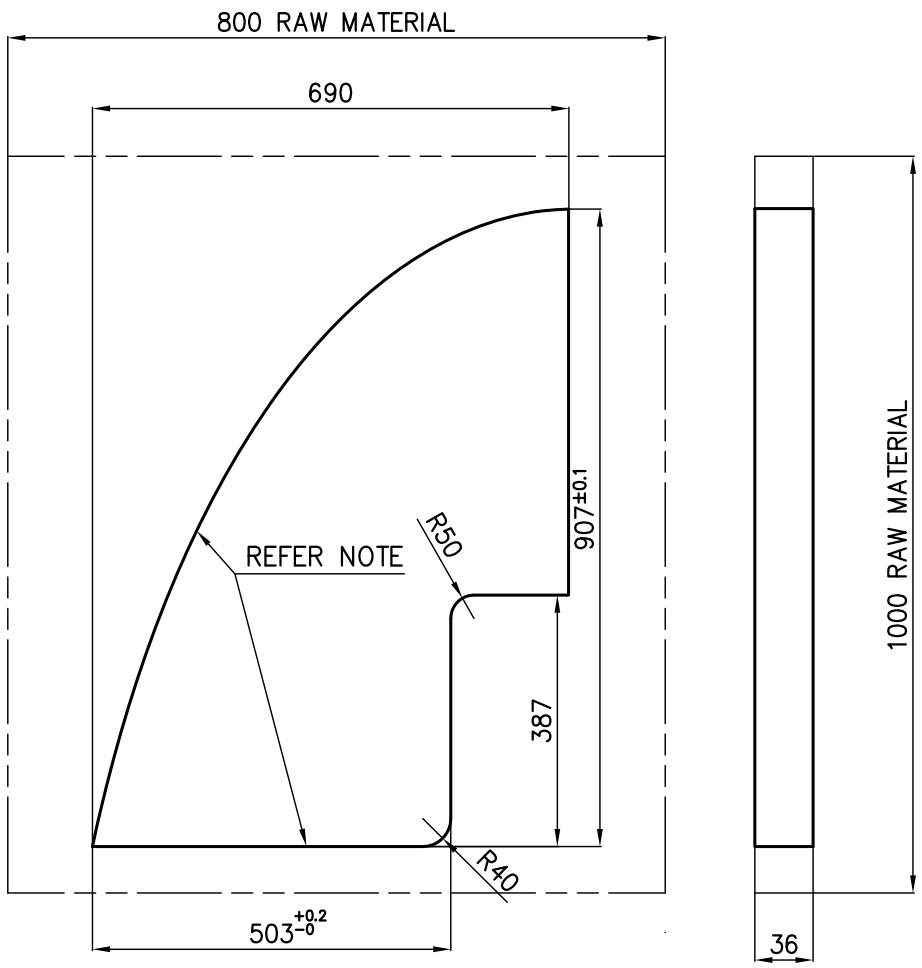
DEPT. COMP.	UNTOL. DIM. GR.		SCALE	WEIGHT (KG)	REF. TO ASSY DRG.	ITEM NO.	NO. OF ITEMS
DEPT. CODE 420	e/M/F		NTS	210	1-331-07-00031	NA	NA
TITLE			CARD CODE	DRAWING NO.		REV.	
RIB FOR DIA 48" NOZZLE			NA	4-331-07-00118		00	
				SHT No. 01	NO OF SHT. 01		

INVENTORY NO \_\_\_\_\_ SIGN. AND DATE \_\_\_\_\_ 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  
 GEN. DIM. LIMITS, FITS, & TOLERANCES AS PER P.S. :- HY0230261

FIRST ANGLE PROJECTION

(ALL DIMENSIONS ARE IN mm)

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. 03310700030. THE PROFILE CAN BE CUT USING A TEMPLATE MADE FROM CASING PROFILE

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

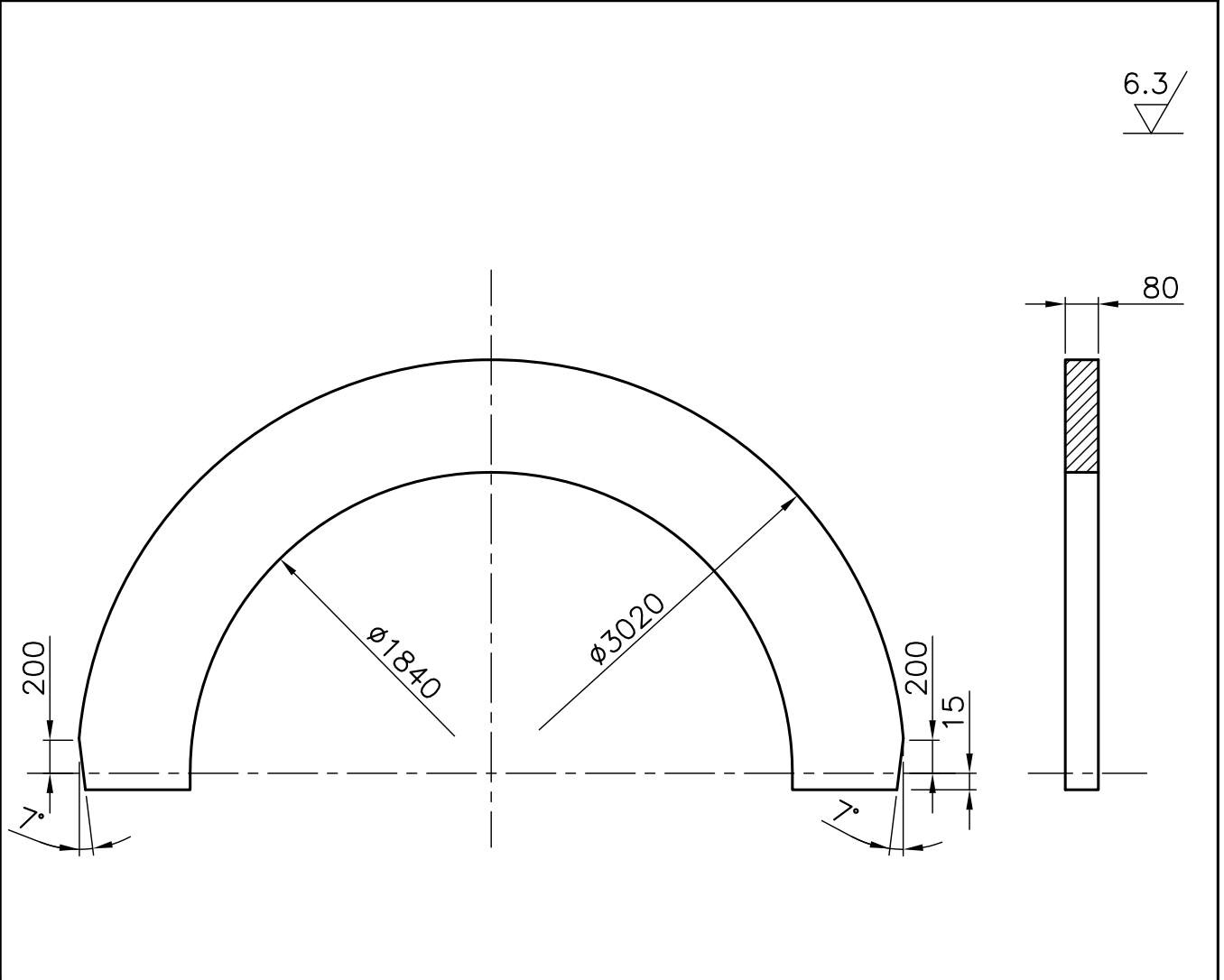


DRN.	NAME	SIGN.	DATE	NO. OF VAR.
CHD.	RAGHU		28.10.22	
APPD.	NEMA		30.10.22	
	YVRL		30.10.22	

DEPT. COMP.	UNTOL. DIM. GR.	SCALE	WEIGHT (KG)	REF. TO ASSY DRG.	ITEM NO.	NO. OF ITEMS
DEPT. CODE 420	c/M/F	NTS	125	0-331-07-00030		
TITLE				CARD CODE	DRAWING NO.	REV.
INLET RIB ON SUCTION SIDE					4-331-07-00119	00
				SHT No.	NO OF SHT.	
				1	1	

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



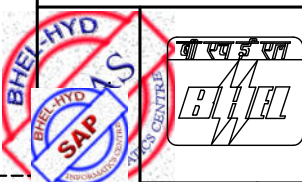
**NOTE:**

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

COMPUTER FILE NAME

TYPE OF PRODUCT OR  
NAME OF CUSTOMER/PROJECT

SIGN. & DATE



**BHARAT HEAVY ELECTRICALS LTD.**  
**HYDERABAD**

	NAME	SIGN	DATE	NO.OF VAR.
DRN.	RAGHU		28.10.22	00
CKD.	NEMA		30.11.22	
APPD.	YVRL		30.11.22	

INVENTORY NO.

REF. TO HY0230  
UNSPECIFIED TOL

DEPT. COMP. CODE 420	UNTOL. DIMS. GR. $\varnothing/M/F$		SCALE NTS	WEIGHT(K.G.) 1410	REF.TO ASSY.DRG. -NA-	ITEM NO. -NA-	NO.OF ITEM -NA-
TITLE <b>HALF RING FOR COUNTER CASING FIXING</b>					DRAWING NO. <b>4-331-07-00120</b>		REV. <b>00</b>
					SHT.NO. 01	NO.OF SHT. 01	