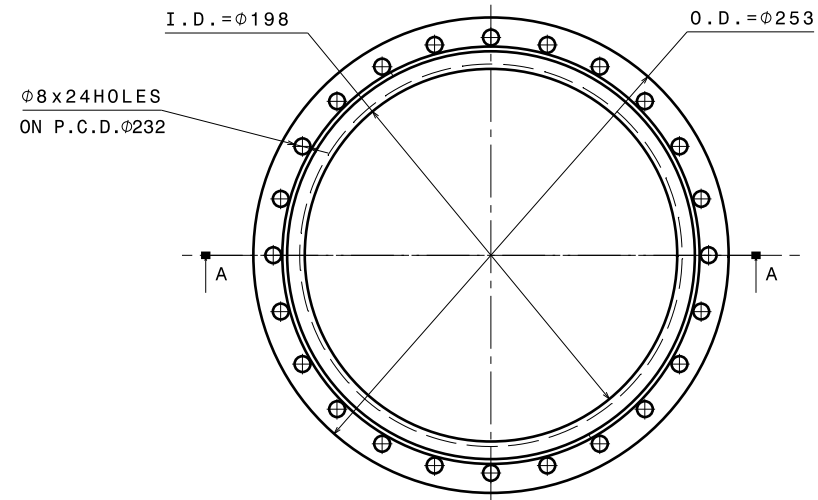
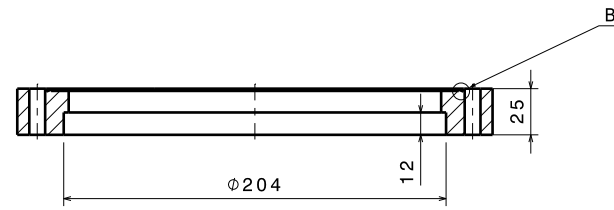


This file has been cleaned of potential threats.

To view the reconstructed contents, please SCROLL DOWN to next page.

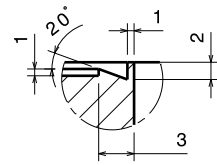


FRONT VIEW

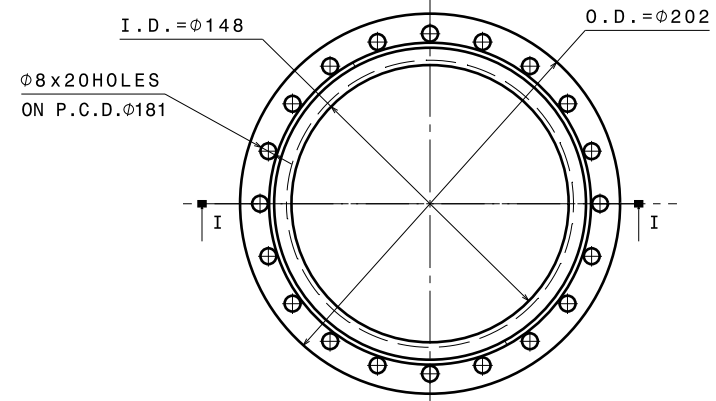


SECTION A-A

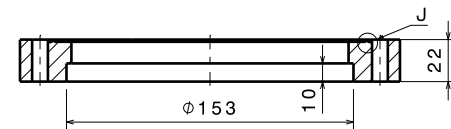
DN 200CF BLANK FLANGE



DETAIL VIEW-B
SCALE-3:1

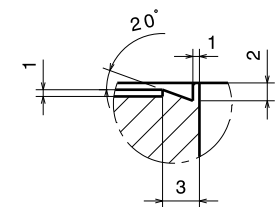


FRONT VIEW

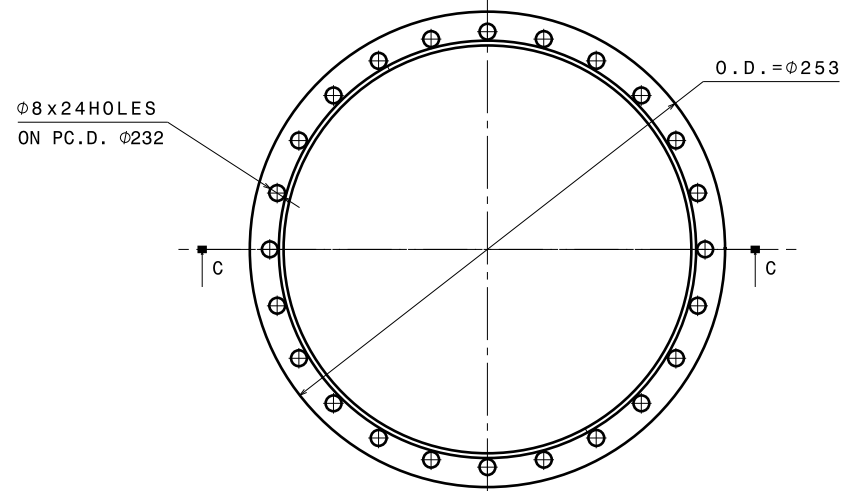


SECTION I-I

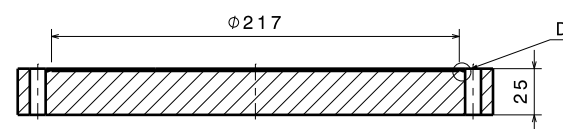
DN 160CF BLANK FLANGE



DETAIL VIEW-J
SCALE-3:1

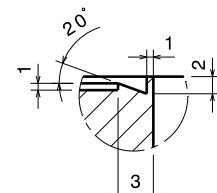


FRONT VIEW

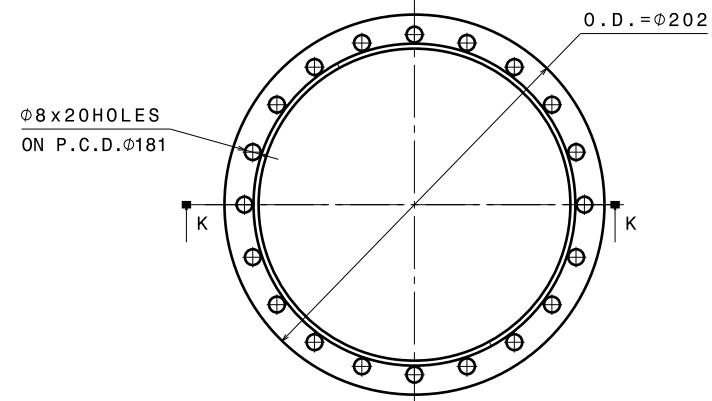


SECTION C-C

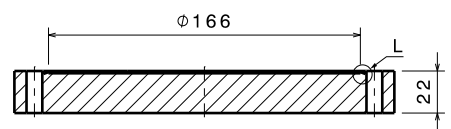
DN 200CF COVER FLANGE



DETAIL VIEW-D
SCALE-3:1

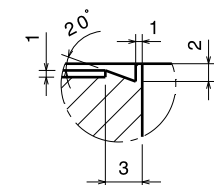


FRONT VIEW



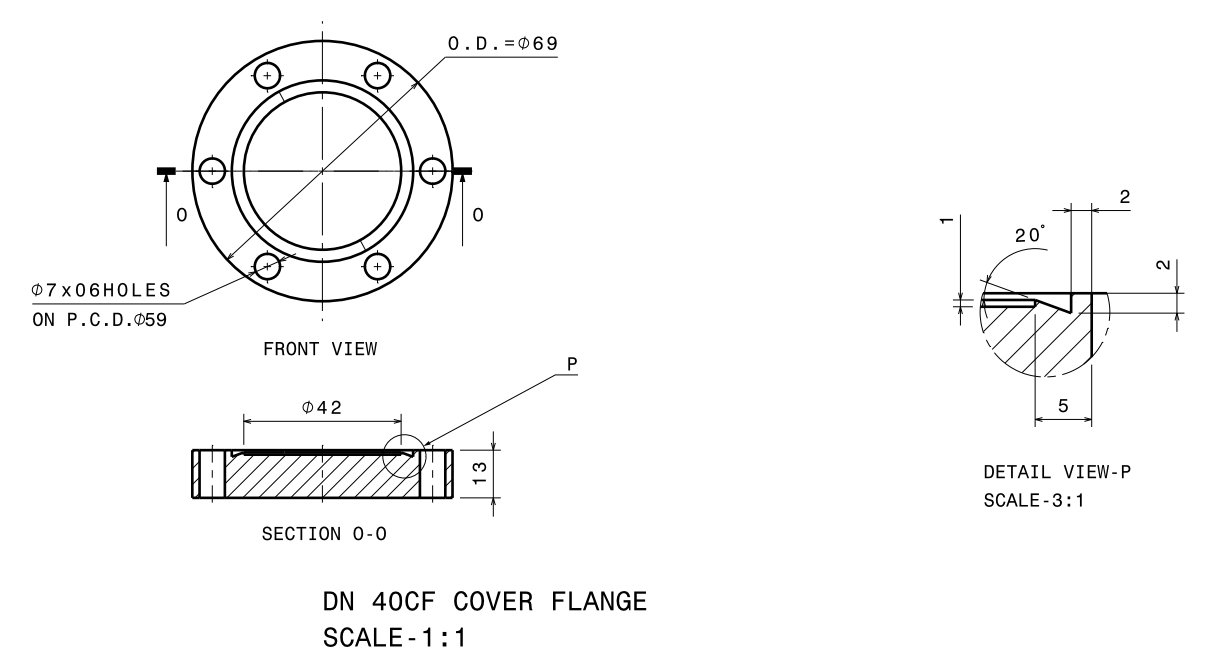
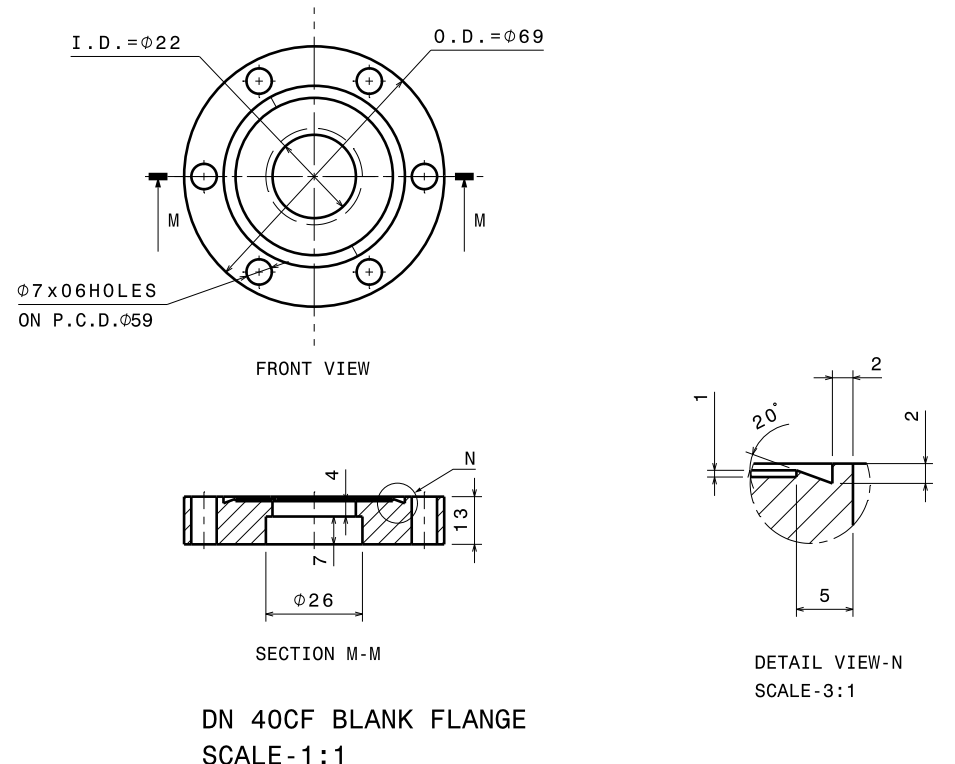
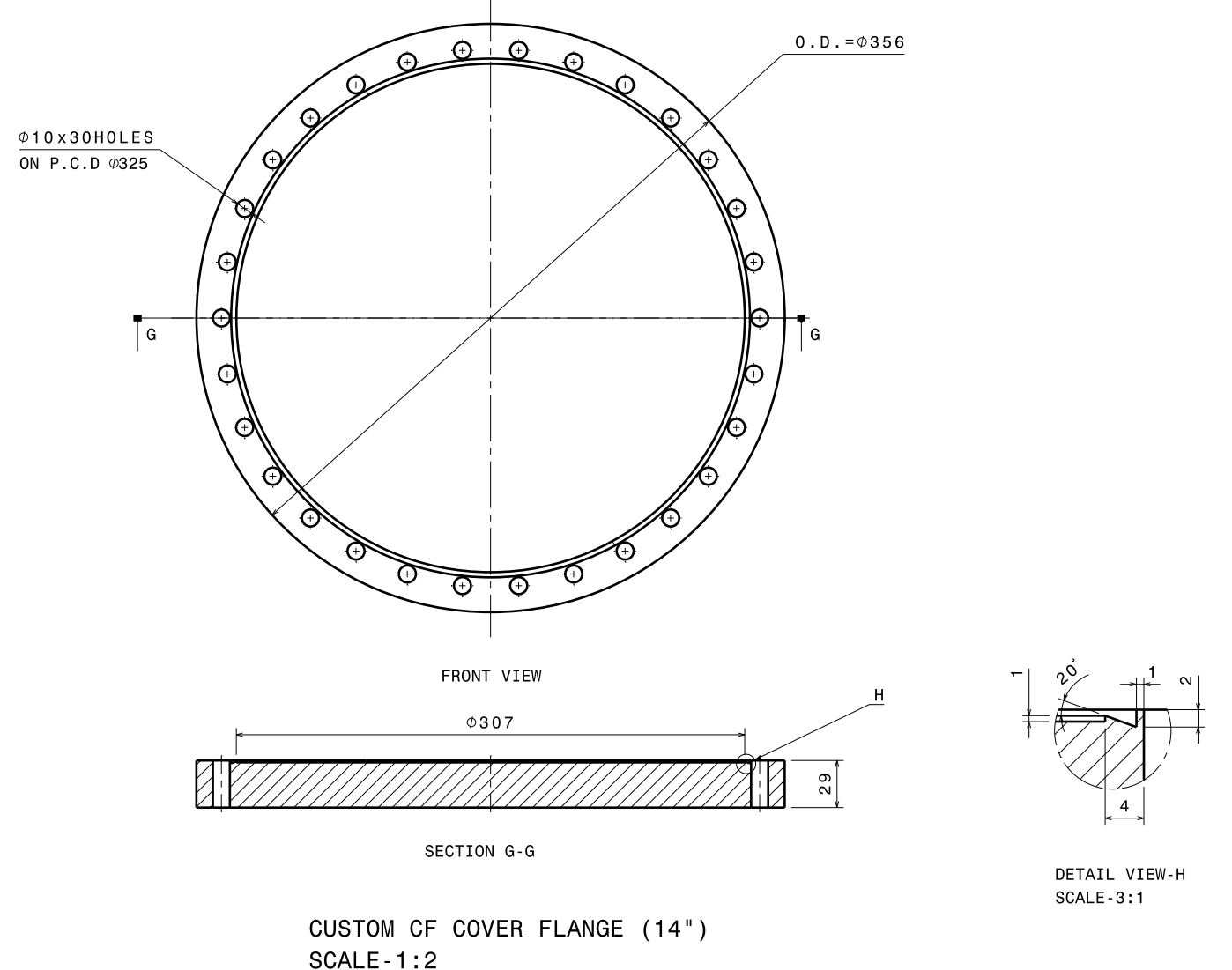
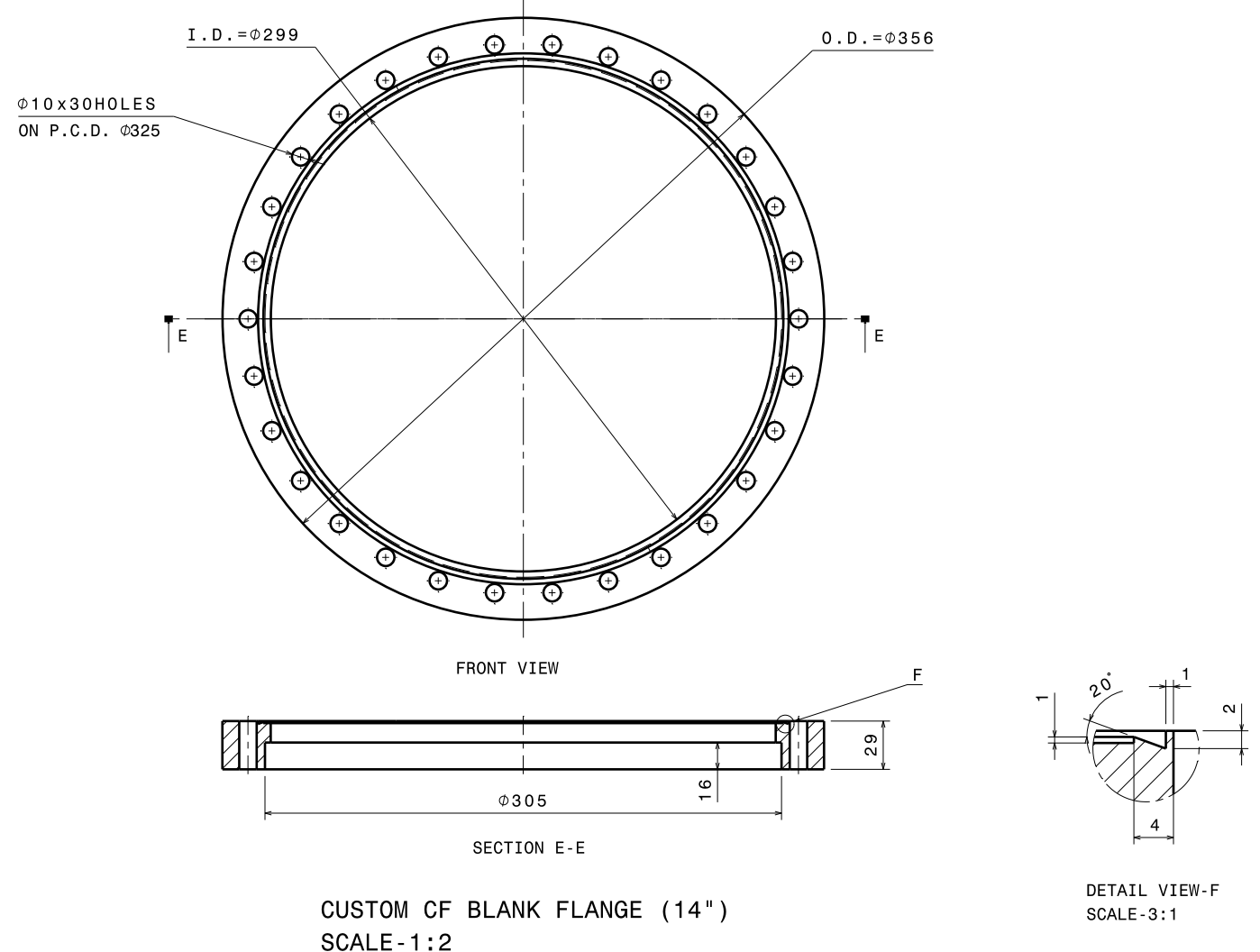
SECTION K-K

DN 160CF COVER FLANGE

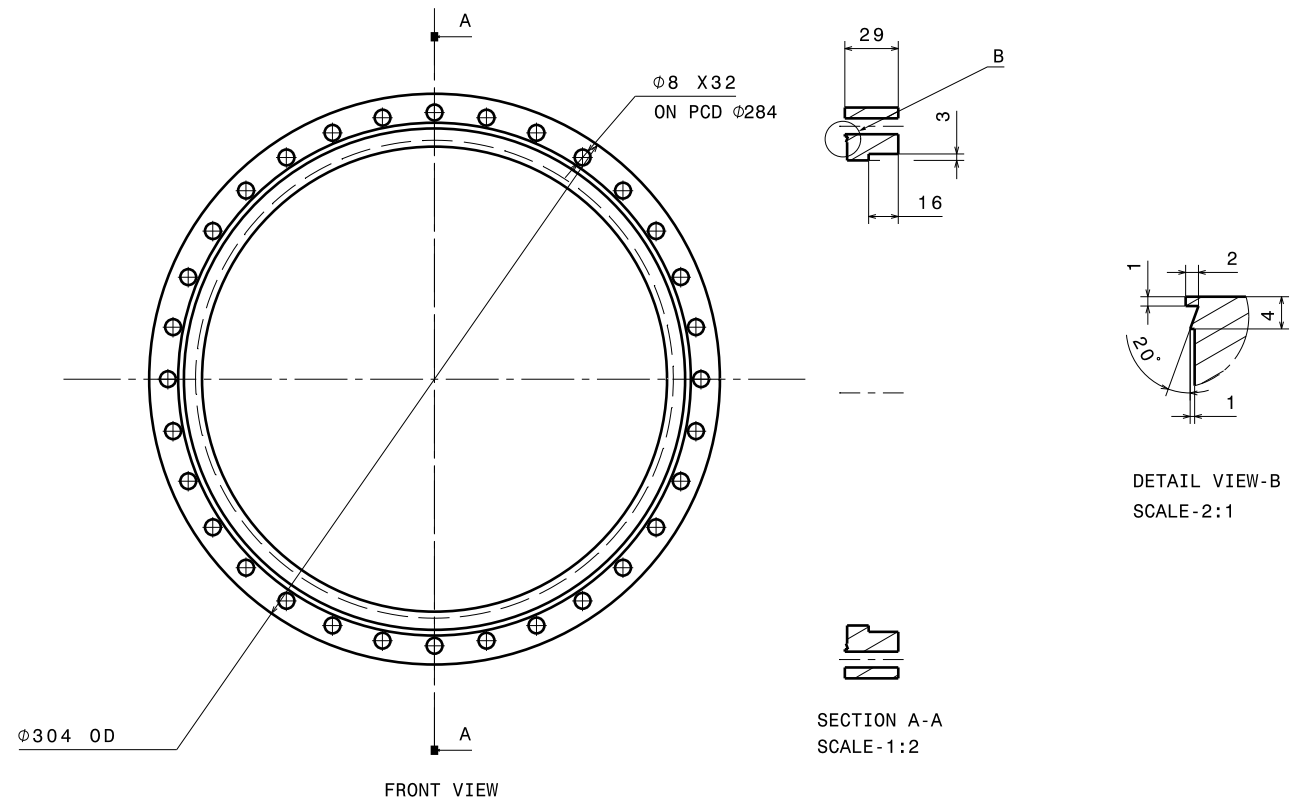


DETAIL VIEW-L
SCALE-3:1

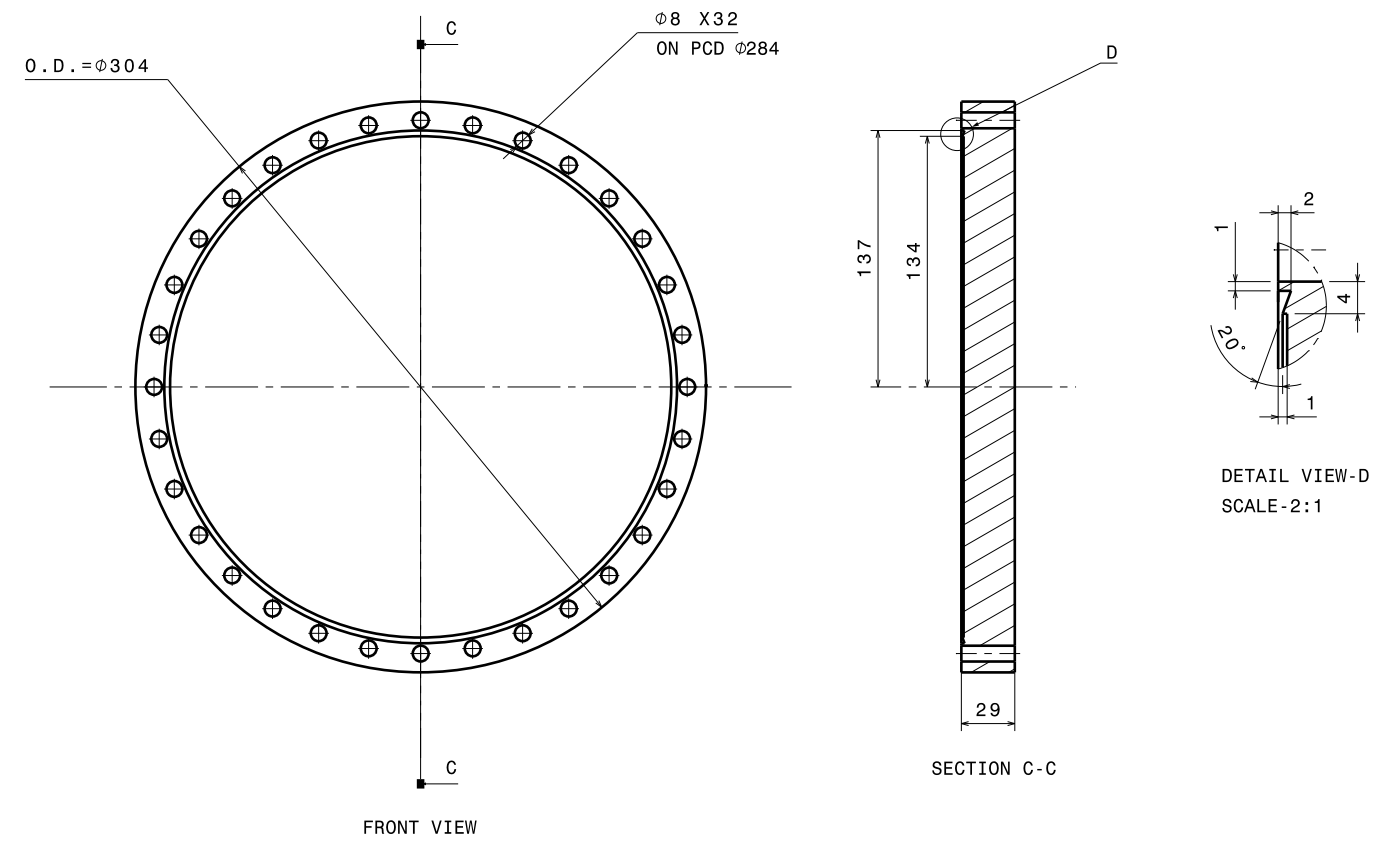
MATERIAL:	▽ 8-25	▽ 1.6-8	▽ 0.025-1.6	▽ 0.025 < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.				
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:2	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	A.N.N.	04/06/2014	STANDARD FLANGES
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5			CHECKED	R.K.	REF DRG NO: NA	REV RO	
±1°	±0°-30'	±0°-20'	±0°-10'								APPROVED	M.K.G.	DRG. NO	V001-001-RO	
													SHEET 01 OF 05		



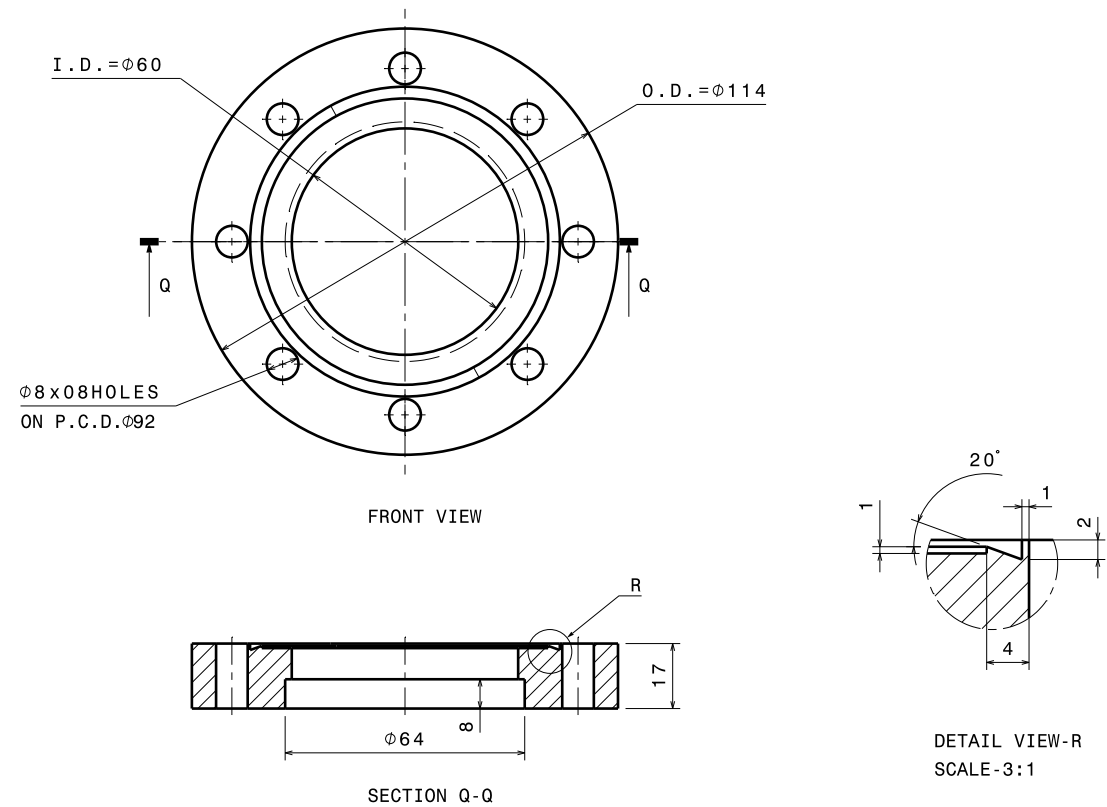
MATERIAL:		8-25	1.6-8	0.025-1.6	< 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.		
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED	TITLE	STANDARD FLANGES
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS														
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315						
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5						
$\pm 1^\circ$	$\pm 0^\circ-30'$	$\pm 0^\circ-20'$	$\pm 0^\circ-10'$								CHECKED	R.K.	REF DRG NO: NA	REV RO
									APPROVED	M.K.G.	DRG. NO	V001-001-RO	SHEET 02 OF 05	



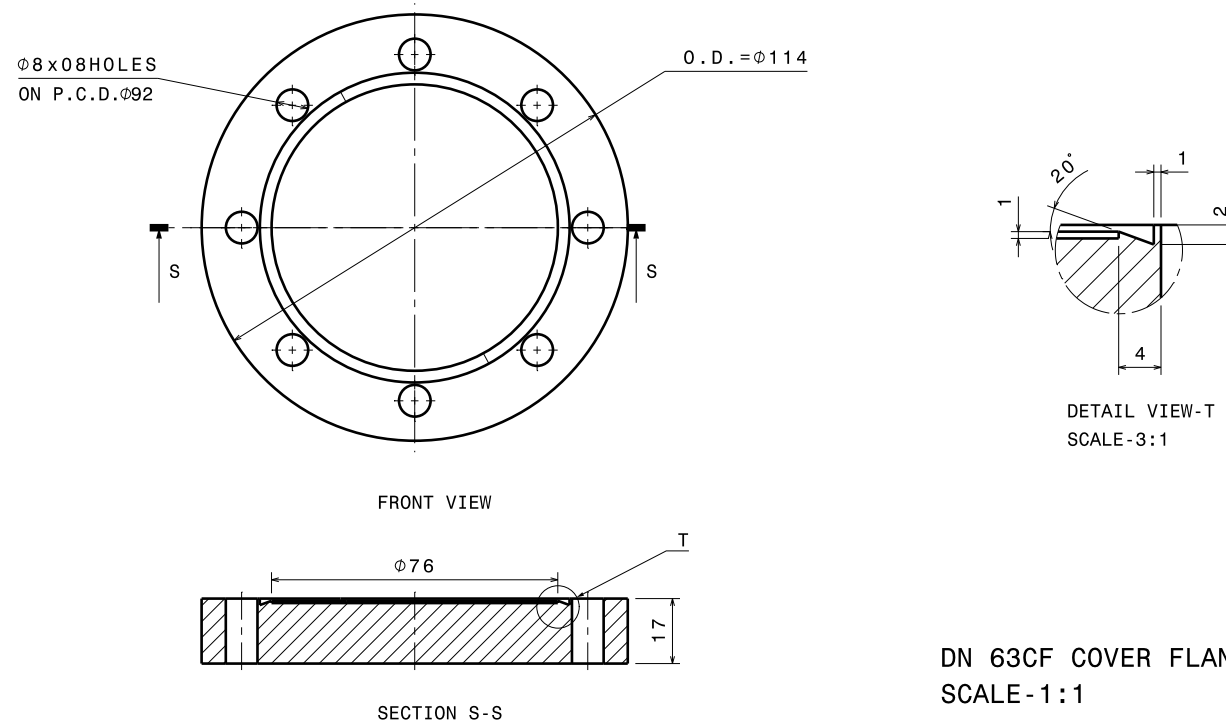
DN 250CF BLANK FLANGE
SCALE-1:2



DN 250CF COVER FLANGE
SCALE-1:2



DN 63CF BLANK FLANGE
SCALE-1:1



DN 63CF COVER FLANGE
SCALE-1:1

MATERIAL:		8-25	1.6-8	0.025-1.6	0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)		
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												TITLE STANDARD FLANGES		
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315			SCALE	AS NOTED	DATE	DRAWN A.N.N. 04/06/2014	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5			CHECKED	R.K.	REF DRG NO: NA	REV RO
±1°	±0°-30'	±0°-20'	±0°-10'								APPROVED	M.K.G.	DRG. NO	V001-001-RO
												SHEET 03 OF 05		

INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)
BHAT, GANDHINAGAR-382 428.

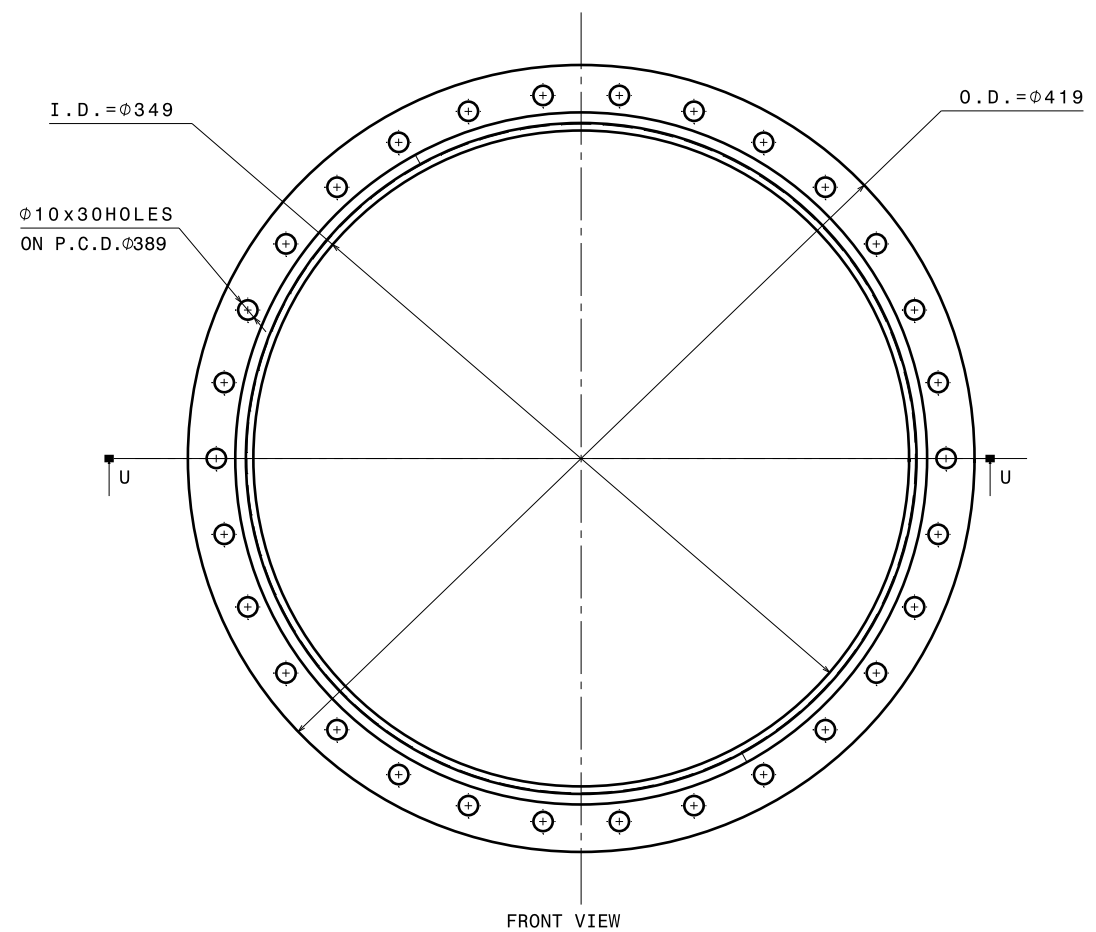
TITLE STANDARD FLANGES

REF DRG NO: NA

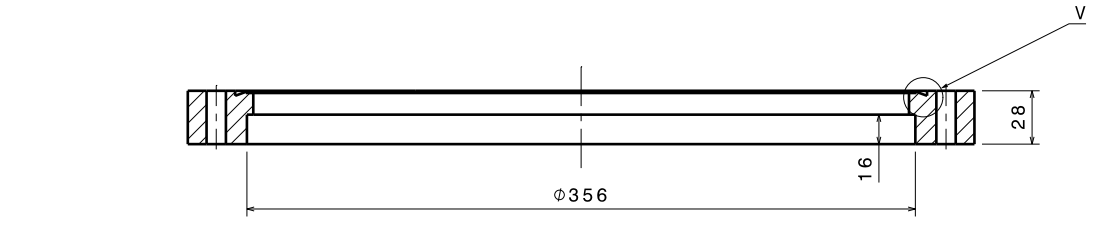
DRG. NO V001-001-RO

P O N M L K J I H G F E D C B A

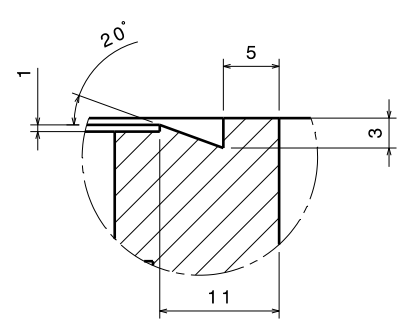
8 7 6 5 4 3 2 1



FRONT VIEW

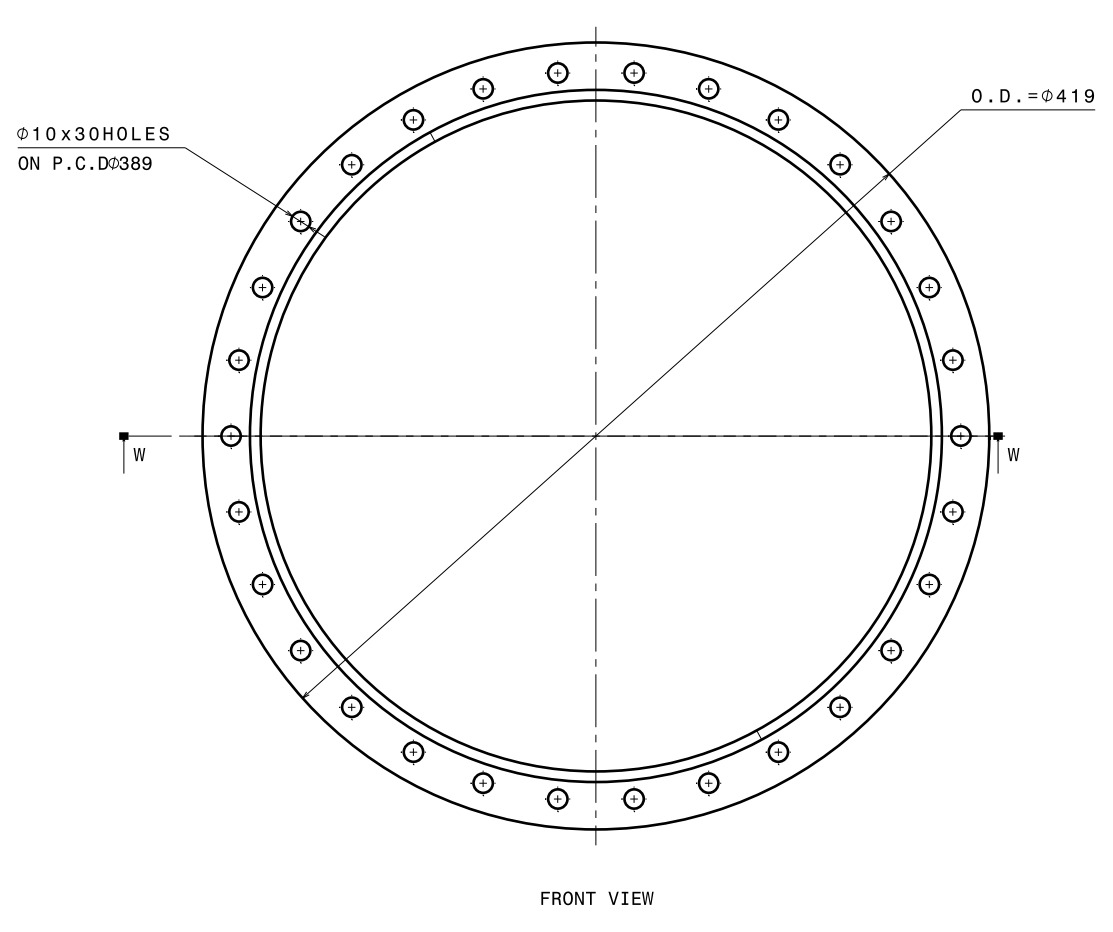


SECTION U-U

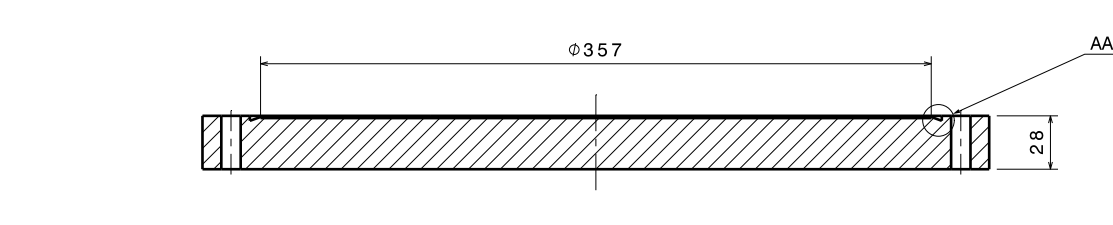


DETAIL VIEW-V
SCALE-3:1

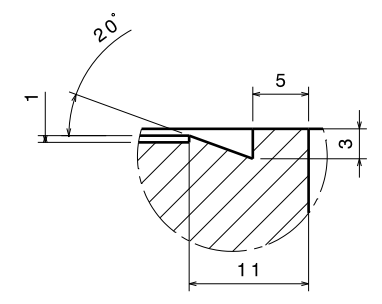
CUSTOM CF BLANK FLANGE (16 1/2")



FRONT VIEW



SECTION W-W

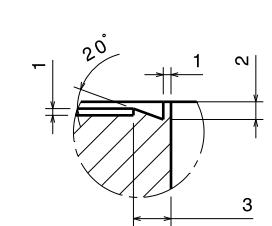
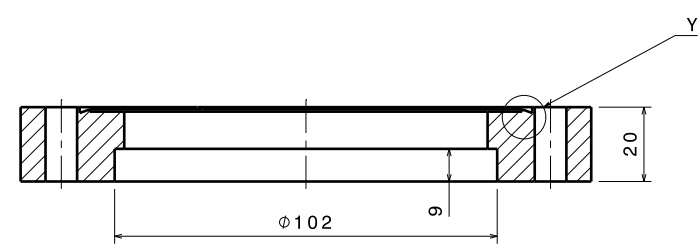
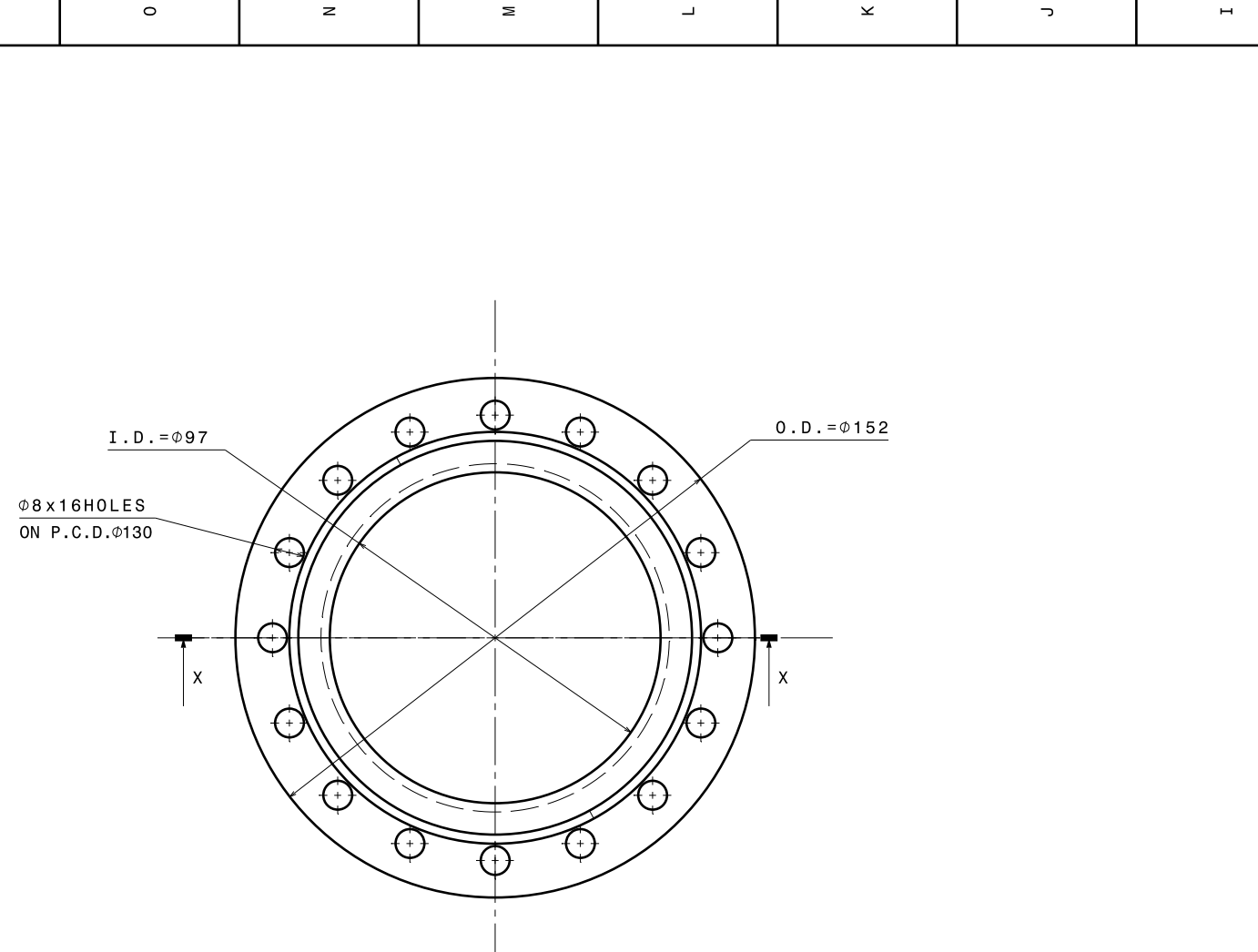


DETAIL VIEW-AA
SCALE-3:1

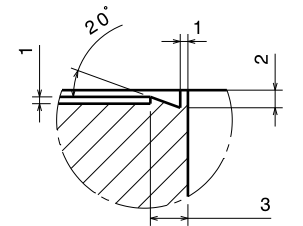
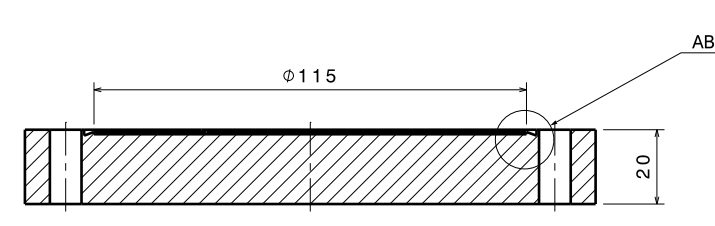
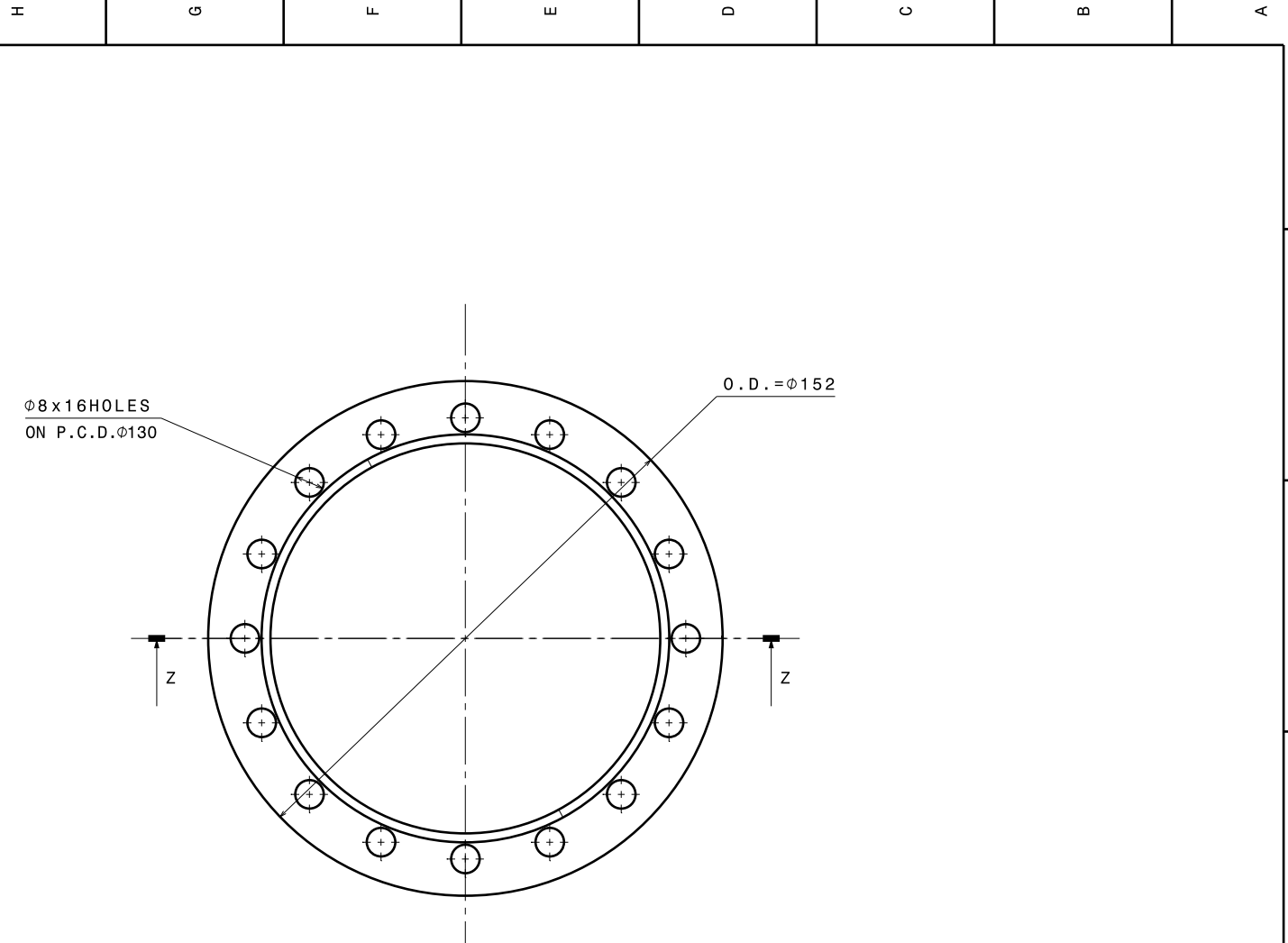
CUSTOM CF COVER FLANGE (16 1/2")

MATERIAL:		8-25	1.6-8	0.025-1.6	< 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	SCALE 1:2	DATE 04/06/2014	TITLE STANDARD FLANGES	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS															
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315							
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5	CHECKED	R.K.	REF DRG NO: NA	REV	RO	SHEET 04 OF 05	
±1°	+0°-30'	+0°-20'	+0°-10'						APPROVED	M.K.G.	DRG. NO	V001-001-RO			

P O N M L K J I H G F E D C B A

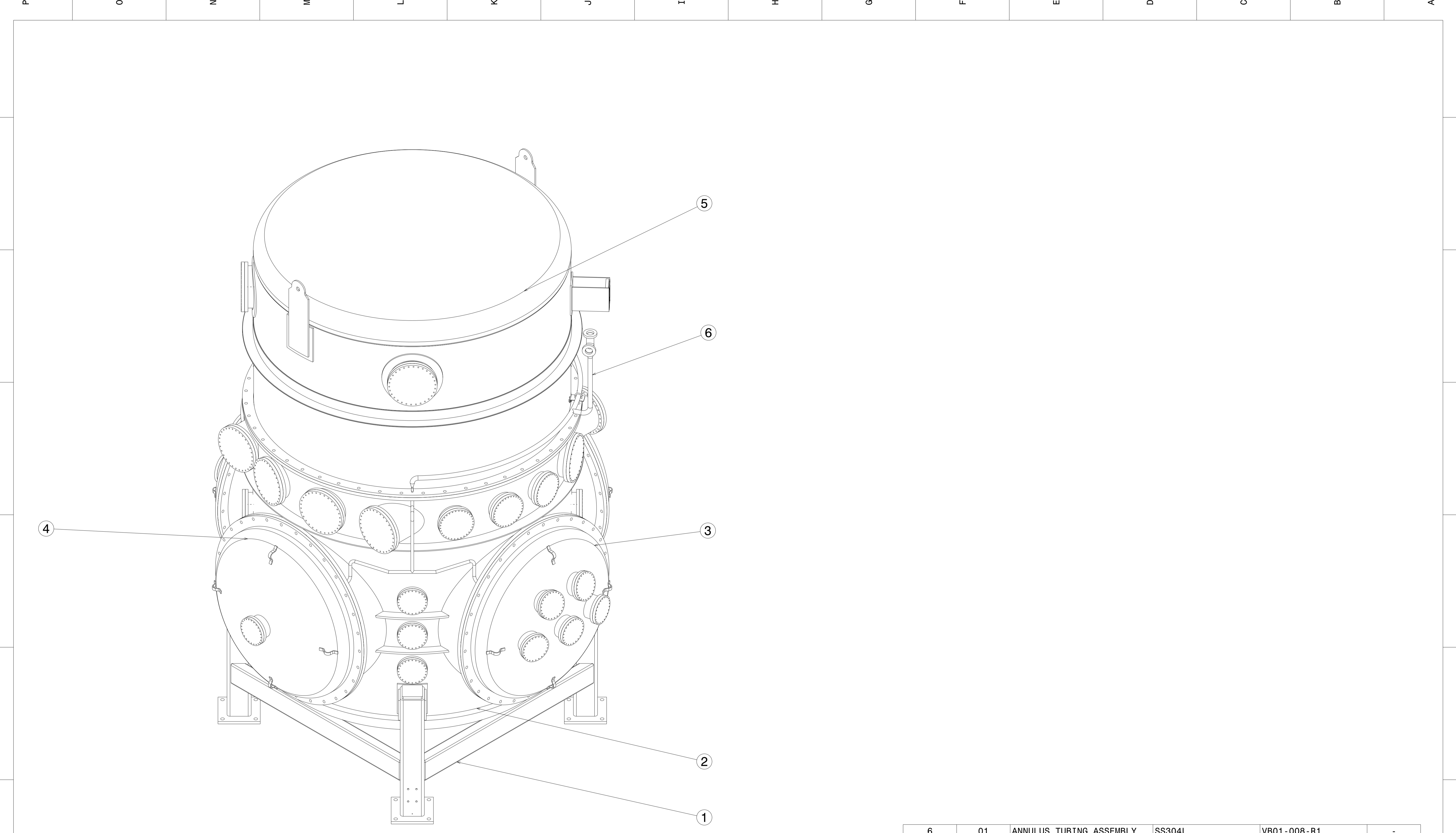


DN 100CF BLANK FLANGE



DN 100CF COVER FLANGE

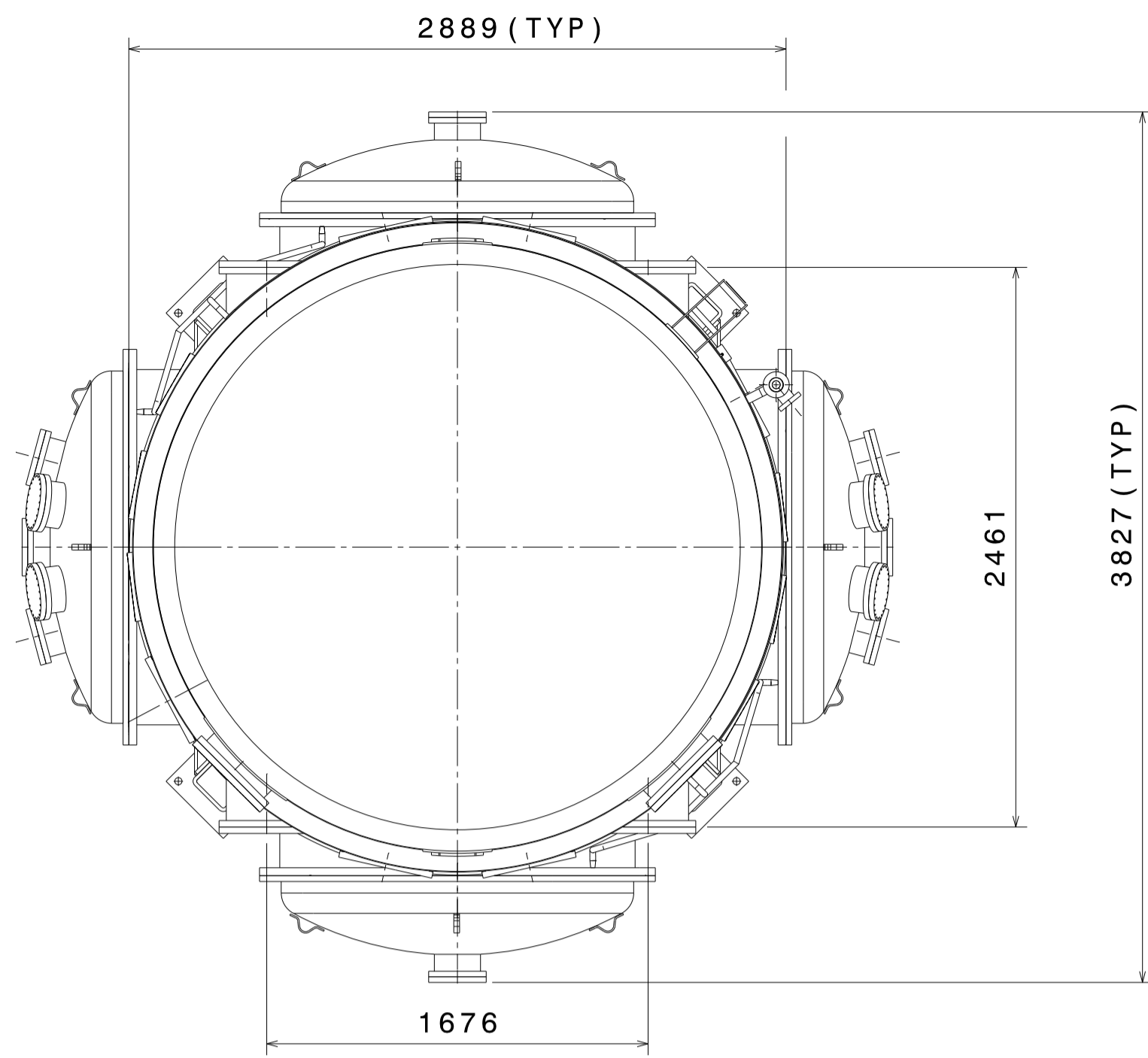
MATERIAL:		8-25	1.6-8	0.025-1.6	< 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS																	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315									
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5									
±1°	±0°-30°	±0°-20°	±0°-10°								SCALE	1:1	DATE	04/06/2014	TITLE	STANDARD FLANGES	
											DRAWN	A.N.N.	REF DRG NO: NA		REV	RO	
											CHECKED	R.K.	DRG. NO		V001-001-RO	SHEET	05 OF 05
											APPROVED	M.K.G.					



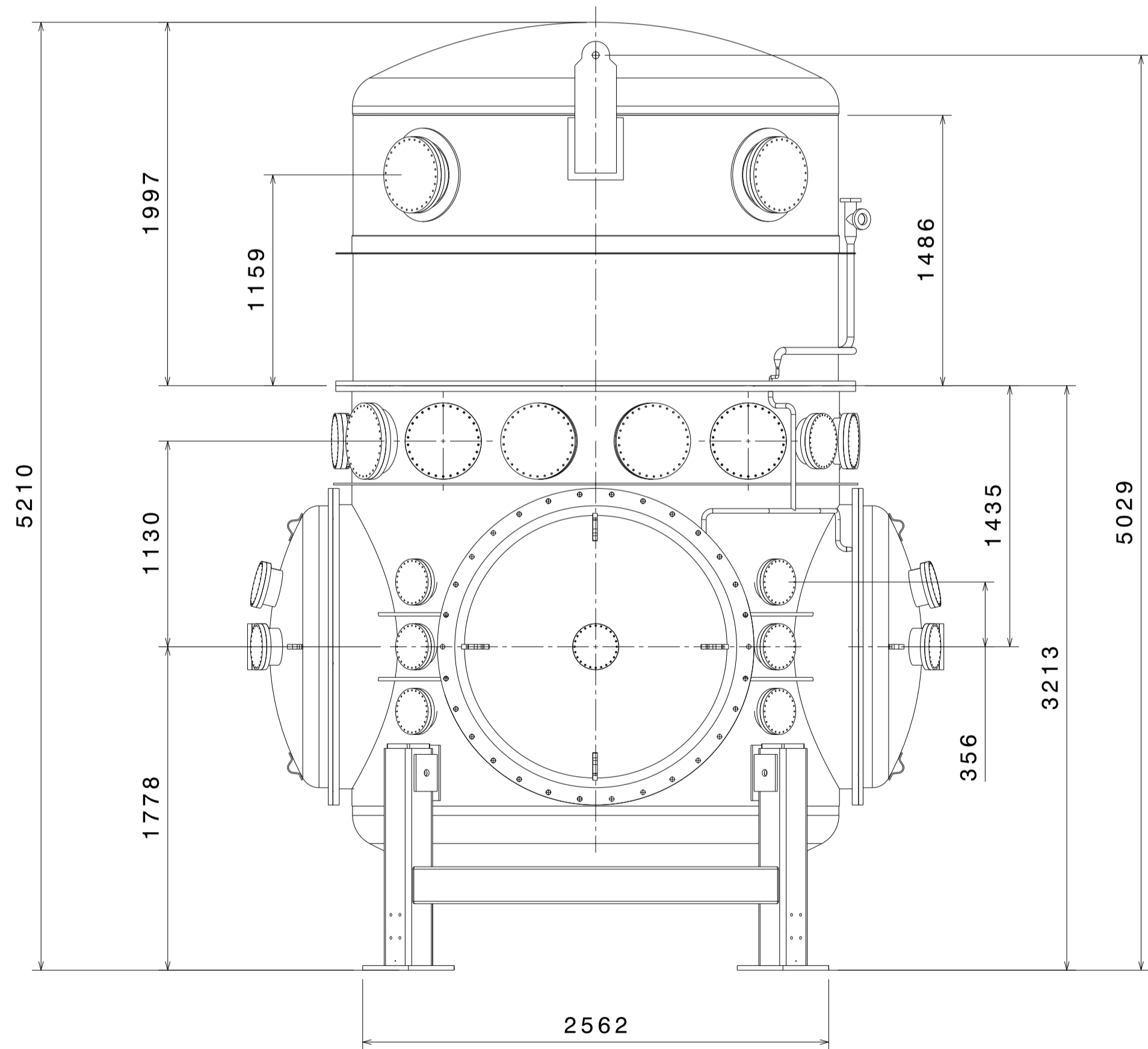
BASIC SYMMETRIC CHAMBER

PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
6	01	ANNULUS TUBING ASSEMBLY	SS304L	VB01 -008 -R1	-
5	01	UPPER PART	SS304L	VB01 -007 -R1	-
4	02	END COVER TYPE -A11	SS304L	VB01 -006 -R1	-
3	02	END COVER TYPE -1	SS304L	VB01 -005 -R1	-
2	01	LOWER PART	SS304L	VB01 -003 -R1	-
1	01	SUPPORT ASSEMBLY	CARBON STEEL	VB01 -002 -R1	-

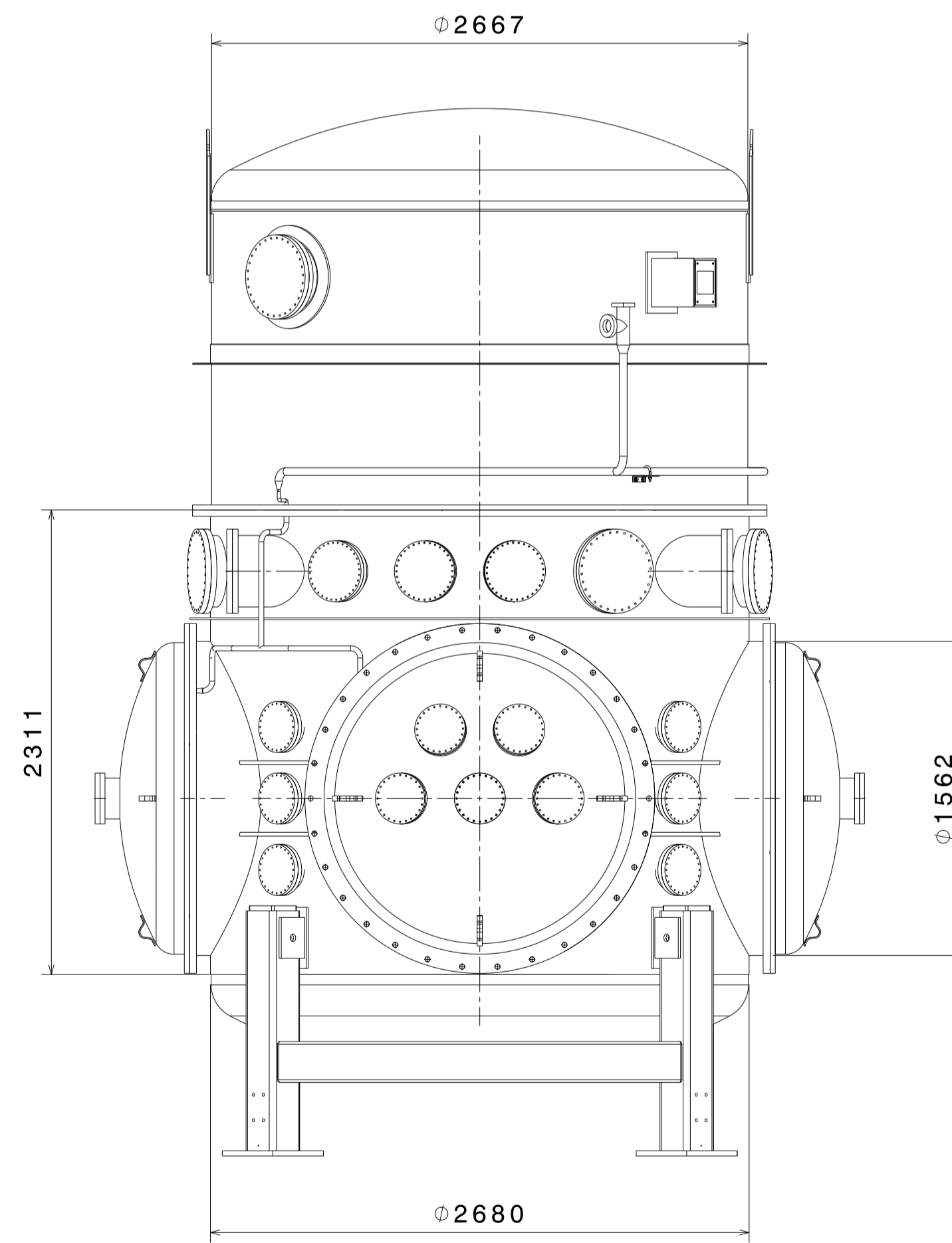
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.							
CO-ORDINATED BY	REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		SCALE	1:15	DATE	TITLE	BASIC SYMMETRIC CHAMBER							
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS																				
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA	UPTO 6	6-30	30-120	120-315									DRAWN	A.N.N.	01/07/2015	REF DRG NO: NA	REV R1	
UPTO 10	10-50	50-120	OVER 120-400	±0.1	±0.2	±0.3	±0.5									CHECKED	R.K.		REF DRG NO: NA	REV R1
±1'	±0'-30'	±0'-20'	±0'-10'									APPROVED	M.K.G.		DRG. NO	VB01-001-R1	SHEET 01 OF 03			



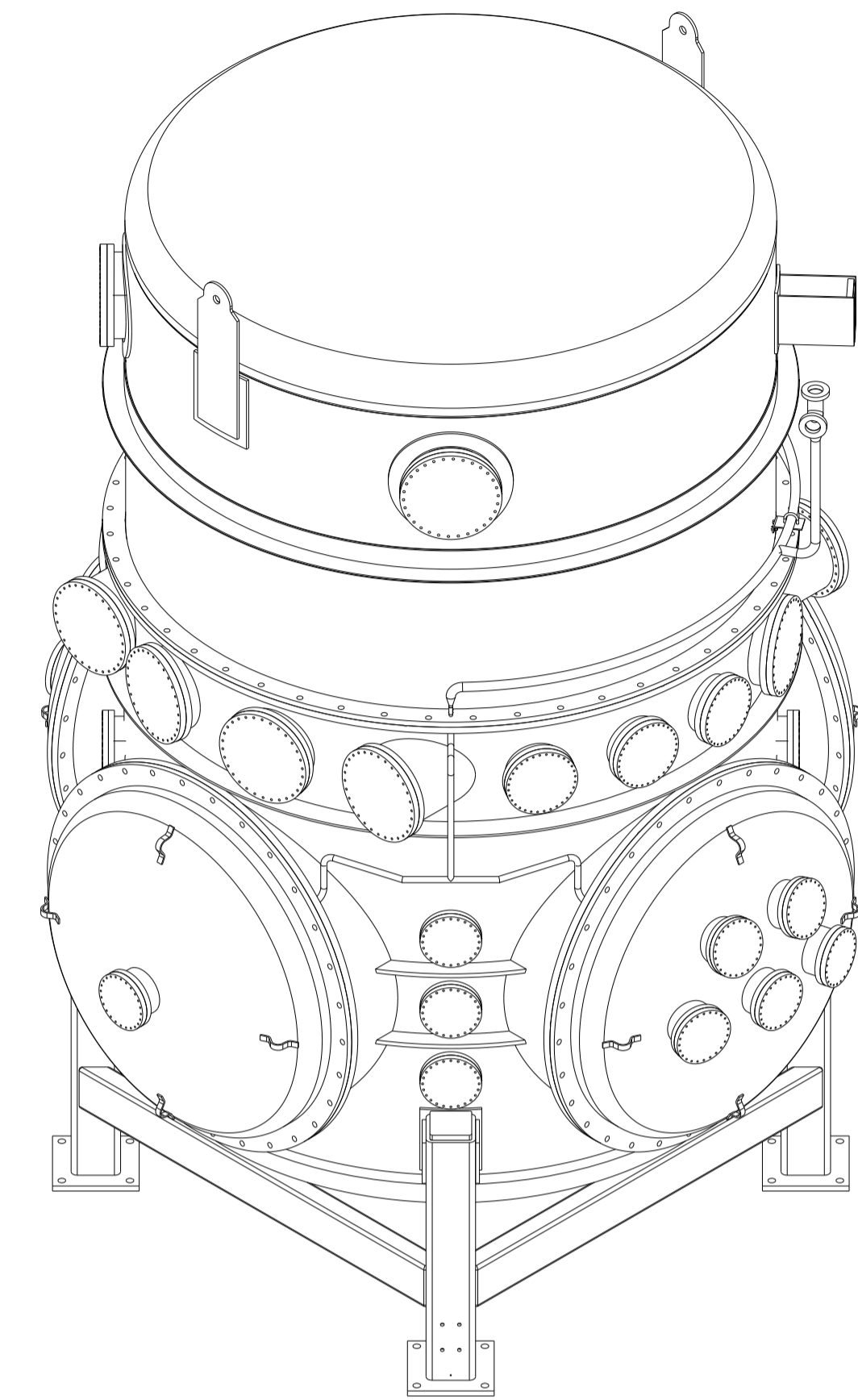
TOP VIEW



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

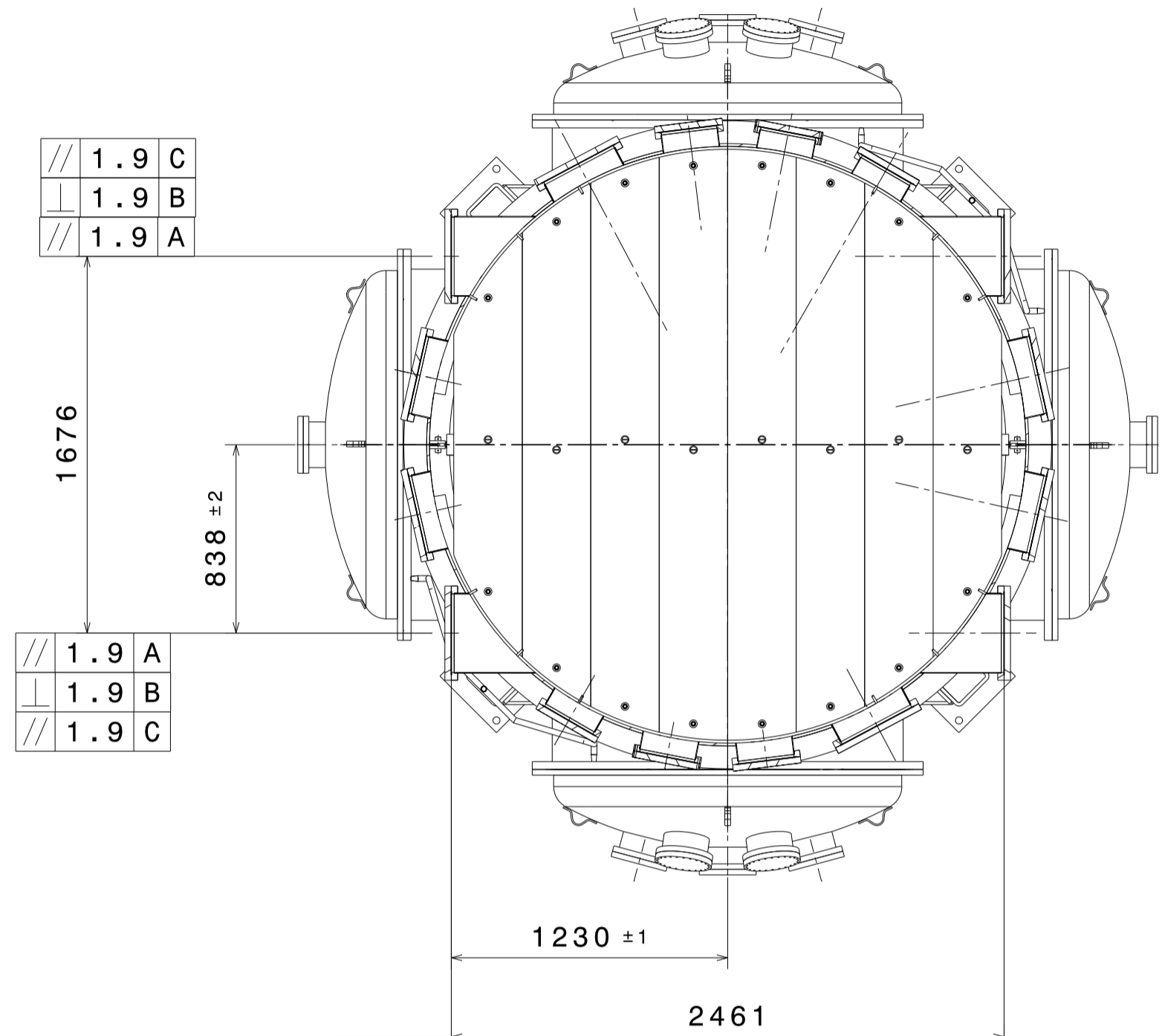
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS													SCALE	1:25	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES													DRAWN	A. N. N.	01/07/2015	BASIC SYMMETRIC CHAMBER	
UPTO 10		10-50	50-120	OVER 120-400	LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			CHECKED	R.K.	REF DRG NO:	NA	REV	R1
+1'		+0'-30'	+0'-20'	+0'-10'			+0.1	+0.2	+0.3	+0.5	APPROVED		M.K.G.	DRG. NO	VB01-001-R1	SHEET 02 OF 03	

1.9 C
1.9 B
1.9 A

1.9 A
1.9 B
1.9 C

0.4
1.9 A
1.9 C
1.9 B

0.4
1.9 A
1.9 C
1.6 B



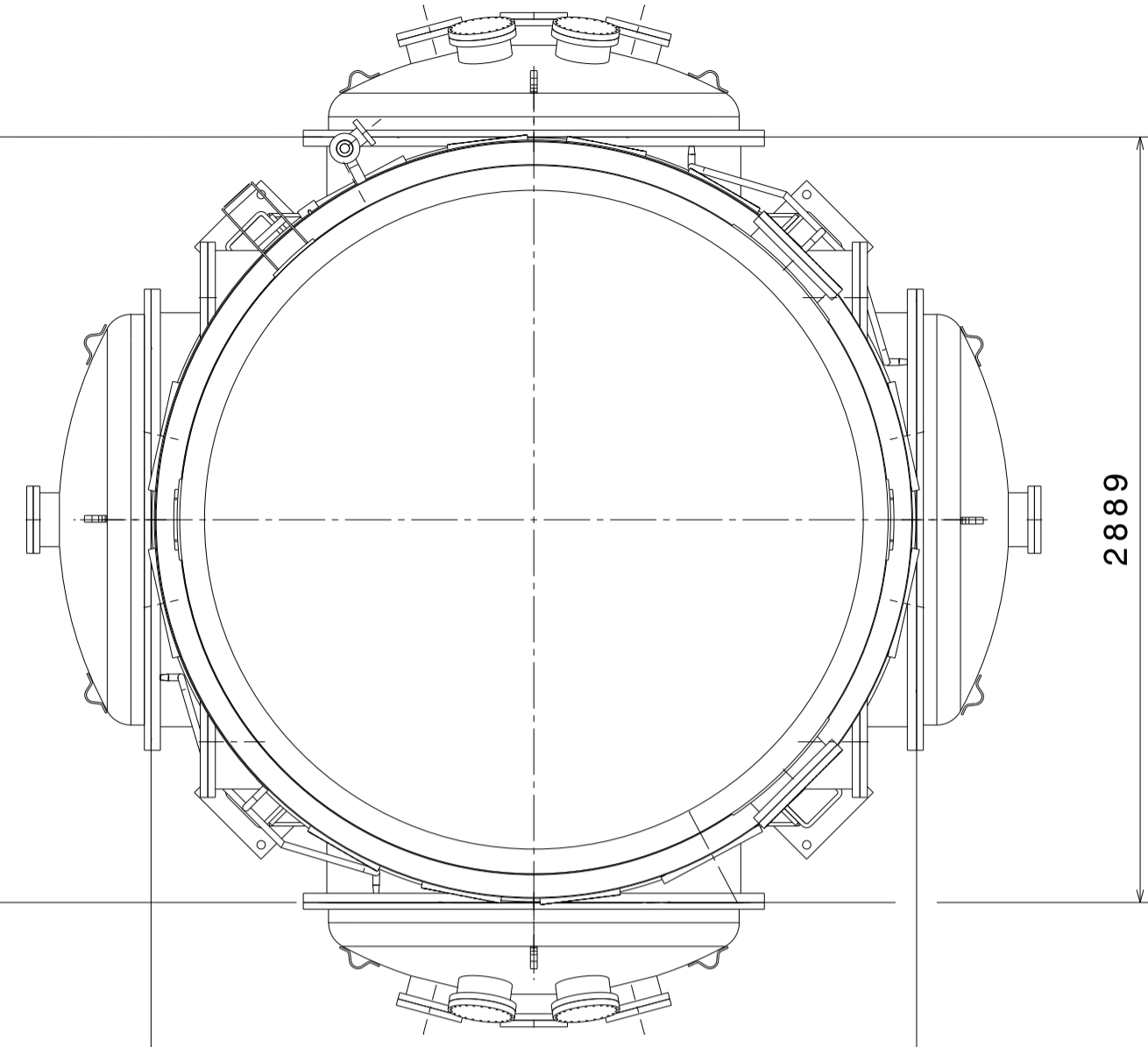
SECTION A-A

0.4
0.8 B
0.8 A
0.8 C

C
0.4
0.8 B
0.8 A

B
0.4
0.8 A
0.8 C

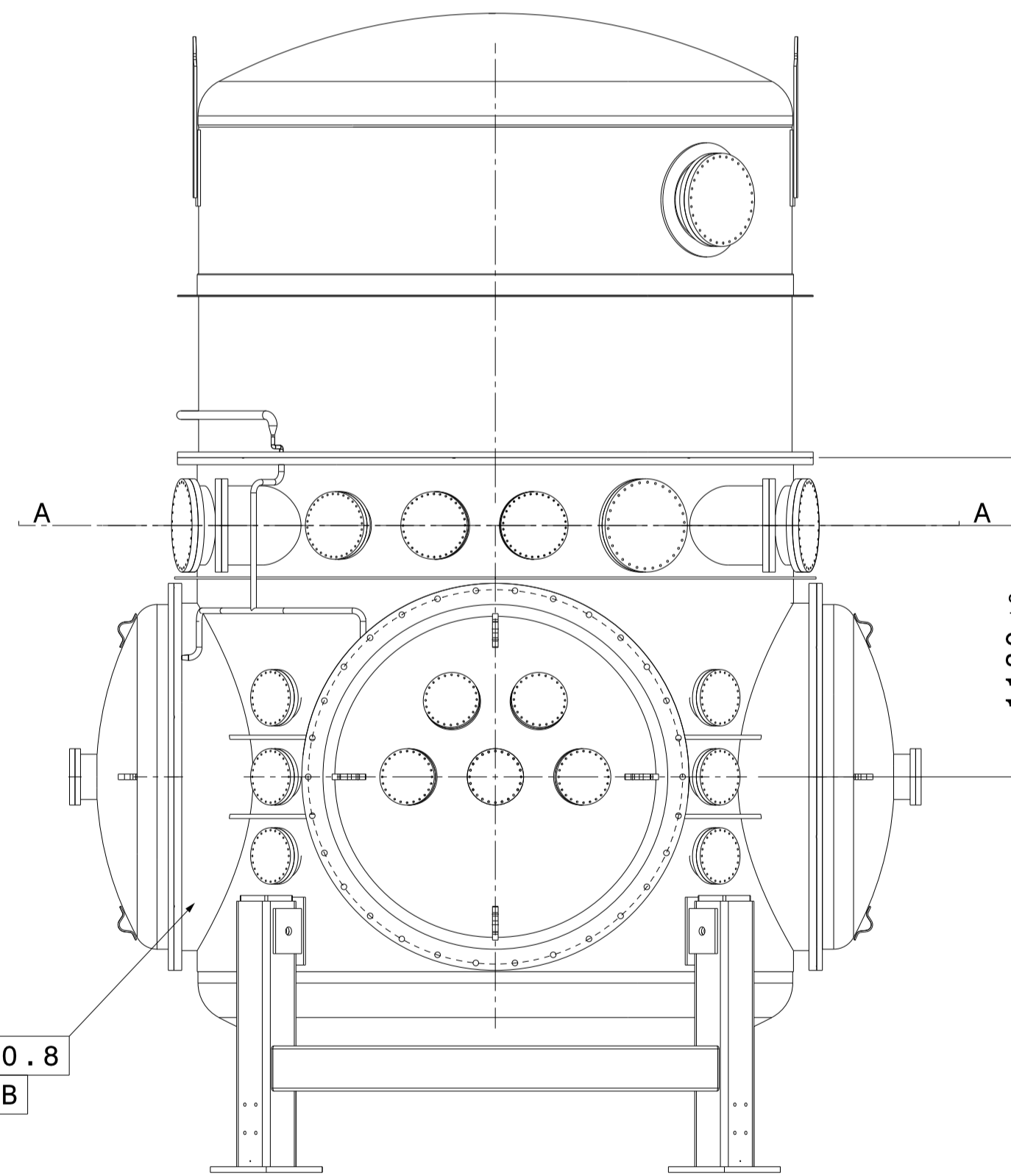
0.4
0.8 B
0.8 A
0.8 C



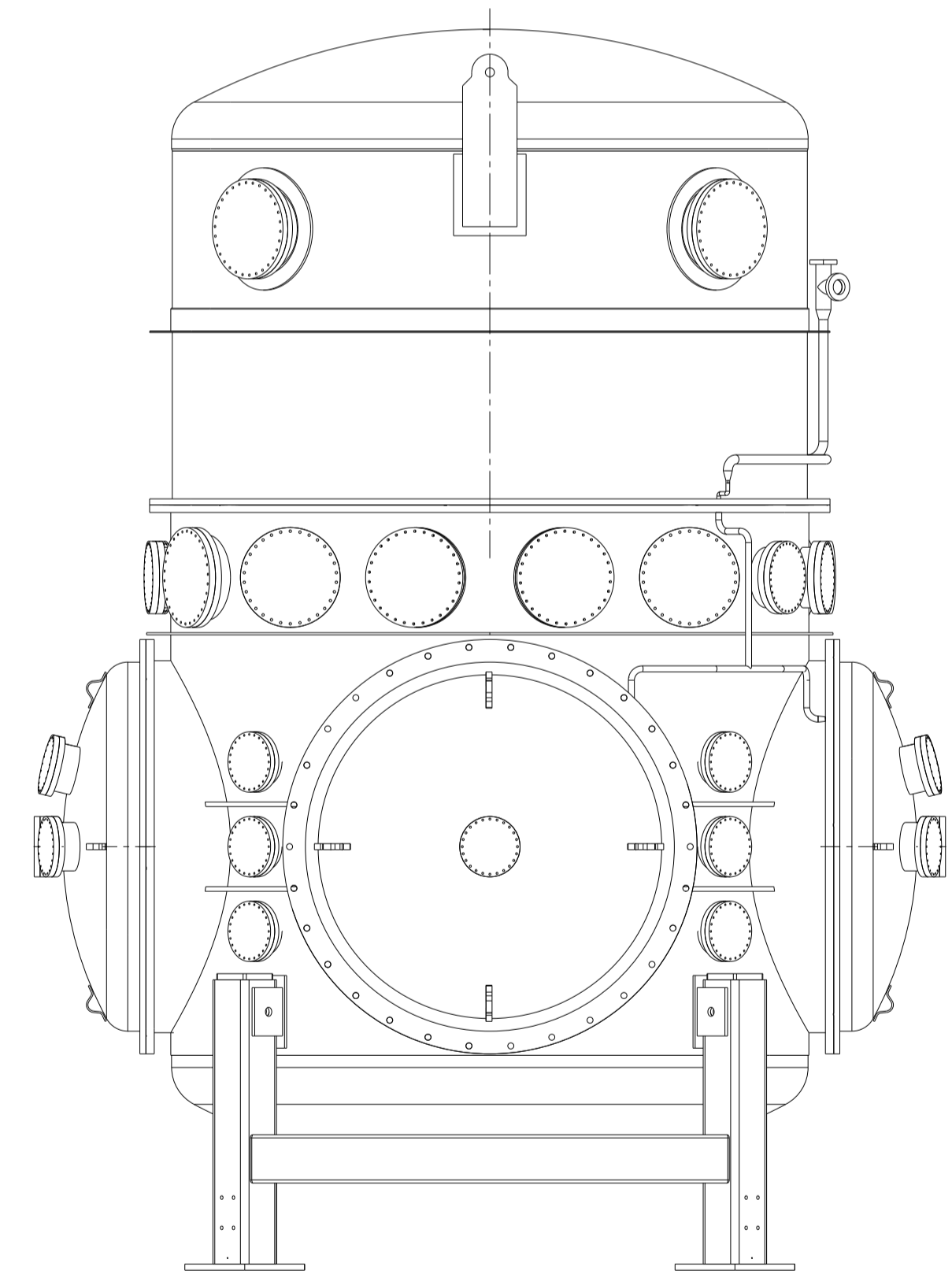
TOP VIEW

0.8
B

A
0.4

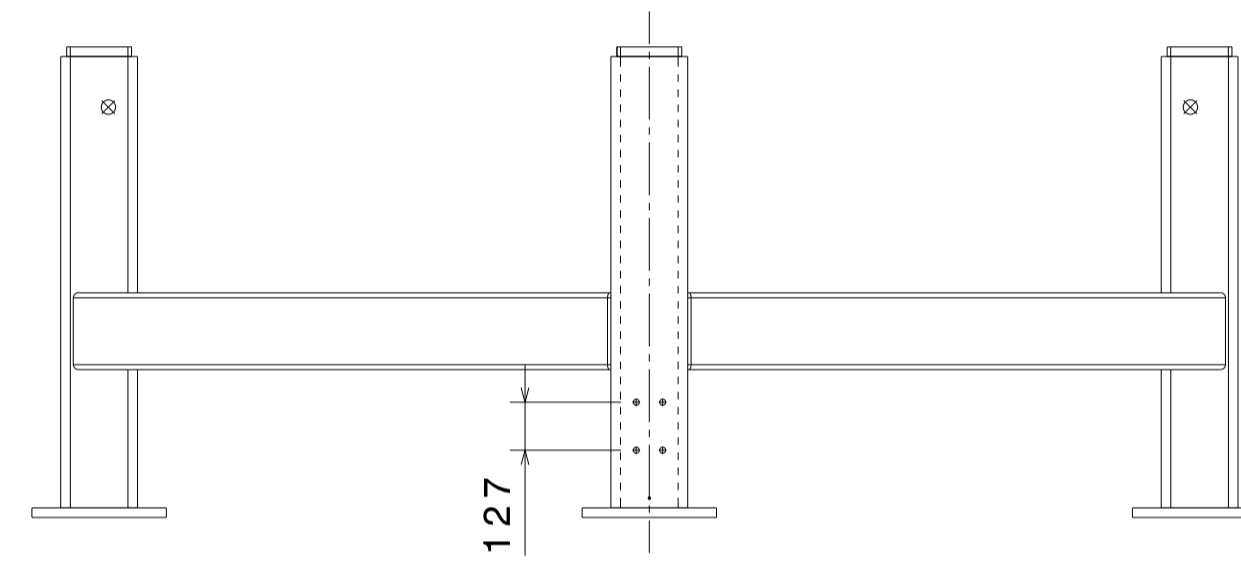
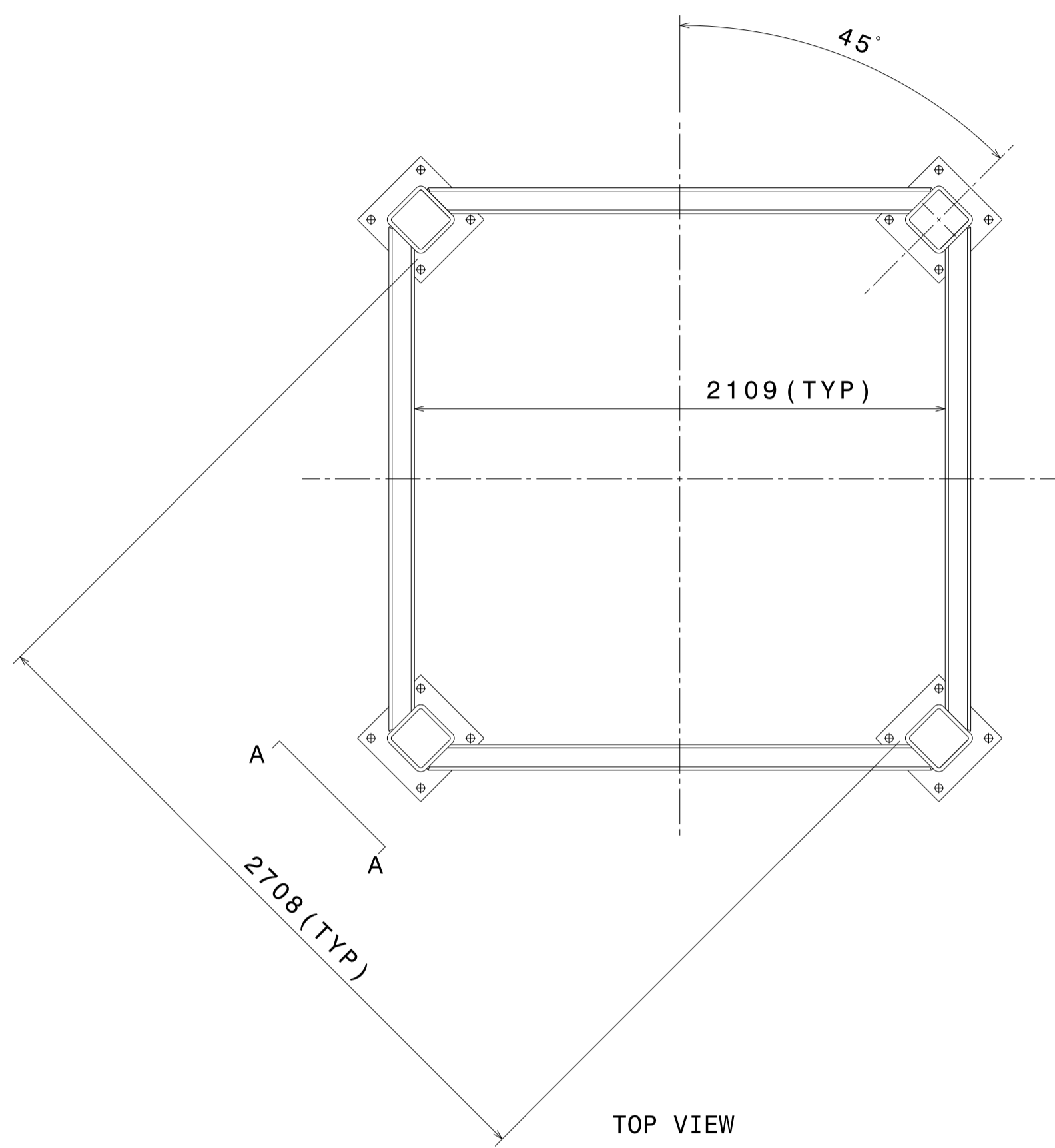


FRONT VIEW

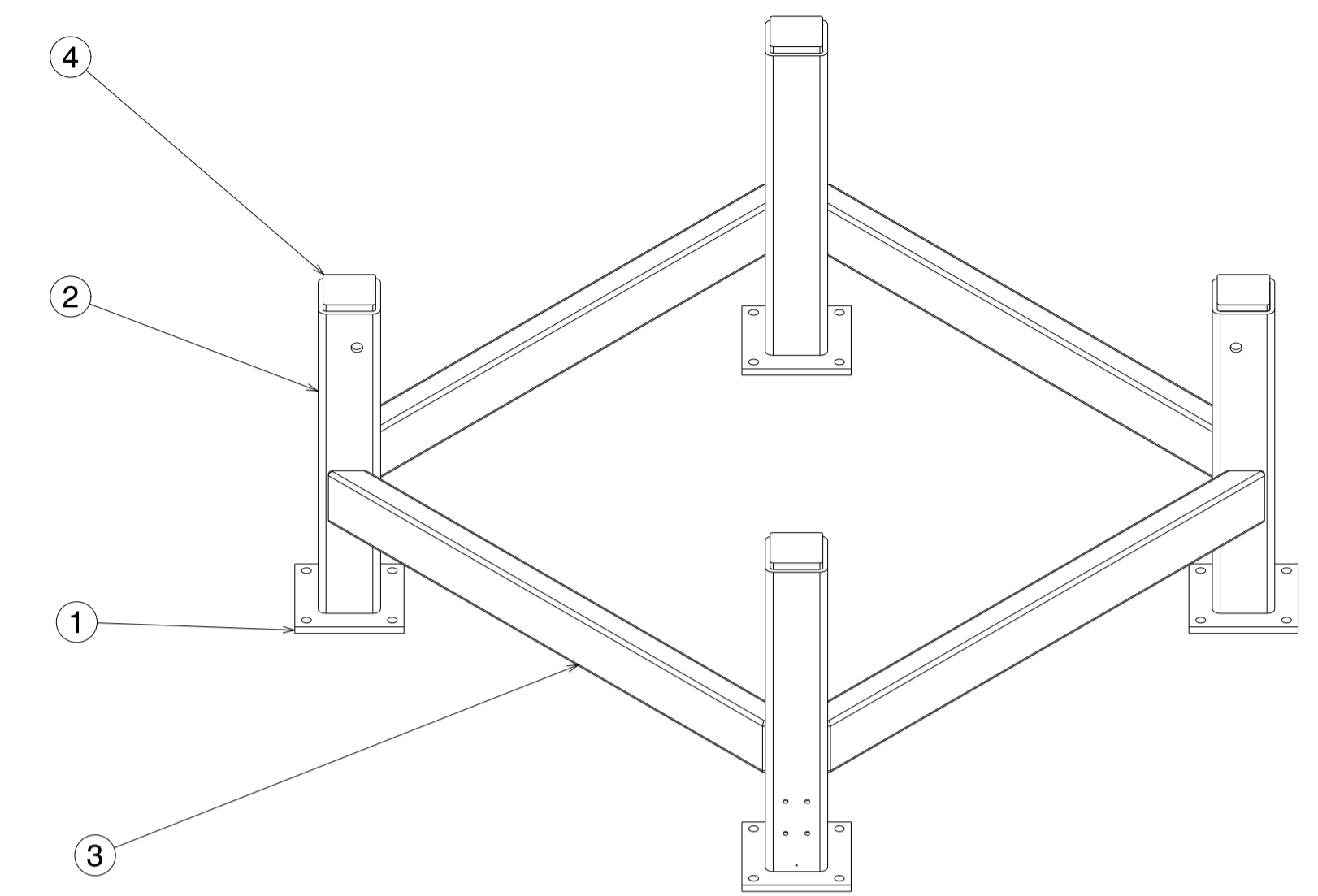


RIGHT SIDE VIEW

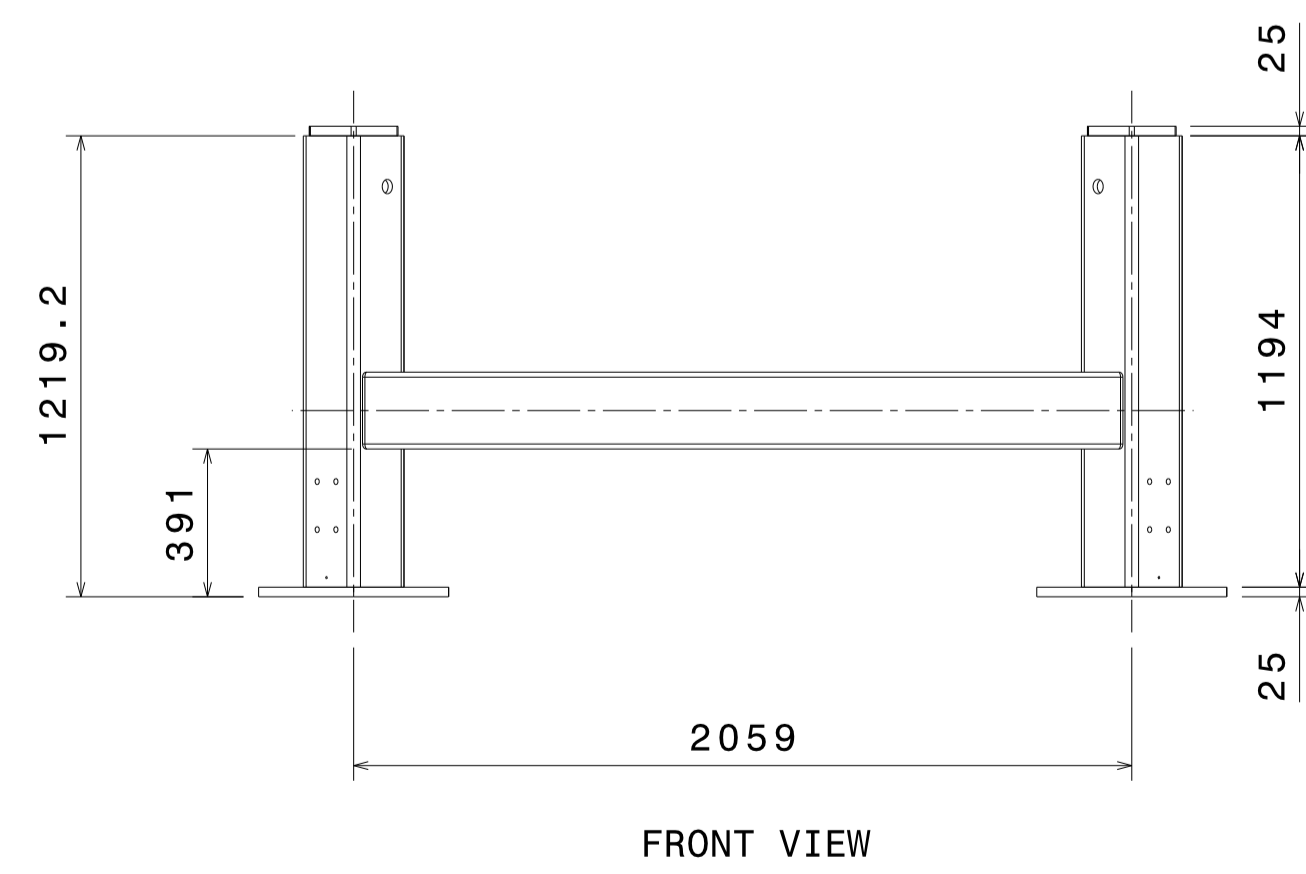
MATERIAL:	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.		
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS					SCALE	1:15	DATE	TITLED		BASIC SYMMETRIC CHAMBER			
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			DRAWN	A. N. N.	01/07/2015
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5	CHECKED	R.K.	REF DRG NO:	NA	REV R1
+1'	+0'-30'	+0'-20'	+0'-10'						APPROVED	M.K.G.	DRG. NO	VB01-001-R1	SHEET 03 OF 03



AUXILIARY VIEW A-A



ISOMETRIC VIEW

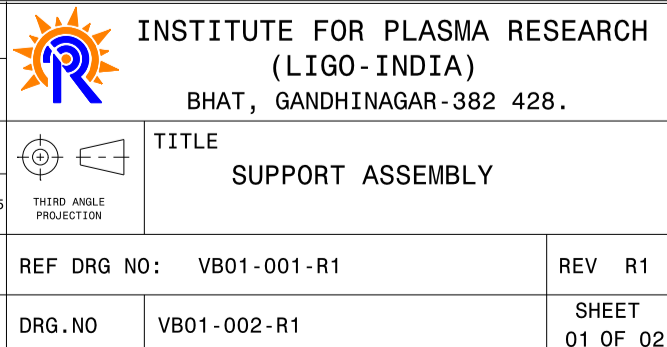


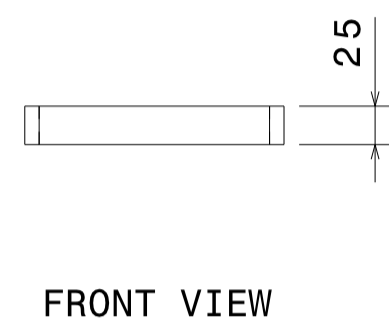
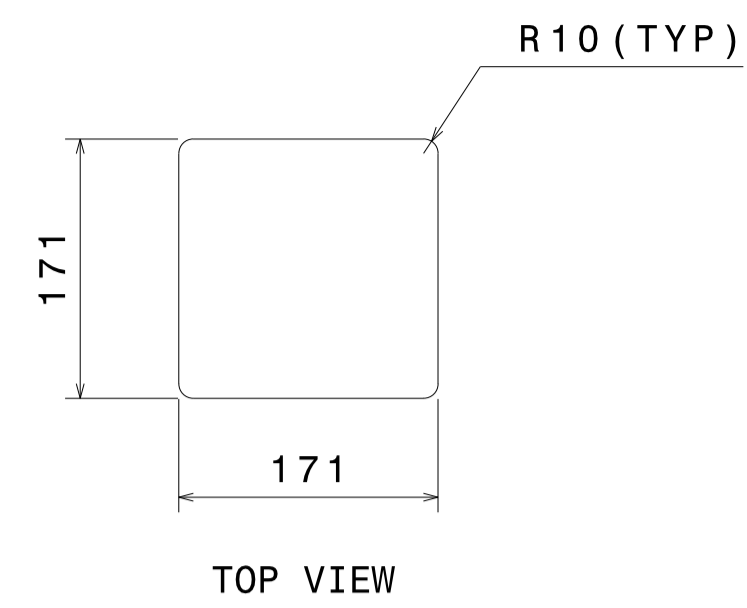
FRONT VIEW

01 SUPPORT ASSEMBLY

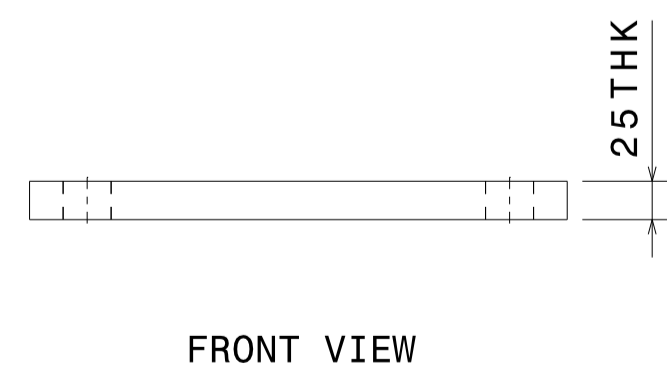
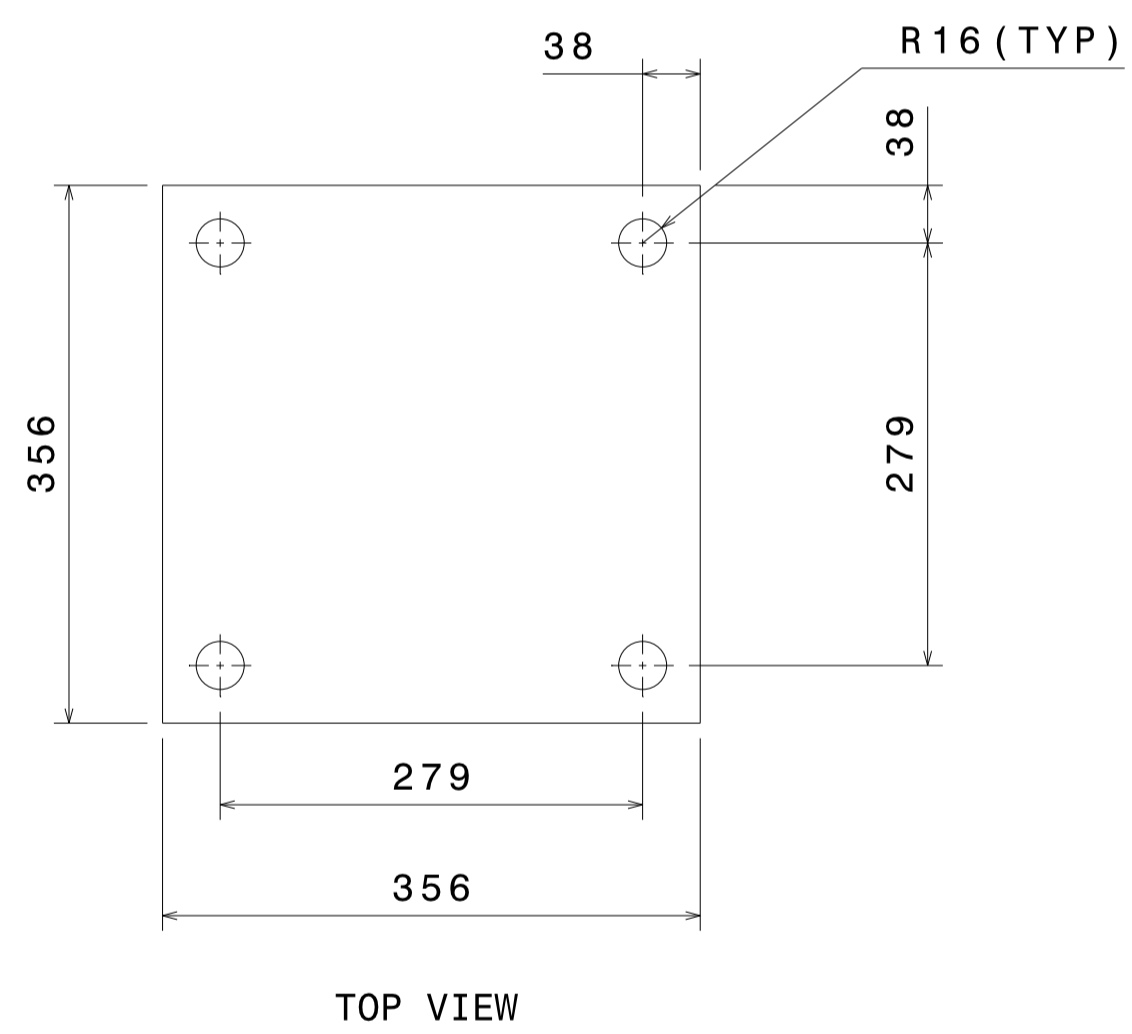
PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
4	04	TOP PLATE	CARBON STEEL	VB01-002-R1/SHEET 02	-
3	04	TUBE STEEL -2	CARBON STEEL	VB01-002-R1/SHEET 02	-
2	04	TUBE STEEL -1	CARBON STEEL	VB01-002-R1/SHEET 02	-
1	04	BASE PLATE	CARBON STEEL	VB01-002-R1/SHEET 02	-

MATERIAL:		REVISION COLUMN		MED		SIZE		INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)	
CO-ORDINATED BY	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED	A1	A1	BHAT, GANDHINAGAR-382 428.	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS				REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	SCALE	1:20	DATE
UPTO 10	10-50	50-120	OVER 120-400	±0.1	±0.2	±0.3	±0.5	DRAWN	A. N. N.
±1'	±0'-30'	±0'-20'	±0'-10'					CHECKED	R.K.
				APPROVED		M.K.G.	REF DRG NO:	VB01-001-R1	REV R1
							DRG. NO	VB01-002-R1	SHEET 01 OF 02

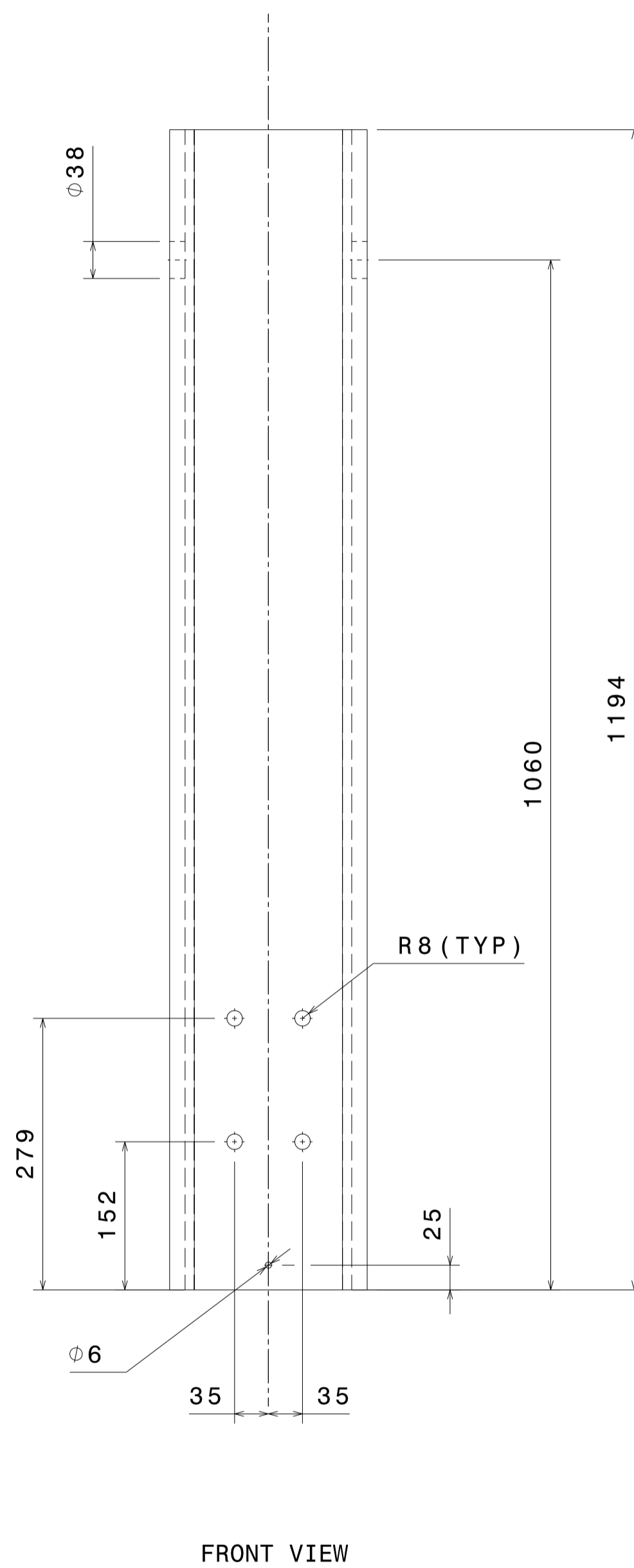
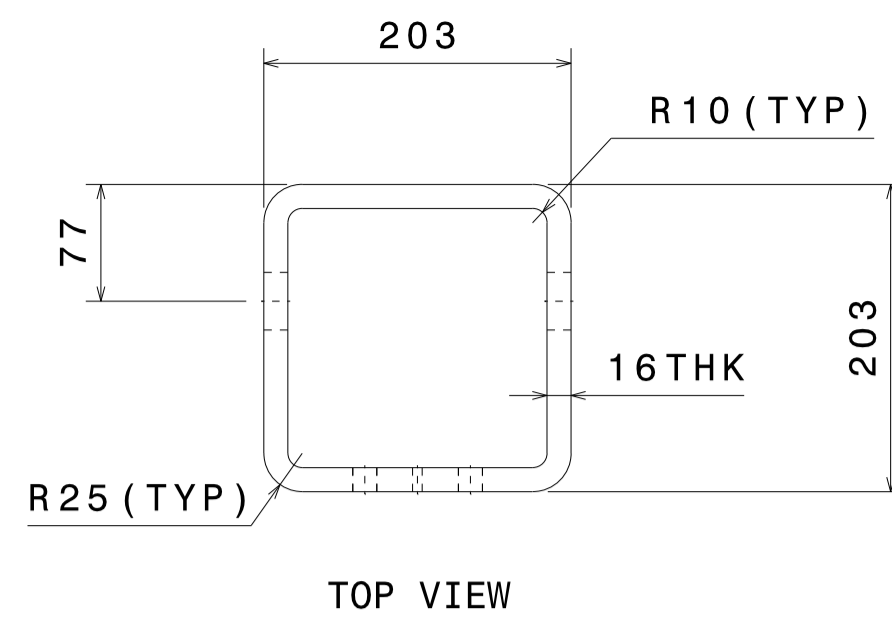




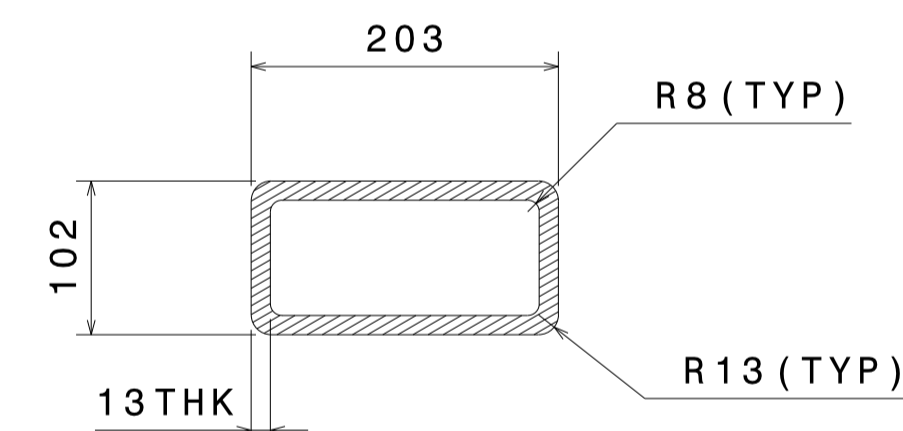
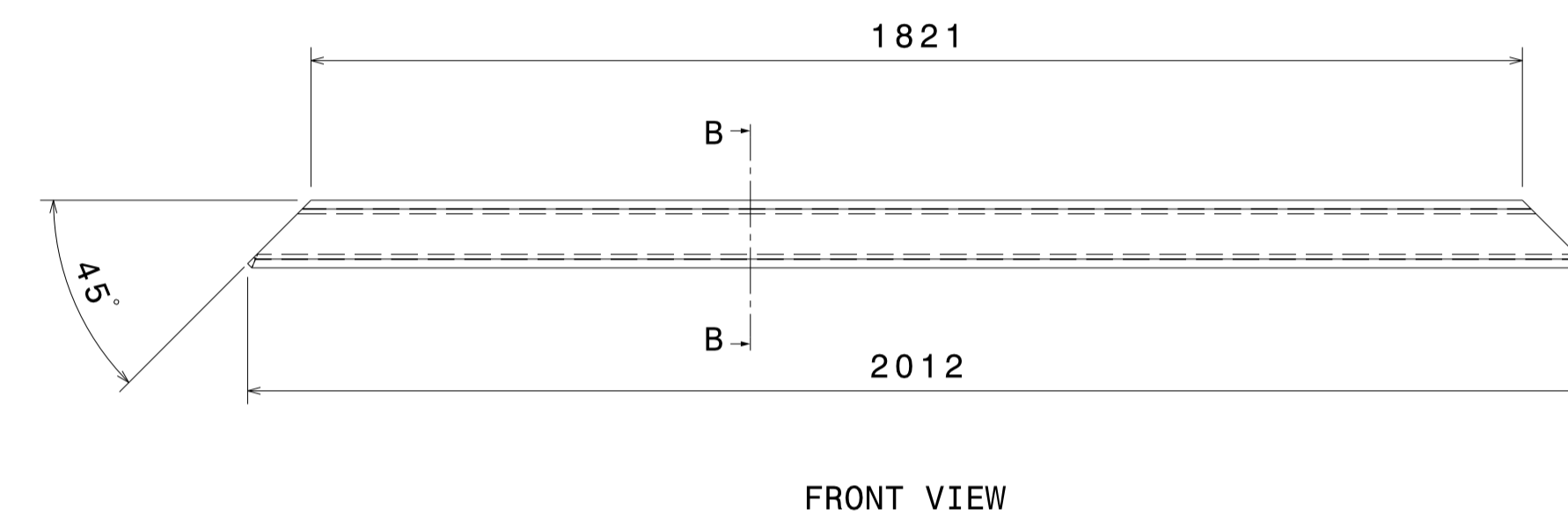
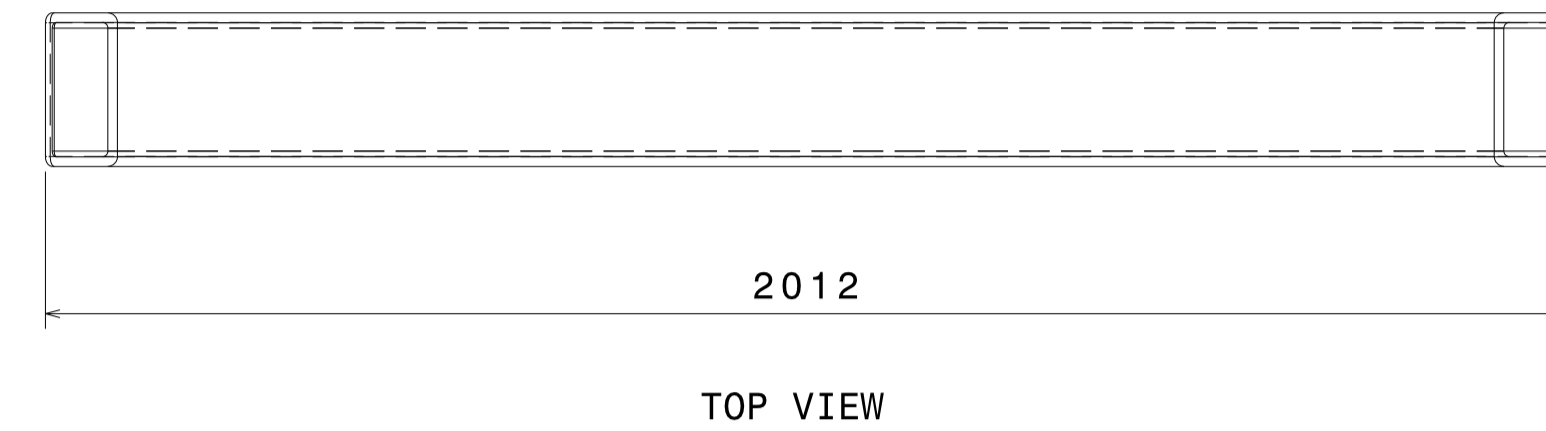
④ TOP PLATE
SCALE - 1:5



① BASE PLATE
SCALE - 1:5

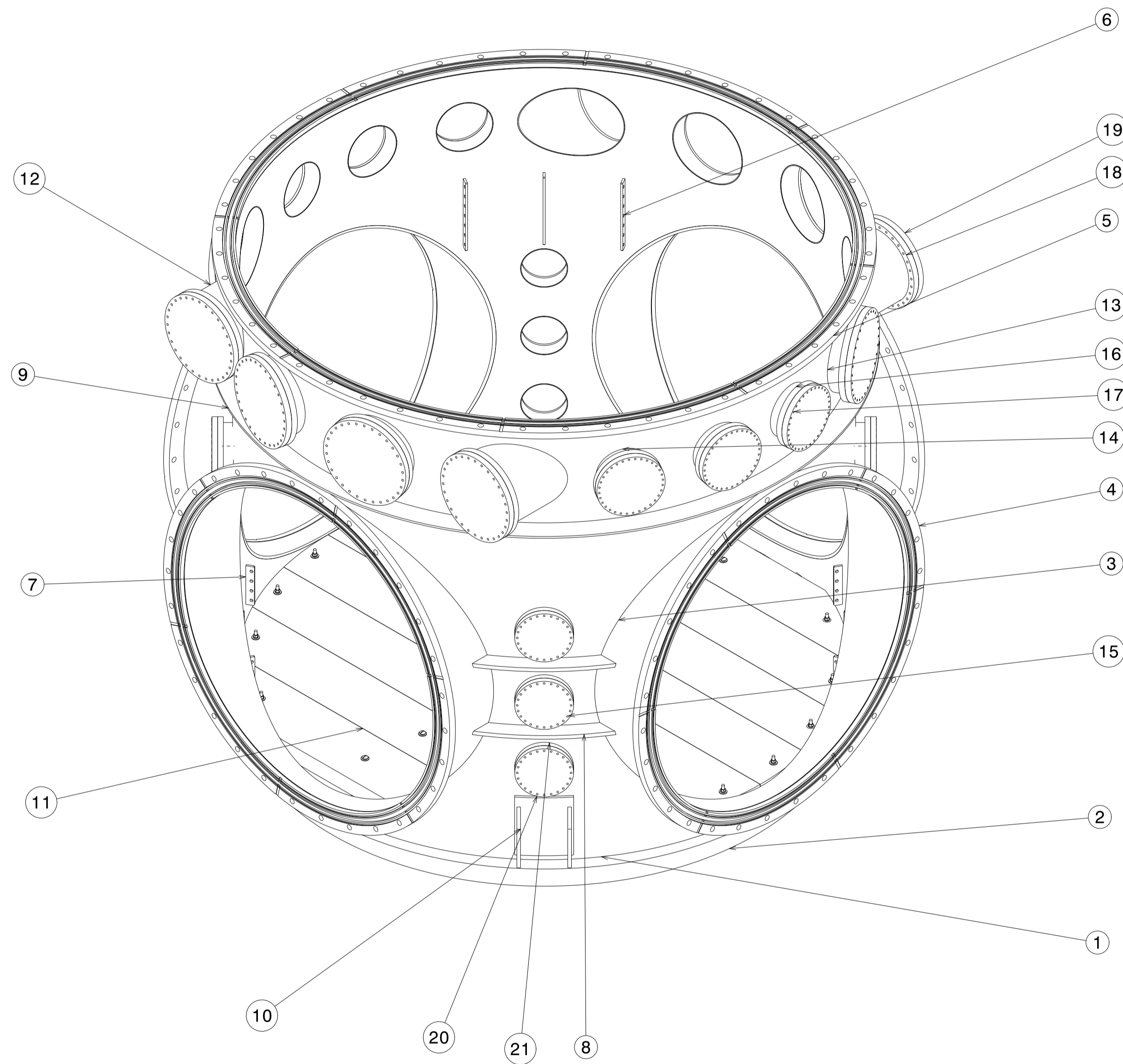


② TUBE STEEL - 1
SCALE - 1:5



③ TUBE STEEL - 2
SCALE - 1:10

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS															
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315							
UPTO 10	10-50	50-120	OVER 120-400												
+1'	+0'-30'	+0'-20'	+0'-10'		+0.1	+0.2	+0.3	+0.5							
											SCALE	AS NOTED	DATE	TITLE	
											DRAWN	A. N. N.	02/07/2015	SUPPORT ASSEMBLY	
											CHECKED	R. K.	REF DRG NO:	VB01-001-R1	REV R1
											APPROVED	M. K. G.	DRG. NO	VB01-002-R1	SHEET 02 OF 02



02 LOWER PART

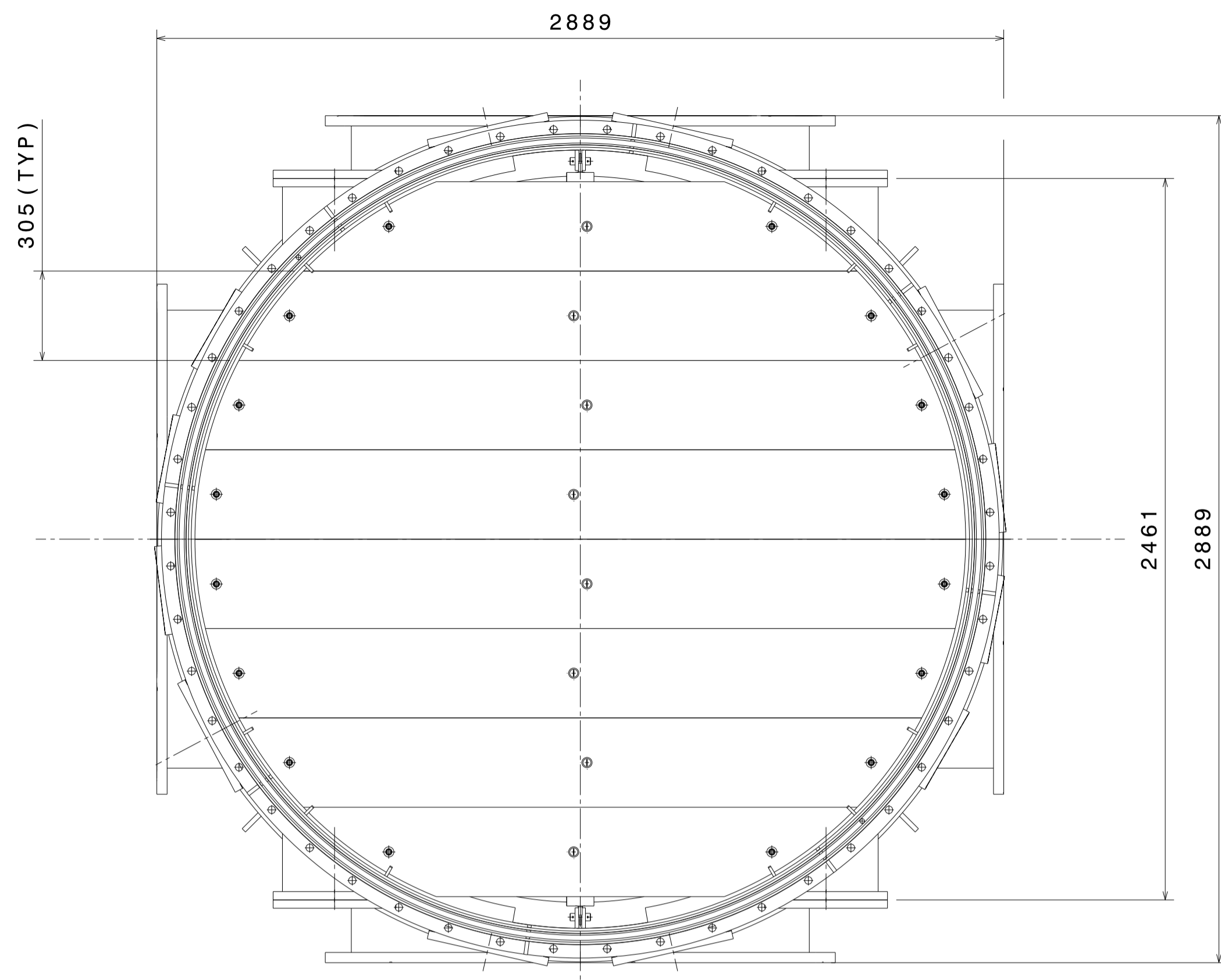
21	12	DN 200CF BLANK FLANGE	SS304L	VO01-001-R0/SHEET 01	-
20	12	DN 200CF COVER FLANGE	SS304L	VO01-001-R0/SHEET 01	-
19	10	CUSTOM CF COVER FLANGE (16 1/2")	SS304L	VO01-001-R0/SHEET 04	-
18	10	CUSTOM CF BLANK FLANGE (16 1/2")	SS304L	VO01-001-R0/SHEET 04	-
17	06	DN 250CF COVER FLANGE	SS304L	VO01-001-R0/SHEET 04	-
16	06	DN 250CF BLANK FLANGE	SS304L	VO01-001-R0/SHEET 04	-
15	12	PORT-G NOZZLE	SS304L	VB01-003-R1/SHEET 09	-
14	06	PORT-F NOZZLE	SS304L	VB01-003-R1/SHEET 09	-
13	06	PORT-E NOZZLE	SS304L	VB01-003-R1/SHEET 09	-
12	04	PORT-D NOZZLE	SS304L	VB01-003-R1/SHEET 09	-
11	01	FLOOR ASSEMBLY	ALUMINIUM	VB01-004-R1	-
10	04	SUPPORT PAD	SS304L	VB01-003-R1/SHEET 08	-
9	01	SHELL STIFFENER	SS304L	VB01-003-R1/SHEET 08	-
8	08	STIFFENER 60" PORT	SS304L	VB01-003-R1/SHEET 08	-
7	12	INTERNAL ATTACHMENT-2	SS304L	VB01-003-R1/SHEET 05	-
6	12	INTERNAL ATTACHMENT-1	SS304L	VB01-003-R1/SHEET 05	-
5	01	FLANGE GROOVED (104.5" ID)	SS304L	VB01-003-R1/SHEET 07	-
4	04	FLANGE GROOVED (60.5" ID)	SS304L	VB01-003-R1/SHEET 06	-
3	04	SIDE CYLINDRICAL PART	SS304L	VB01-003-R1/SHEET 05	-
2	01	BOTTOM F & D HEAD	SS304L	VB01-003-R1/SHEET 04	-
1	01	CYLINDRICAL SHELL	SS304L	VB01-003-R1/SHEET 04	-
PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK

MATERIAL:		REVISION COLUMN				MED	SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)		
▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS										
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	SCALE	DATE
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5	DRAWN	TITLE
+1'	+0'-30'	+0'-20'	+0'-10'						CHECKED	REF DRG NO: VB01-001-R1
									APPROVED	REV R1
										SHEET 01 OF 09

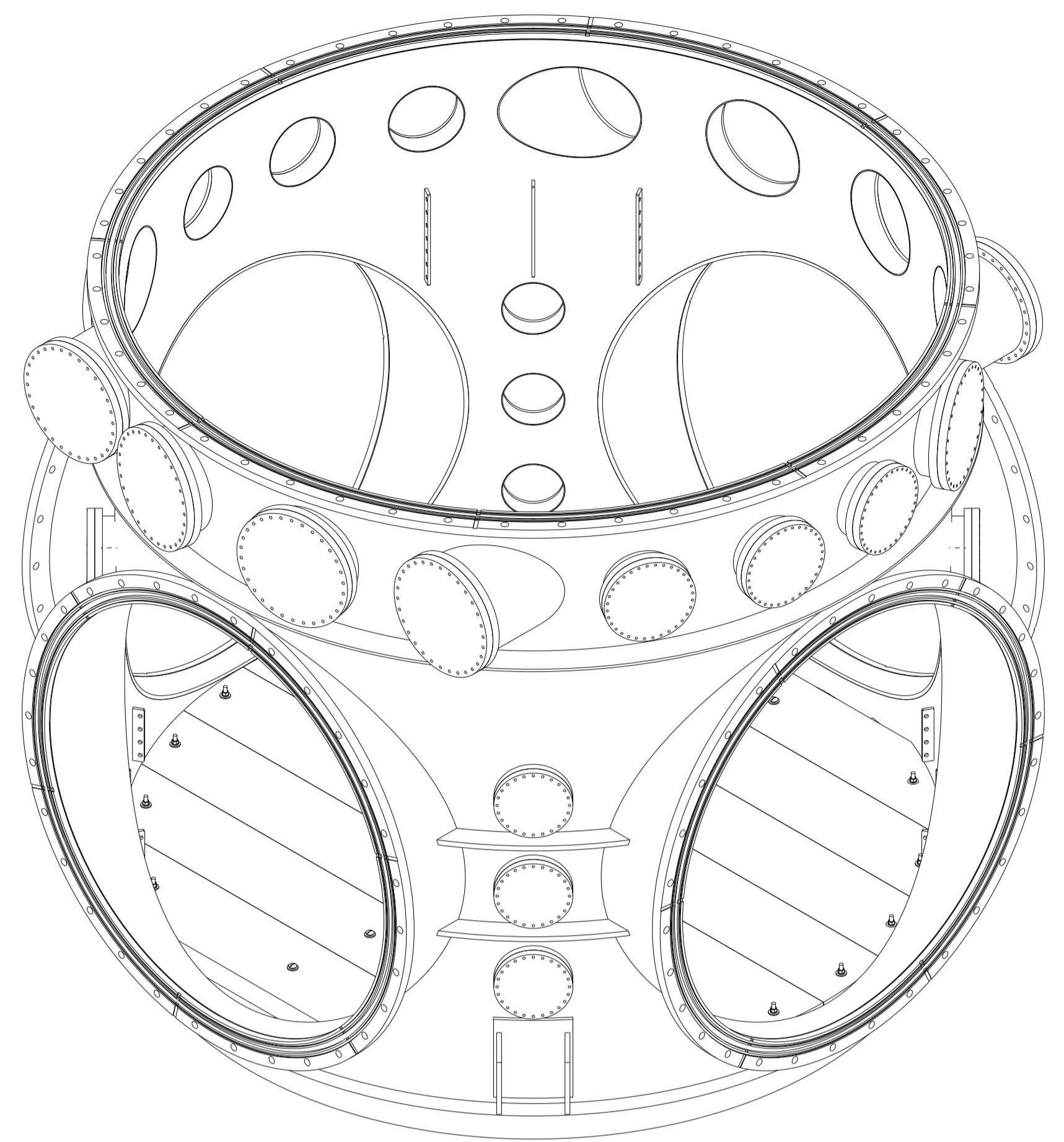
INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)
BHAT, GANDHINAGAR-382 428.

SCALE: 1:15
DATE: 05/07/2015
DRAWN: A. N. N.
CHECKED: R. K.
APPROVED: M. K. G.

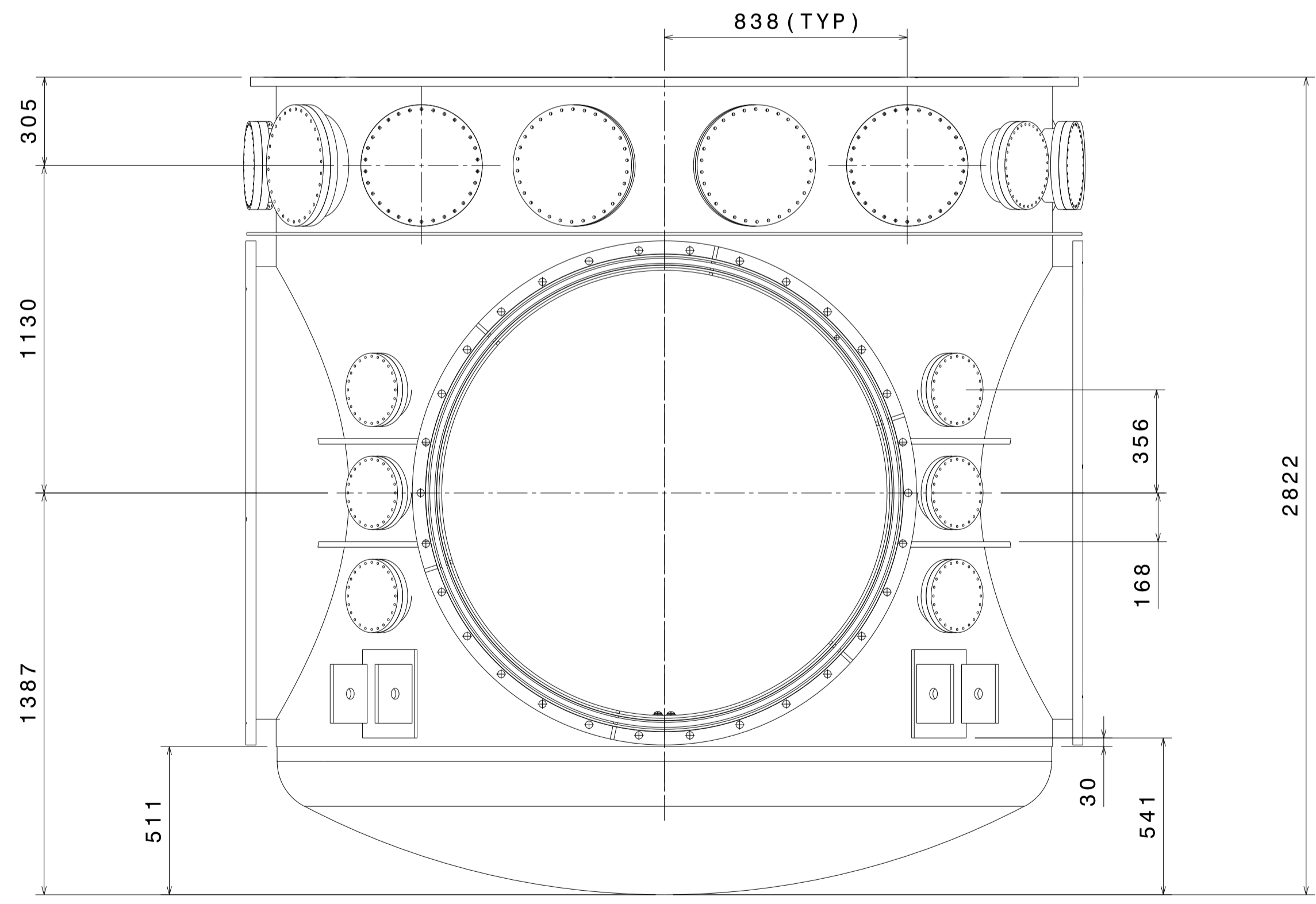
TITLE: LOWER PART
REF DRG NO: VB01-001-R1
DRG. NO: VB01-003-R1



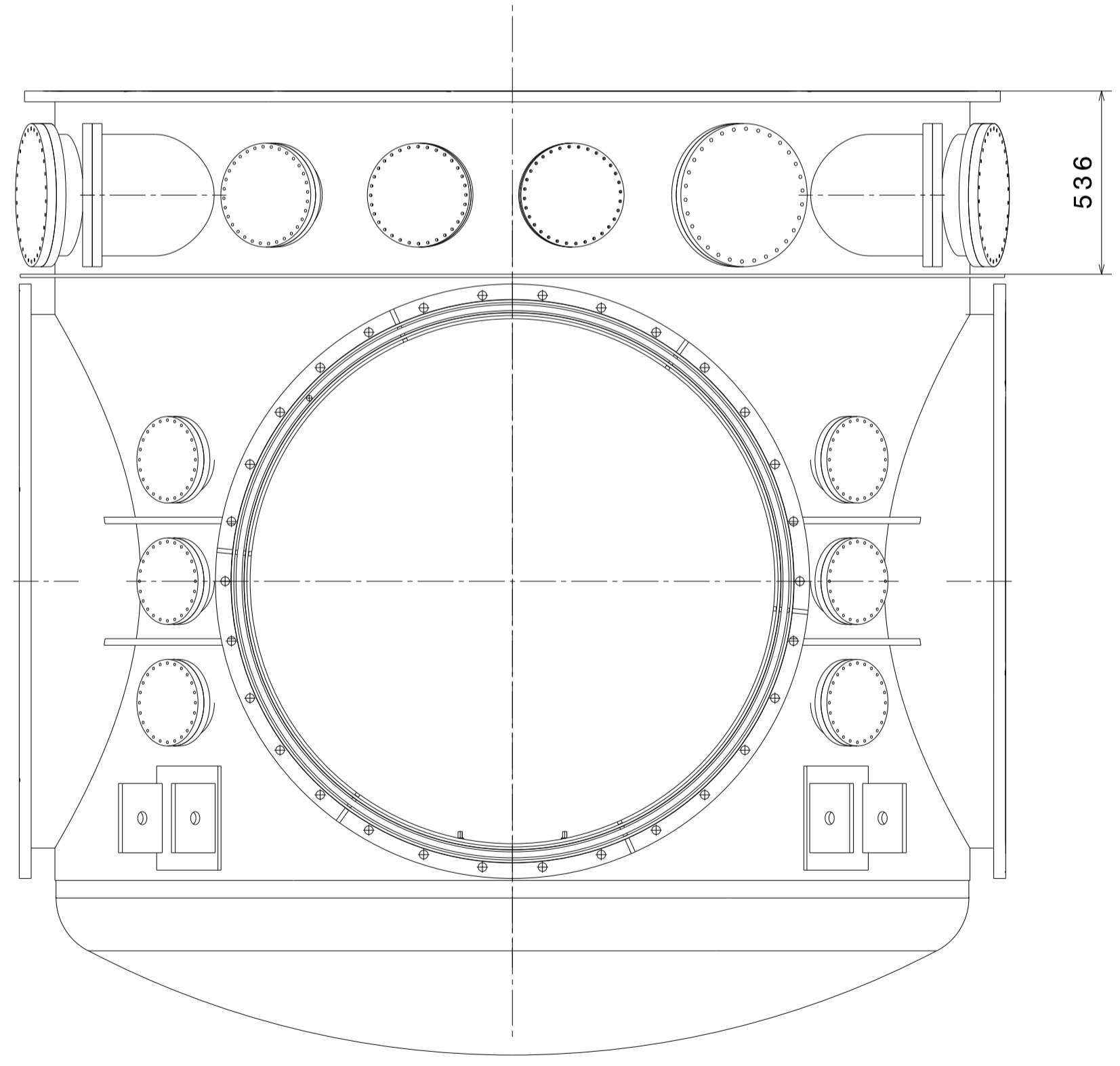
TOP VIEW



ISOMETRIC VIEW



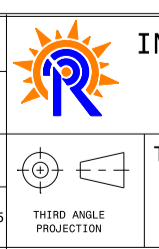
FRONT VIEW

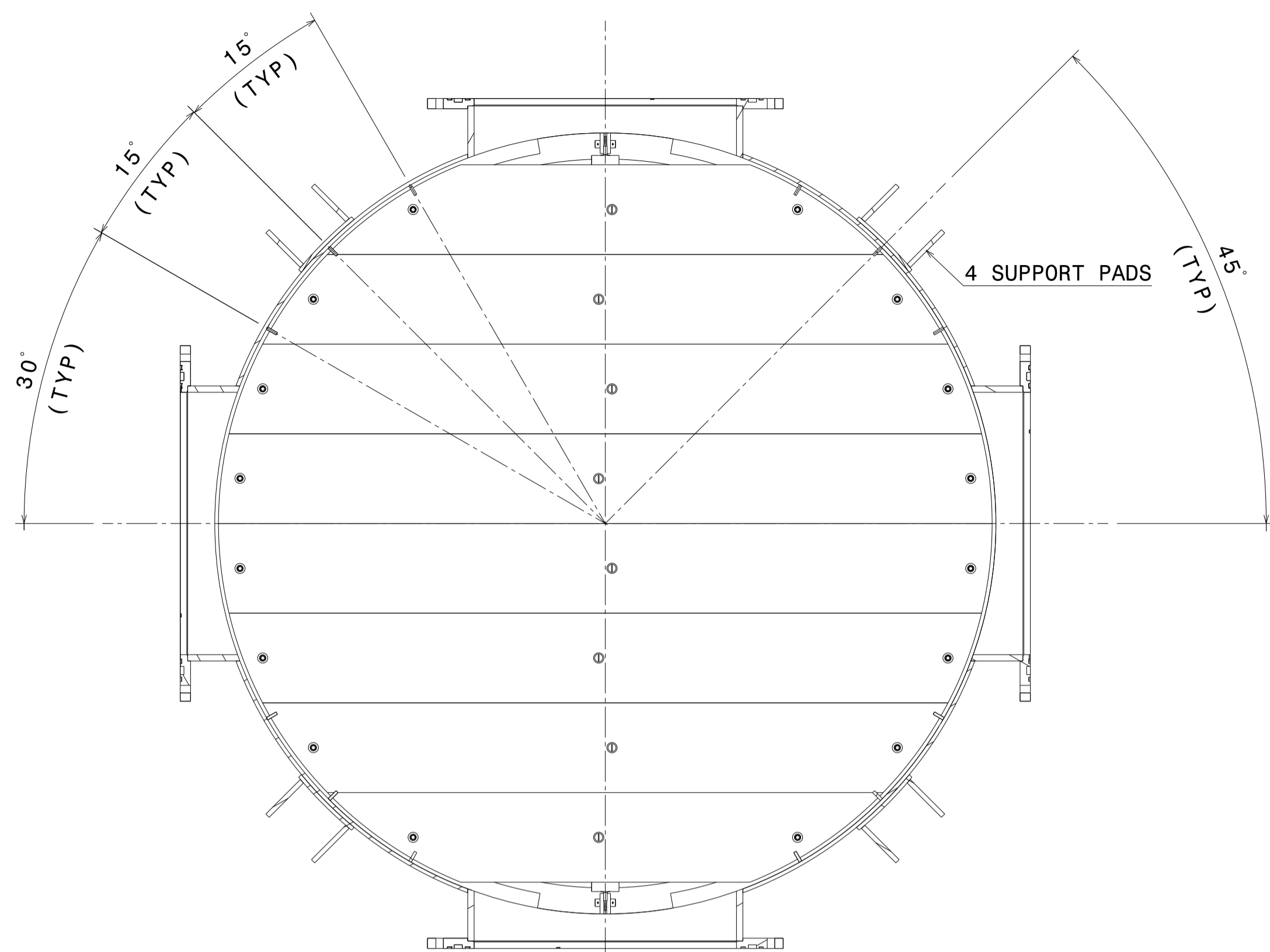


SIDE VIEW

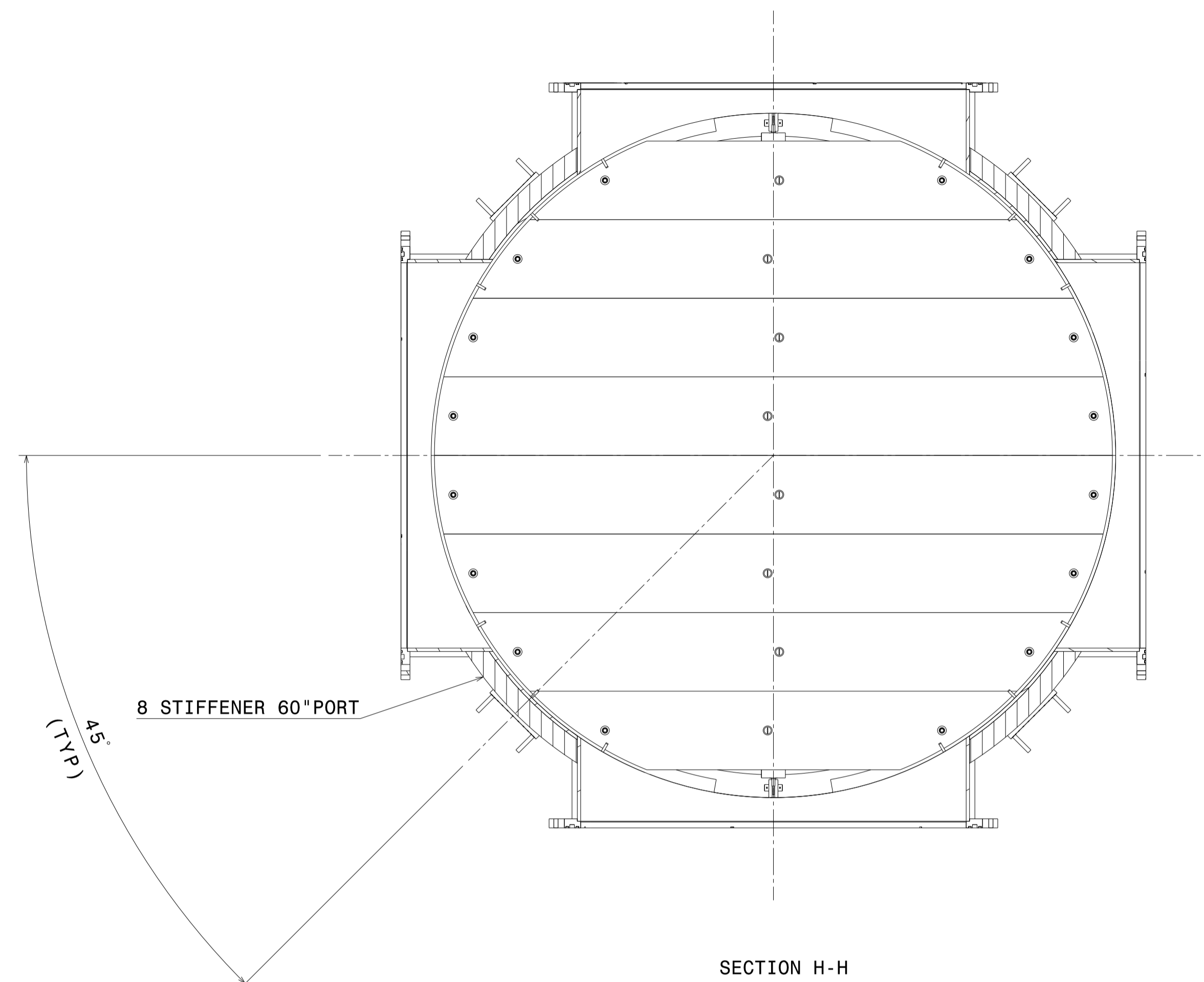
02 LOWER PART

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:15	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315			DRAWN		A. N. N.	05/07/2015	LOWER PART		
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5			CHECKED		R. K.	REF DRG NO:	VB01-001-R1	REV R1
±1'	±0'-30'	±0'-20'	±0'-10'								APPROVED		M. K. G.	DRG. NO	VB01-003-R1	SHEET 02 OF 09

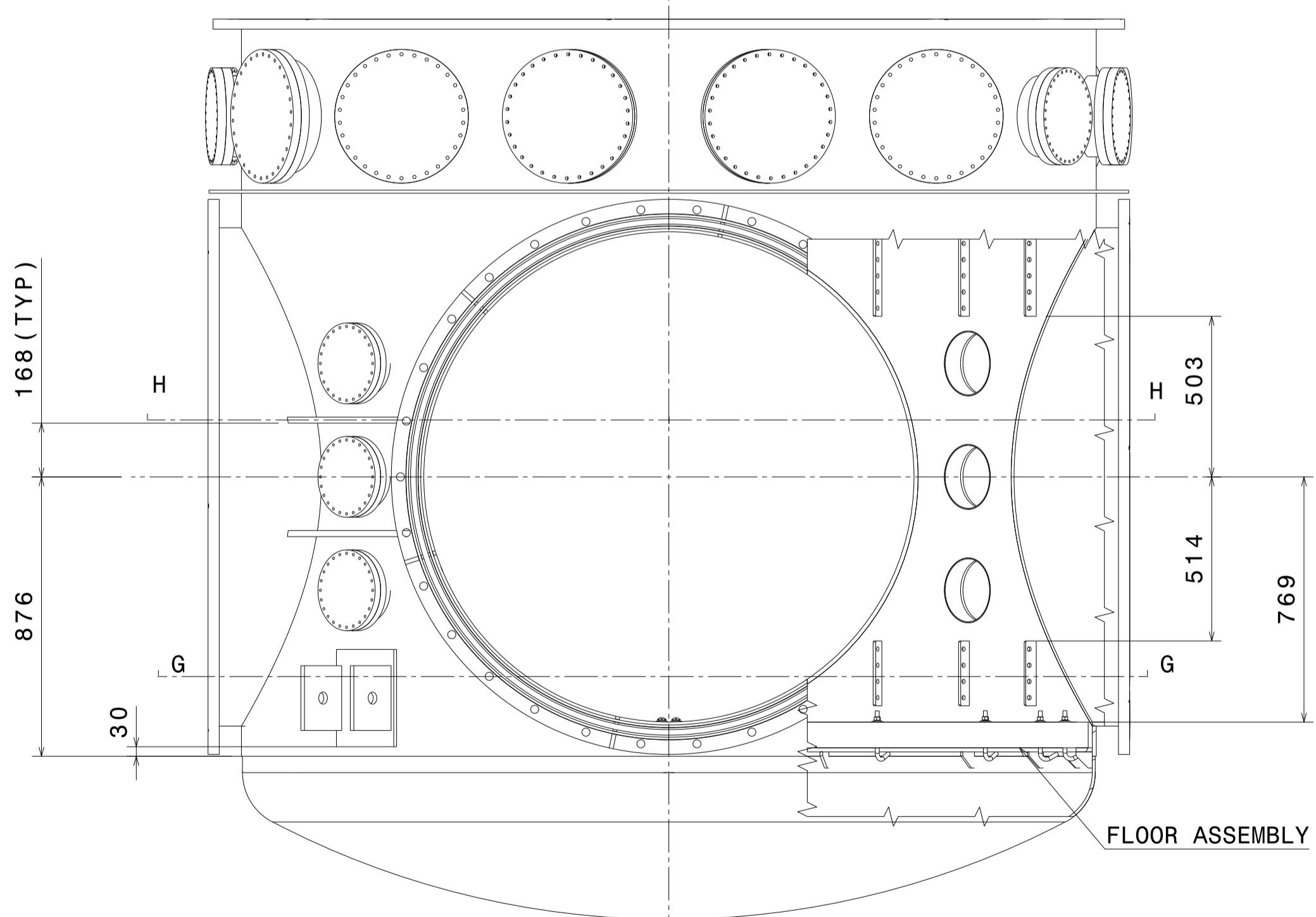




SECTION G-G



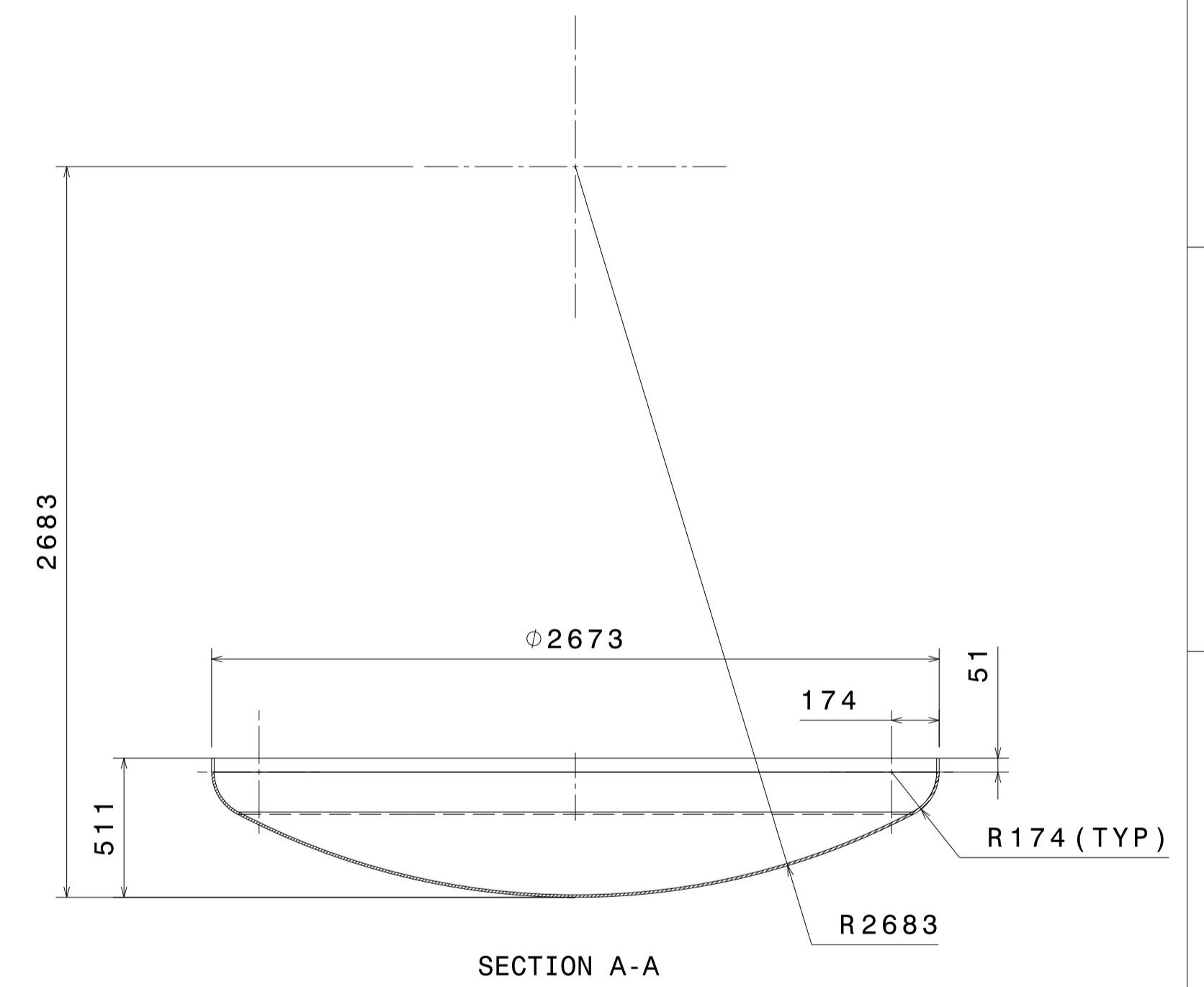
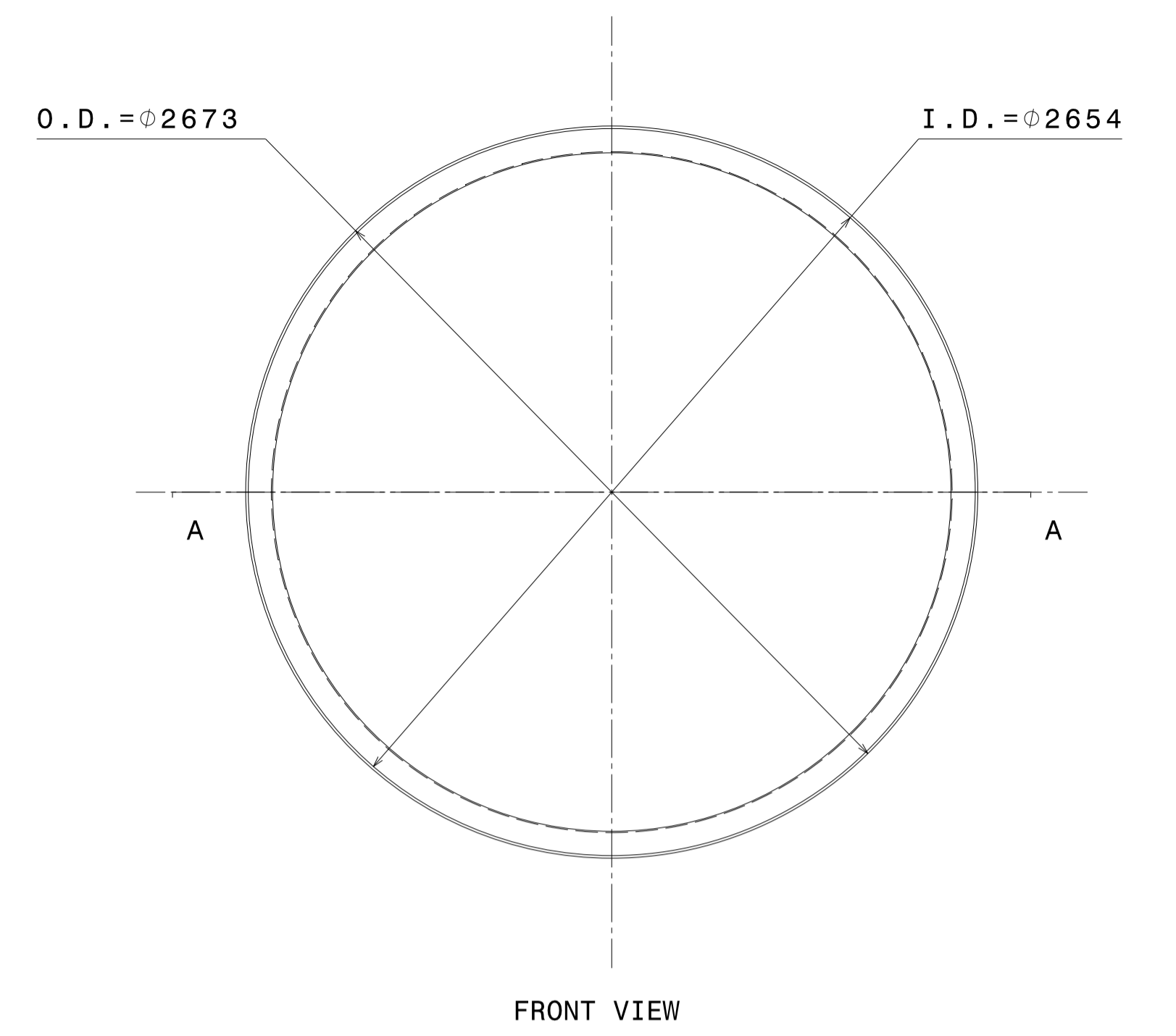
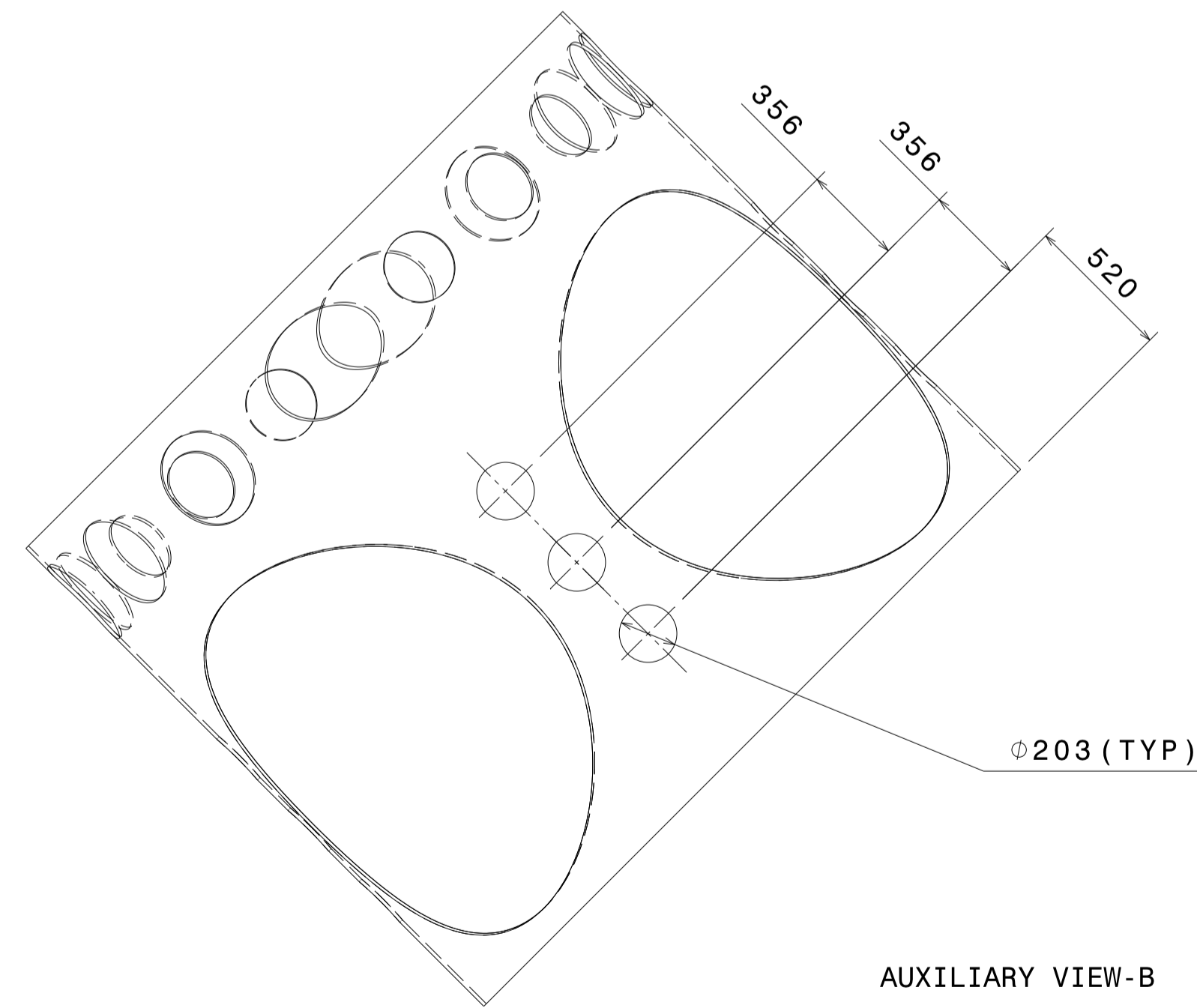
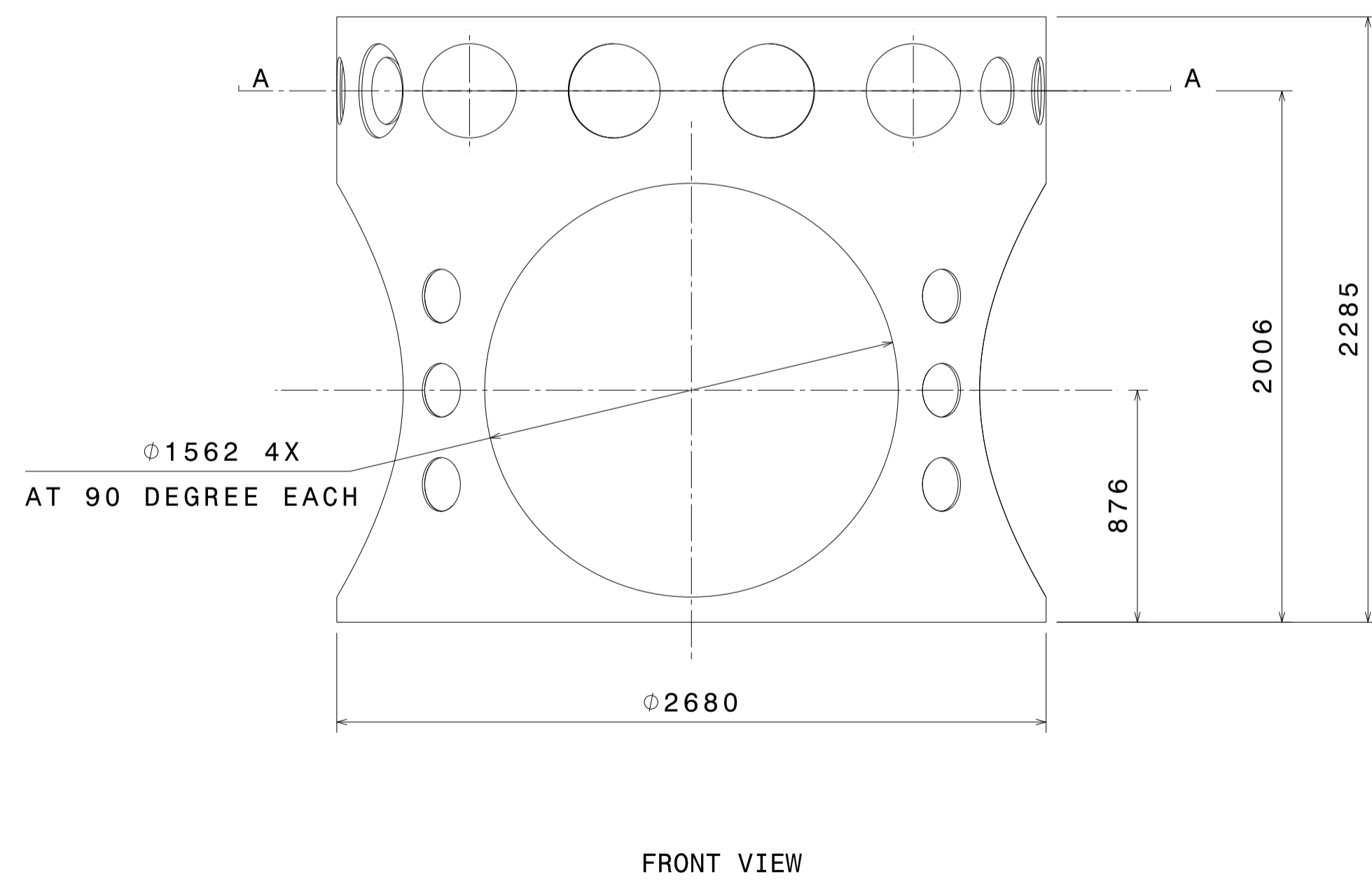
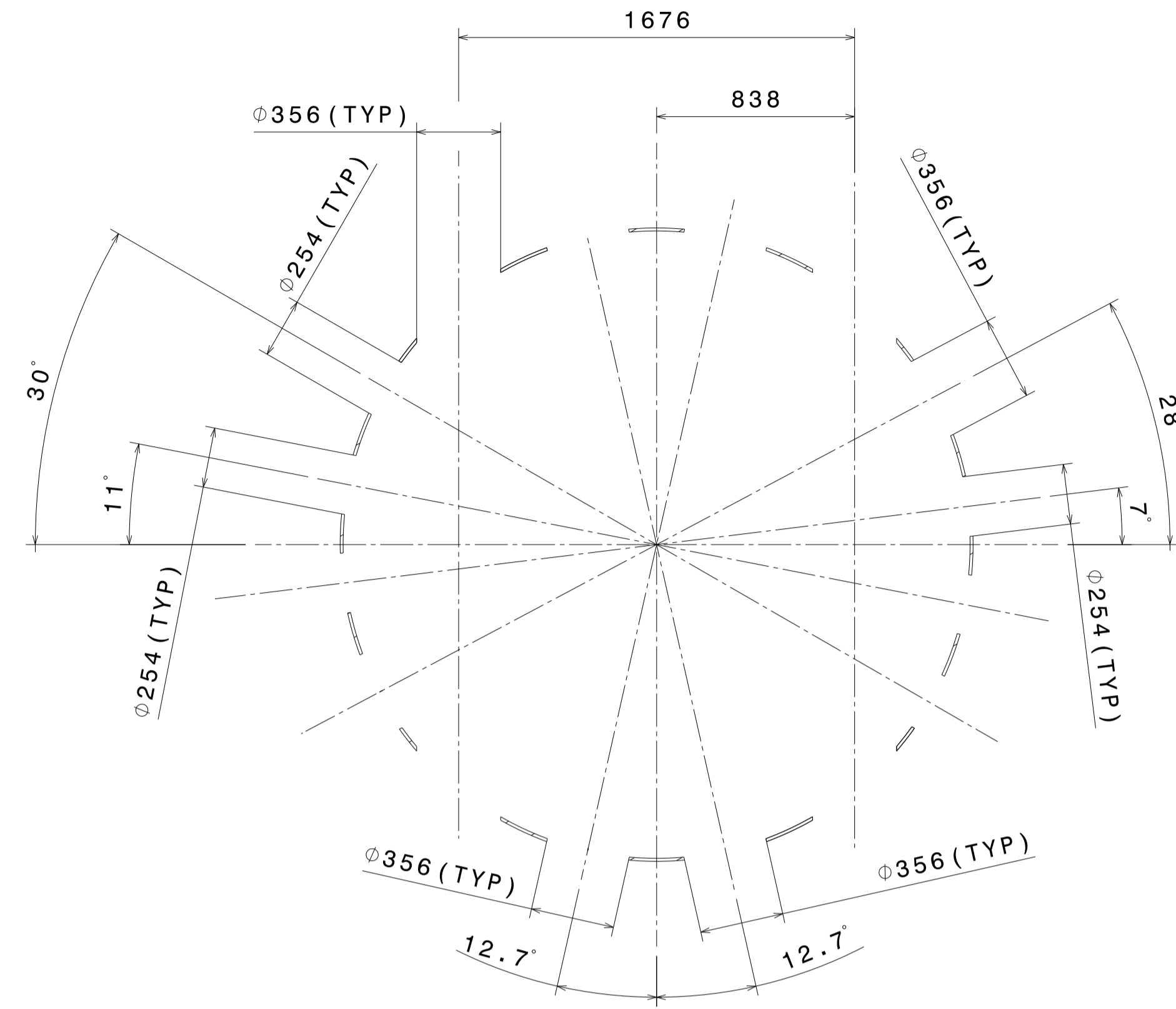
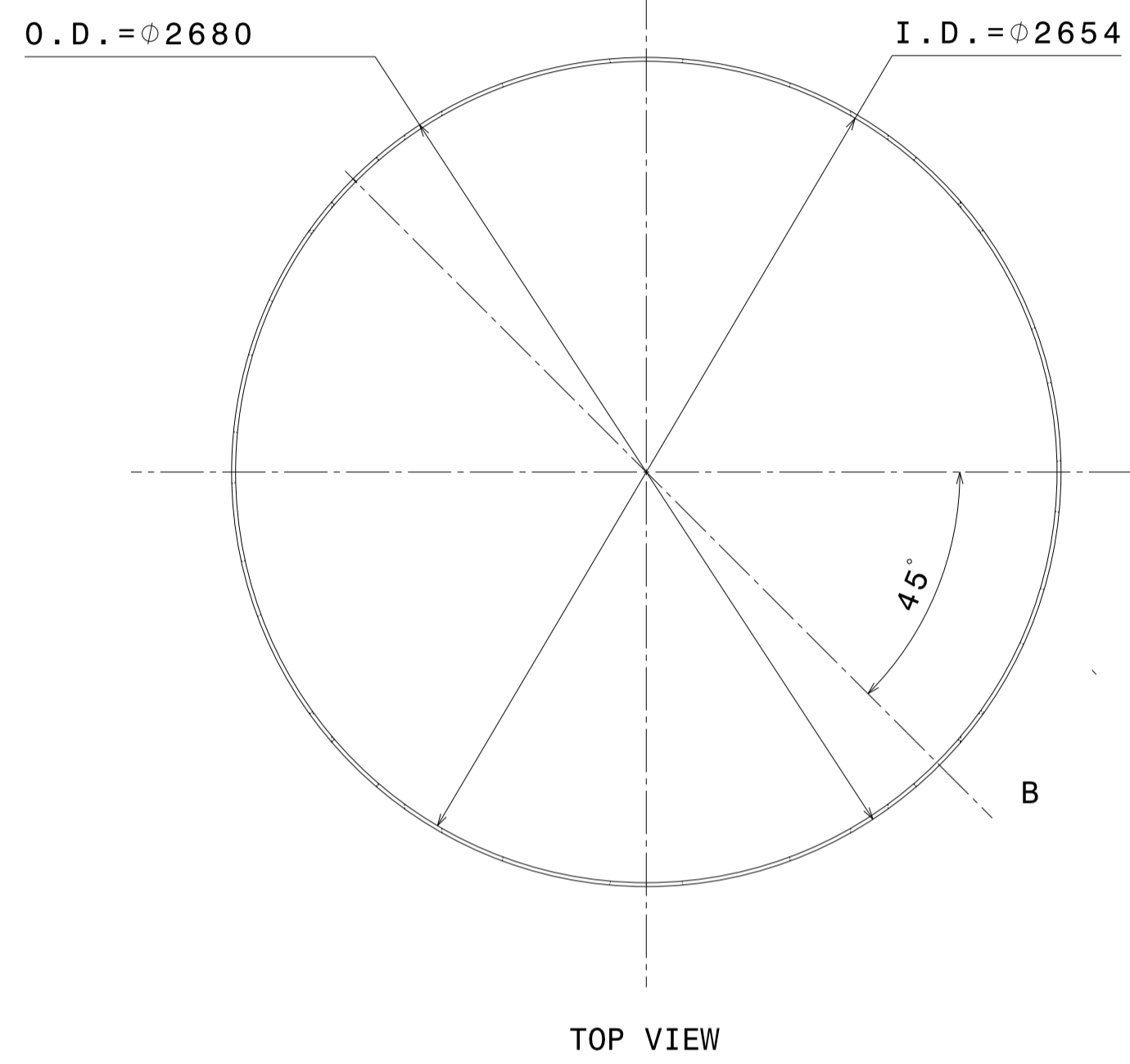
SECTION H-H



FRONT BREAKOUT VIEW

02 LOWER PART

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:15	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A.N.N.	05/07/2015	LOWER PART		
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5					CHECKED	R.K.	REF DRG NO: VB01-001-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'										APPROVED	M.K.G.	DRG. NO	VB01-003-R1	SHEET 03 OF 09

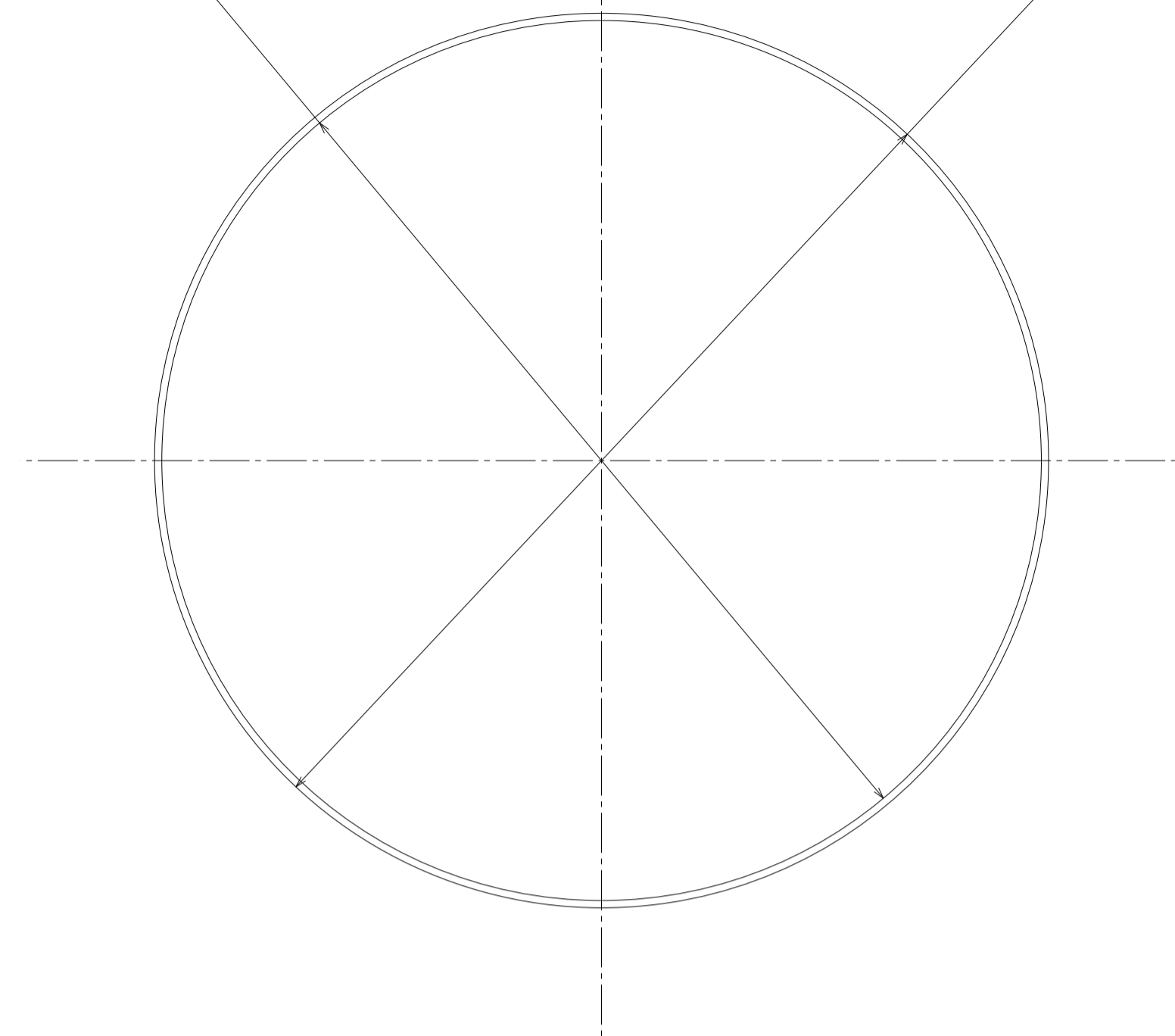


① CYLINDRICAL SHELL

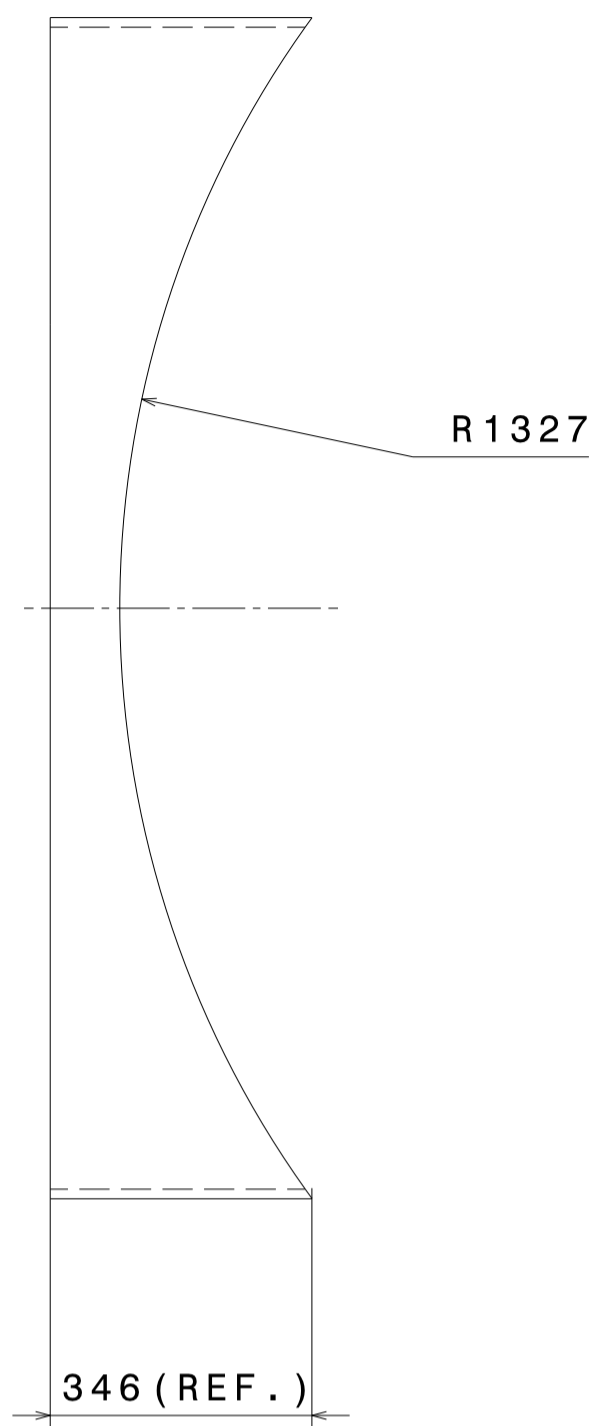
② BOTTOM F & D HEAD

MATERIAL:		REVISION COLUMN				MED		SIZE	INSTITUTE FOR PLASMA RESEARCH								
CO-ORDINATED BY	▽ 8-25	▽ 1.6-8	▽ 0.025-1.6	▽ 0.025 < 0.025	REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED	A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:20	DATE	05/07/2015	TITLE	LOWER PART	
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA	UPTO 6	6-30	30-120	120-315					DRAWN	A.N.N.					
UPTO 10	10-50	50-120	OVER 120-400								CHECKED	R.K.	REF DRG NO:	VB01-001-R1	REV	R1	
+1'	+0'-30'	+0'-20'	+0'-10'								APPROVED	M.K.G.	DRG. NO	VB01-003-R1		SHEET	04 OF 09

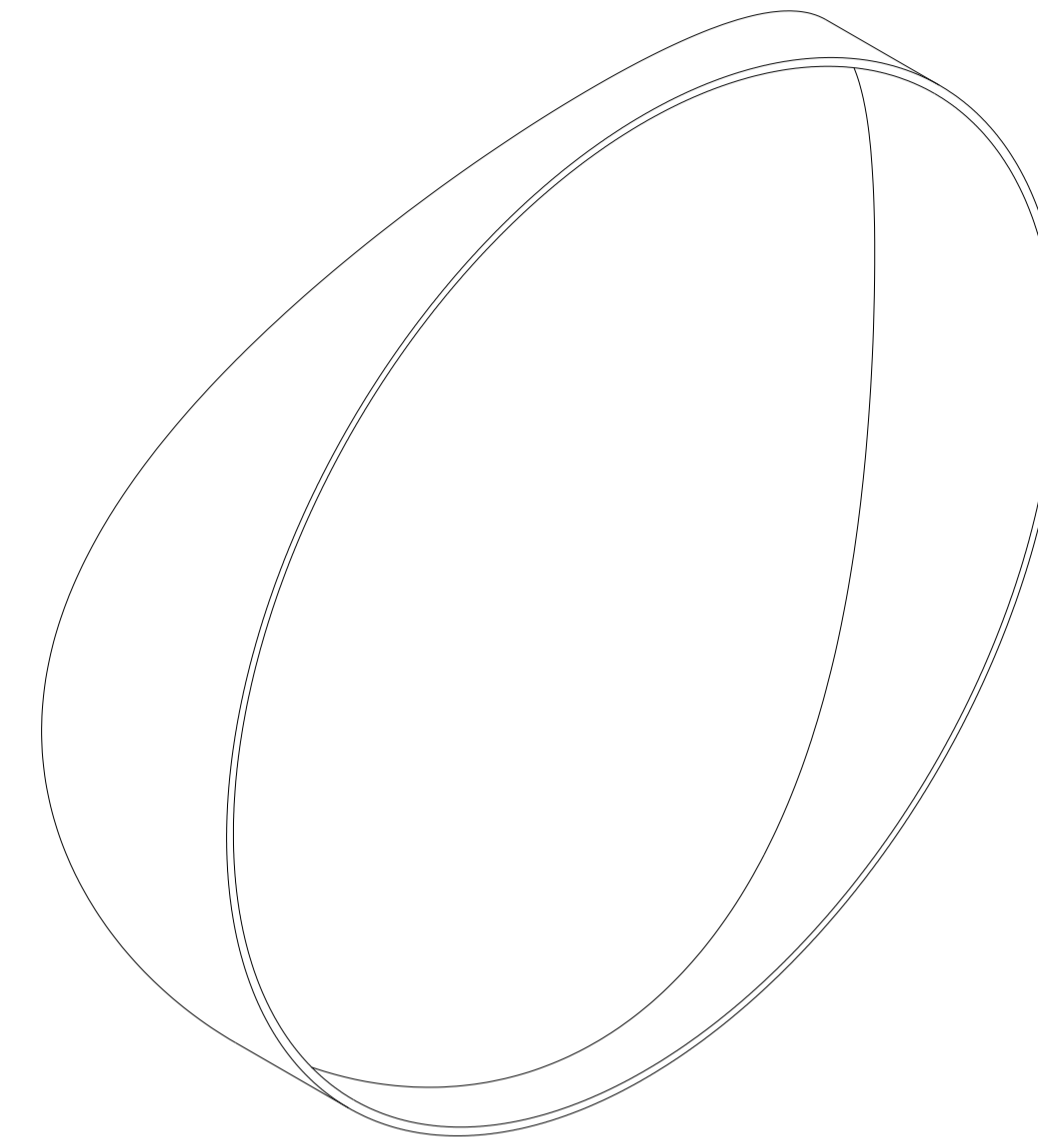
I.D. = $\phi 1537$ O.D. = $\phi 1562$



FRONT VIEW

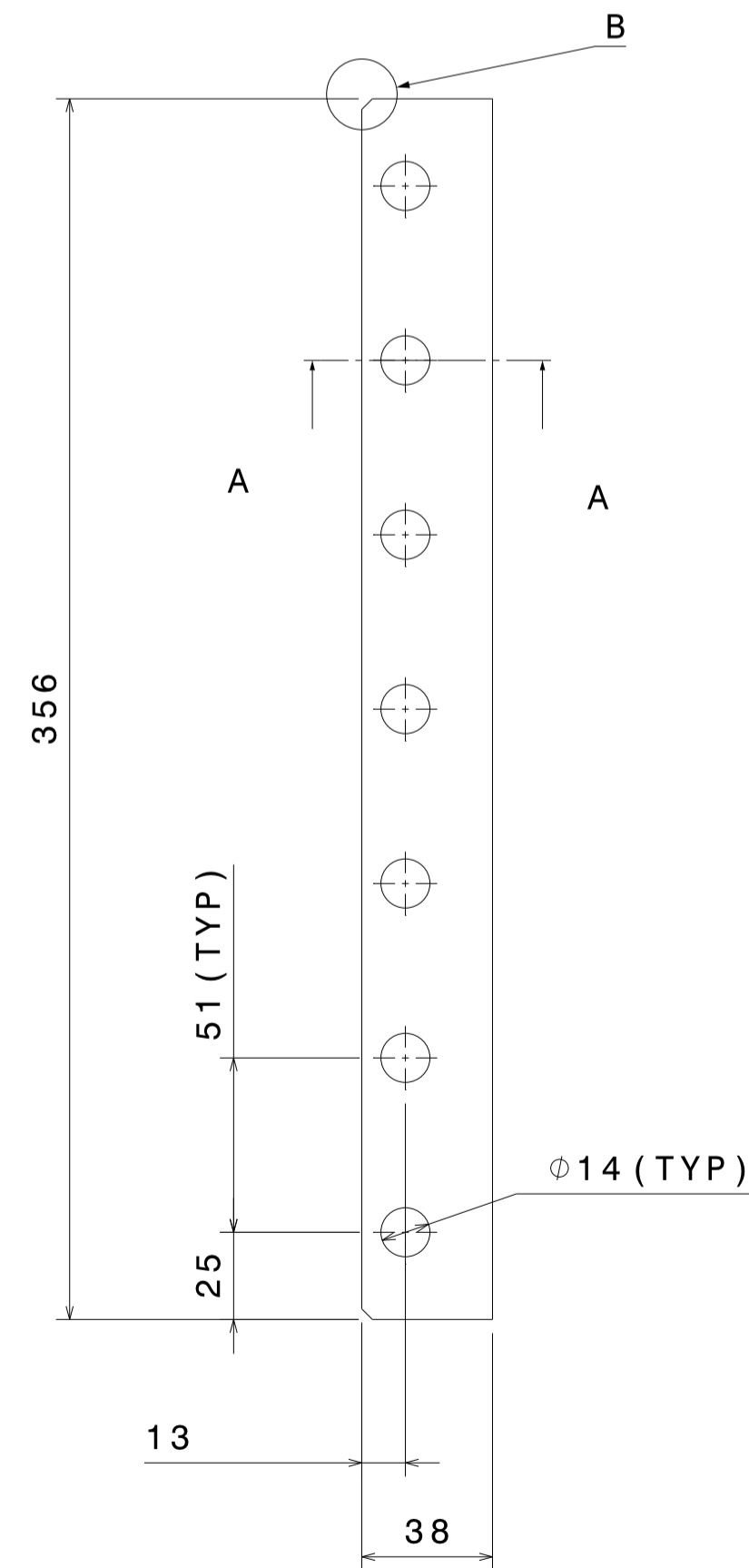


SIDE VIEW

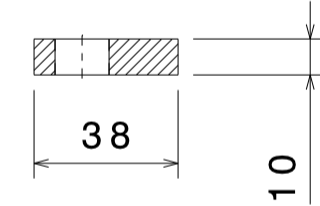


ISOMETRIC VIEW

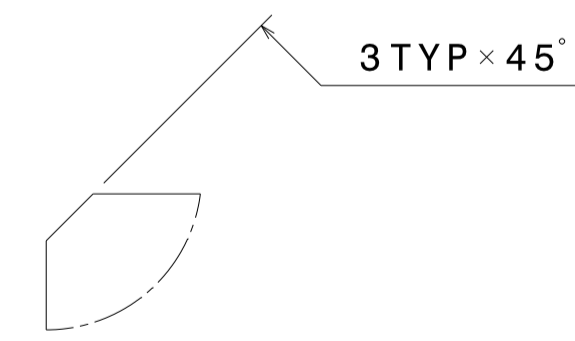
③ SIDE CYLINDRICAL PART
SCALE - 1:10



FRONT VIEW

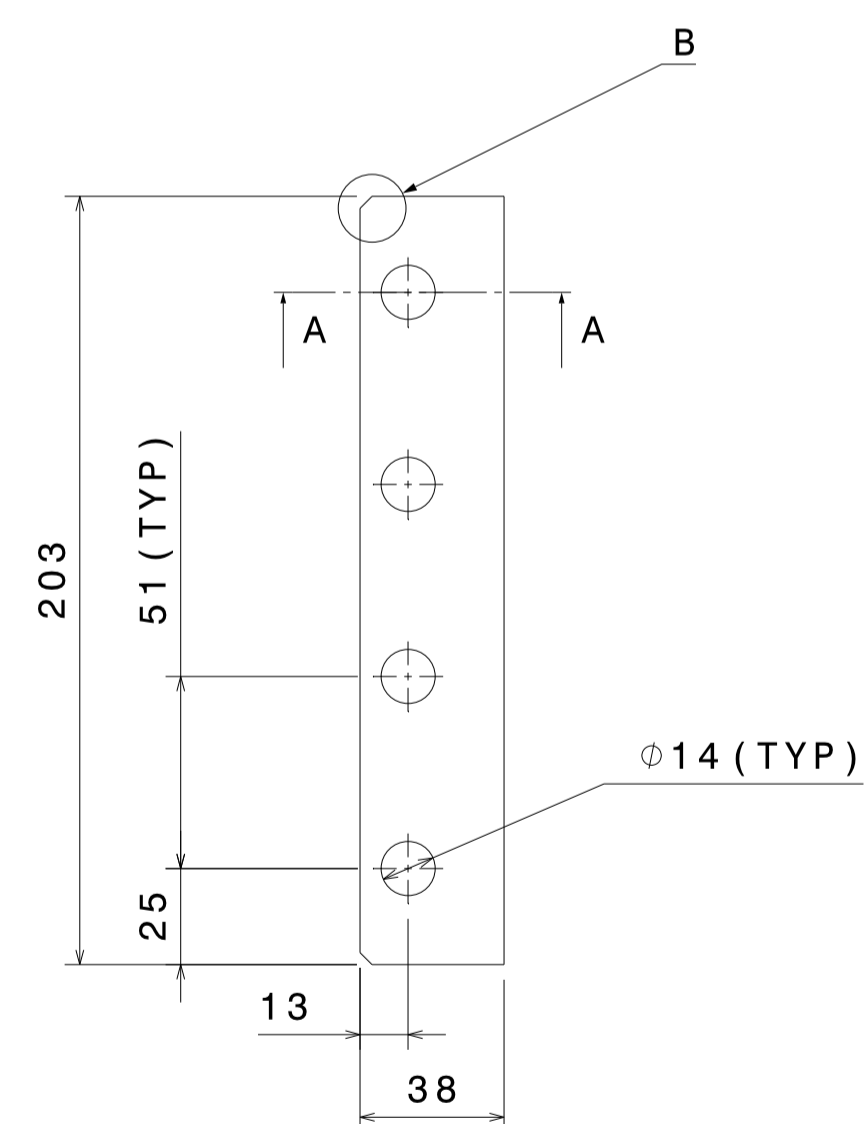


SECTION A-A

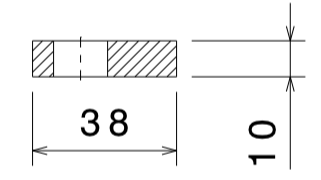


DETAIL VIEW-B
SCALE - 2:1

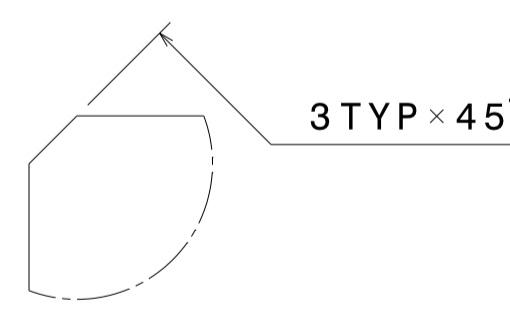
⑥ INTERNAL ATTACHMENT-1
SCALE - 1:2



FRONT VIEW



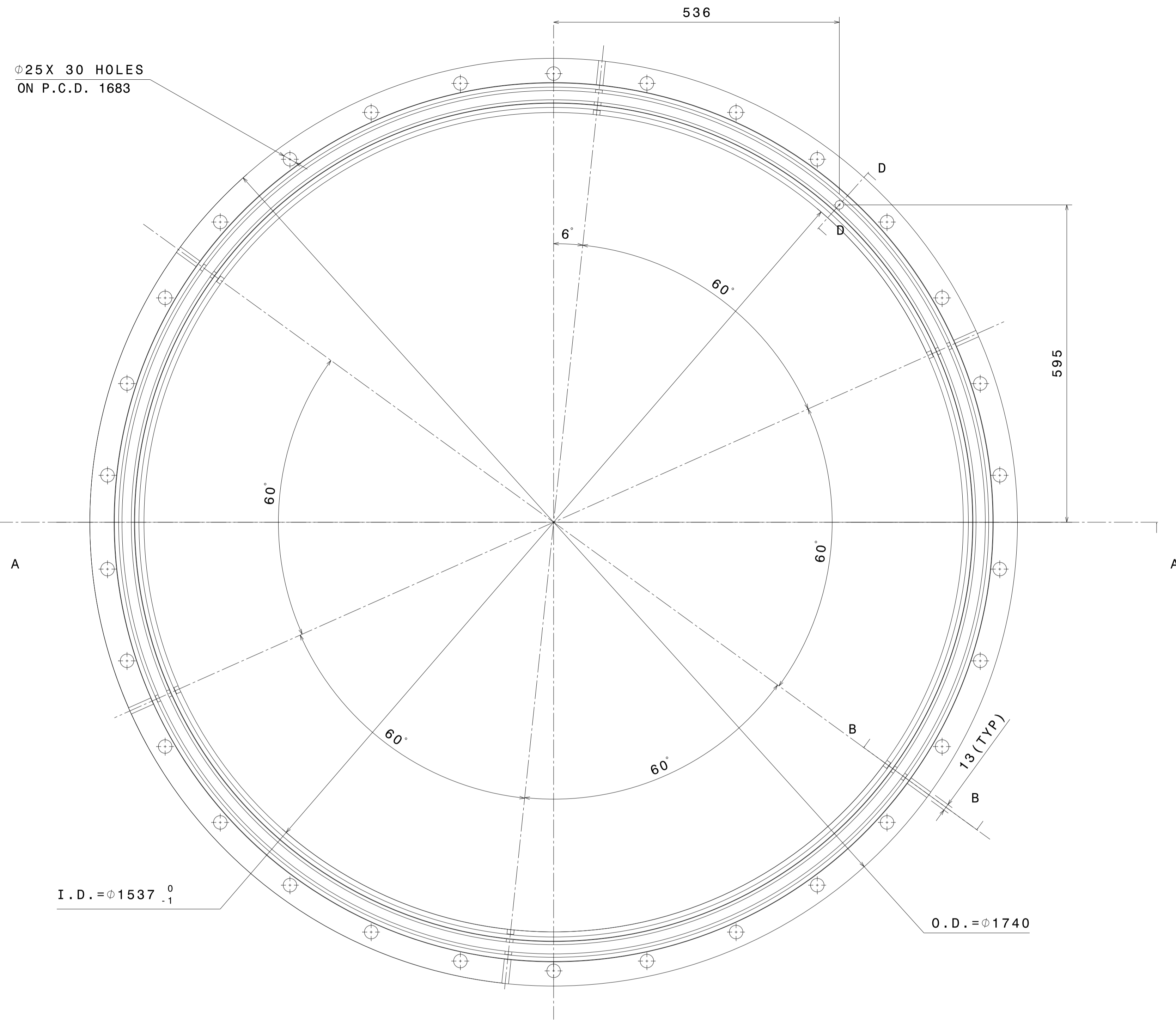
SECTION A-A



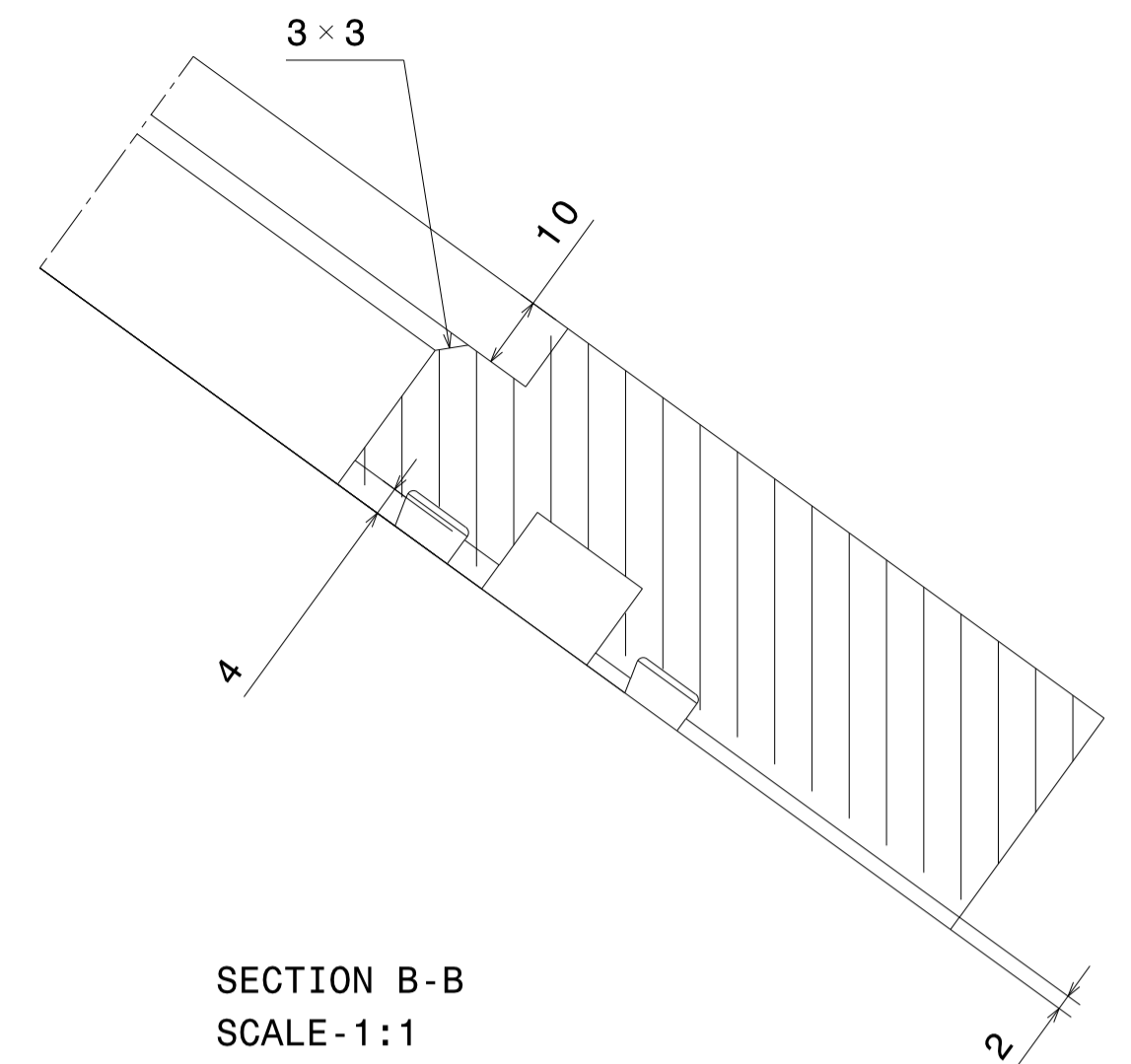
DETAIL VIEW-B
SCALE - 2:1

⑦ INTERNAL ATTACHMENT-2
SCALE - 1:2

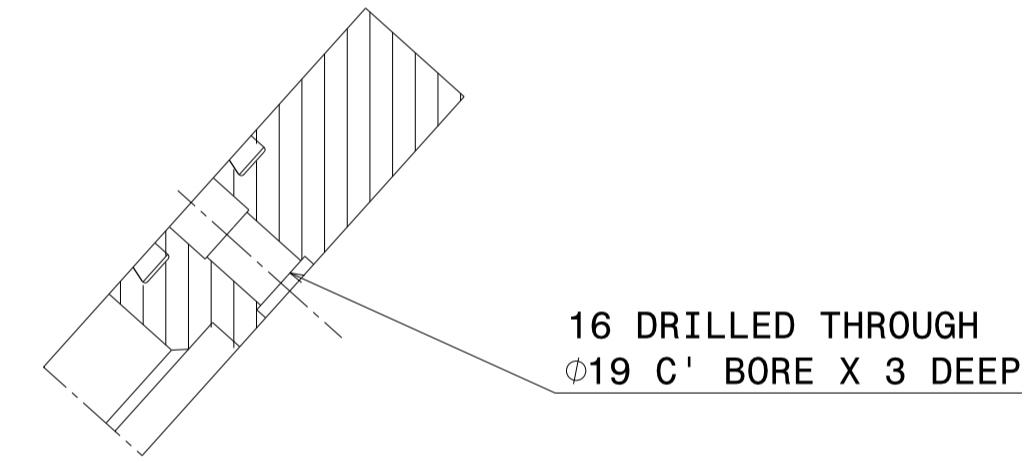
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.						
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED						
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS													SCALE		AS NOTED	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A. N. N.	05/07/2015	LOWER PART			
UPTO 10	10-50	50-120	OVER 120-400	±0.1	±0.2	±0.3	±0.5					CHECKED	R. K.	REF DRG NO:	VB01-001-R1	REV R1		
+1'	+0'-30'	+0'-20'	+0'-10'									APPROVED	M. K. G.	DRG. NO	VB01-003-R1	SHEET 05 OF 09		



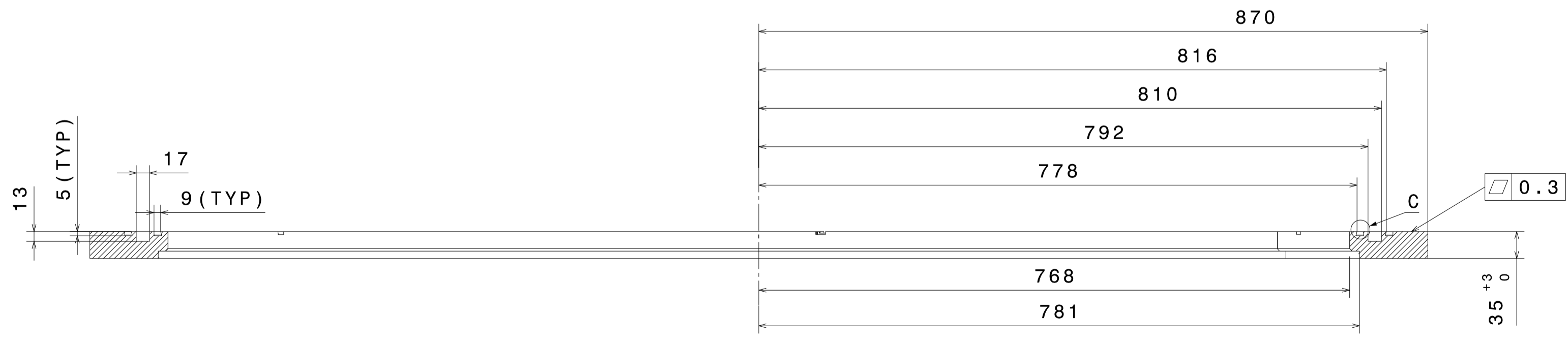
FRONT VIEW
SCALE - 1:5



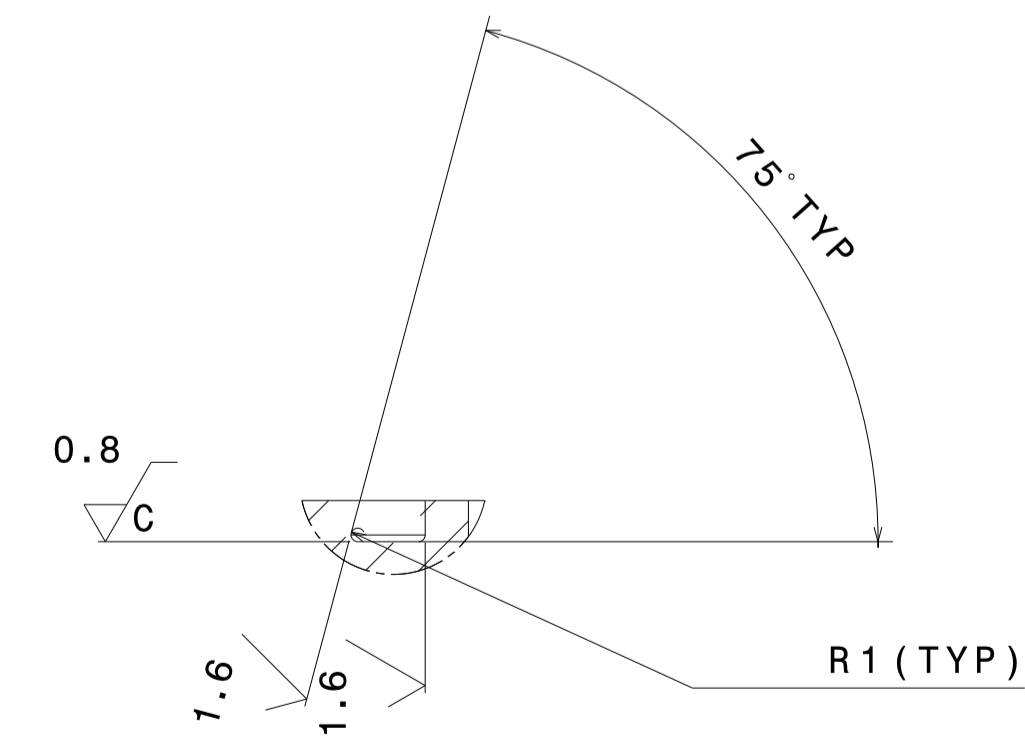
SECTION B-B
SCALE - 1:1



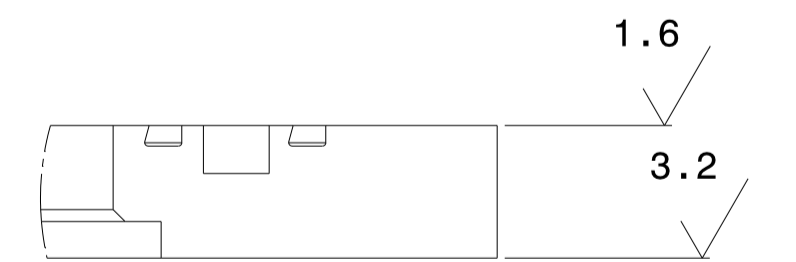
SECTION D-D
SCALE - 1:2



SECTION A-A
SCALE - 1:5



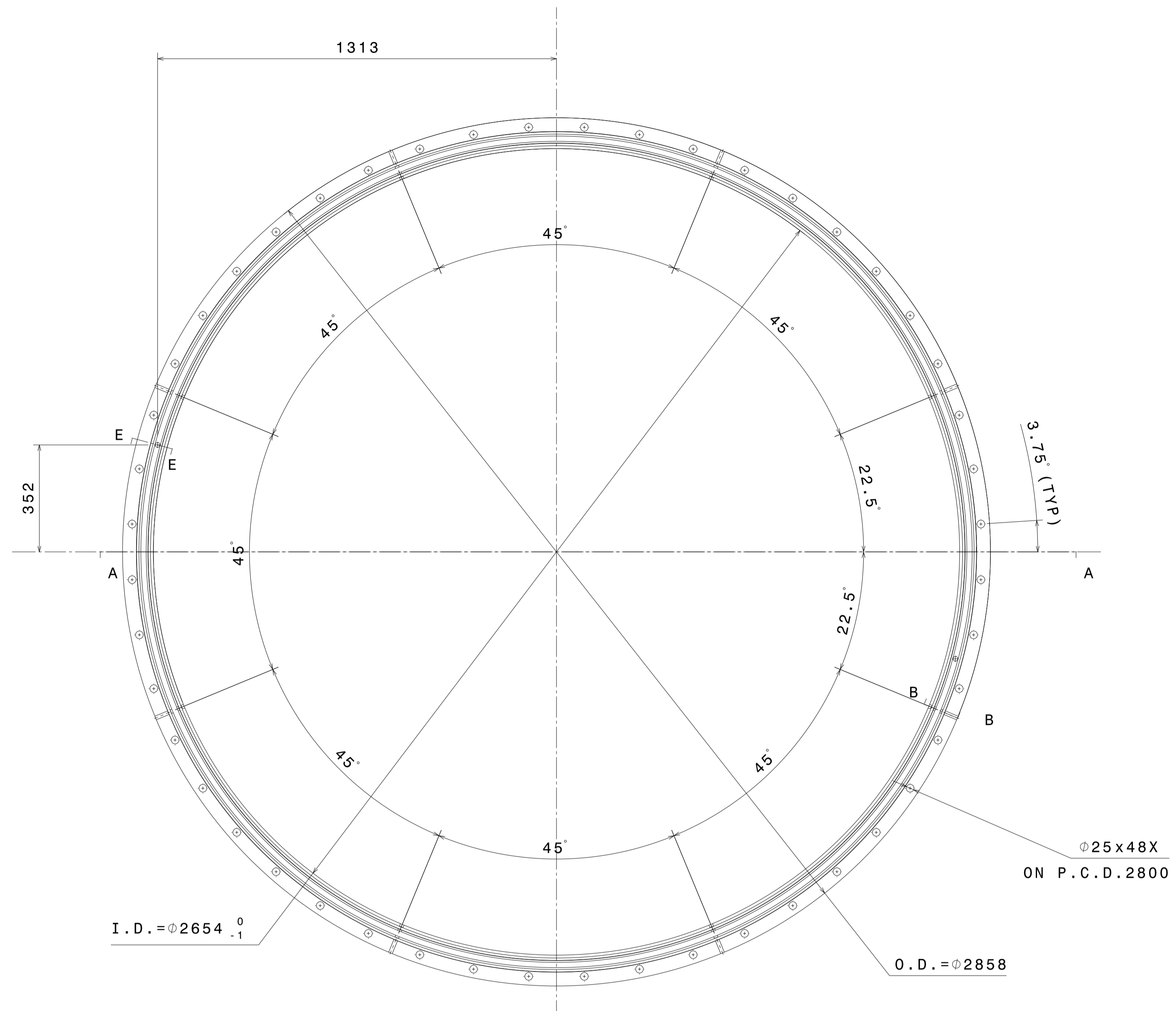
DETAIL VIEW-C
SCALE - 1:1



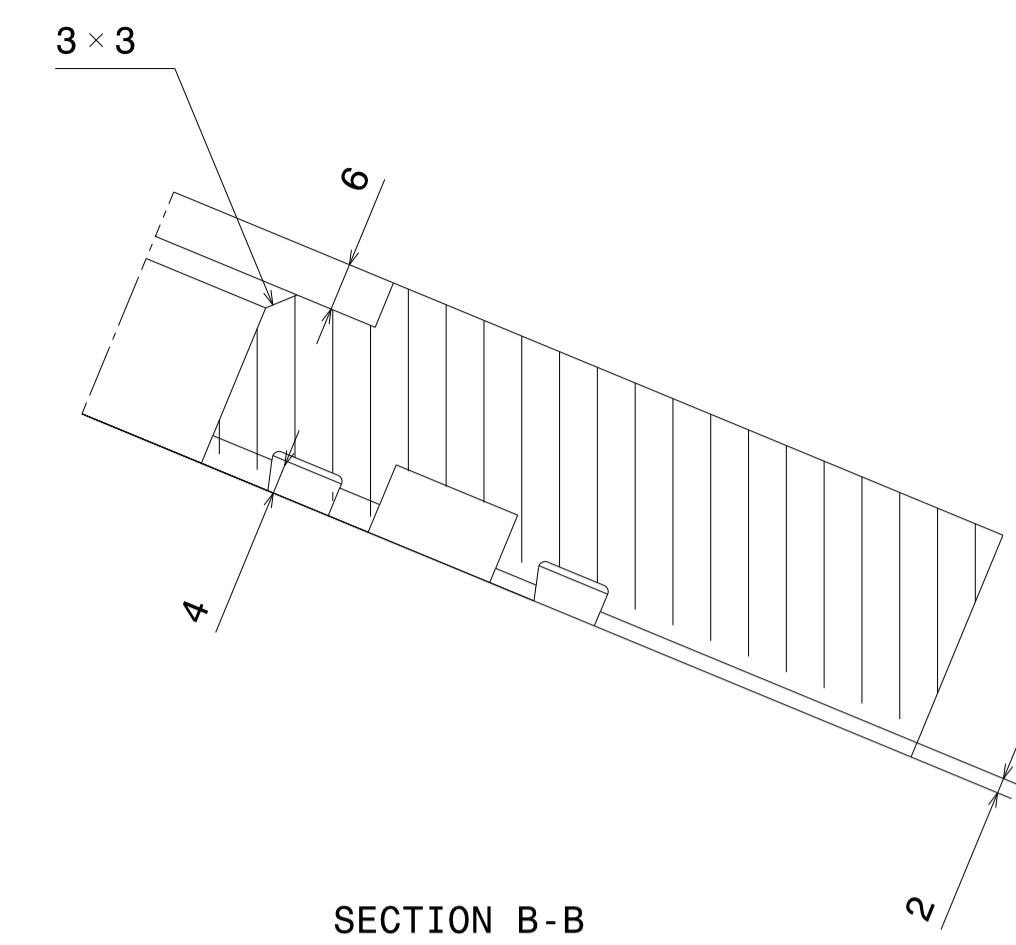
SURFACE ROUGHNESS RA MICROMETER

④ FLANGE GROOVED (60.5" ID)

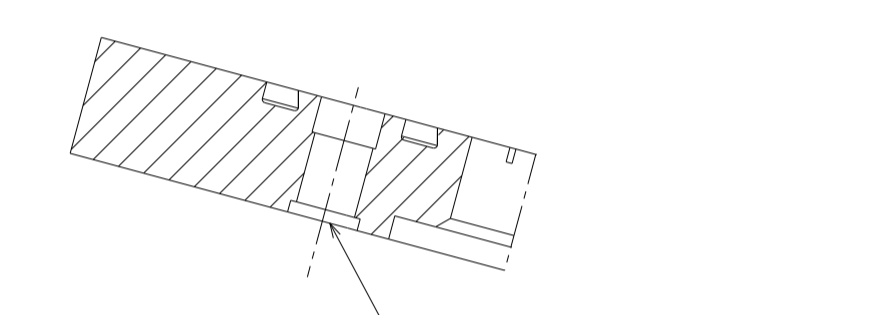
MATERIAL:	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.				
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS					SCALE	AS NOTED	DATE	TITILE			LOWER PART				
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	DRAWN			A. N. N.	05/07/2015	REF DRG NO: VB01-001-R1	REV R1
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5	CHECKED			R.K.	DRG. NO	VB01-003-R1	SHEET 06 OF 09
+1'	+0'-30'	+0'-20'	+0'-10'		APPROVED			M.K.G.							



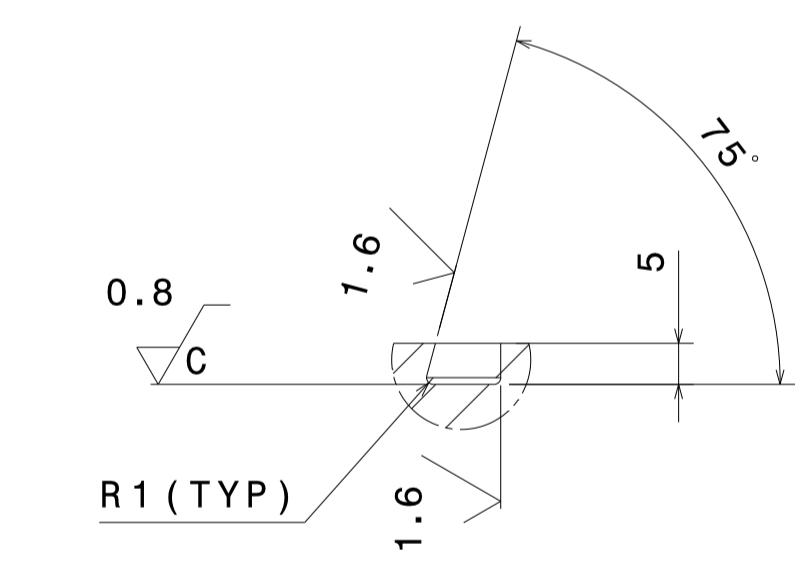
FRONT VIEW
SCALE-1:10



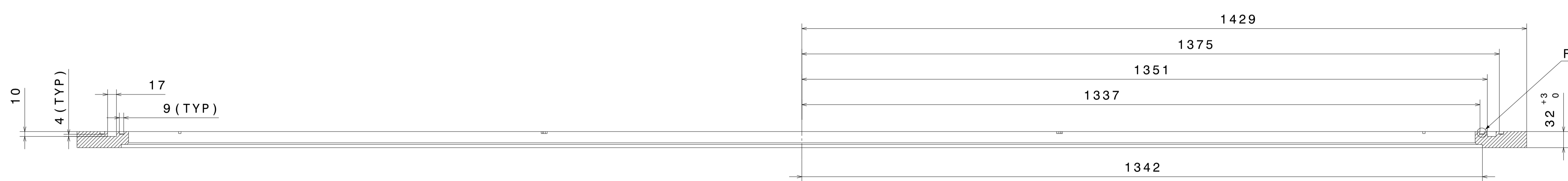
SECTION B-B
SCALE-1:1



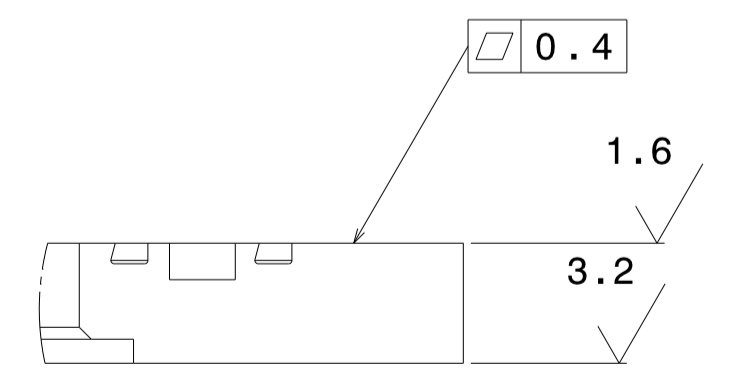
SECTION E-E
SCALE-1:2



DETAIL VIEW-F
SCALE-1:1

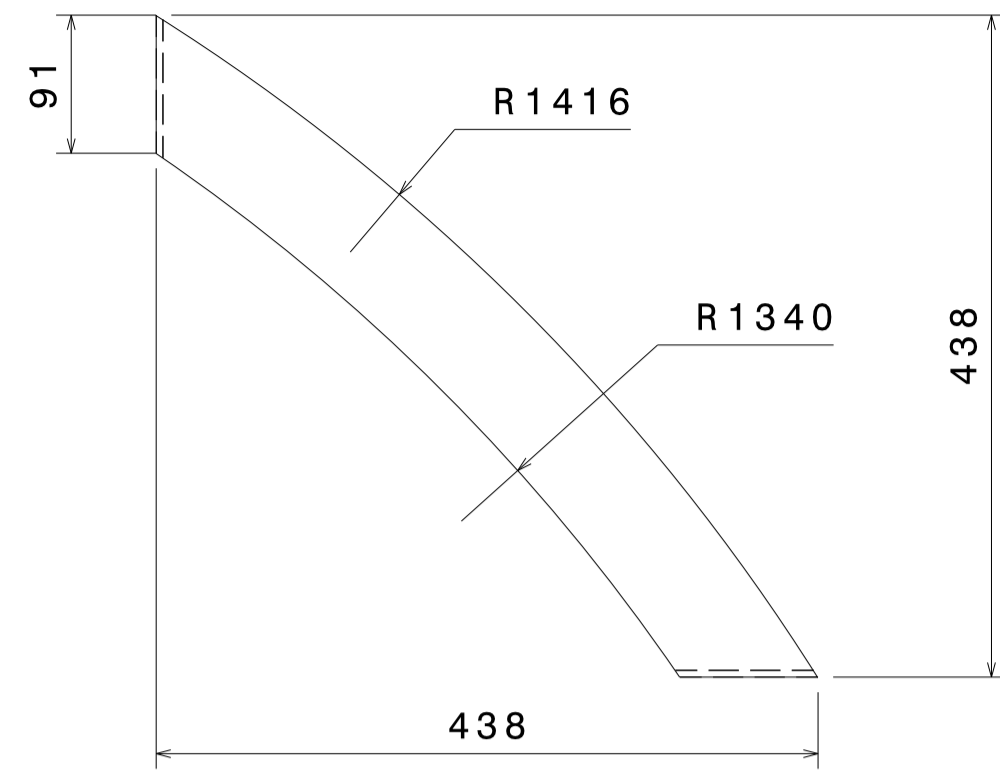


SECTION A-A
SCALE-1:5

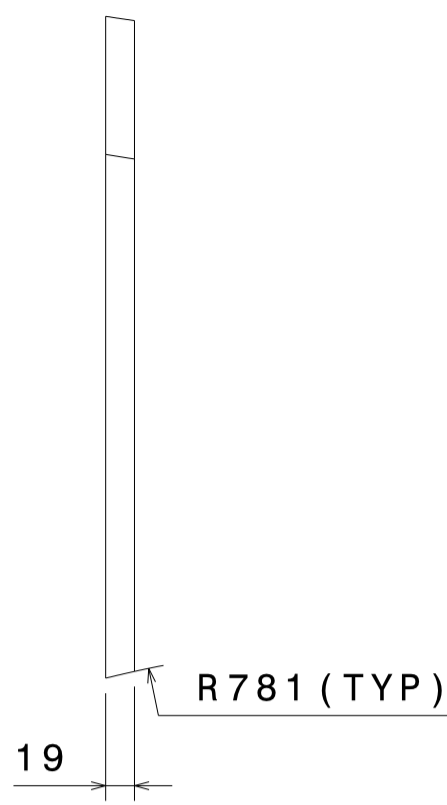


5 FLANGE GROOVED (104.5" ID)

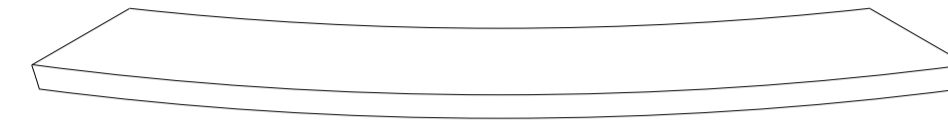
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	AS NOTED	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A. N. N.	05/07/2015	LOWER PART		
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5					CHECKED	R.K.	REF DRG NO: VB01-001-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'										APPROVED	M.K.G.	DRG. NO	VB01-003-R1	SHEET 07 OF 09



FRONT VIEW

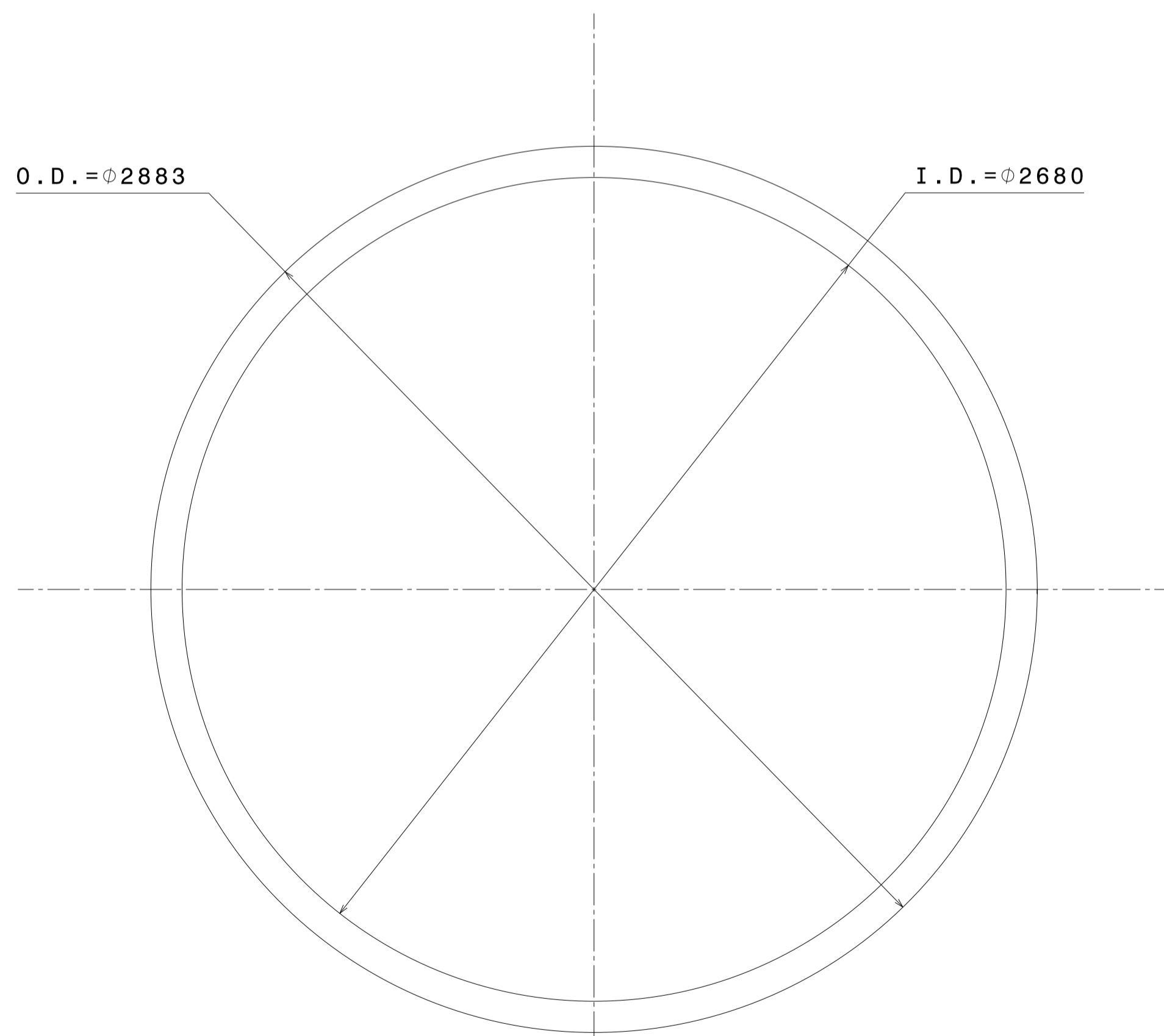


SIDE VIEW

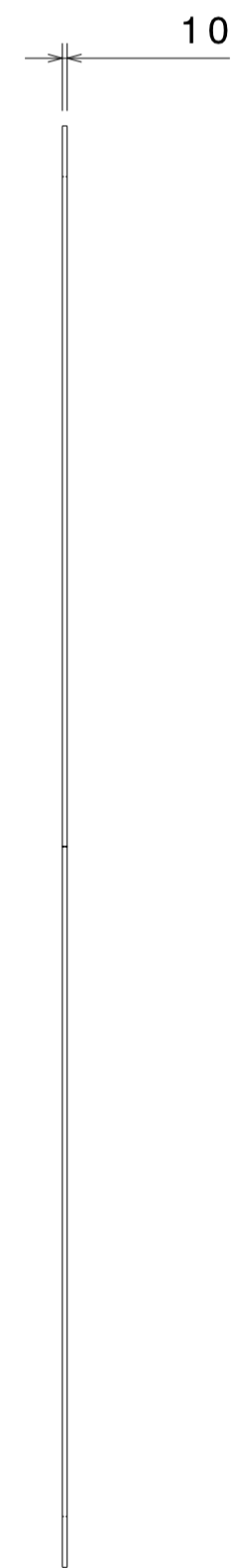


ISOMETRIC VIEW

8 STIFFENER 60" PORT
SCALE - 1:5

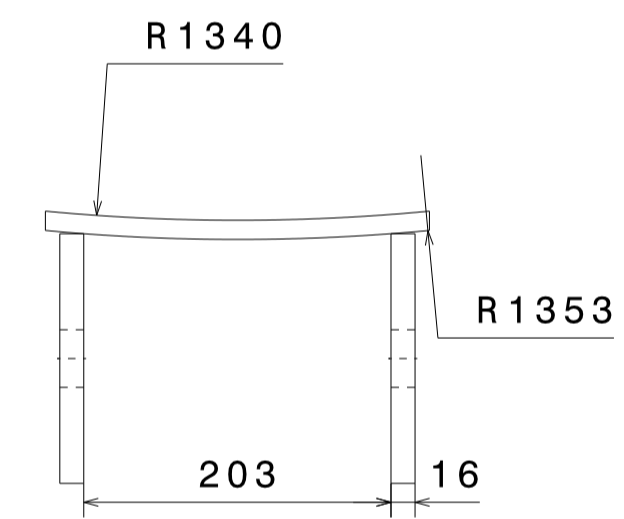


FRONT VIEW

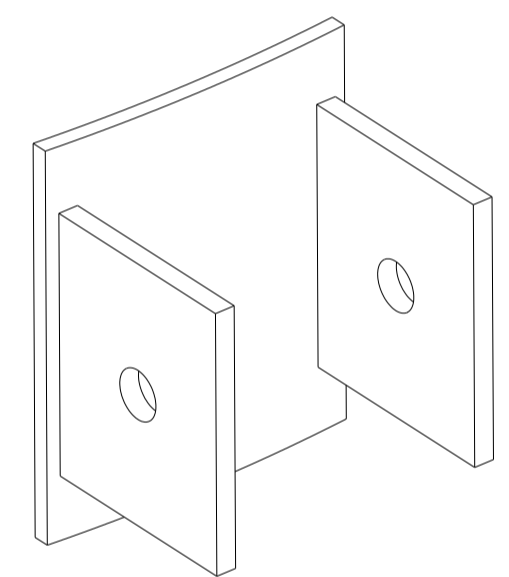


SIDE VIEW

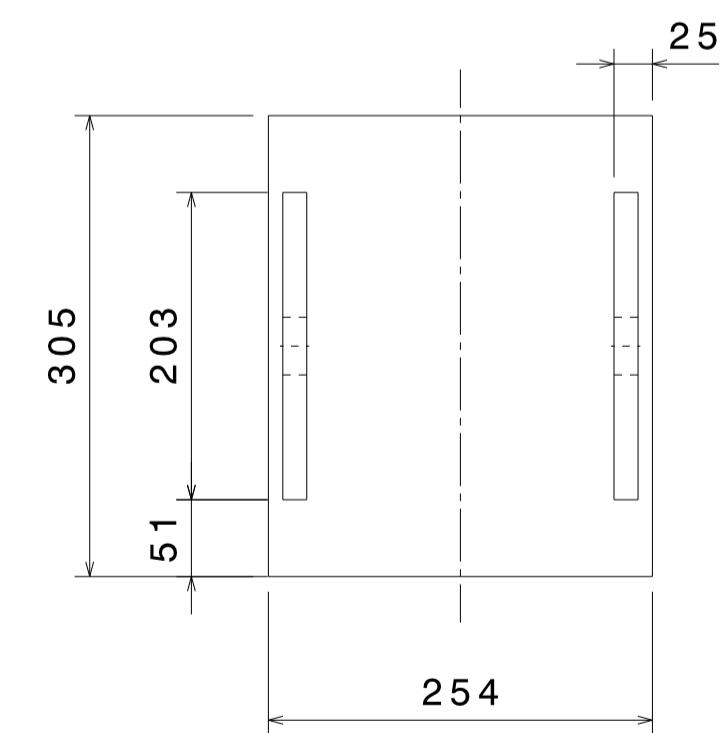
9 SHELL STIFFENER
SCALE - 1:10



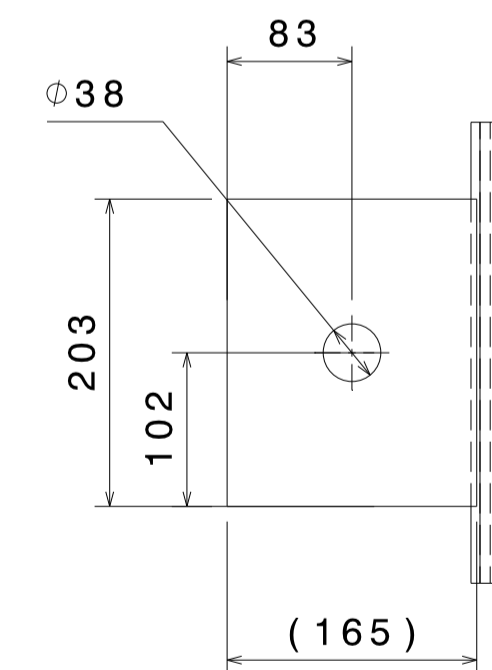
TOP VIEW



ISOMETRIC VIEW



FRONT VIEW

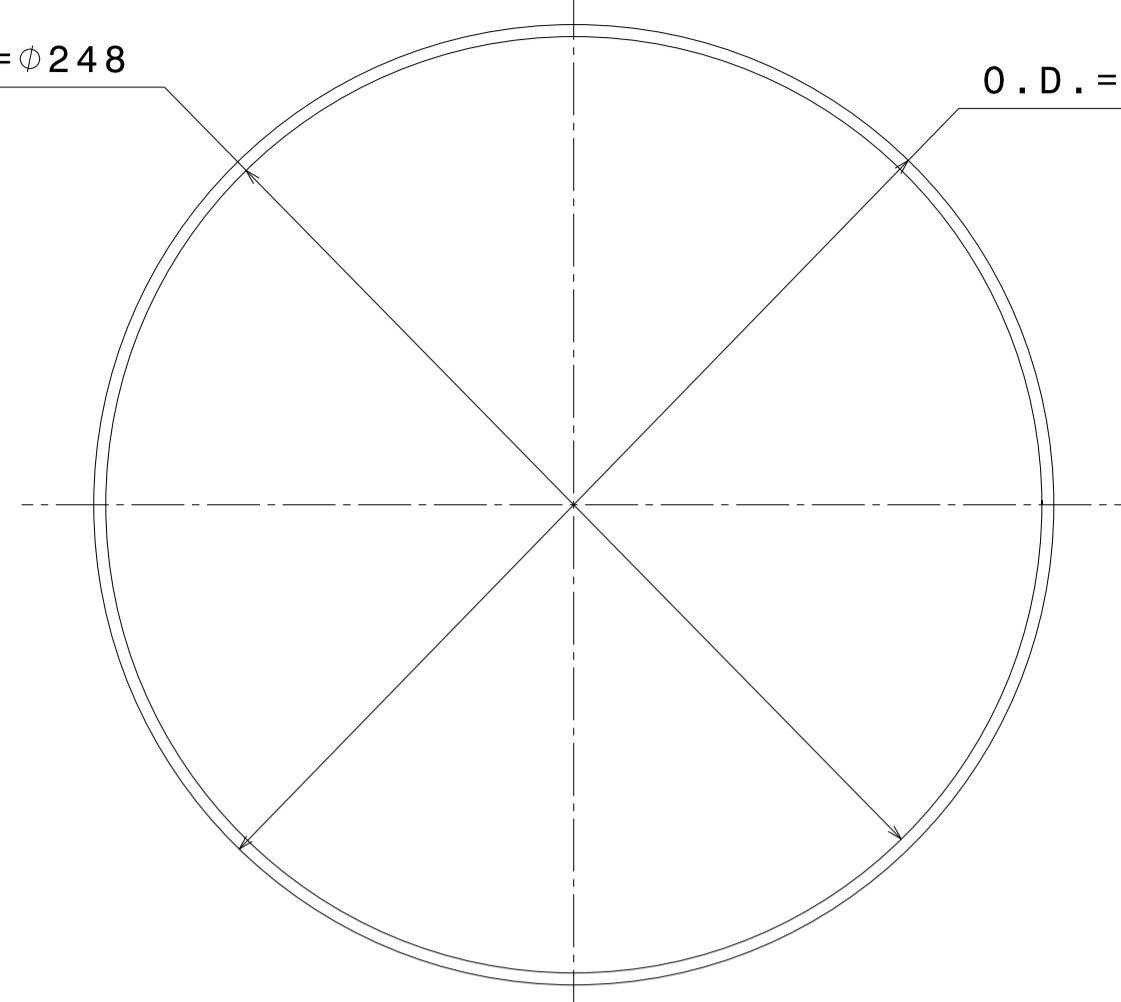


SIDE VIEW

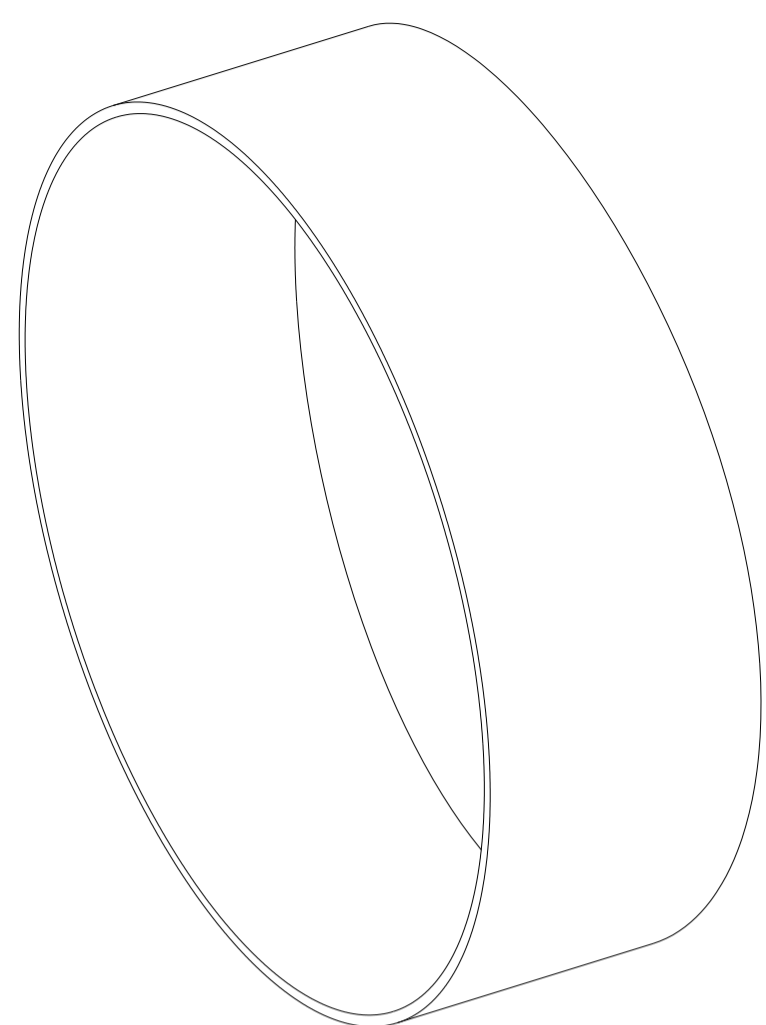
10 SUPPORT PAD
SCALE - 1:5

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS															
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315							
UPTO 10	10-50	50-120	OVER 120-400												
+1'	+0'-30'	+0'-20'	+0'-10'		+0.1	+0.2	+0.3	+0.5							
											SCALE	AS NOTED	DATE	TITLE	
											DRAWN	A. N. N.	05/07/2015	LOWER PART	
											CHECKED	R. K.	REF DRG NO:	VB01-001-R1	REV R1
											APPROVED	M. K. G.	DRG. NO	VB01-003-R1	SHEET 08 OF 09

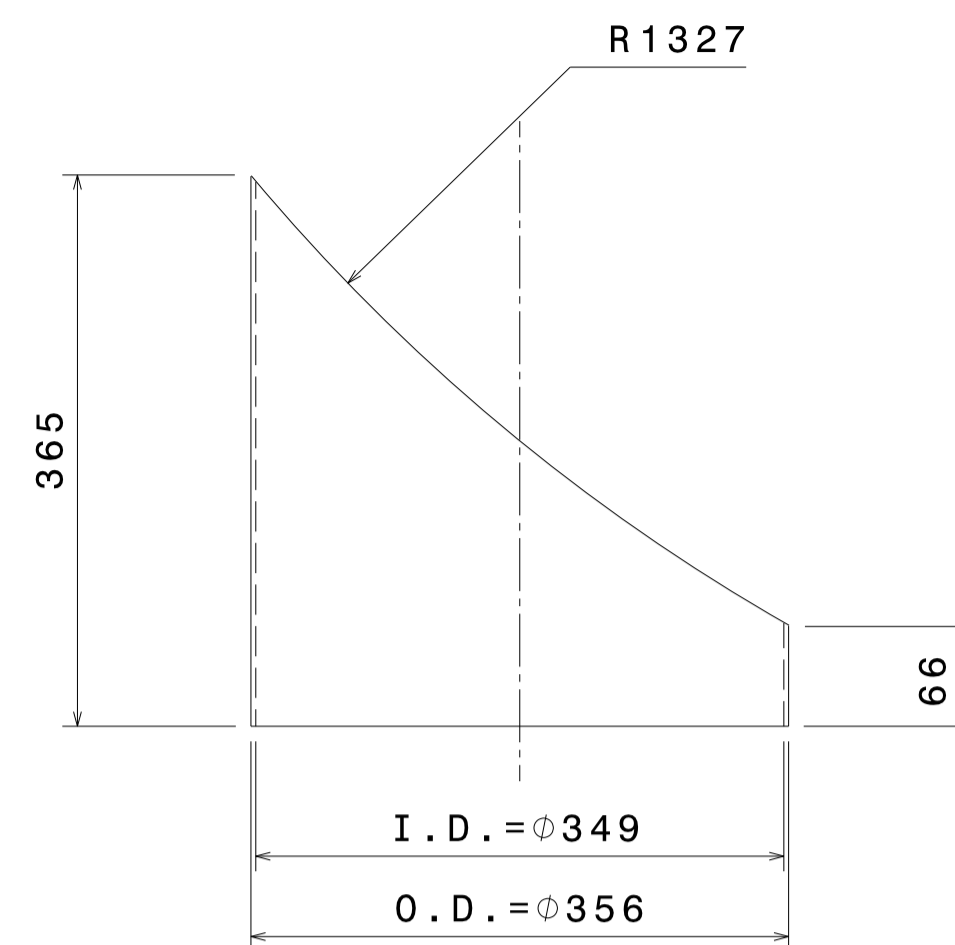
I.D. = ϕ 248 O.D. = ϕ 254



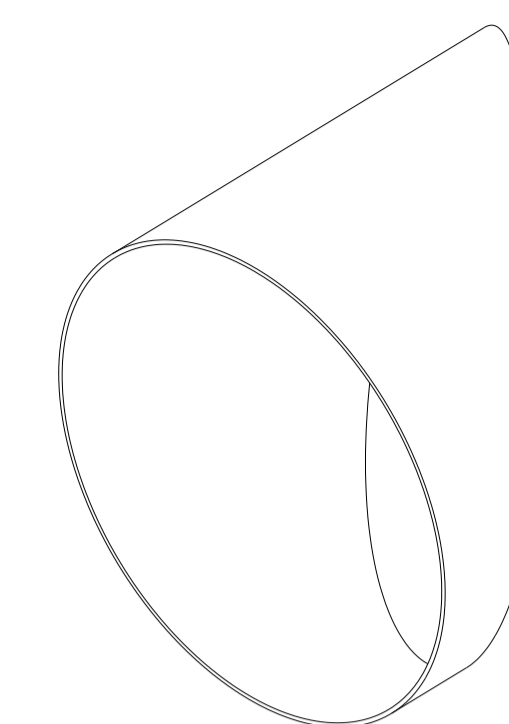
TOP VIEW



ISOMETRIC VIEW

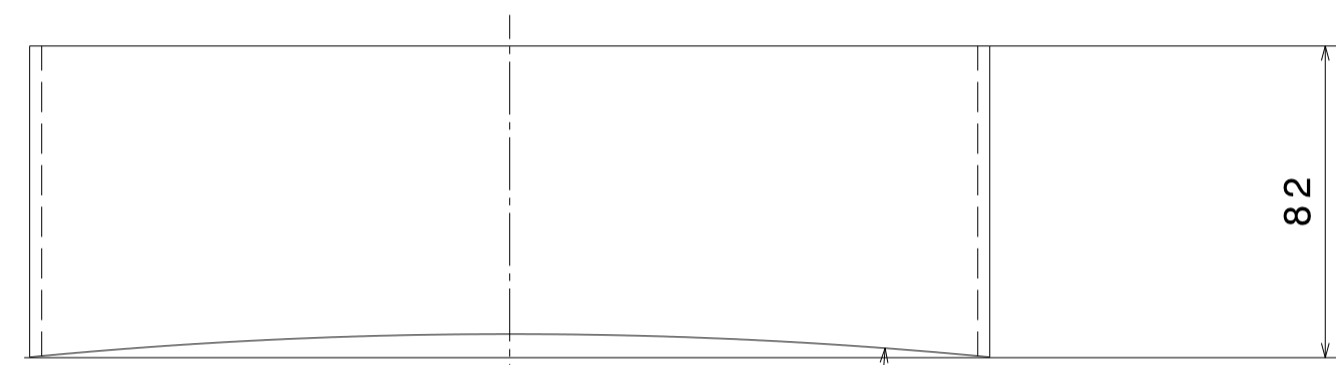


FRONT VIEW



ISOMETRIC VIEW

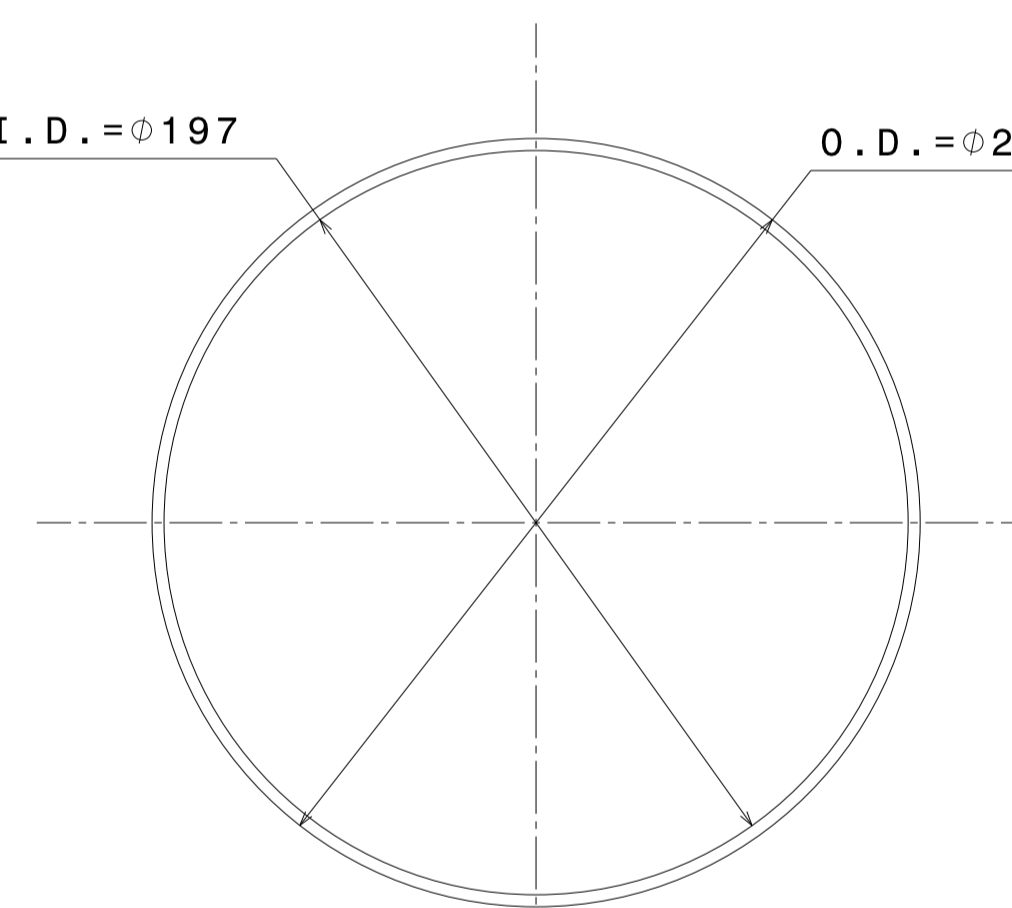
12 PORT-D NOZZLE
SCALE-1:5



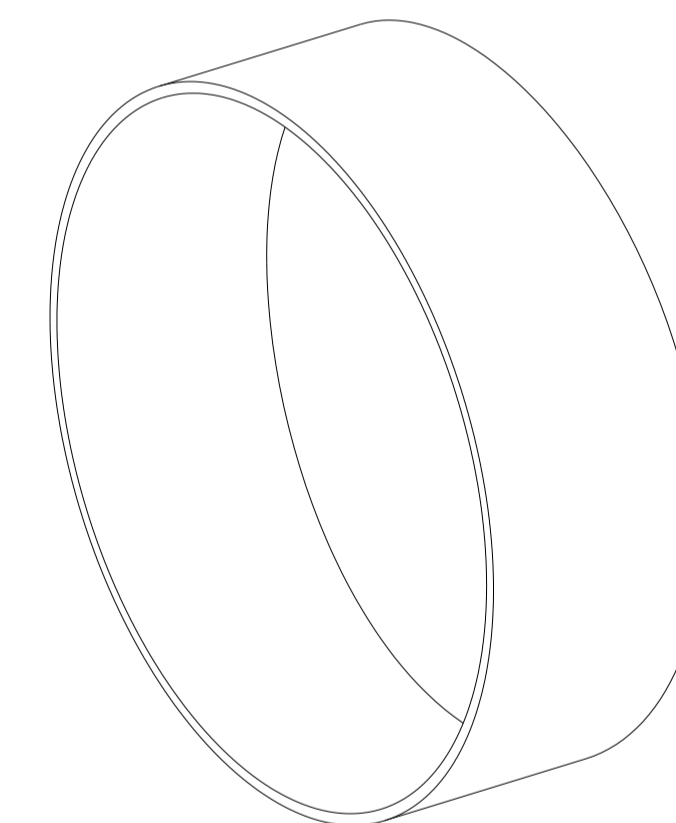
FRONT VIEW

14 PORT-F NOZZLE
SCALE-1:2

I.D. = ϕ 197 O.D. = ϕ 203



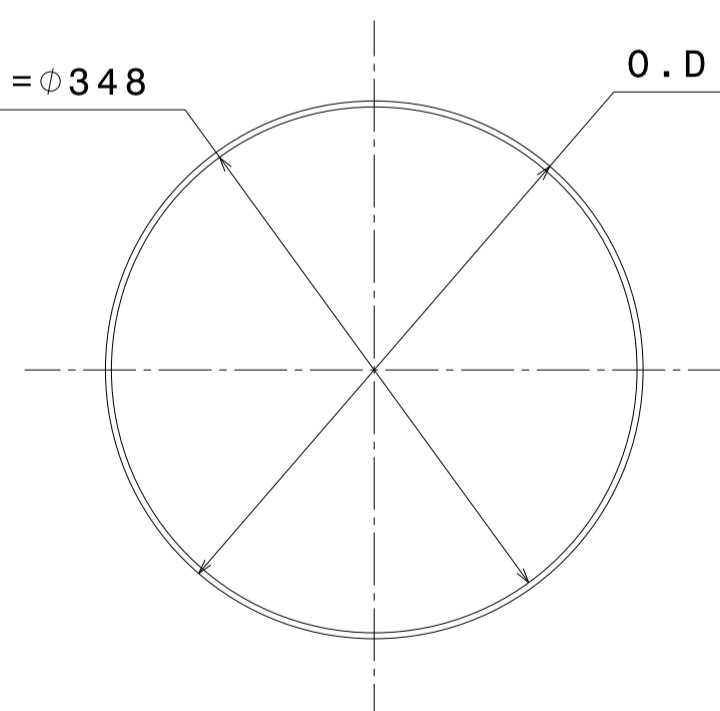
TOP VIEW



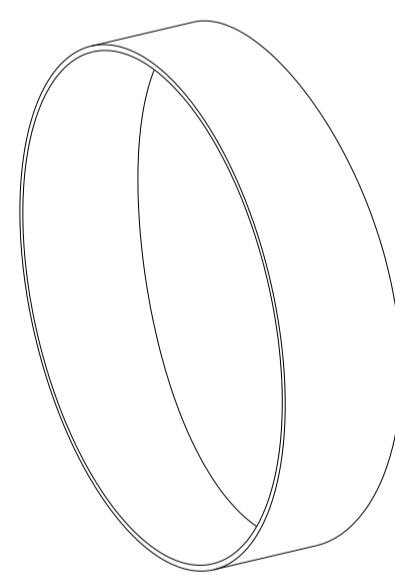
ISOMETRIC VIEW

15 PORT-G NOZZLE
SCALE-1:2

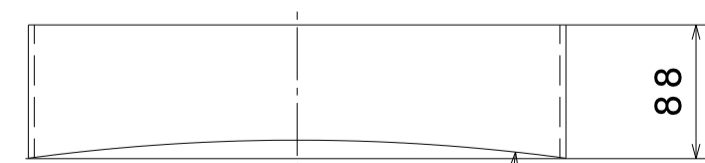
I.D. = ϕ 348 O.D. = ϕ 356



TOP VIEW



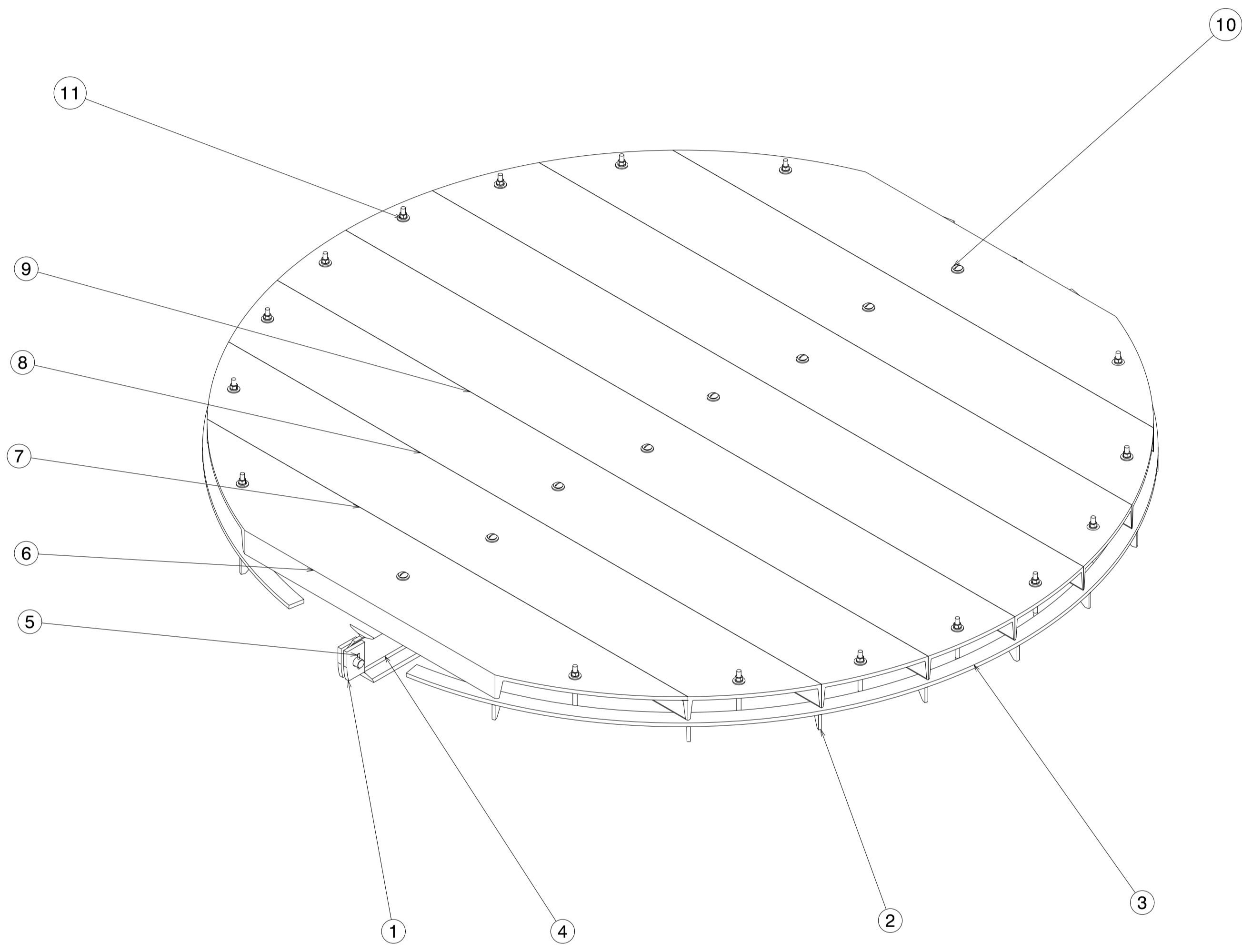
ISOMETRIC VIEW



FRONT VIEW

13 PORT-E NOZZLE
SCALE-1:5

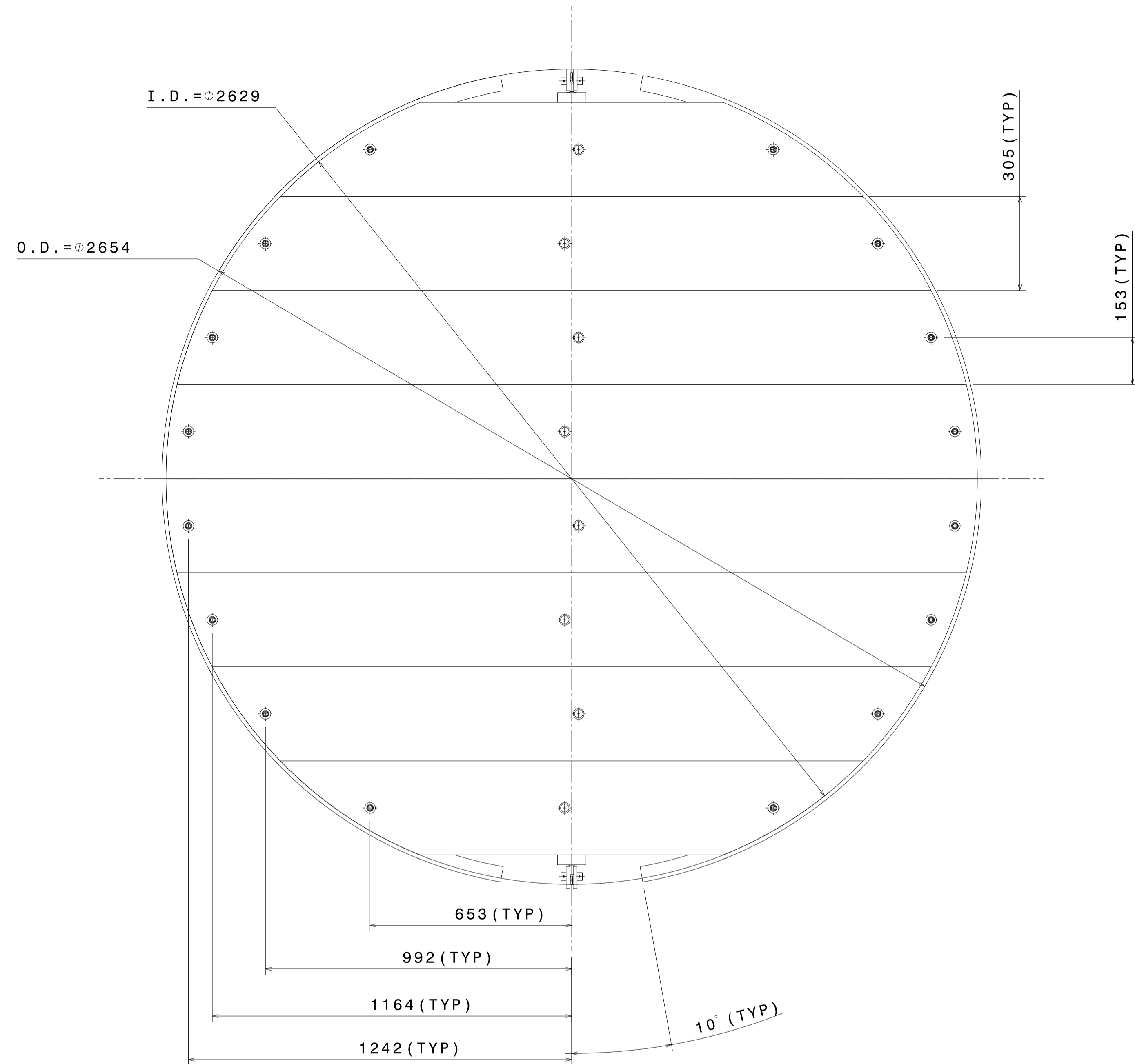
MATERIAL:		∇ 8-25	$\nabla\nabla$ 1.6-8	$\nabla\nabla\nabla$ 0.025-1.6	$\nabla\nabla\nabla\nabla$ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	AS NOTED	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A.N.N.	05/07/2015	LOWER PART		
UPTO 10	10-50	50-120	OVER 120-400		± 0.1	± 0.2	± 0.3	± 0.5					CHECKED	R.K.	REF DRG NO: VB01-001-R1	REV R1	
$\pm 1'$	$\pm 0'-30'$	$\pm 0'-20'$	$\pm 0'-10'$										APPROVED	M.K.G.	DRG. NO	VB01-003-R1	SHEET 09 OF 09



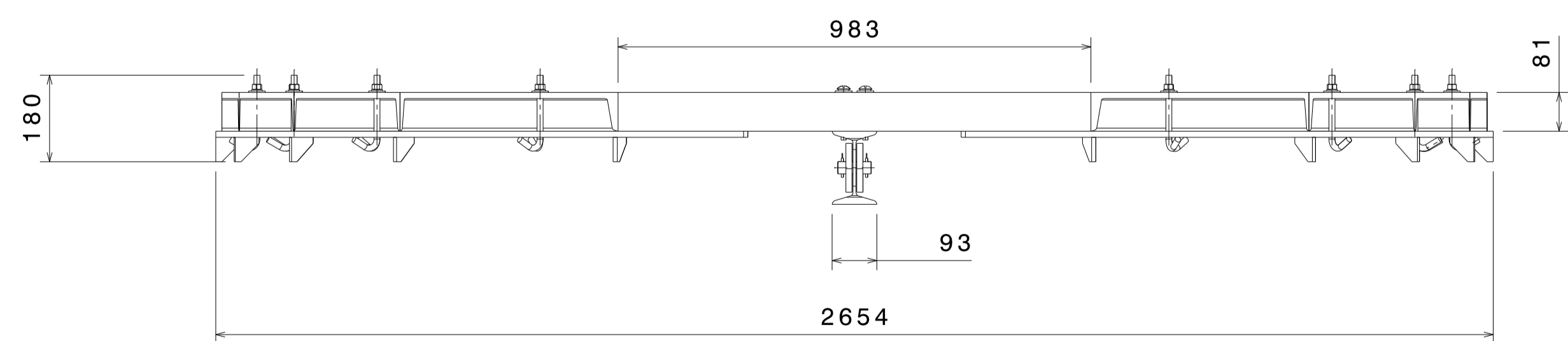
11 FLOOR ASSEMBLY

PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
11	16	FLOOR HOLDING ROD ASSEMBLY	ALUMINIUM	VB01-004-R1/SHEET 04	-
10	08	SCREW ASSEMBLY	ALUMINIUM	VB01-004-R1/SHEET 04	-
9	02	FLOOR PLATE-4	ALUMINIUM	VB01-004-R1/SHEET 04	-
8	02	FLOOR PLATE-3	ALUMINIUM	VB01-004-R1/SHEET 04	-
7	02	FLOOR PLATE-2	ALUMINIUM	VB01-004-R1/SHEET 04	-
6	02	FLOOR PLATE-1	ALUMINIUM	VB01-004-R1/SHEET 04	-
5	02	PIN ASSEMBLY	ALUMINIUM	VB01-004-R1/SHEET 03	-
4	01	SUPPORT BAR	ALUMINIUM	VB01-004-R1/SHEET 03	-
3	02	SUPPORT RING	ALUMINIUM	VB01-004-R1/SHEET 03	-
2	18	SUPPORT BRACKET-2	ALUMINIUM	VB01-004-R1/SHEET 03	-
1	04	SUPPORT BRACKET-1	ALUMINIUM	VB01-004-R1/SHEET 03	-

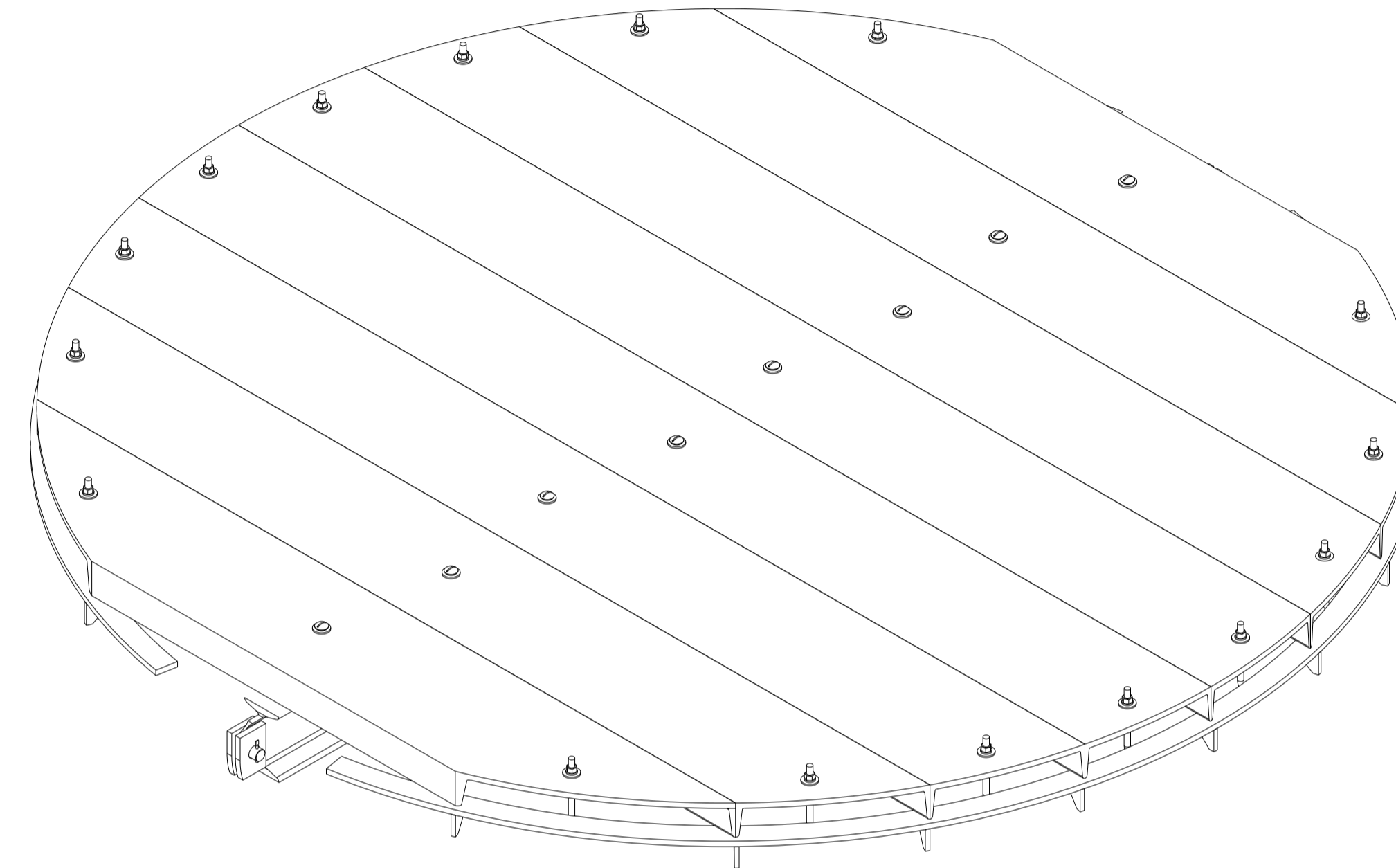
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS								REVISION COLUMN				MED		SIZE A1		INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.	
LENGTH IN mm OF SHORTER SIDE OF ANGLES								REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		TITLE	
UPTO 10	10-50	50-120	OVER 120-400	LENGTH OR DIA	UPTO 6	6-30	30-120	120-315					SCALE	DATE	FLOOR ASSEMBLY		
+1'	+0'-30'	+0'-20'	+0'-10'		+0.1	+0.2	+0.3	+0.5					DRAWN	A.N.N.	06/07/2015	REF DRG NO: VB01-003-R1	REV R1
												CHECKED	R.K.	DRG. NO	VB01-004-R1	SHEET 01 OF 04	
												APPROVED	M.K.G.				



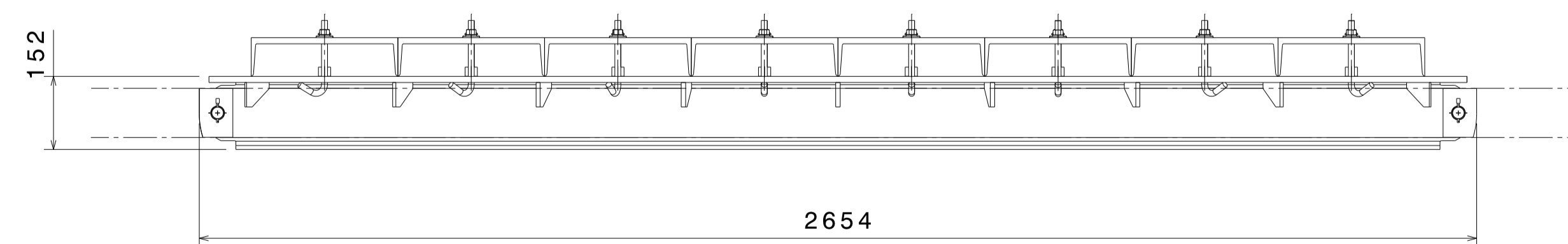
TOP VIEW



FRONT VIEW



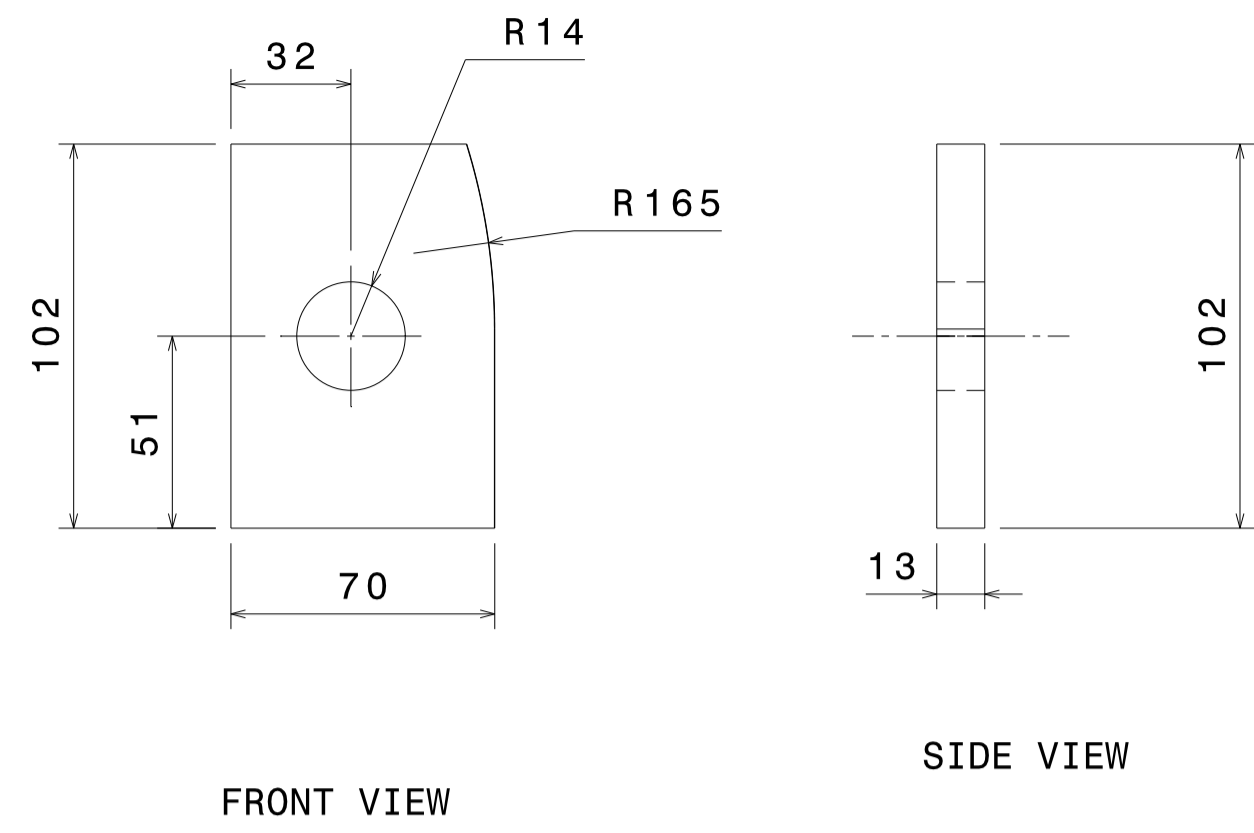
ISOMETRIC VIEW



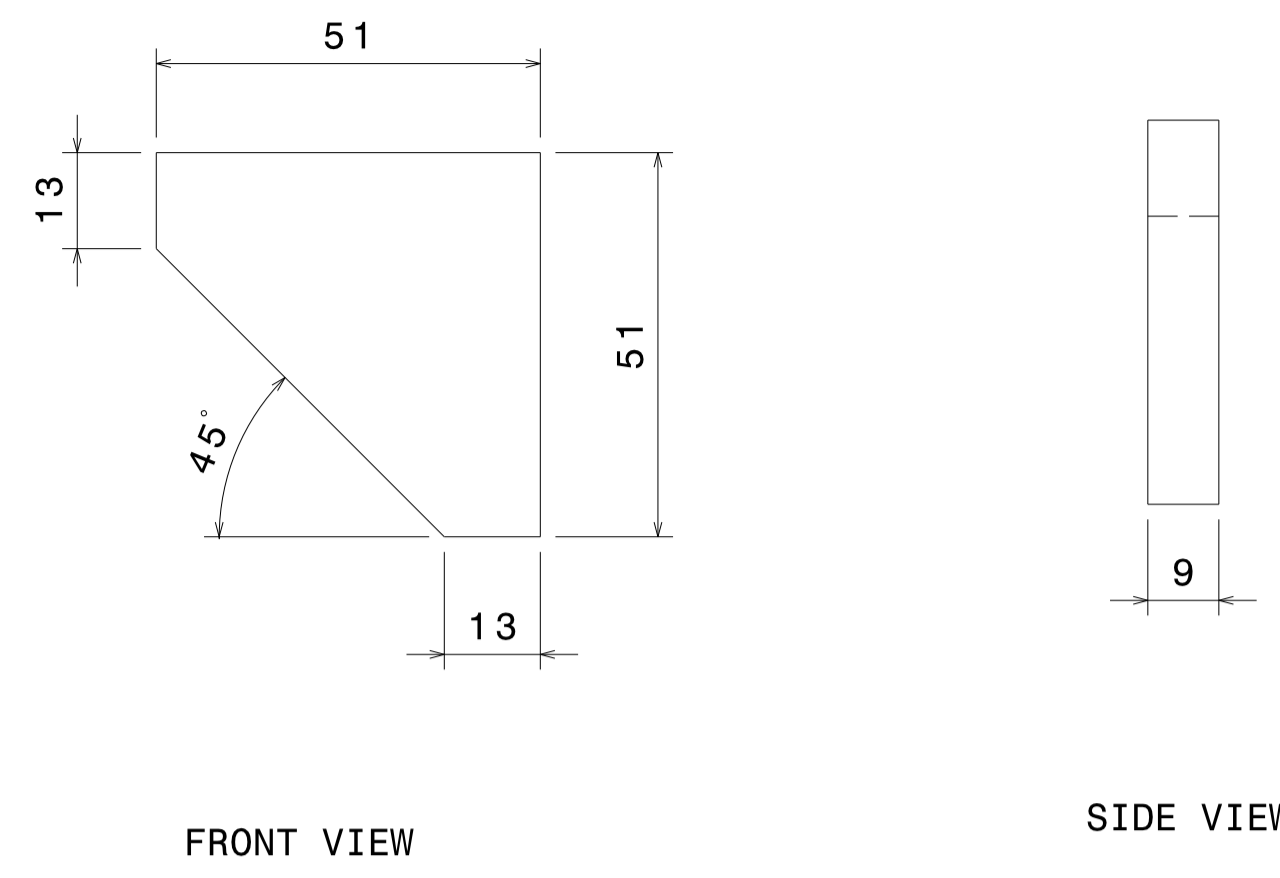
SIDE VIEW

11 FLOOR ASSEMBLY

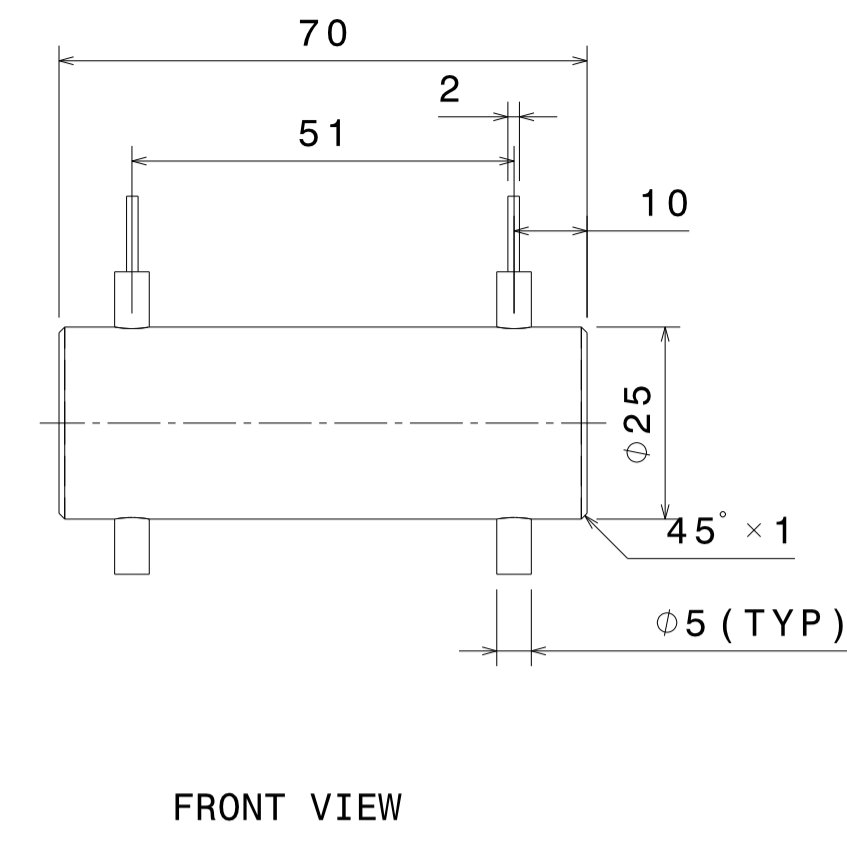
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:10	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315					DRAWN	A.N.N.	06/07/2015	FLOOR ASSEMBLY	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5					CHECKED	R.K.	REF DRG NO: VB01-003-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'										APPROVED	M.K.G.	DRG. NO	VB01-004-R1	SHEET 02 OF 04



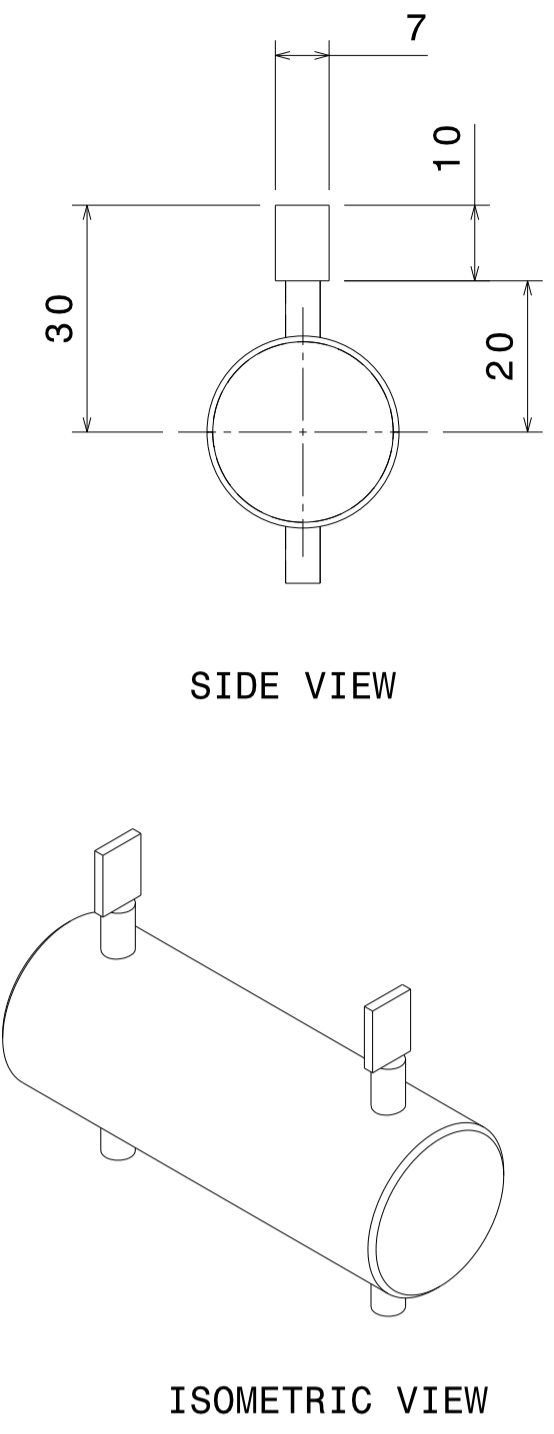
① SUPPORT BRACKET-1
SCALE-1:2



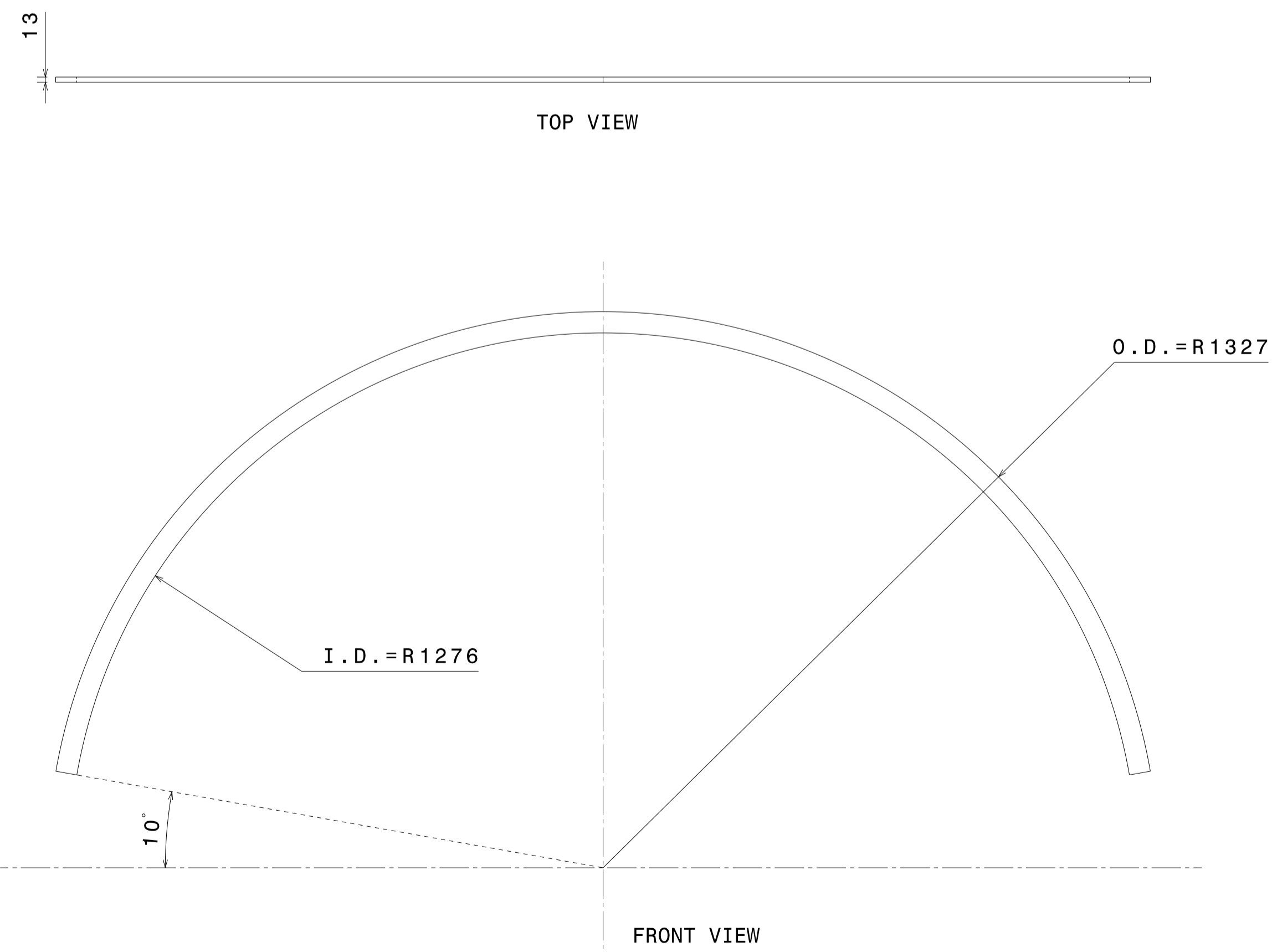
② SUPPORT BRACKET-2
SCALE-1:1



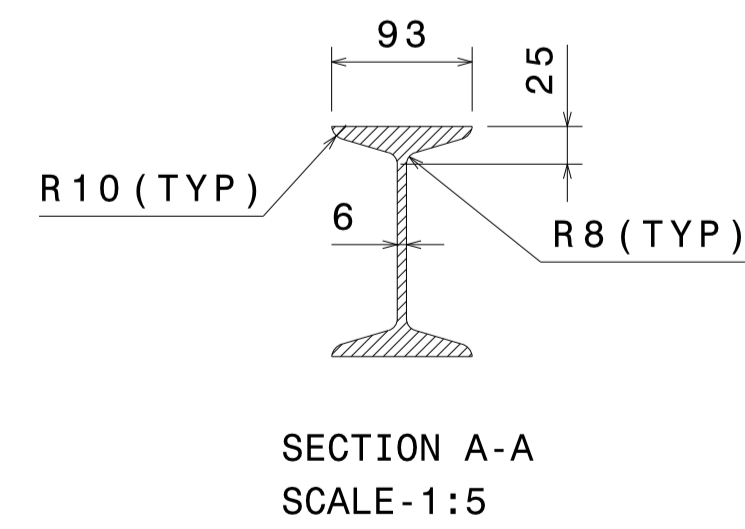
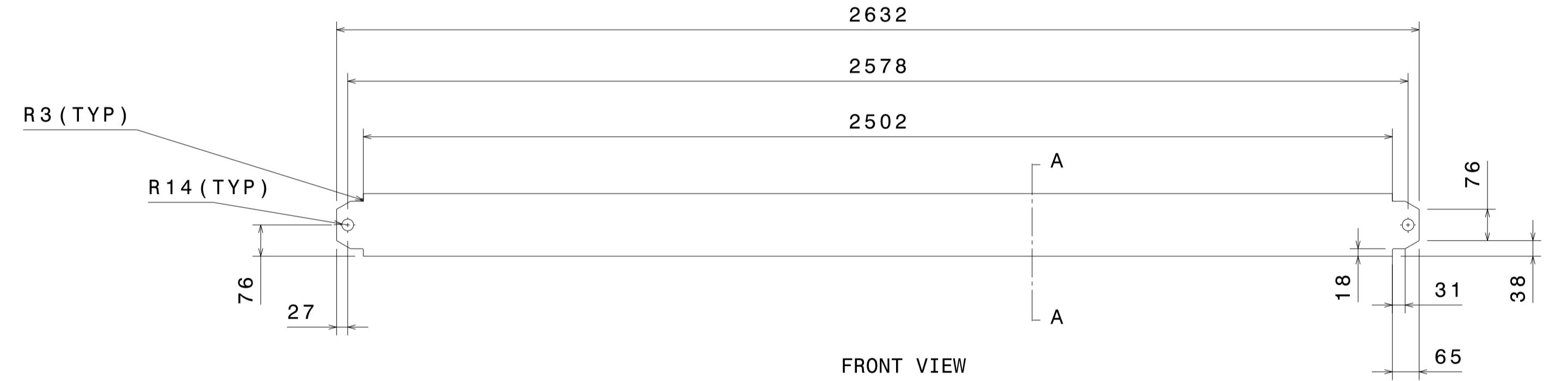
⑤ PIN ASSEMBLY
SCALE-1:1



ISOMETRIC VIEW

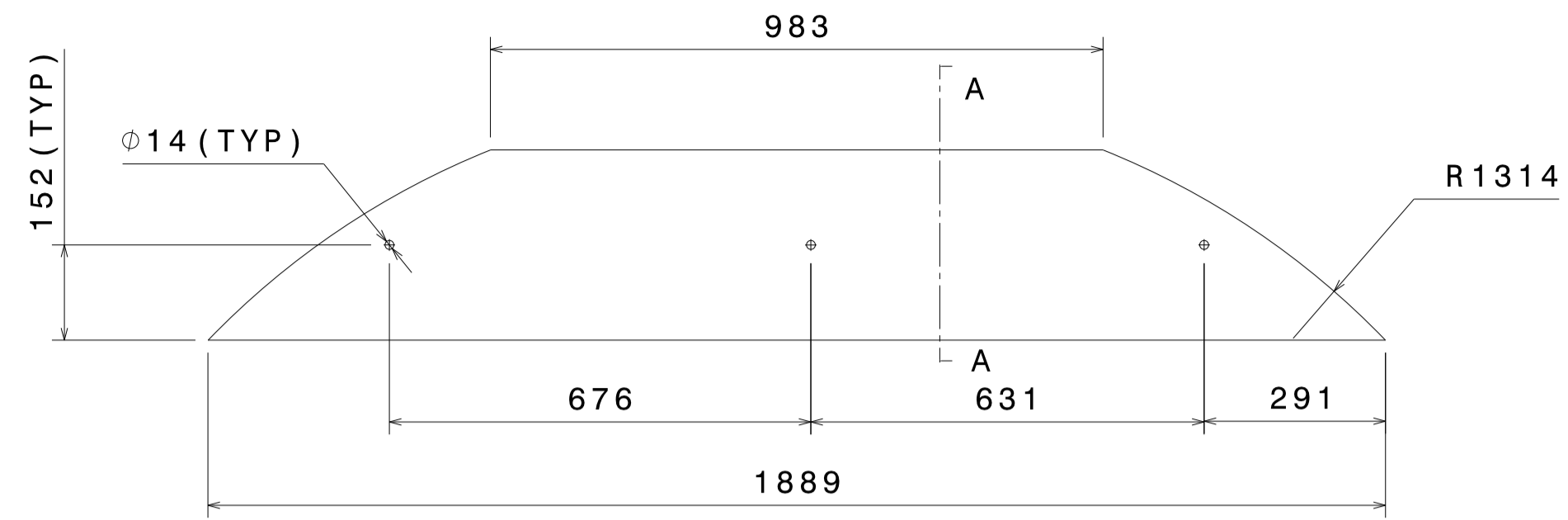


③ SUPPORT RING
SCALE-1:10



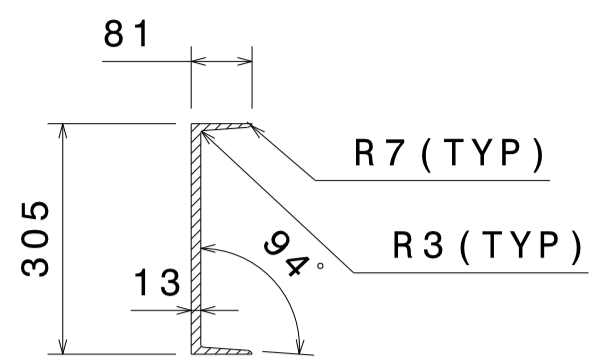
④ SUPPORT BAR
SCALE-1:10

MATERIAL:		REVISION COLUMN				MED		SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)							
CO-ORDINATED BY		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REV	ZONE	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED	DATE	TITLE	REF DRG NO:	REV	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	AS NOTED	DATE	TITLE	REF DRG NO:	REV
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA	UPTO 6	6-30	30-120	120-315					DRAWN	A. N. N.	06/07/2015	FLOOR ASSEMBLY	REF DRG NO: VB01-003-R1	REV R1
UPTO 10	10-50	50-120	OVER 120-400								CHECKED	R. K.			REF DRG NO: VB01-004-R1	SHEET 03 OF 04
+1'	+0'-30'	+0'-20'	+0'-10'								APPROVED	M. K. G.			DRG. NO	

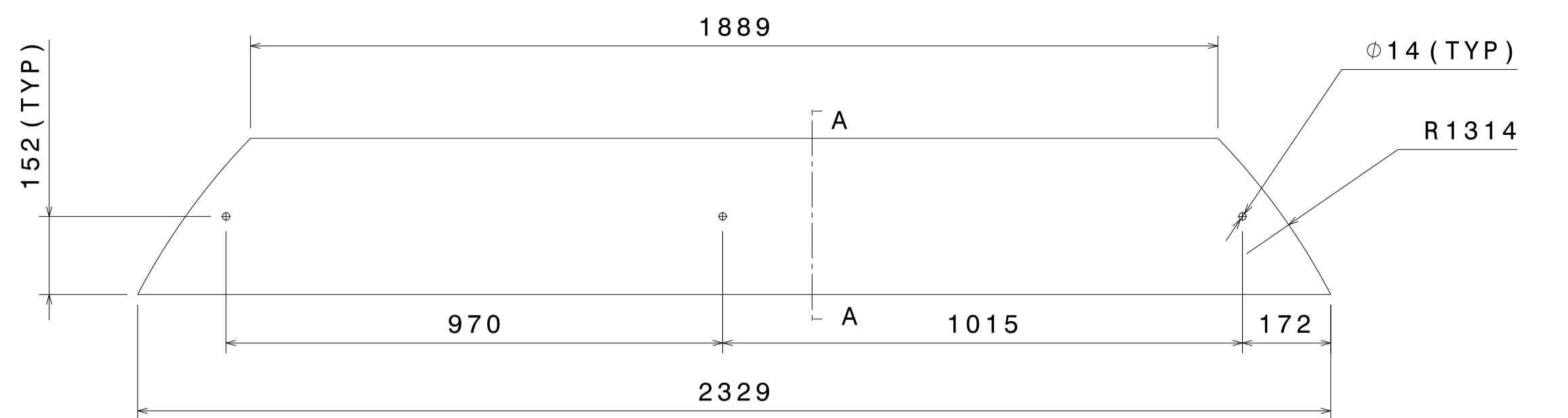


FRONT VIEW

⑥ FLOOR PLATE-1
SCALE-1:10

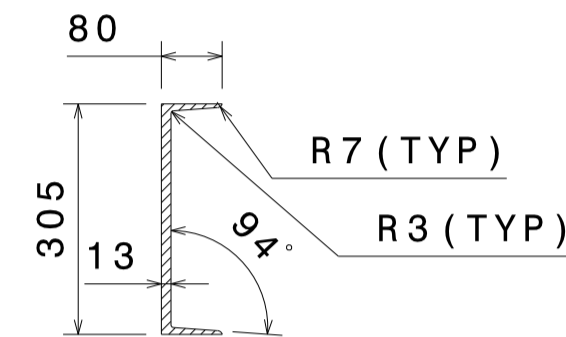


SECTION A-A

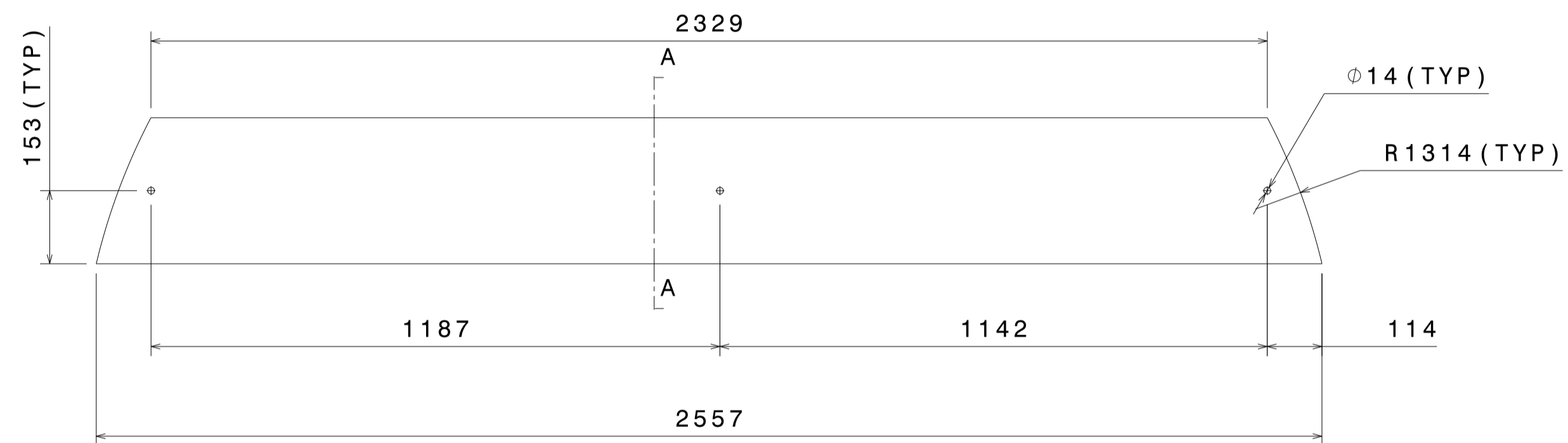


FRONT VIEW

⑦ FLOOR PLATE-2
SCALE-1:10

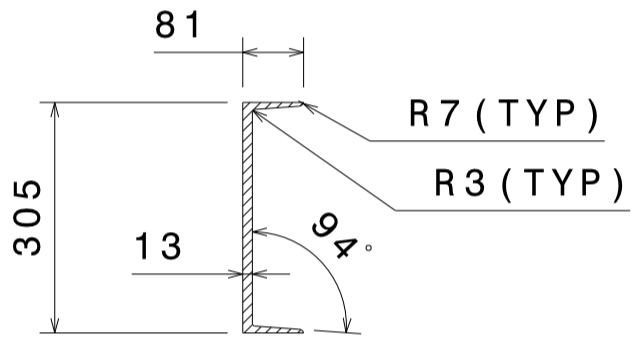


SECTION A-A

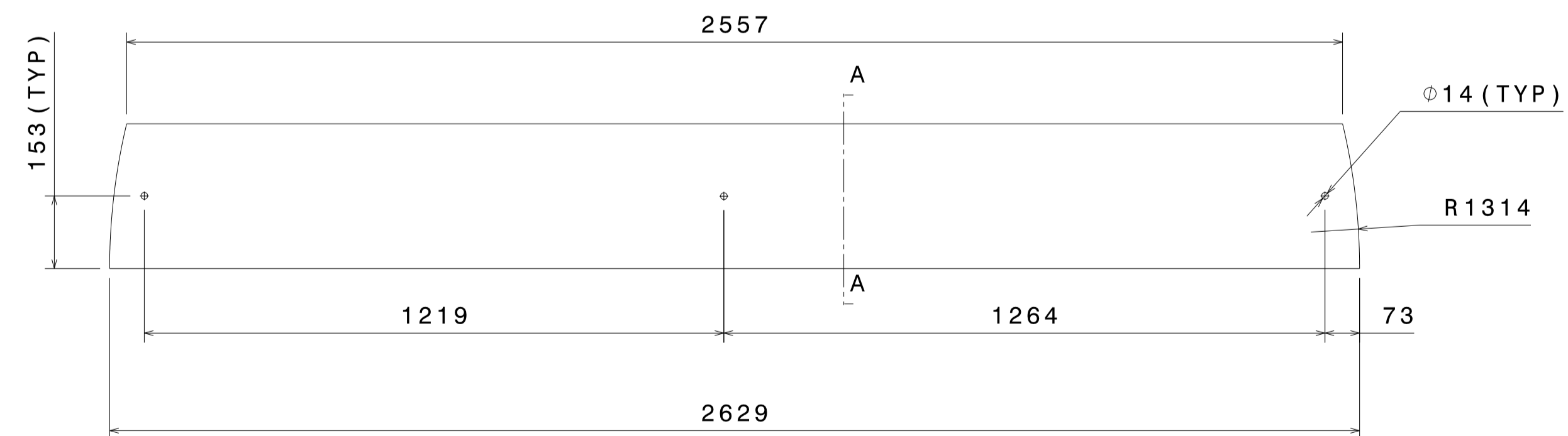


FRONT VIEW

⑧ FLOOR PLATE-3
SCALE-1:10

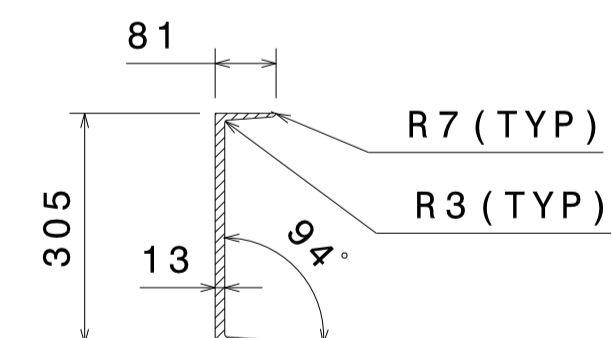


SECTION A-A

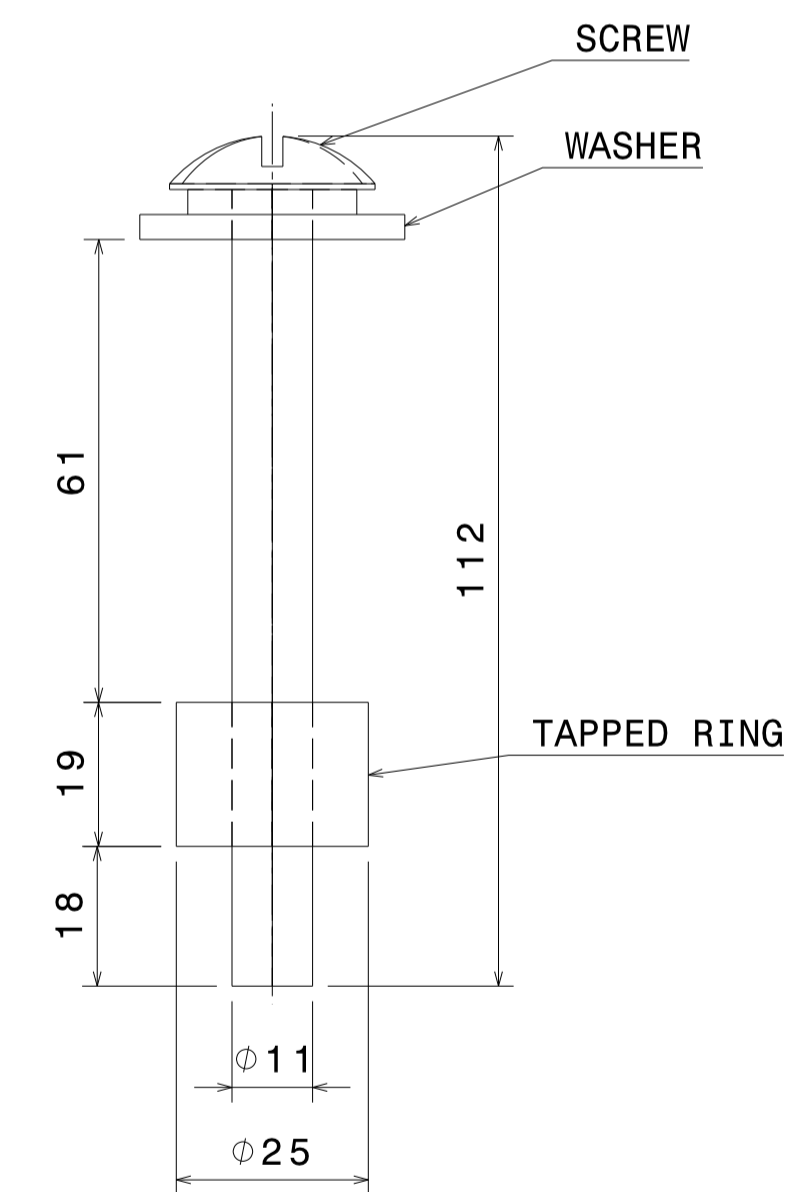


FRONT VIEW

⑨ FLOOR PLATE-4
SCALE-1:10

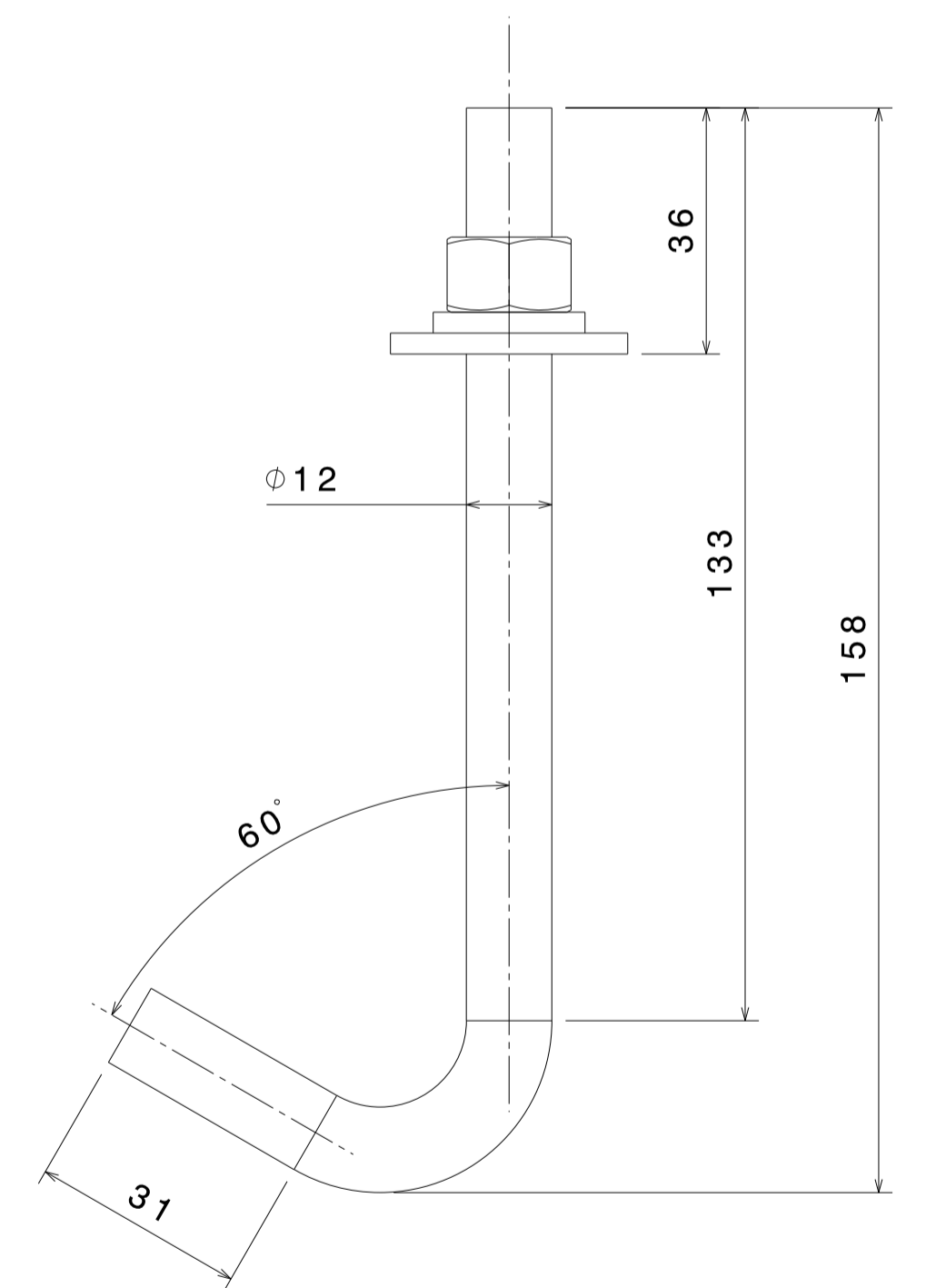


SECTION A-A



FRONT VIEW

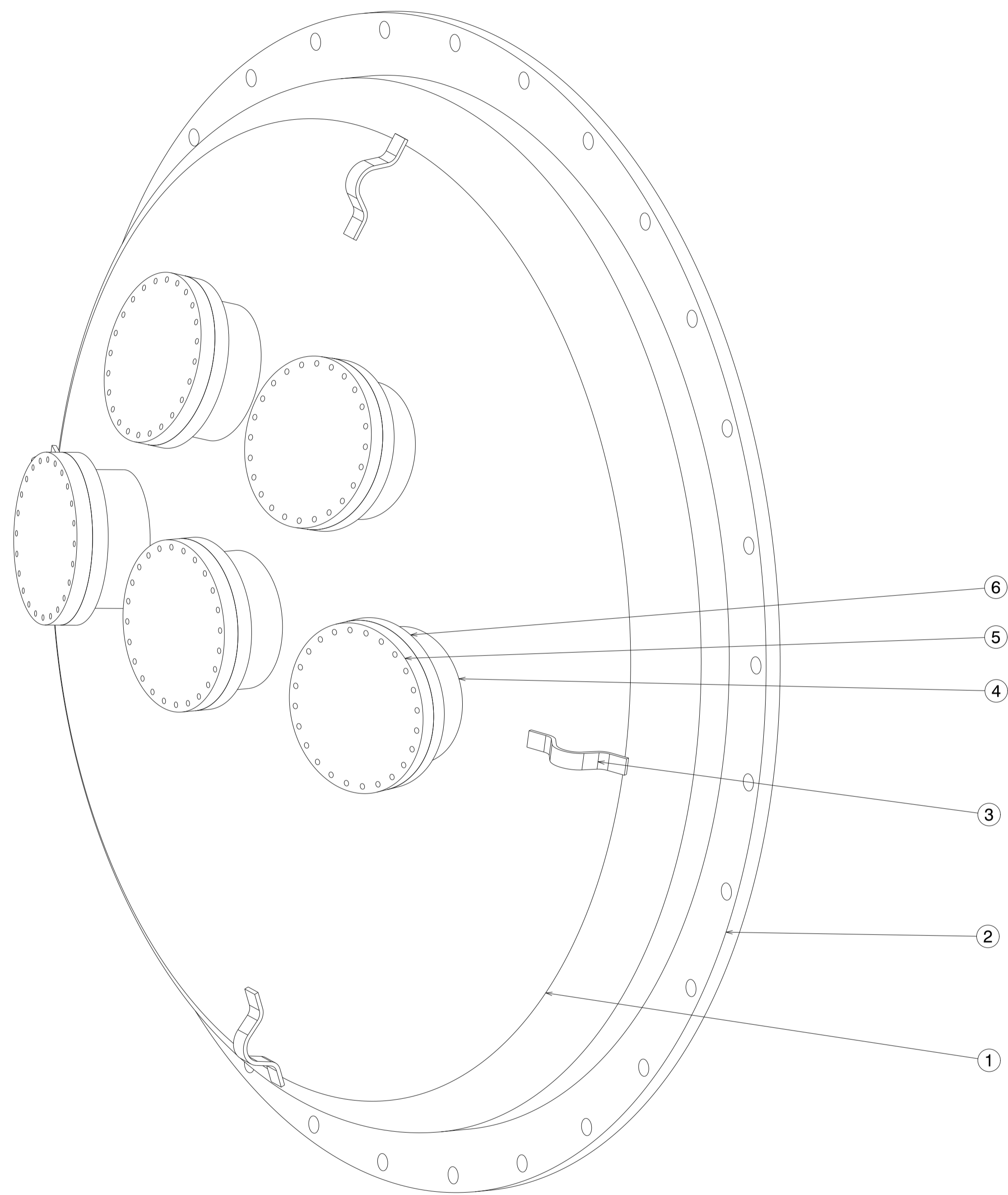
⑩ SCREW ASSEMBLY
SCALE-1:1



FRONT VIEW

⑪ FLOOR HOLDING ROD ASSEMBLY
SCALE-1:1

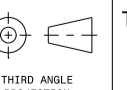
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS													SCALE	AS NOTED	DATE	TITLE
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A. N. N.	06/07/2015	FLOOR ASSEMBLY	
UPTO 10	10-50	50-120	OVER 120-400	±0.1	±0.2	±0.3	±0.5					CHECKED	R.K.	REF DRG NO: VB01-003-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'									APPROVED	M.K.G.	DRG. NO	VB01-004-R1	SHEET 04 OF 04

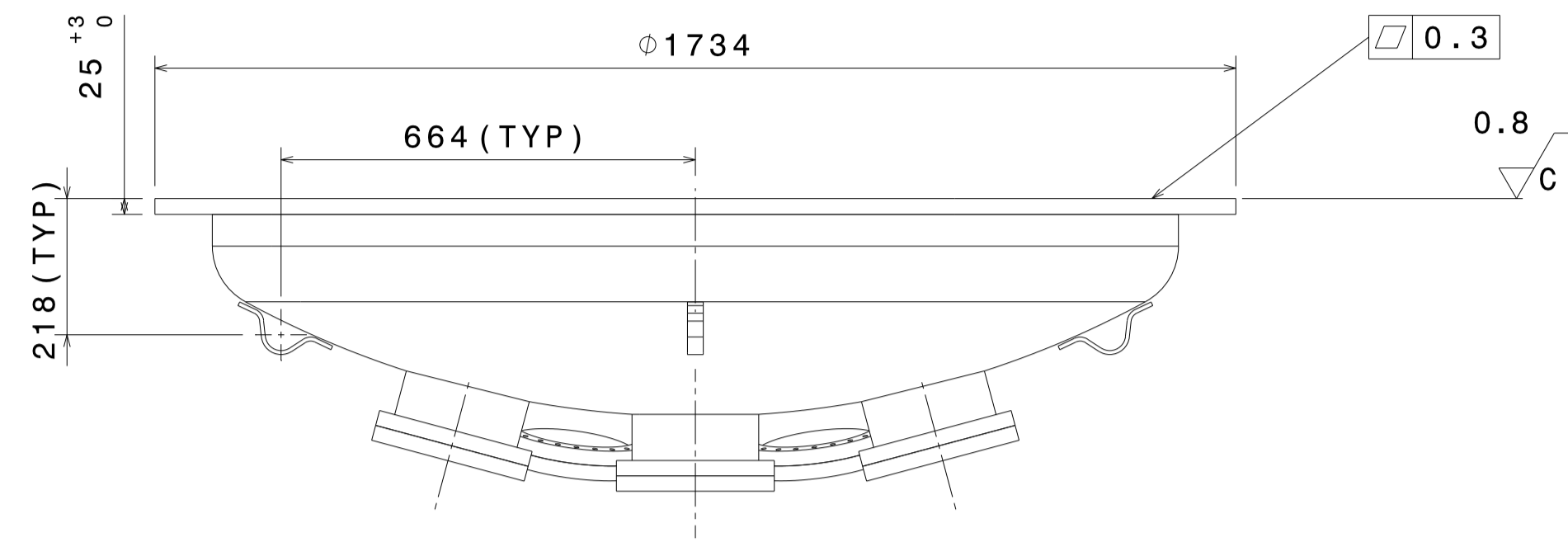


03 END COVER TYPE-1

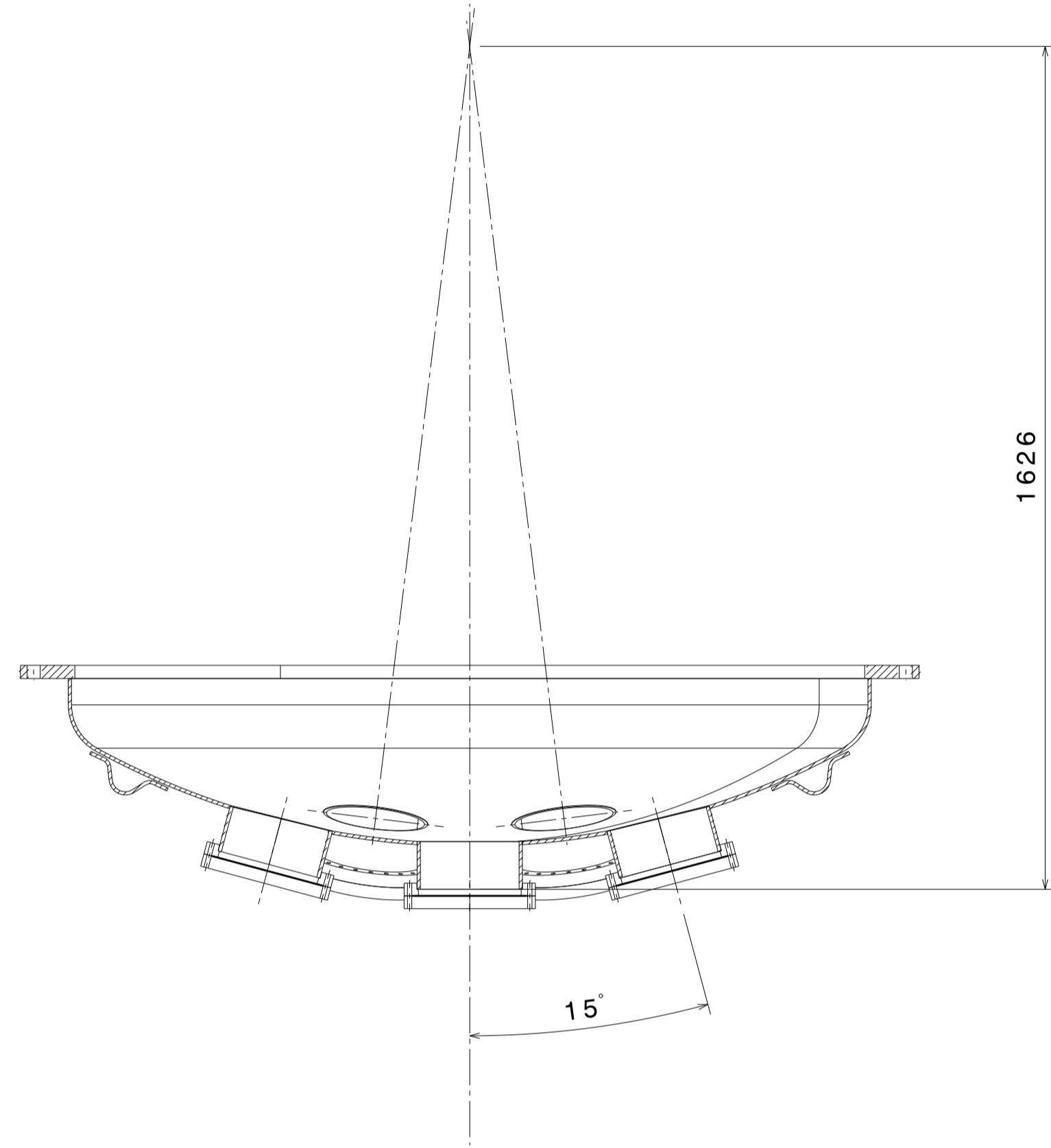
PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
6	05	DN 200CF BLANK FLANGE	SS304L	V001-001-R0/SHEET 01	
5	05	DN 200CF COVER FLANGE	SS304L	V001-001-R0/SHEET 01	-
4	05	PORT NOZZLE	SS304L	VB01-005-R1/SHEET 03	-
3	04	LIFTING LUG	SS304L	VB01-005-R1/SHEET 03	-
2	01	FLANGE FLAT (60.5" ID)	SS304L	VB01-005-R1/SHEET 03	-
1	01	F & D HEAD	SS304L	VB01-005-R1/SHEET 03	-

MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS								REVISION COLUMN				MED		SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)				
LENGTH IN mm OF SHORTER SIDE OF ANGLES								REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED		A1	BHAT, GANDHINAGAR-382 428.		
UPTO 10	10-50	50-120	OVER 120-400	LENGTH OR DIA	UPTO 6	6-30	30-120	120-315						SCALE	DATE	TITLE			
+1'	+0'-30'	+0'-20'	+0'-10'		±0.1	±0.2	±0.3	±0.5						DRAWN	A. N. N.	09/07/2015	END COVER TYPE-1		
														CHECKED	R. K.		REF DRG NO: VB01-001-R1	REV R1	
														APPROVED	M. K. G.		DRG. NO	VB01-005-R1	SHEET 01 OF 03

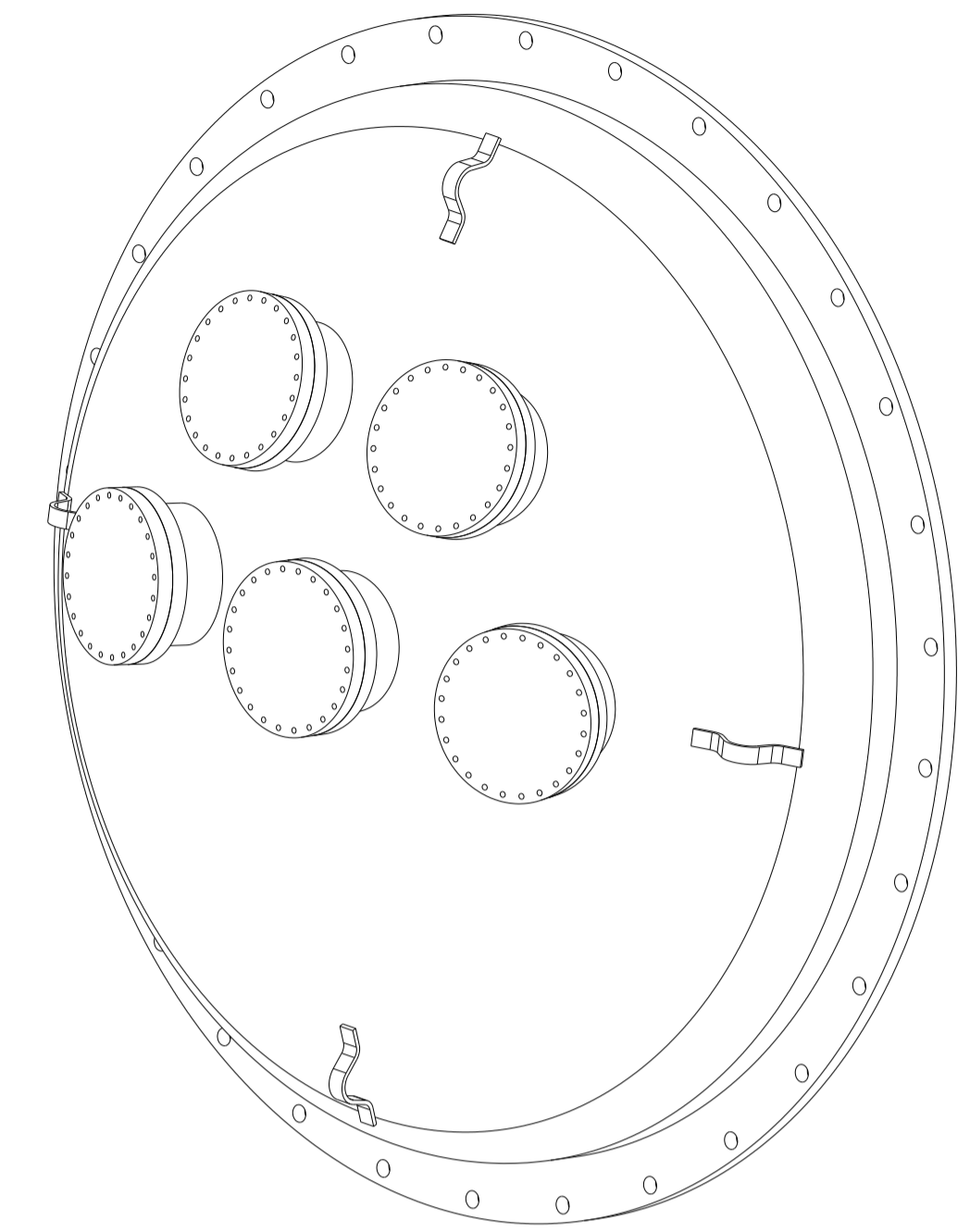




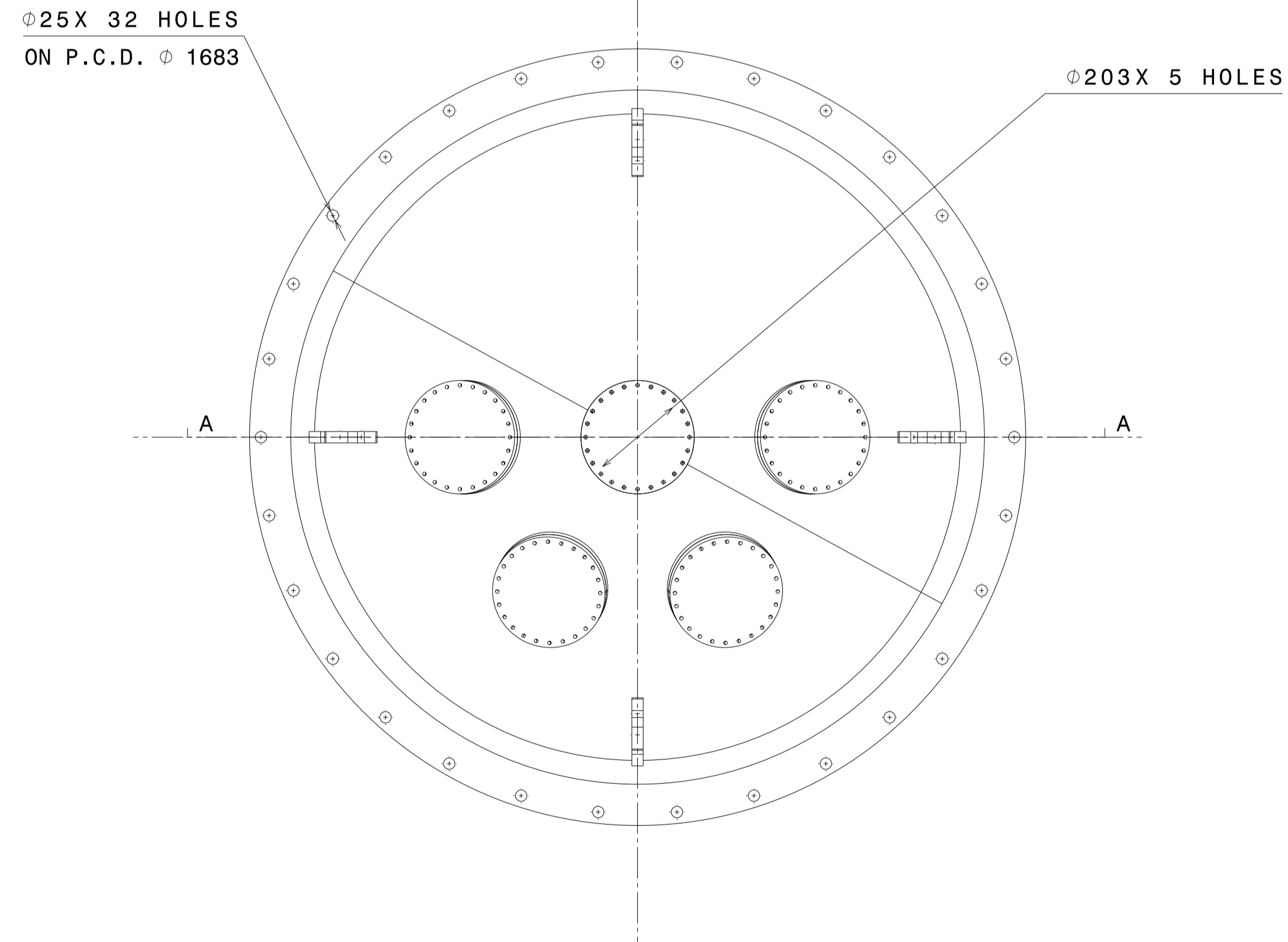
FRONT VIEW



SECTION A-A



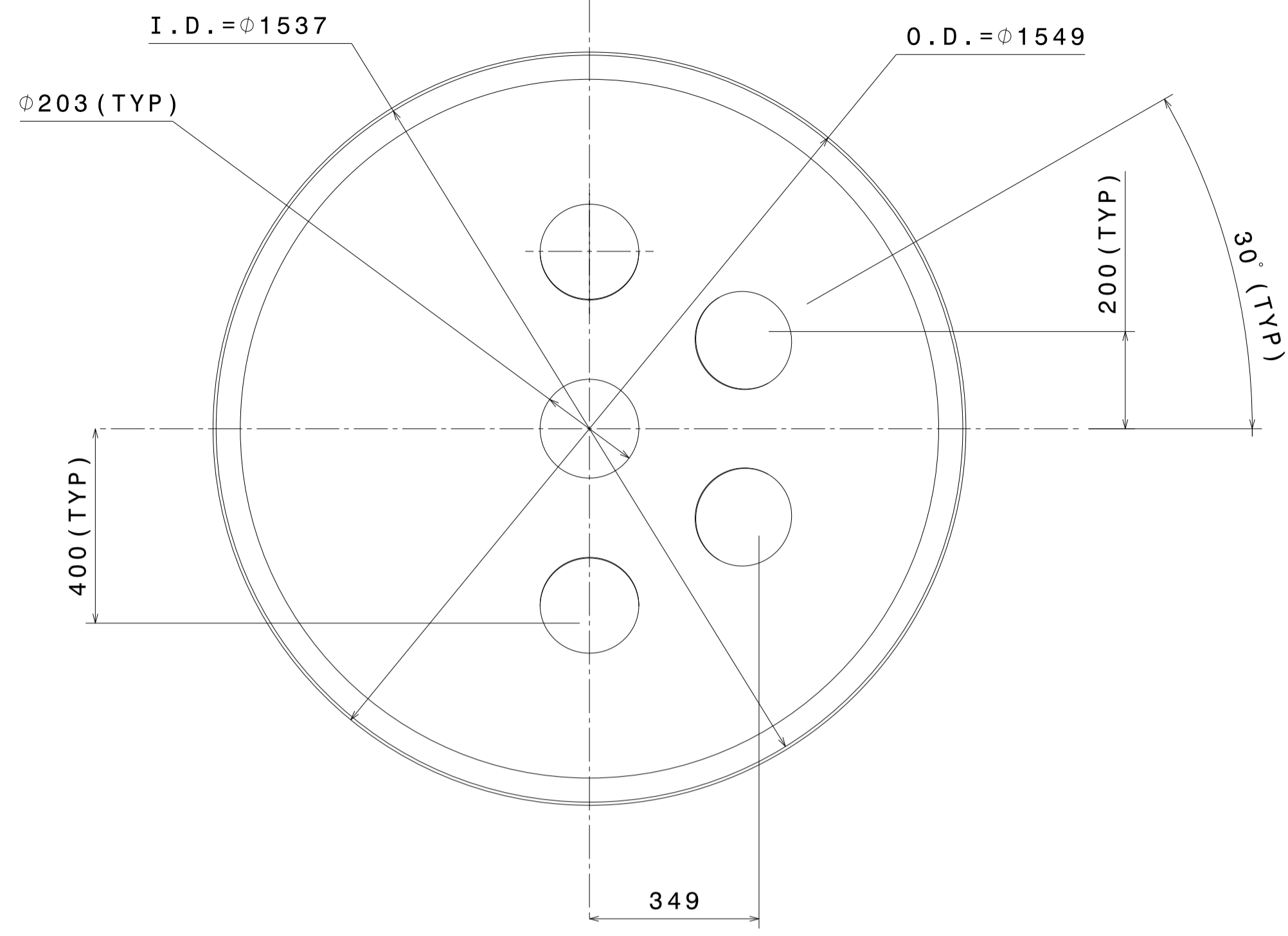
ISOMETRIC VIEW



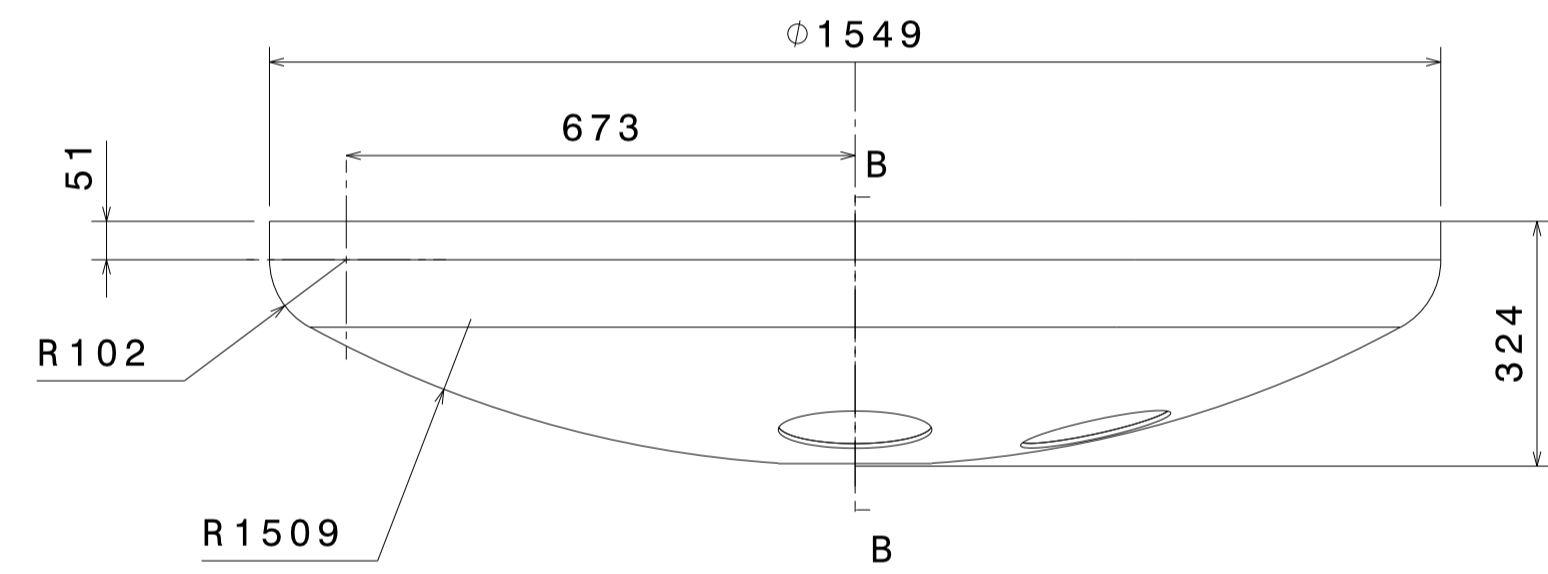
BOTTOM VIEW

③ END COVER TYPE-1

MATERIAL:	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.						
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED						
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:10	DATE	TITLE			
LENGTH IN mm OF SHORTER SIDE OF ANGLES					LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	DRAWN				A.N.N.	09/07/2015	END COVER TYPE-1	
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5	CHECKED				R.K.	REF DRG NO: VB01-001-R1	REV	R1	
+1'	+0'-30'	+0'-20'	+0'-10'						APPROVED				M.K.G.	DRG. NO	VB01-005-R1	SHEET	02 OF 03

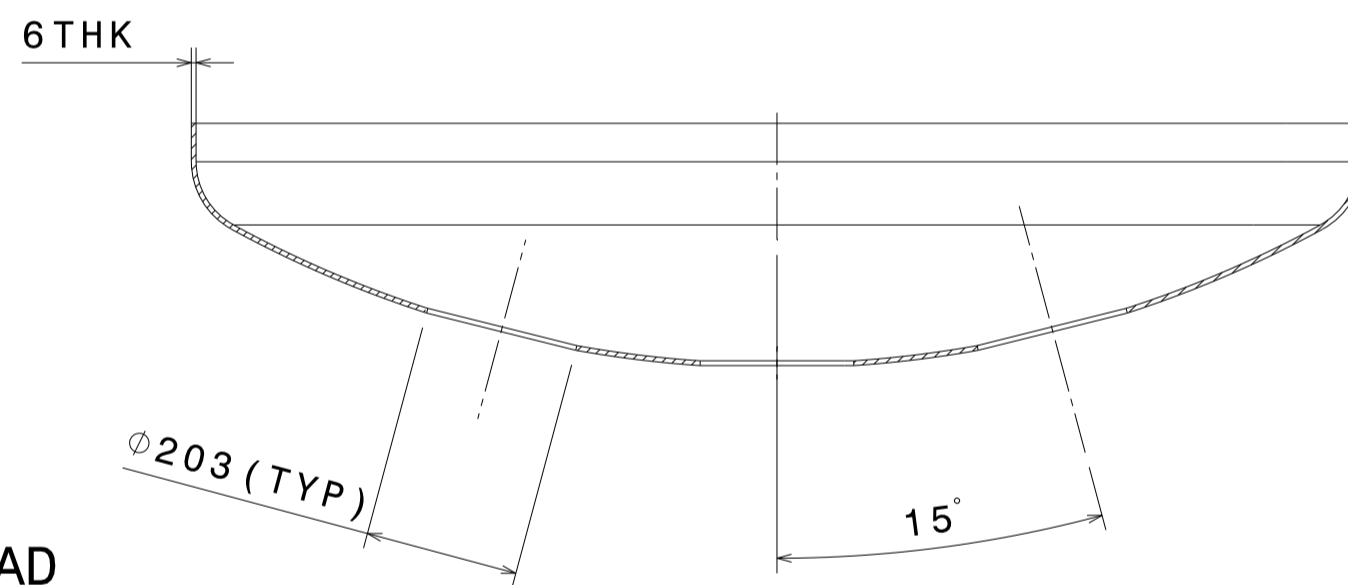


TOP VIEW

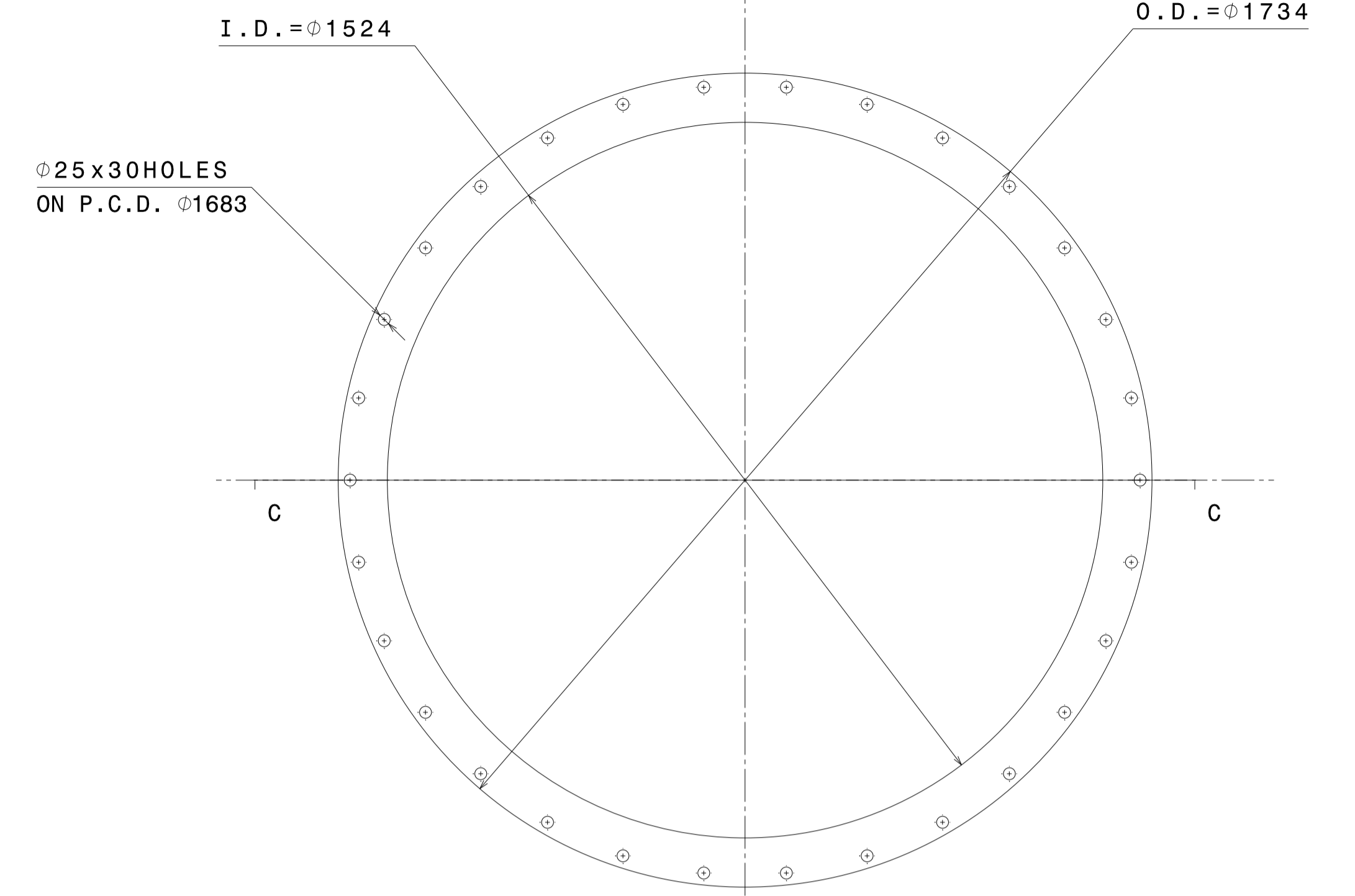


FRONT VIEW

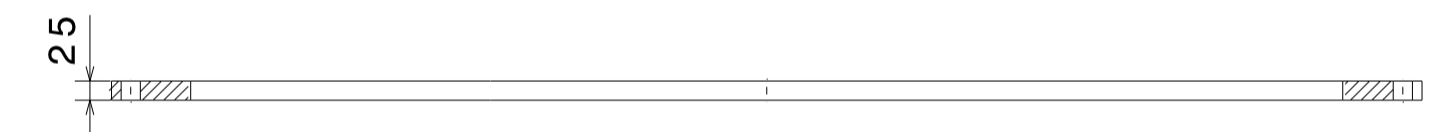
① F & D HEAD
SCALE-1:10



SECTION B-B

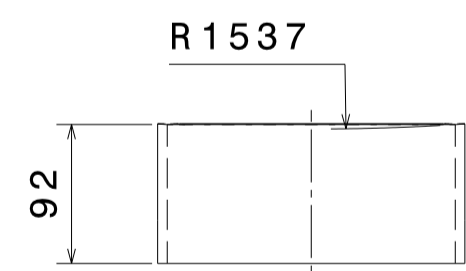


FRONT VIEW

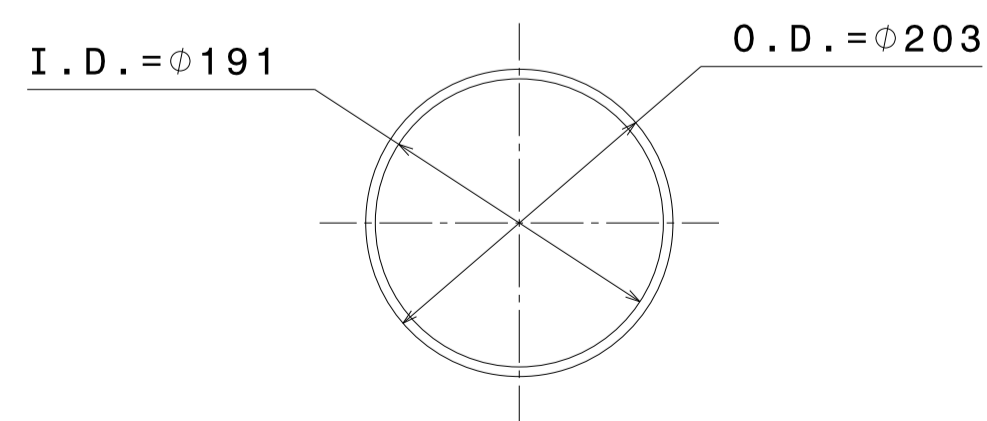


SECTION C-C

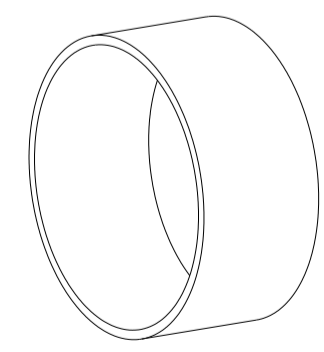
② FLANGE FLAT (60.5" ID)
SCALE-1:10



TOP VIEW

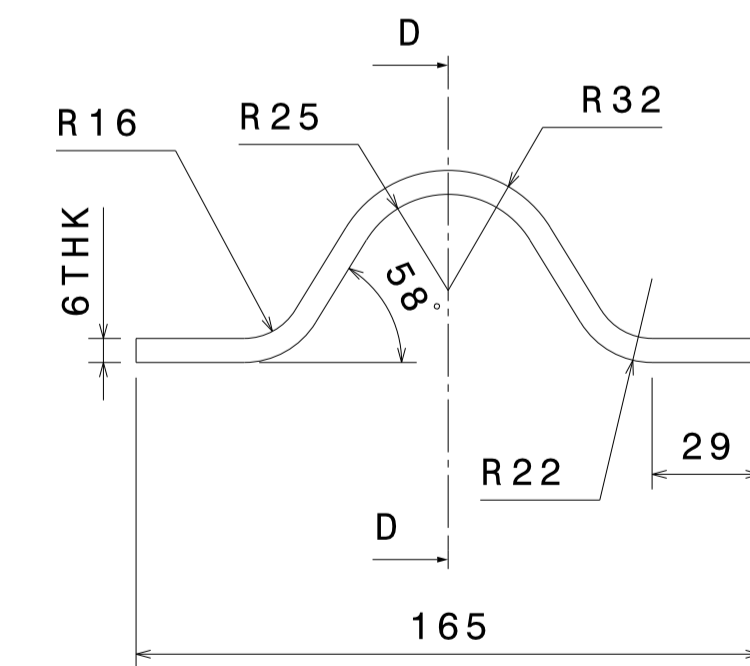


FRONT VIEW

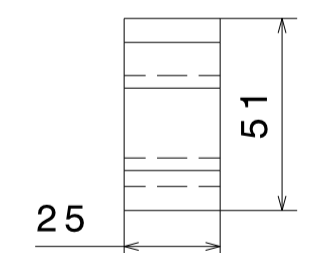


ISOMETRIC VIEW

④ PORT NOZZLE
SCALE-1:5



FRONT VIEW

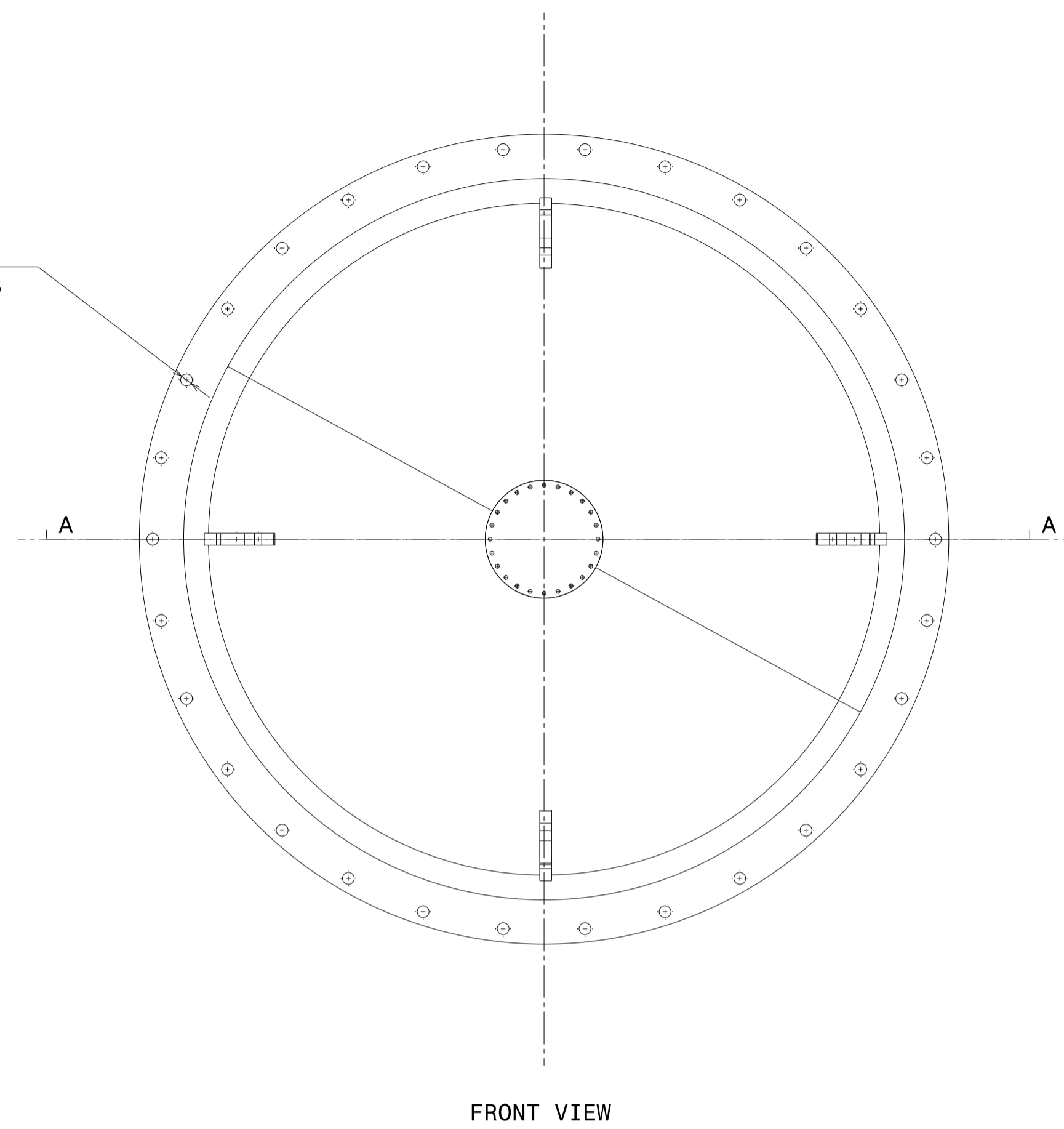


SECTION D-D

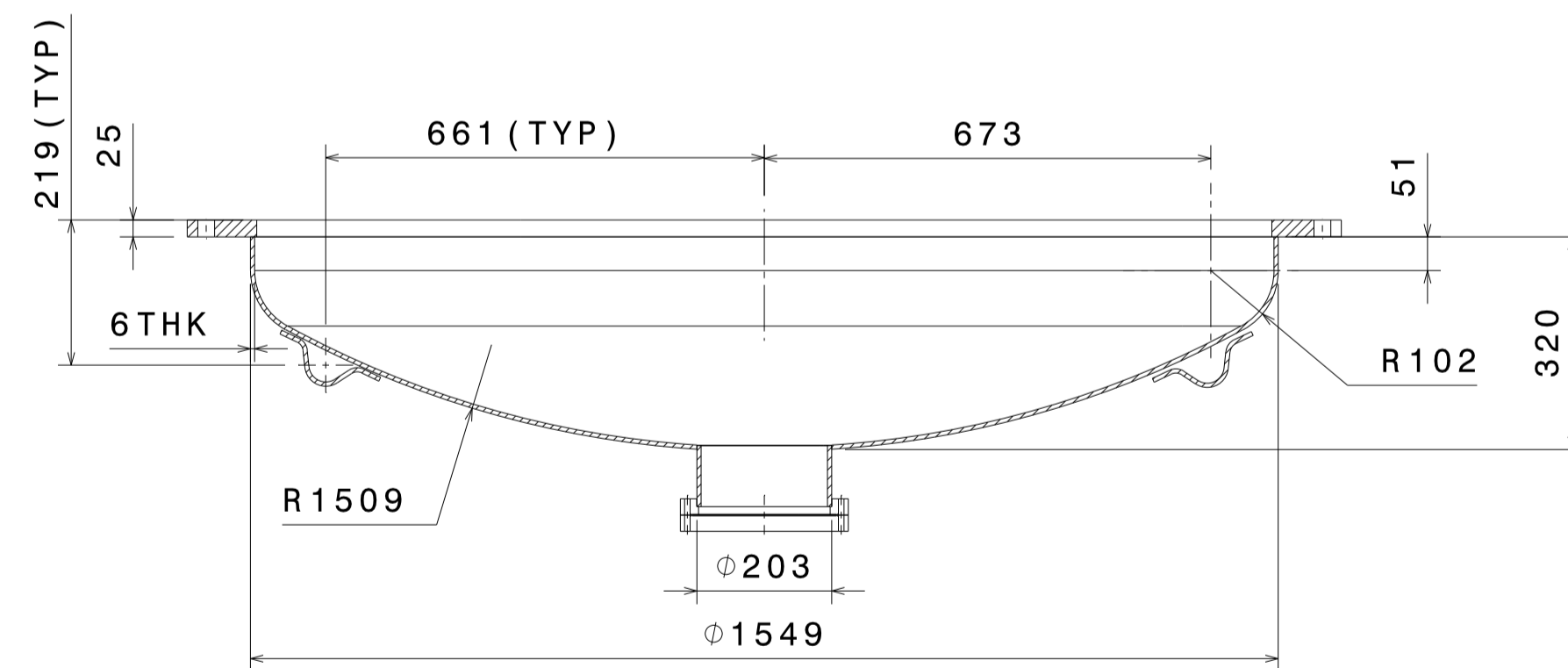
③ LIFTING LUG
SCALE-1:2

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	AS NOTED	DATE	TITLE
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			DRAWN	A. N. N.	09/07/2015	END COVER TYPE-1	
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5			CHECKED	R.K.	REF DRG NO: VB01-001-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'								APPROVED	M.K.G.	DRG. NO	VB01-005-R1	SHEET 03 OF 03

Ø25x30HOLES
ON P.C.D. Ø1683

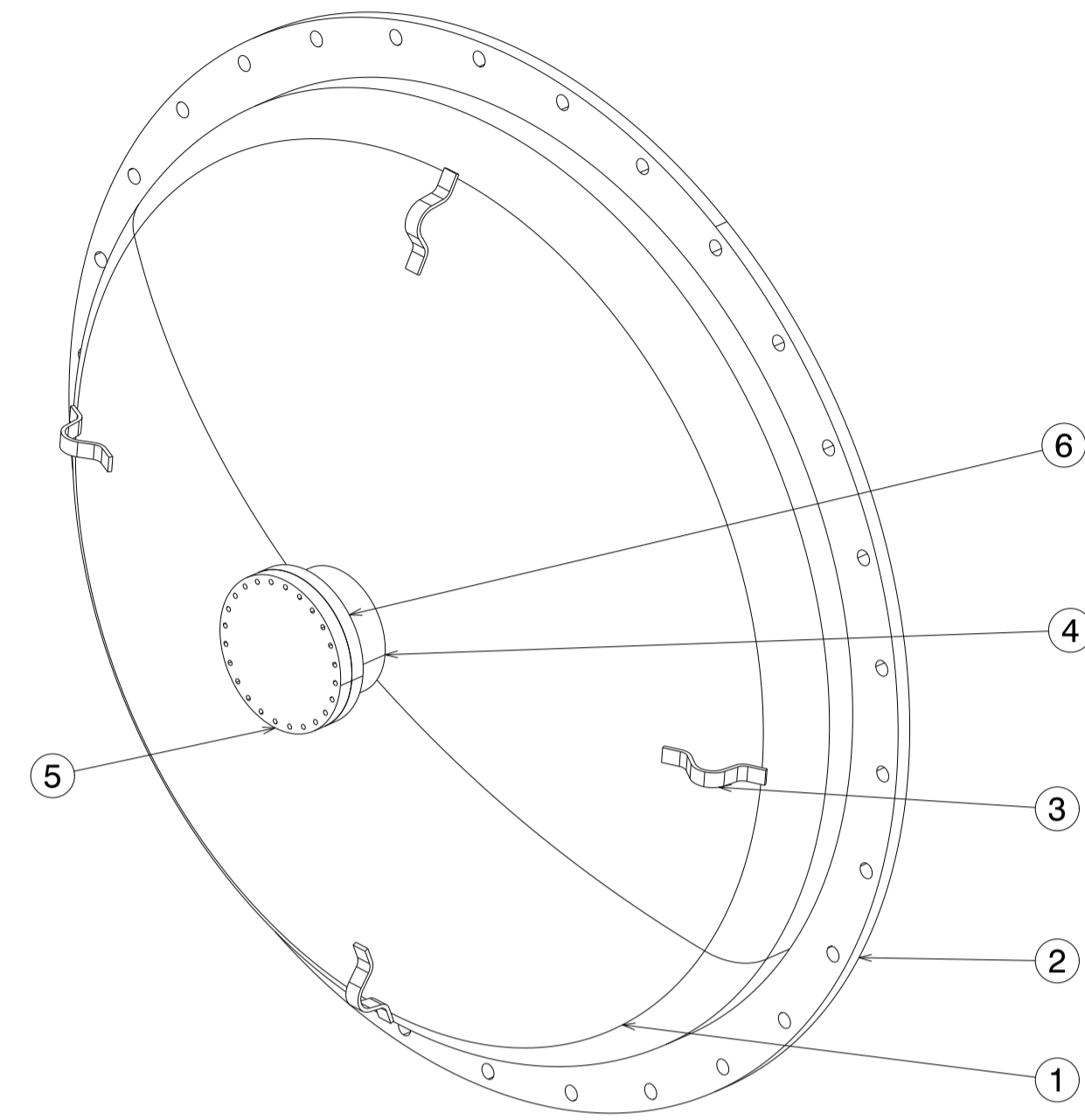


FRONT VIEW



SECTION A-A

④ END COVER TYPE-A11



ISOMETRIC VIEW

PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
6	01	DN 200CF BLANK FLANGE	SS304L	V001-001-R0/SHEET 01	
5	01	DN 200CF COVER FLANGE	SS304L	V001-001-R0/SHEET 01	-
4	01	PORT NOZZLE	SS304L	VB01-005-R1/SHEET 03	-
3	04	LIFTING LUG	SS304L	VB01-005-R1/SHEET 03	-
2	01	FLANGE FLAT (60.5" ID)	SS304L	VB01-005-R1/SHEET 03	-
1	01	F & D HEAD	SS304L	VB01-006-R1/SHEET 01	

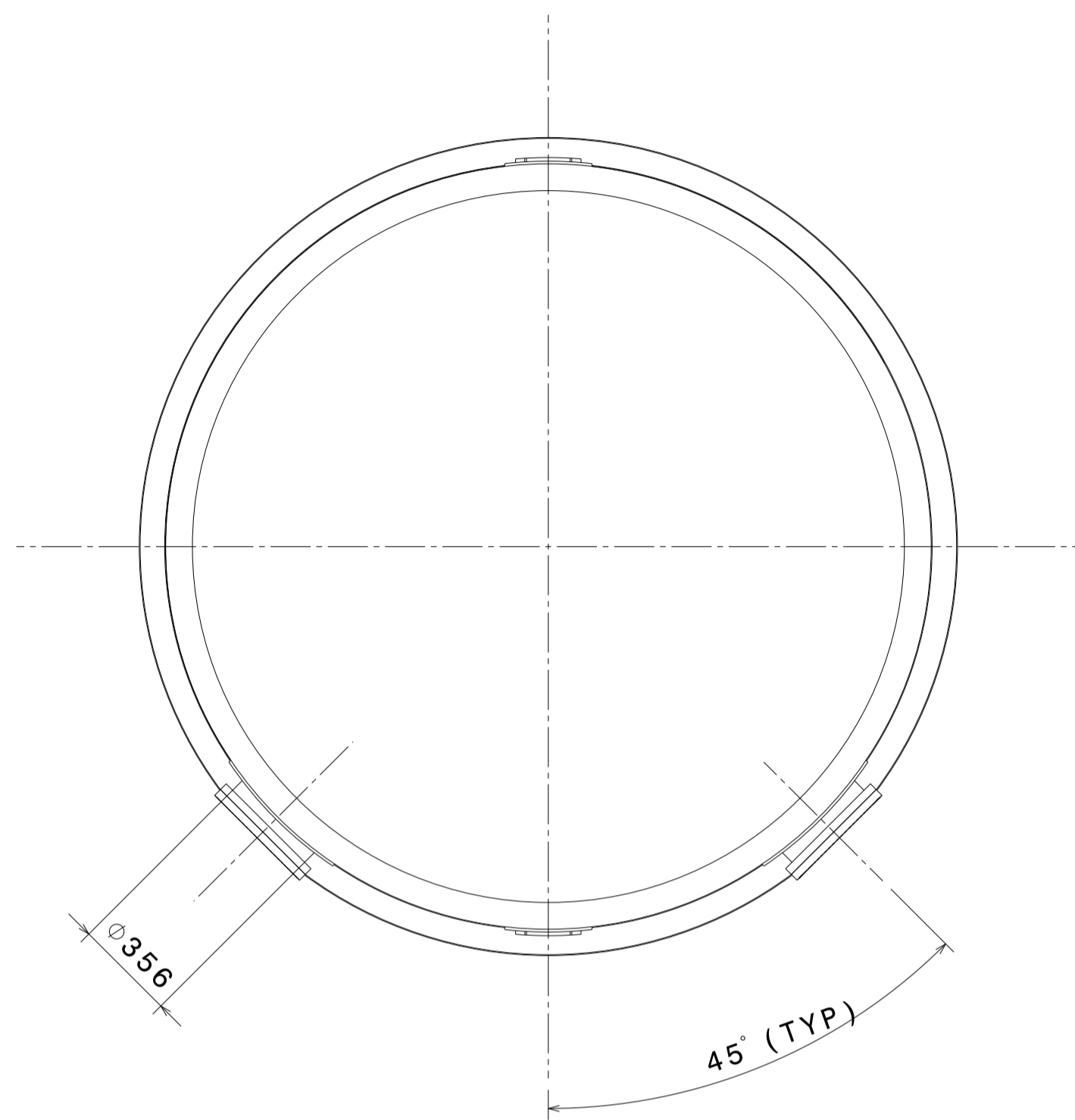
MATERIAL:		REVISION COLUMN				MED	SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)					
▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS													
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	SCALE	DATE			
UPTO 10	10-50	50-120	OVER 120-400						DRAWN	A.N.N.			
+1'	+0'-30'	+0'-20'	+0'-10'						CHECKED	R.K.			
									APPROVED	M.K.G.			
<table border="0" style="width:100%"> <tr> <td>REF DRG NO: VB01-001-R1</td> <td>REV R1</td> </tr> <tr> <td>DRG. NO VB01-006-R1</td> <td>SHEET 01 OF 01</td> </tr> </table>										REF DRG NO: VB01-001-R1	REV R1	DRG. NO VB01-006-R1	SHEET 01 OF 01
REF DRG NO: VB01-001-R1	REV R1												
DRG. NO VB01-006-R1	SHEET 01 OF 01												

INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)
BHAT, GANDHINAGAR-382 428.

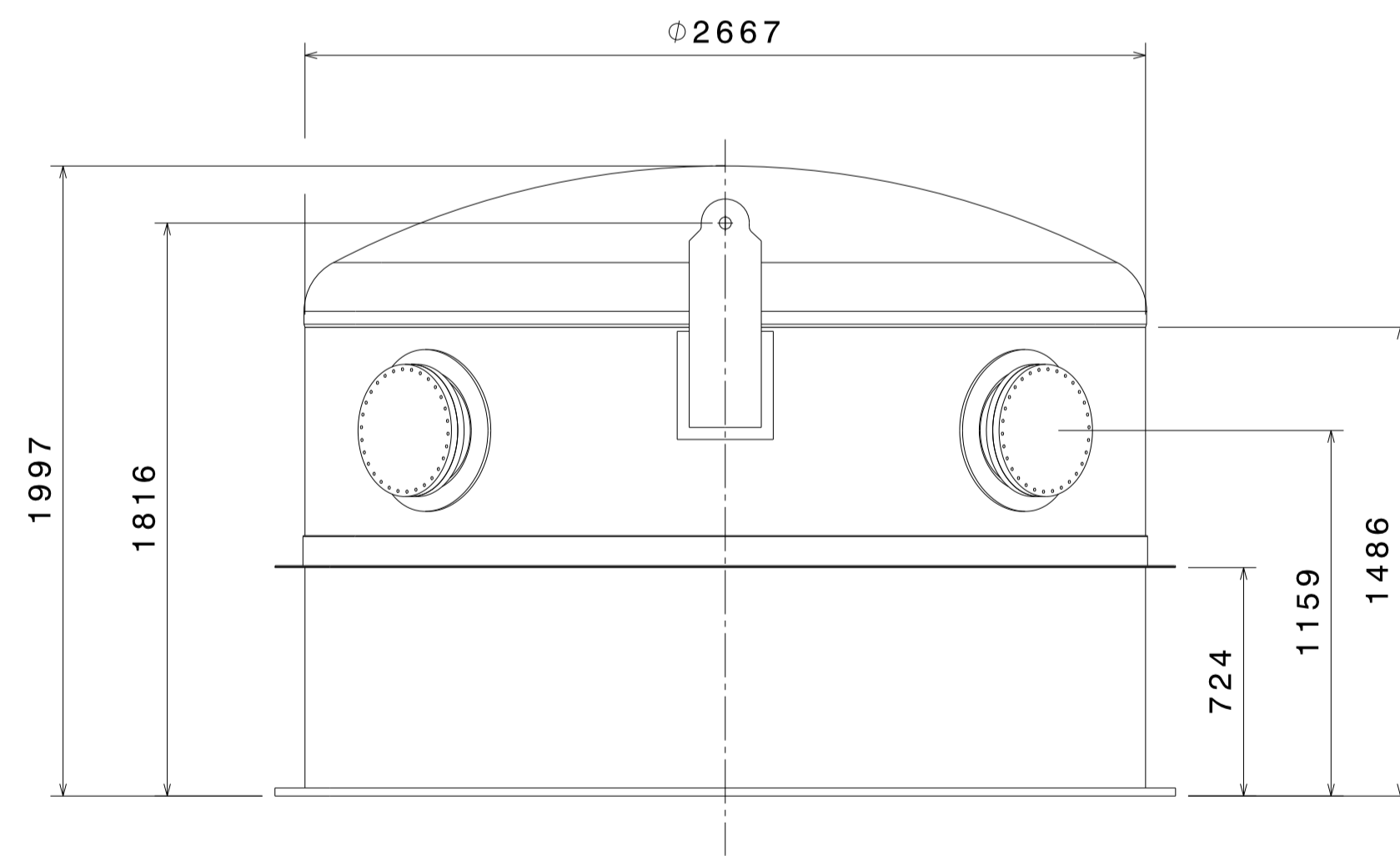
TITLE: END COVER TYPE-A11

REF DRG NO: VB01-001-R1
REV R1

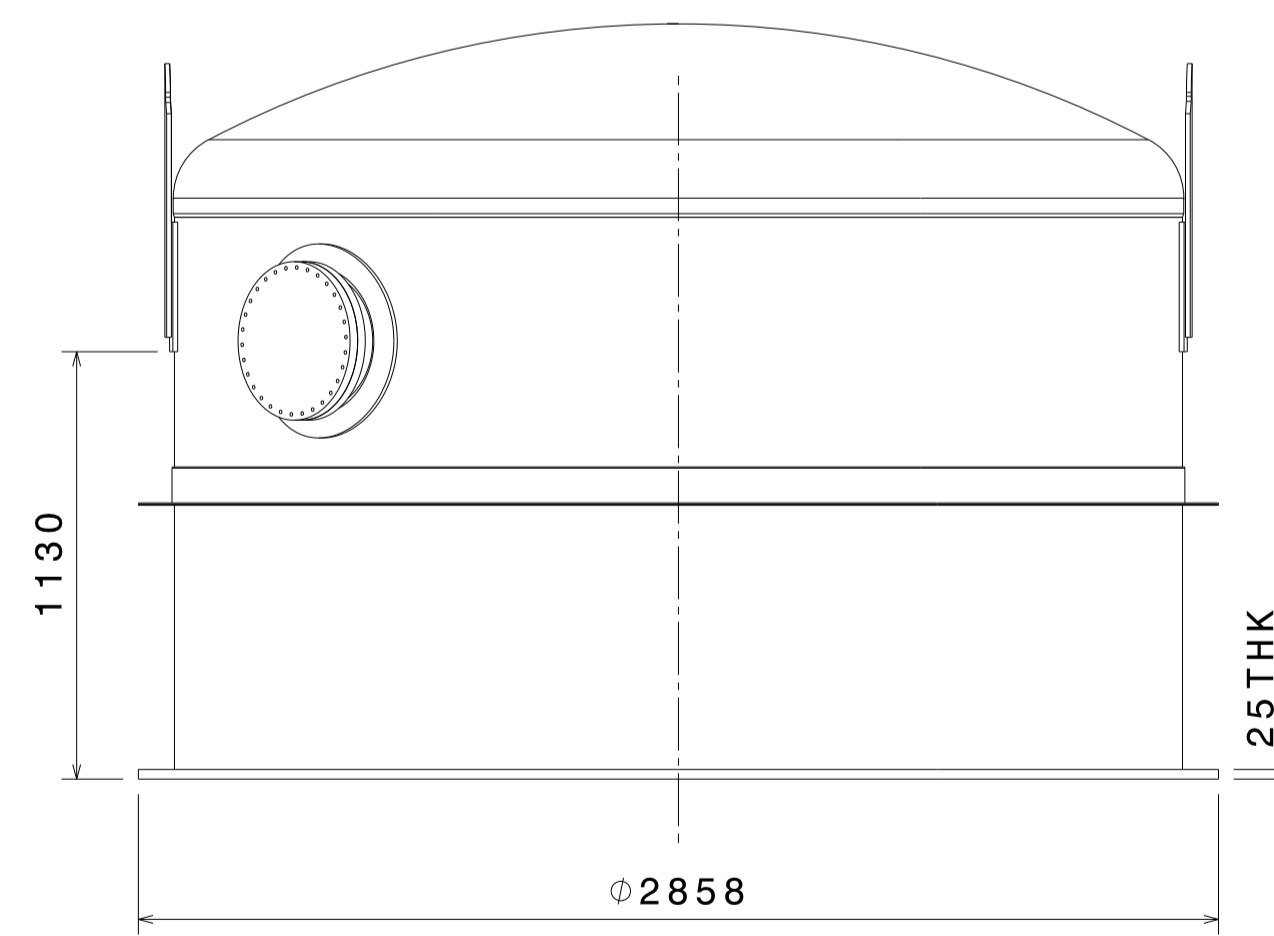
DRG. NO VB01-006-R1
SHEET 01 OF 01



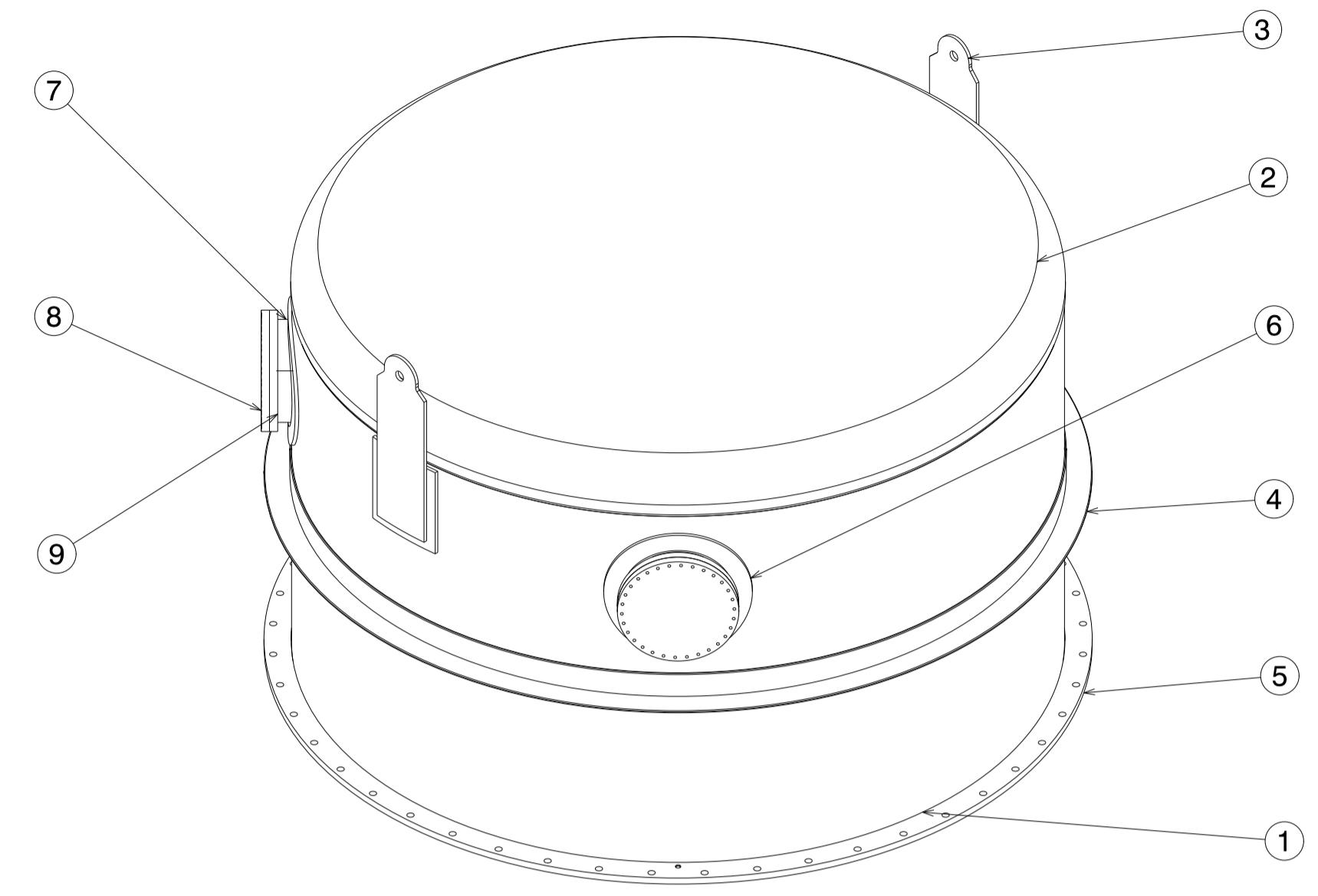
TOP VIEW



FRONT VIEW



SIDE VIEW



ISOMETRIC VIEW

PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
9	02	CUSTOM CF BLANK FLANGE (16 1/2")	SS304L	V001-001-R0/SHEET 04	
8	02	CUSTOM CF COVER FLANGE (16 1/2")	SS304L	V001-001-R0/SHEET 04	-
7	02	PORT NOZZLE	SS304L	VB01-007-R1/SHEET 03	-
6	02	RING NOZZLE	SS304L	VB01-007-R1/SHEET 03	-
5	01	FLANGE FLAT (104.5" ID)	SS304L	VB01-007-R1/SHEET 03	-
4	01	STIFFENER	SS304L	VB01-007-R1/SHEET 03	-
3	02	LIFTING LUG	SS304L	VB01-007-R1/SHEET 03	-
2	01	UPPER F & D HEAD	SS304L	VB01-007-R1/SHEET 02	-
1	01	CYLINDRICAL SHELL	SS304L	VB01-007-R1/SHEET 02	-

5 UPPER PART

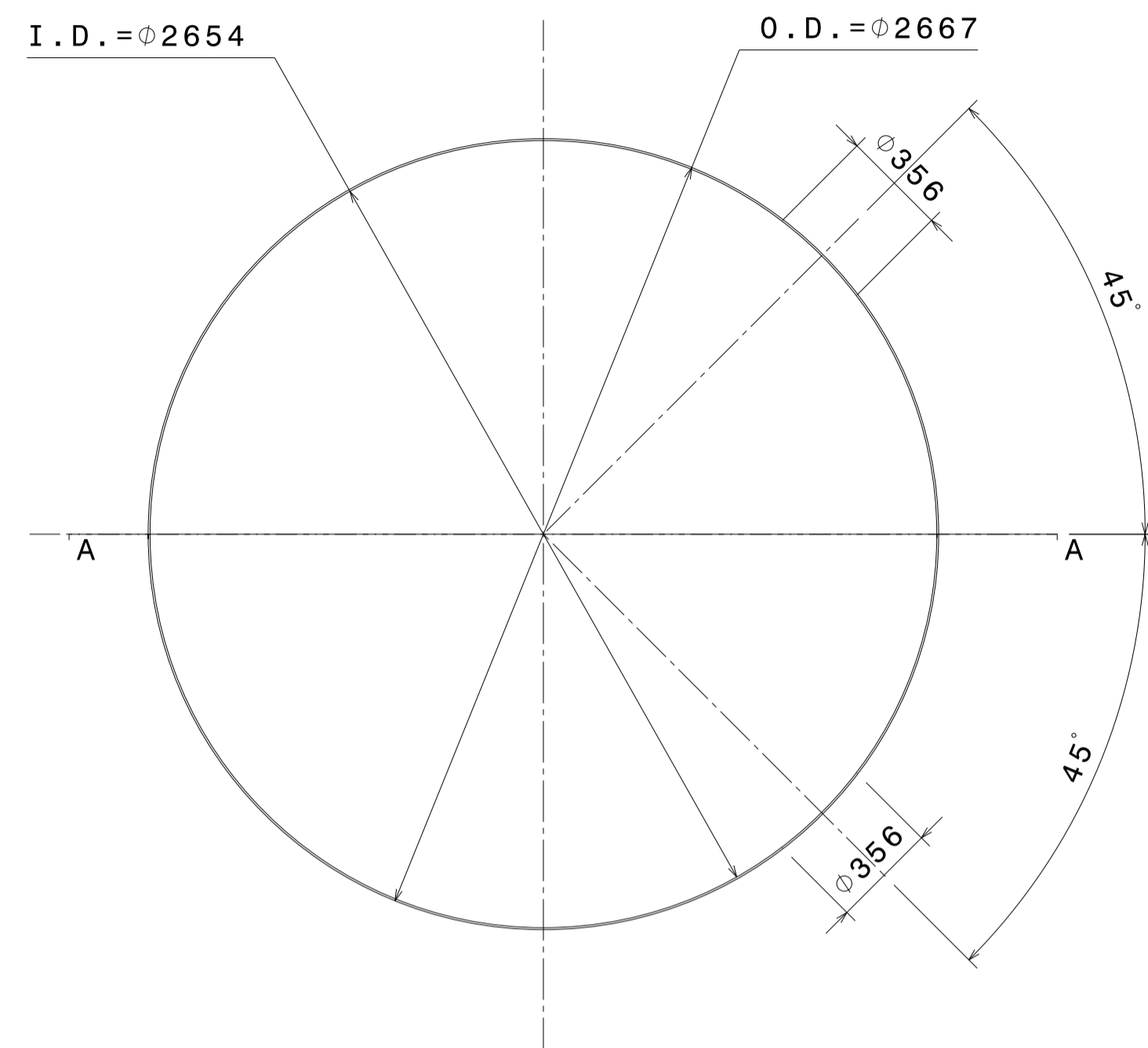
MATERIAL:		REVISION COLUMN				MED		SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)	
CO-ORDINATED BY		REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	A1	BHAT, GANDHINAGAR-382 428.	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS										
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA	UPTO 6	6-30	30-120	120-315	SCALE	1:20	DATE	TITLE
UPTO 10	10-50	50-120	OVER 120-400				DRAWN	A. N. N.	12/07/2015	UPPER PART
+1'	+0'-30'	+0'-20'	+0'-10'				CHECKED	R.K.		REF DRG NO: VB01-001-R1
							APPROVED	M.K.G.		REV R1
									DRG. NO	SHEET 01 OF 03



INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA)
BHAT, GANDHINAGAR-382 428.

TITLE
UPPER PART

REF DRG NO: VB01-001-R1
REV R1
SHEET 01 OF 03

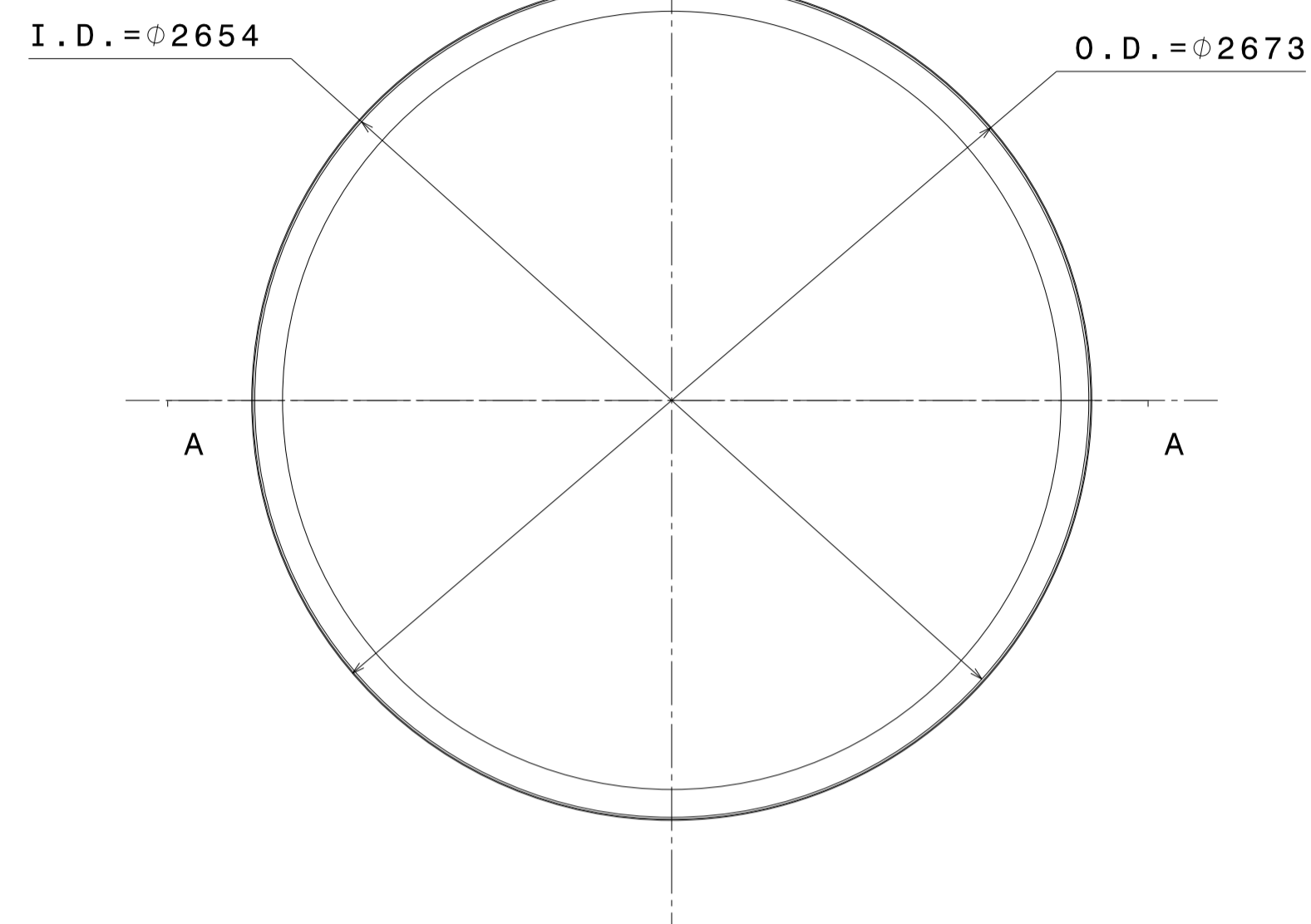


FRONT VIEW

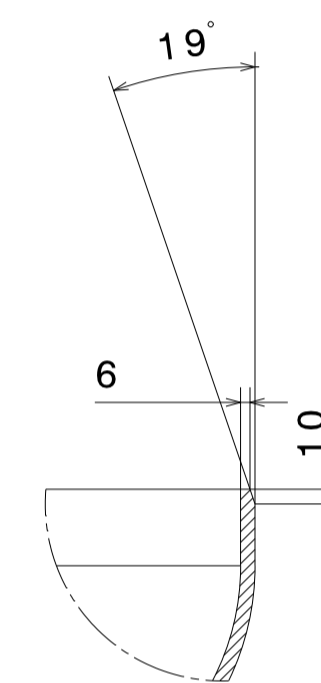


SECTION A-A

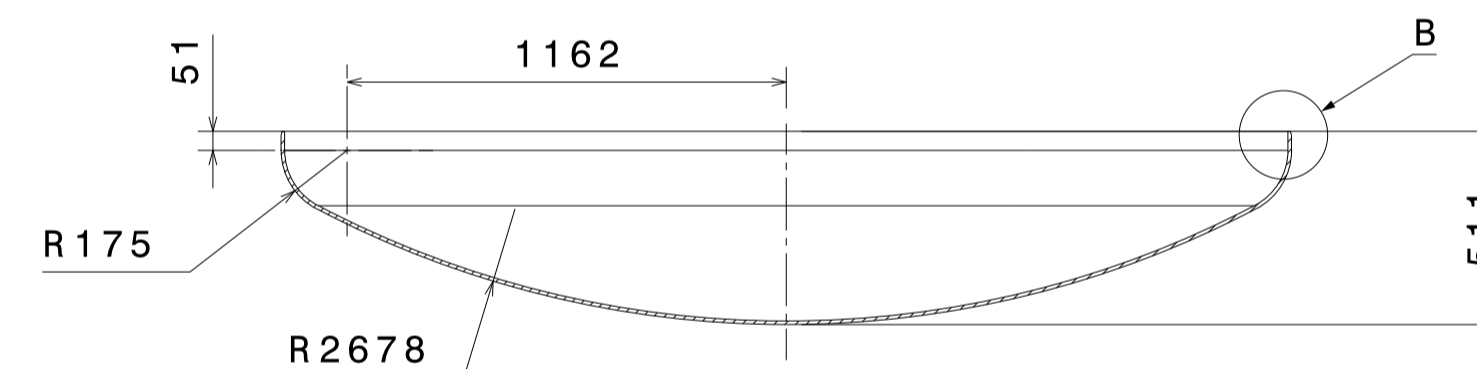
① CYLINDRICAL SHELL



FRONT VIEW



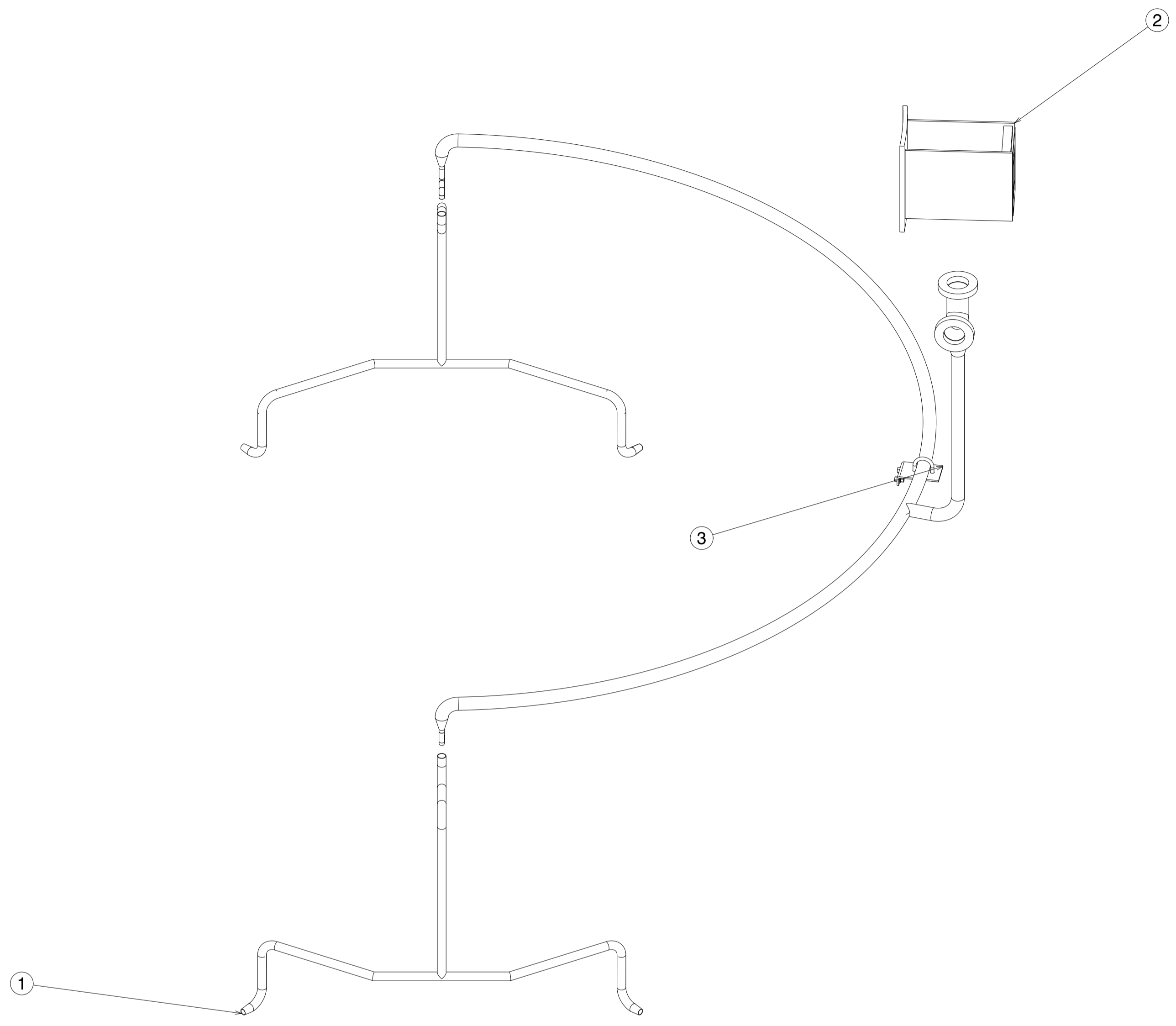
DETAIL VIEW-B
SCALE-1:5



SECTION A-A

② UPPER F & D HEAD

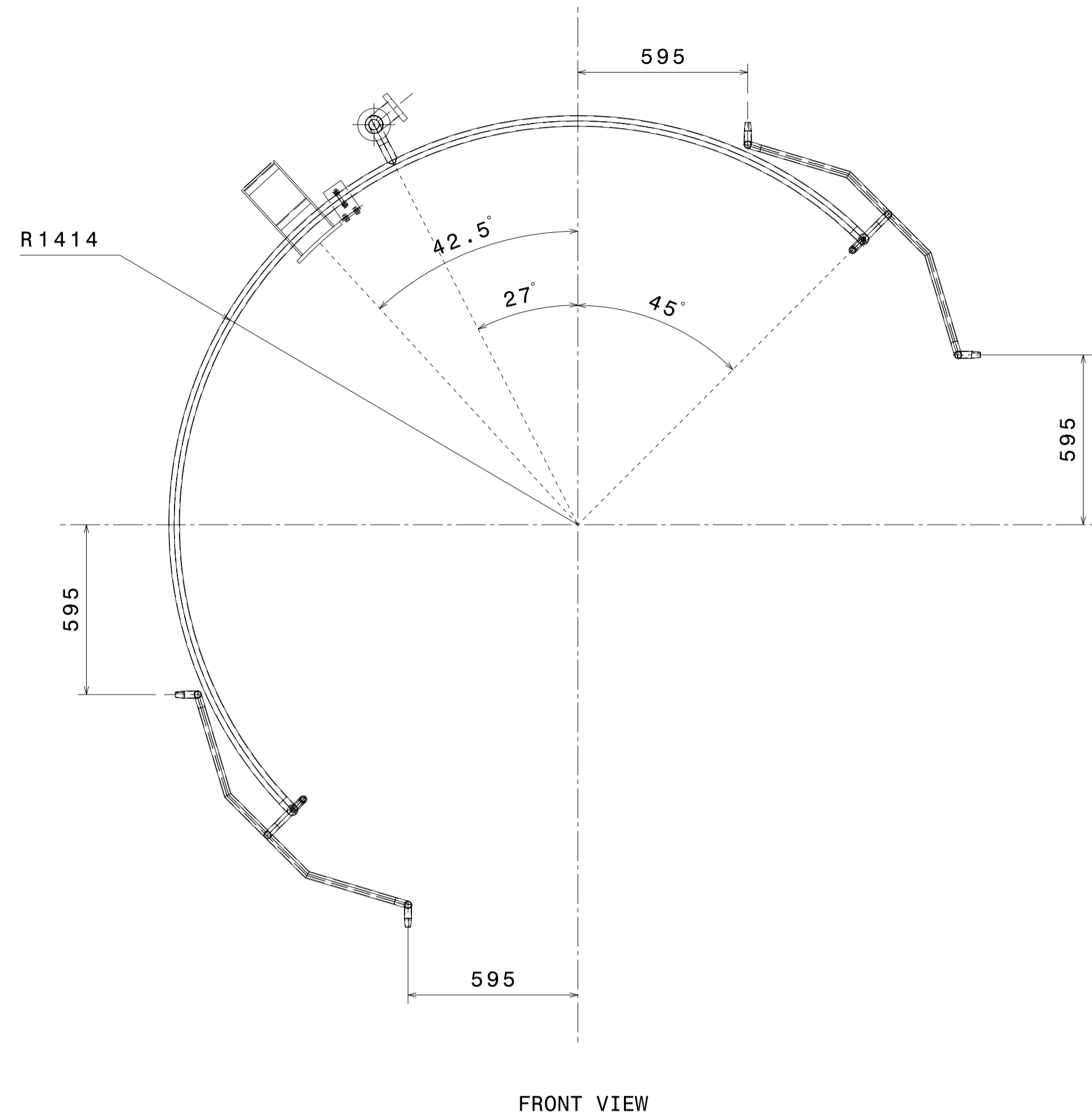
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS															
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			SCALE	1:20	DATE	TITLE	
UPTO 10	10-50	50-120	OVER 120-400								DRAWN	A.N.N.	12/07/2019	UPPER PART	
+1'	+0'-30'	+0'-20'	+0'-10'		+0.1	+0.2	+0.3	+0.5			CHECKED	R.K.	REF DRG NO: VB01-001-R1	REV R1	
											APPROVED	M.K.G.	DRG. NO	VB01-007-R1	SHEET 02 OF 03



⑥ ANNULUS TUBING ASSEMBLY

PART NO.	QUANTITY	PART NAME	MATERIAL	REF. DWG. NO.	REMARK
3	01	ANNULUS TUBE SUPPORT	SS304L	VB01-008-R1/SHEET 02	-
2	01	75 I/S ION PUMP SUPPORT	SS304L	VB01-008-R1/SHEET 02	-
1	01	TUBING ASSEMBLY	SS304L	VB01-008-R1/SHEET 02	-

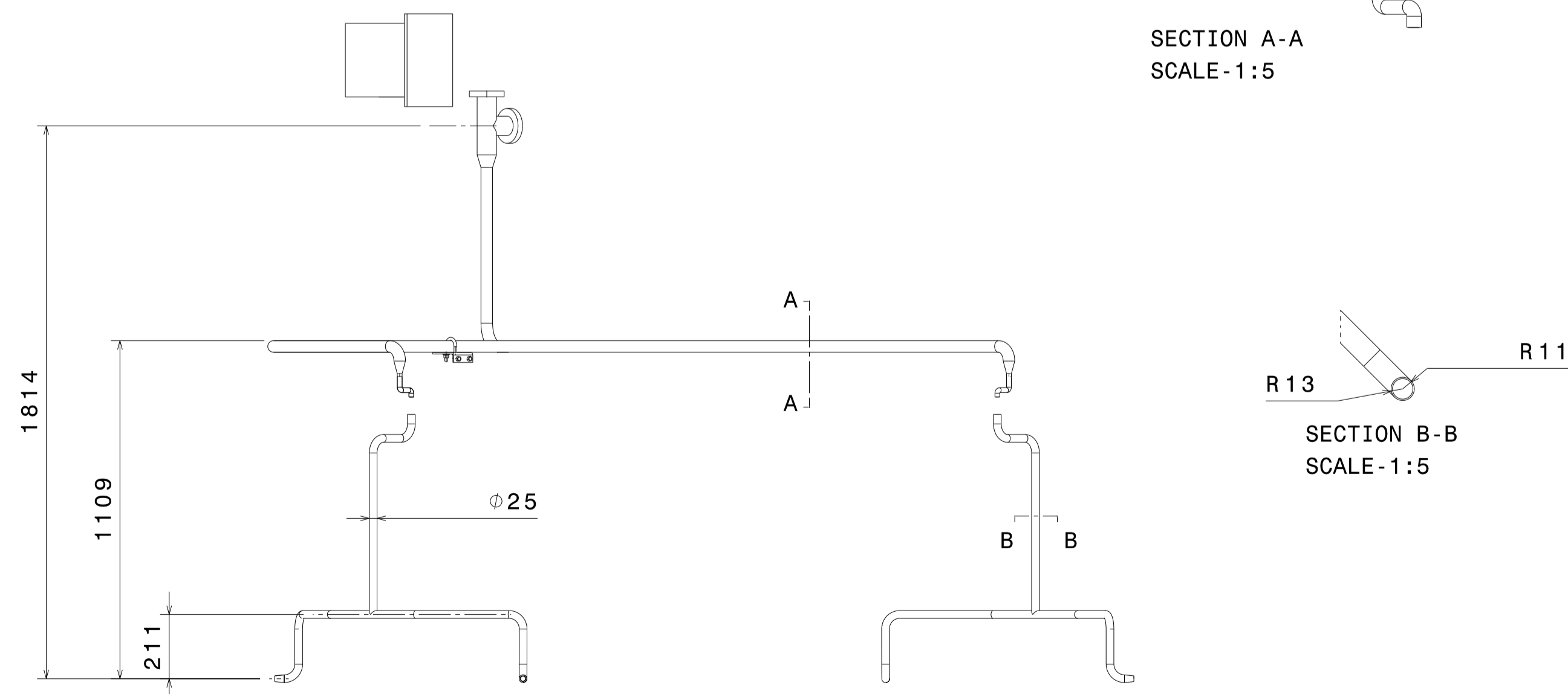
MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					MED	SIZE	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.		
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN mm* UNLESS OTHERWISE STATED		TITLE	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS															
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315							
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5	SCALE	1:10	DATE	13/07/2019	REF DRG NO:	VB01-001-R1	REV R1
±1'	+0'-30'	+0'-20'	+0'-10'						DRAWN	A.N.N.		DRG. NO	VB01-008-R1	SHEET 01 OF 02	
											CHECKED	R.K.	APPROVED	M.K.G.	



FRONT VIEW

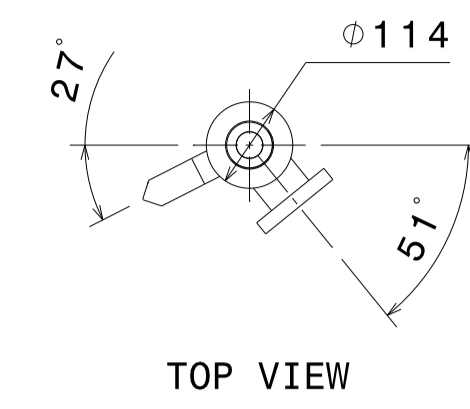


SECTION A-A
SCALE-1:5

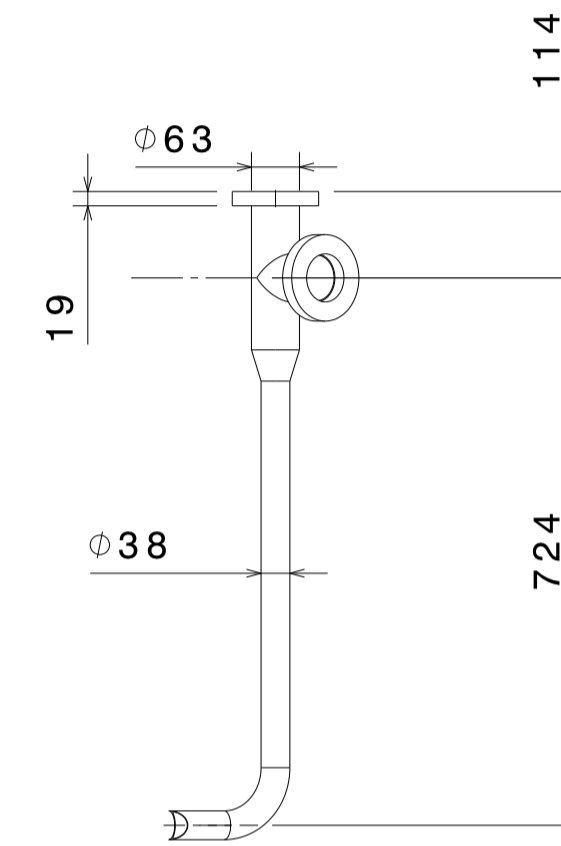


BOTTOM VIEW

① TUBING ASSEMBLY
SCALE-1:15

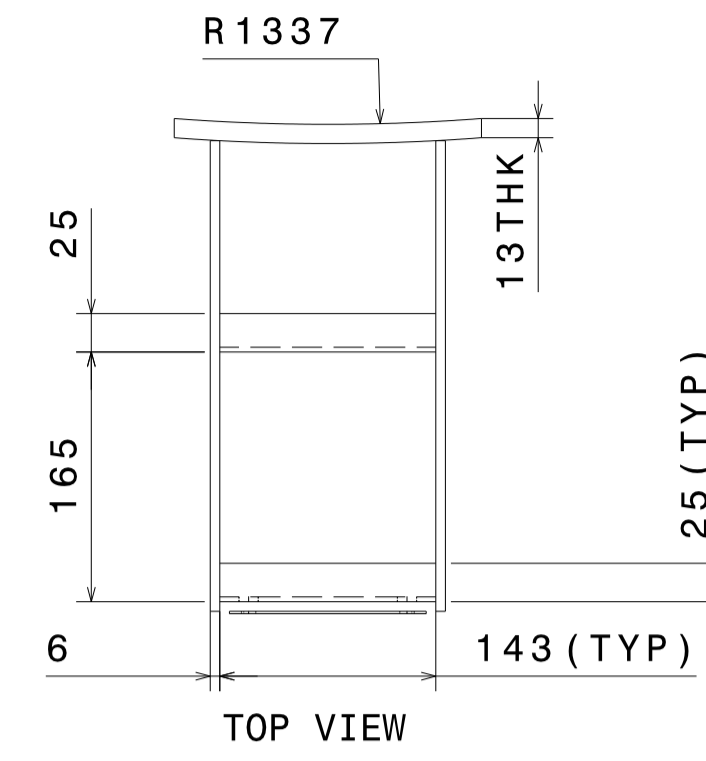


TOP VIEW

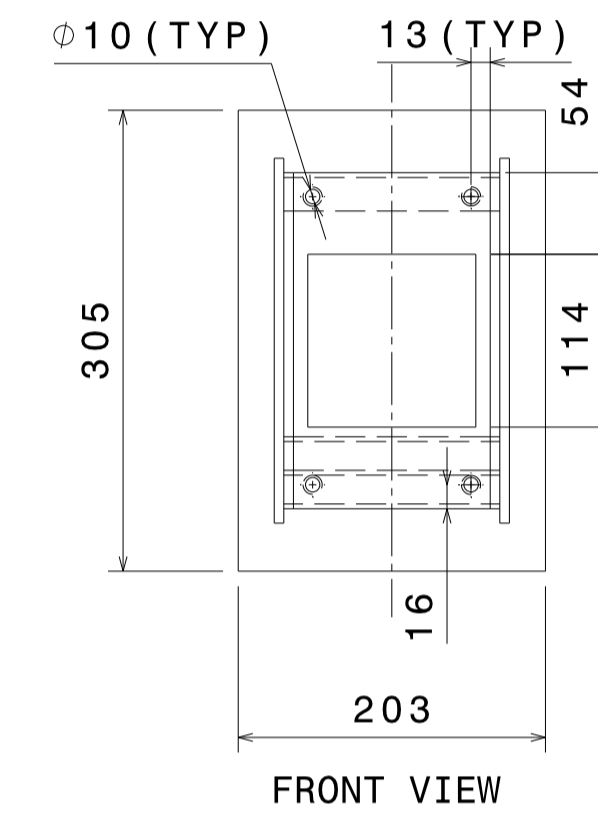


FRONT VIEW

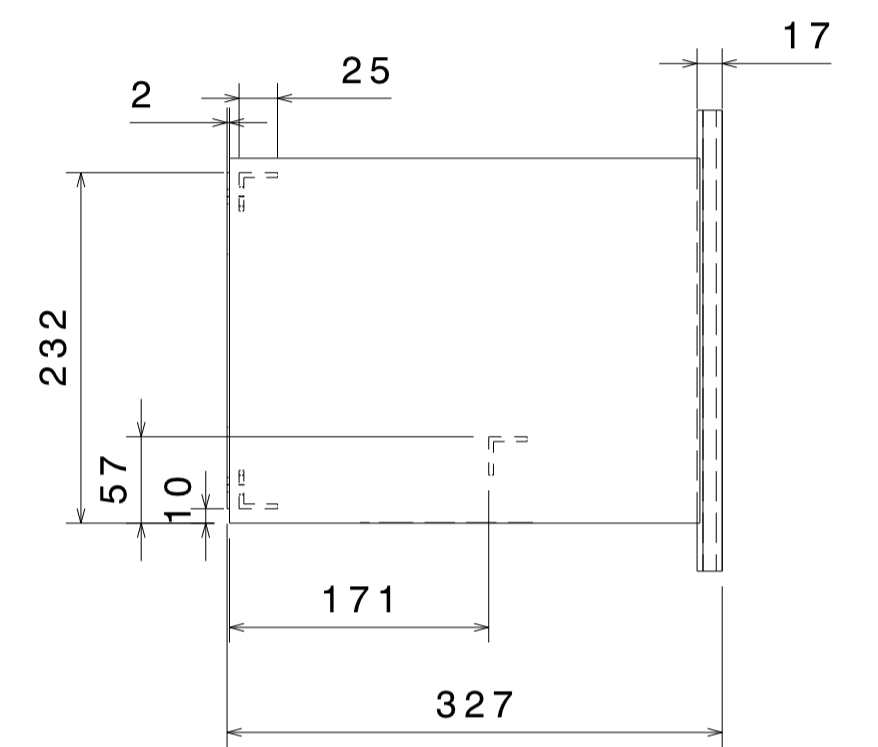
PIPE



TOP VIEW



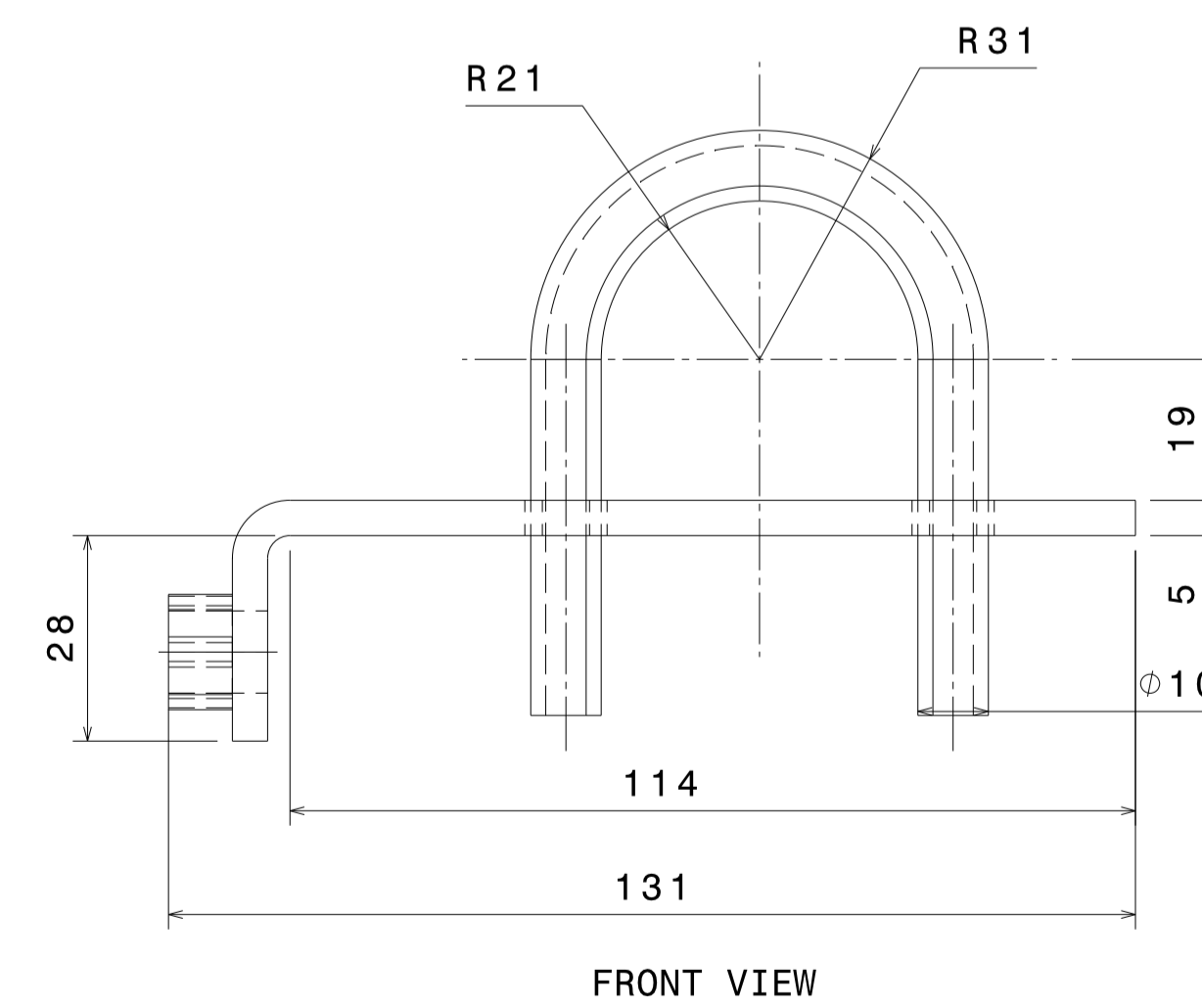
FRONT VIEW



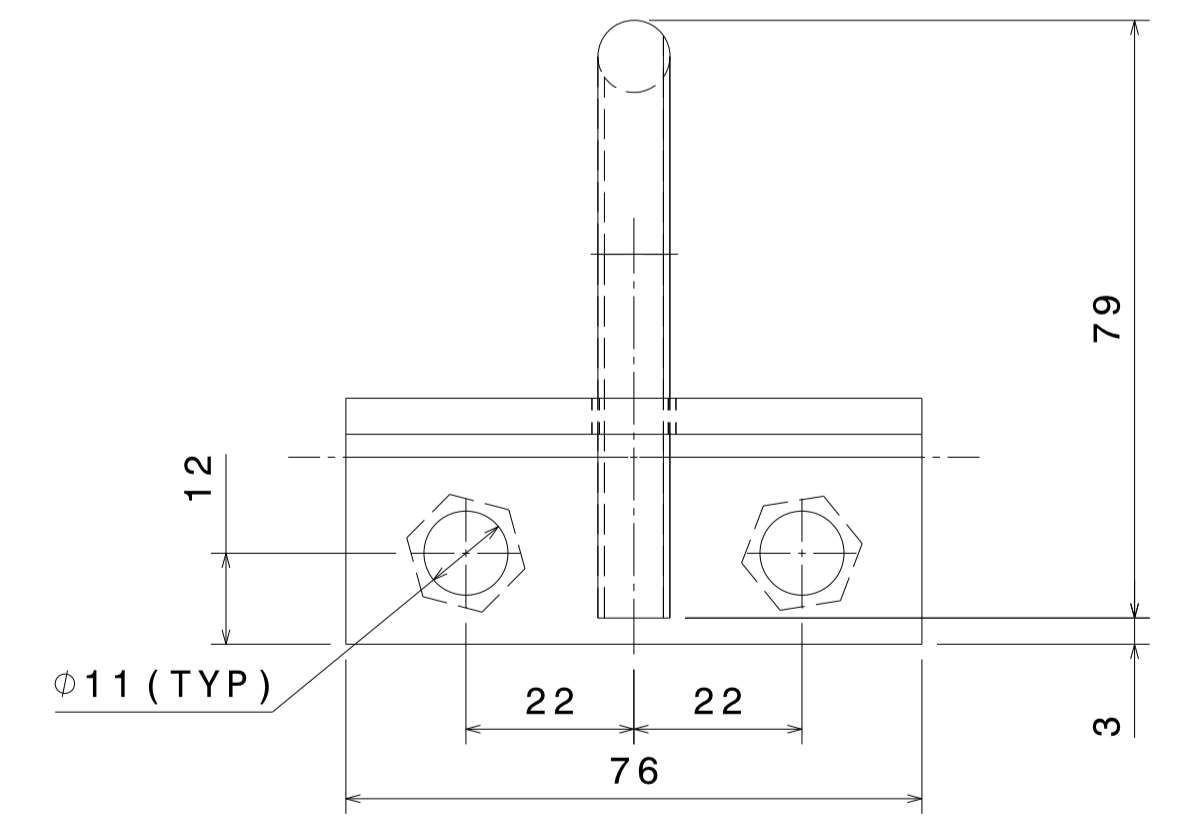
SIDE VIEW

SUPPORT

② 75 I/S ION PUMP SUPPORT
SCALE-1:5



FRONT VIEW



SIDE VIEW

③ ANNULUS TUBE SUPPORT
SCALE-1:1

MATERIAL:		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				MED	SIZE A1	INSTITUTE FOR PLASMA RESEARCH (LIGO-INDIA) BHAT, GANDHINAGAR-382 428.					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED BY	ALL DIMENSIONS ARE IN "mm" UNLESS OTHERWISE STATED					
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE AS NOTED		DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES		LENGTH OR DIA		UPTO 6	6-30	30-120	120-315					DRAWN	A. N. N.	13/07/2015	ANNULUS TUBING ASSEMBLY		
UPTO 10	10-50	50-120	OVER 120-400		±0.1	±0.2	±0.3	±0.5					CHECKED	R. K.	REF DRG NO: VB01-001-R1	REV R1	
+1'	+0'-30'	+0'-20'	+0'-10'										APPROVED	M. K. G.	DRG. NO	VB01-008-R1	SHEET 02 OF 02