

NOTE:

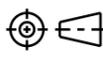
1. LENGTH OF THIS COMPONENT HAS BEEN MACHINED AFTER WELDING AND LEAK CHECKING,SO DO NOT MACHINE OR GRIND THIS SURFACES.
2. OVER ALL SURFACE FINISH: N5-N6 GRADE/Ra- 0.4-0.8 μ m.
3. NO SCRATCH OR DENT IS TOLERABLE ANY WHERE.
4. PROFILE OF EVERY VANE CURVE IS DIFFERENT.
5. R14.82 ON THE PROFILE IS CONSTANT THROUGH OUT.
6. ALL THE DIMENSIONS HAVE TO BE MACHINED FROM REFERENCE LINE (BEAM AXIS) AND DOWEL HOLES.
7. TO GET THE DIMENSIONAL AND POSITIONAL ACCURACY OF 0.02MM, THE DOWEL HOLES SHOULD BE MADE IN THE LAST EITHER BY JIG BORING OR JIG GRINDING.NO REAMING.

SPECIAL NOTE:
POSITIONAL TOLERANCE OF DOWEL HOLES: 0.020MM AND OTHER HOLES: 0.1MM

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					RFQ GROUP:			 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)		
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			TITLE	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:1	DATE	VER. ROD UPPER SEGMENT 5-PROTOTYPE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			DRAWN	K.R.R.	11.01.18	REF DRG NO:	REV 0
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5			CHECKED	PKC		DRG.NO	SHEET 1 OF 1
+1°	+0°-30'	+0°-20'	+0°-10'							APPROVED	JMK		IPR/17/A3/RFQ/19020035		

BILL OF MATERIALS

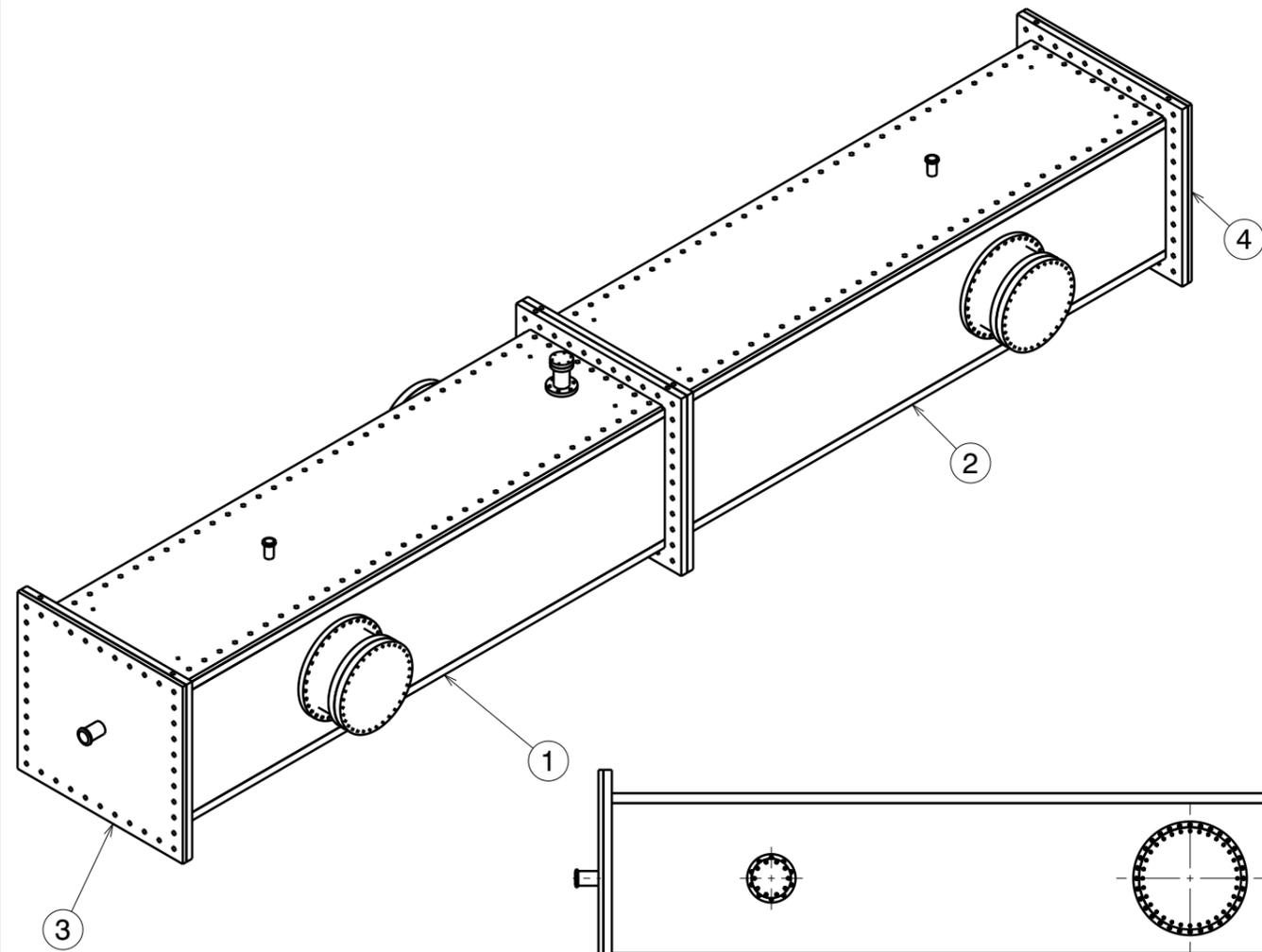
ITEM NO	PART NAME	MATERIAL	DESCRIPTION	QTY	ITEM NO	PART NAME	MATERIAL	DESCRIPTION	QTY
01	BASE PLATE -1	AS PER DWG.	DRG.#19020003	01	29	TOP PLATE		19030020	02
02	BASE PLATE -2	AS PER DWG.	DRG.#19020004	01	30	TOP PLATE COVER -1		19030023	01
03	STEM -1	AS PER DWG.	DRG.#19020007	08	31	TOP PLATE COVER -2		19030024	01
04	STEM -2	AS PER DWG.	DRG.#19020008	02	32	KF25 PORT		19030025	02
05	STEM -3	AS PER DWG.	DRG.#19020009	02	33	CF 40 PORT		19030026	01
06	HOR. ROD LEFT SEGMENT (1TO 6)	AS PER DWG.	DRG.#19020011 TO DRG.#19020016	06	34	DN250 VACUUM PORT		19030027	03
07	HOR. ROD RIGHT SEGMENT (1TO 6)	AS PER DWG.	DRG.#19020017 TO DRG.#19020022	06	35	DN 75 RF PORT		19030028	01
08	VER. ROD LOWER SEGMENT (1 TO6)	AS PER DWG.	DRG.#19020023 TO DRG.#19020027 &29	06	36	KF40 PORT		19030029	01
09	VER. ROD UPPER SEGMENT (1 TO6)	AS PER DWG.	DRG.#19020030 TO DRG.#19020034&36	06	37	CF63 PORT		19030030	01
10	VER. ROD LOWER SEGMENT 5-PROTOTYPE	AS PER DWG.	DRG.#19020028	01	38	1/4" -19 BSP x35L ALLEN BOLT,WASHER	SS 304	FOR BASE PLATE TO VACUUM VESSEL BOTTOM PLATE	210
11	VER. ROD UPPER SEGMENT 5-PROTOTYPE	AS PER DWG.	DRG.#19020035	01	39	1/8" -28 BSPx25L ALLEN BOLT,WASHER	SS 304	FOR BASE PLATE TO STEM	280
12	END FLANGE -1	AS PER DWG.	DRG.#19030005	03	40	M5x35L BOLT,WASHER	SS 304	FOR BASE PLATE TO STEM	100
13	END FLANGE -2	AS PER DWG.	DRG.#19030006	01	41	M5x50L ALLEN BOLT,WASHER	SS 304	FOR ROD TO STEM	100
14	END FLANGE COVER -1	AS PER DWG.	DRG.#19030007	01	42	Ø5 DOWEL PIN	SS 304	FOR STEM TO BASE PLATE	30
15	END FLANGE COVER -2	AS PER DWG.	DRG.#19030008	01	43	Ø5 DOWEL PIN	SS 304	FOR ROD TO STEM	55
16	END FLANGE COVER -3-PROTOTYPE	AS PER DWG.	DRG.#19030014	01	44	M12x75L BOLT WITH DUAL NUT , WASHER	SS 304	FOR FLANGE TO FLANGE	125
17	O-RING -1	AS PER DWG.	DRG.#19030009	03	45	1/4" -19 BSP x35L BOLT WITH WASHER	SS 304	FOR TOP PLATE COVER TO TOP PLATE	160
18	O-RING -2	AS PER DWG.	DRG.#19030010	02	46	DOUBTY SEAL	VITON WITH SS RING	FOR STEM TO VANE	50
19	O-RING -3	AS PER DWG.	DRG.#19030011	01	47	COOLING ARRANGEMENT OF ROD TO STEM -1-PROTOTYPE	COPPER OHFC	19020038	01
20	O-RING -4	AS PER DWG.	DRG.#19030031	01	48	COOLING ARRANGEMENT OF ROD TO STEM -1-PROTOTYPE	COPPER OHFC	19020039	01
21	O-RING -5	AS PER DWG.	DRG.#19020005	08	49	END PLUG FOR VANES	COPPER OHFC	19020037	--
22	O-RING -6	AS PER DWG.	DRG.#19020006	04	50	STEM SLOT COVER FOR PROTOTYPE	COPPER OHFC	19020040	02
23	BOTTOM PLATE -1	AS PER DWG.	DRG.#19030012	01	51	HELICOFLEX SEAL FOR 40CF	AS PER STD	TOP PLATE TO 40CF PORT	01
24	BOTTOM PLATE -2	AS PER DWG.	DRG.#19030013	01	52	HELICOFLEX SEAL FOR 63CF	AS PER STD	END COVER PLATE TO 63 CF PORT	01
25	SIDE PLATE -1	AS PER DWG.	DRG.#19030015	01	53	HELICOFLEX SEAL FOR 75CF	AS PER STD	SIDE PLATE TO 75CF PORT	01
26	SIDE PLATE -2	AS PER DWG.	DRG.#19030016	01	54	HELICOFLEX SEAL FOR 250CF	AS PER STD	SIDE PLATE TO 250 CF PORT	03
27	SIDE PLATE -3	AS PER DWG.	DRG.#19030018	01					
28	SIDE PLATE -4	AS PER DWG.	DRG.#19030019	01					

DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	10.01.18	 BILL OF MATERIAL	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	PKC			REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED	JMK		DRG.NO	IPR/17/A3/RFQ/19010003	SHEET 1 OF 1

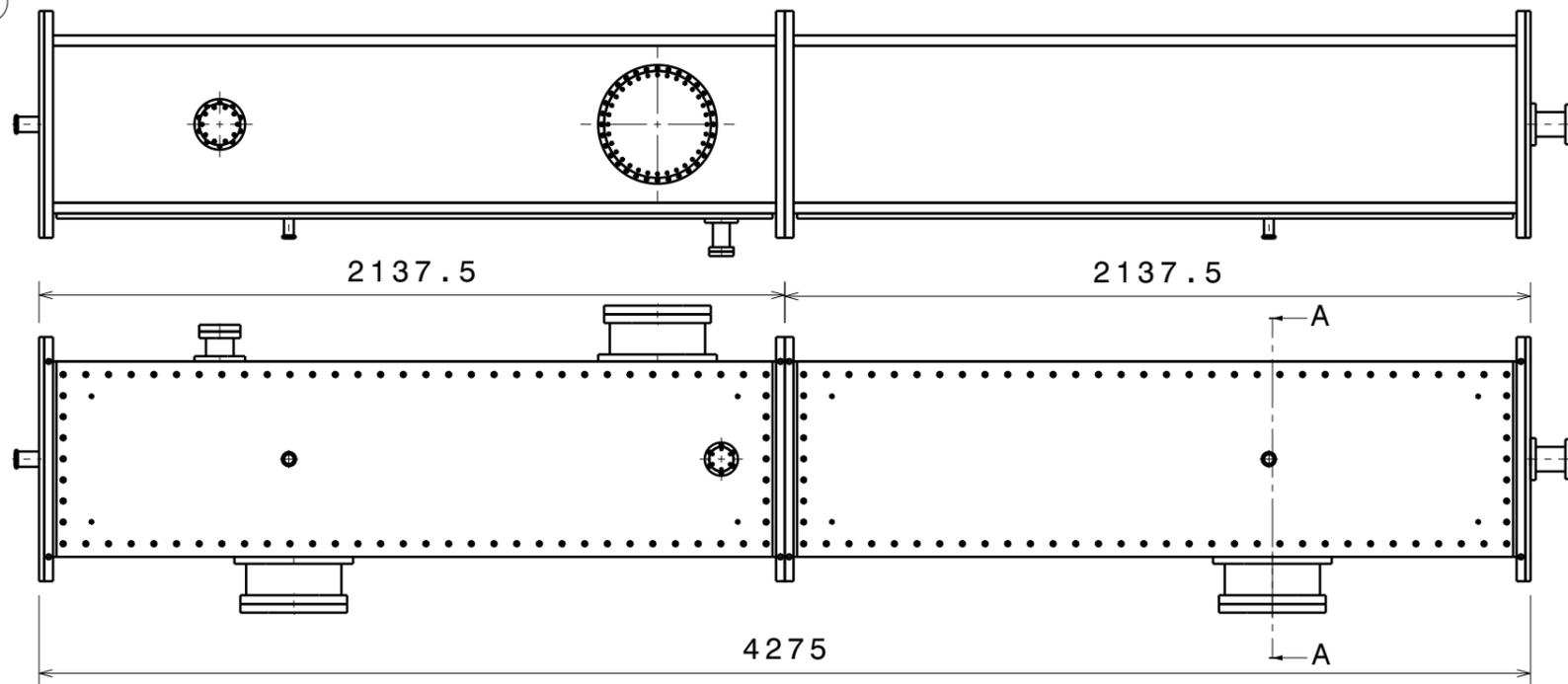
ALL DIMENSIONS ARE IN MM

ASSEMBLY NOTES:-

01. ENOUGH CARE SHALL BE TAKEN TO AVOID DAMAGE (DENT AND SCRATCHES) DURING HANDLING AND STORING OF RAW MATERIAL, SEMI FINISHED PRODUCT AND FINISHED PRODUCTS.
02. MATERIALS, WELDING PROCEDURES, QUALIFICATION REQUIREMENTS, TESTING AND EXAMINATION ETC., SHALL BE AS PER RELEVANT APPROVED SPECIFICATIONS.
03. ABRASIVE CLEANING OF THE SURFACE EXPOSED TO VACUUM IS NOT ALLOWED.
04. AFTER SUCCESSFUL ASSEMBLY, ACCEPTANCE TESTS SHALL BE CARRIED AS PER APPROVED PROCEDURE.
05. ALL SHARP CORNER SHALL BE ROUNDED OFF.
06. USE FIXTURES DURING WELDING, MACHINING AND HEAT TREATMENT.
07. EDGE PREPARATION OF WELD JOINT BETWEEN END FLANGE AND SIDE PLATE, TOP PLATE, BOTTOM PLATE.
08. AFTER SUCCESSFUL TRAIL ASSEMBLY, ACCEPTANCE TEST AND BEFORE REMOVAL OF ASSEMBLY, THE REFERENCE POINT, CO-ORDINATES, MATCH MARKING BETWEEN VANE, STEM, BASE PLATE AND VACUUM VESSEL SHALL BE DONE AS REFERENCE FOR SITE ASSEMBLY.



ITEM NO.	PART NAME	MATERIAL	DESCRIPTION	QTY
01	VACUUM CHAMBER-1	AS PER DWG.	DRG.#19030002	01
02	VACUUM CHAMBER-2	AS PER DWG.	DRG.#19030003	01
03	FLANGE COVER-1	AS PER DWG.	DRG.#19030007	01
04	FLANGE COVER-2	AS PER DWG.	DRG.#19030008	01



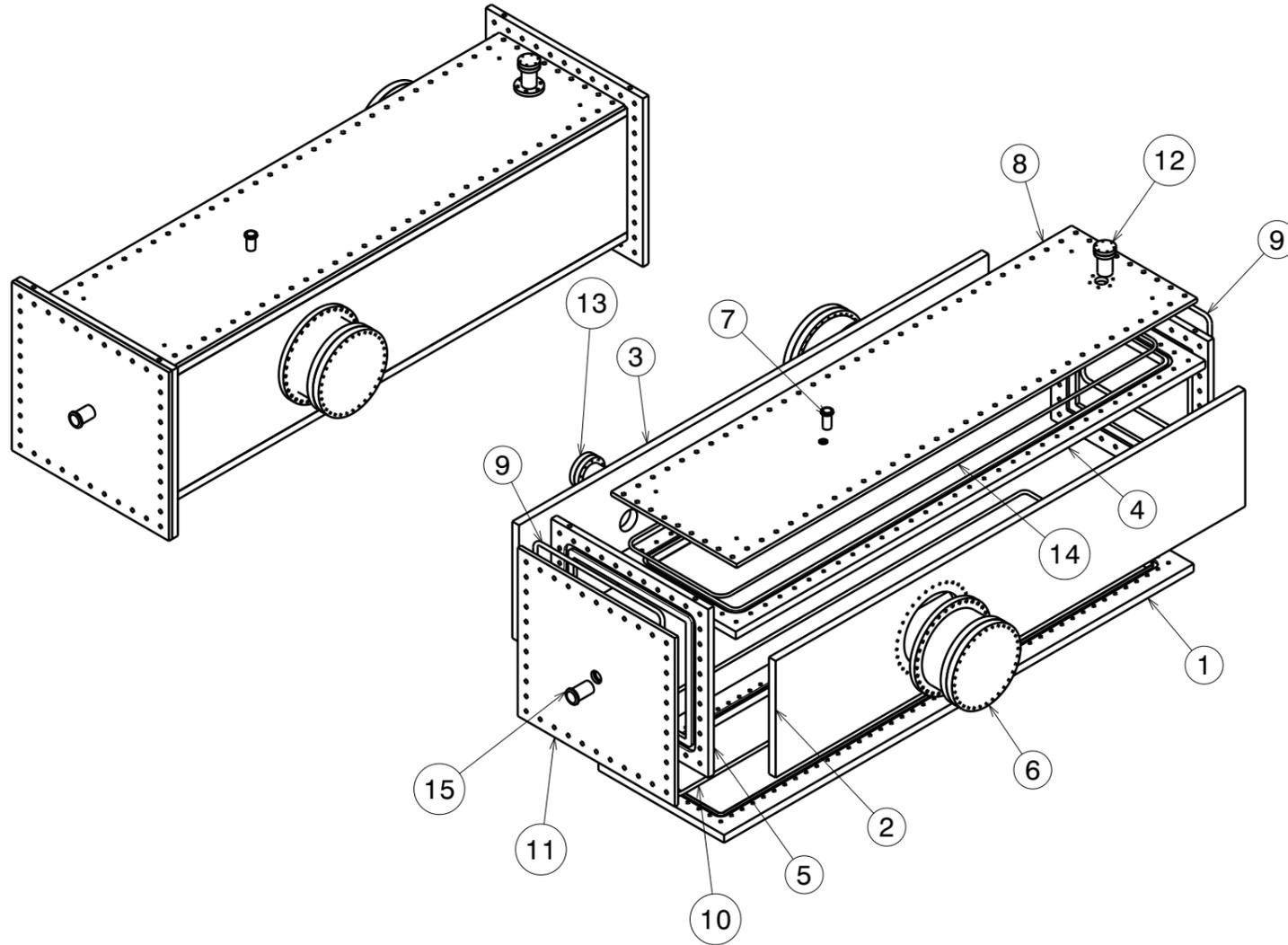
RADIAL MATCHING SIDE

FRINGE FIELD SIDE

Section view A-A

DRG. NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					RFQ. GROUP:			 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)		
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			TITLE	
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:1	DATE	VACUUM VESSEL ASSEMBLY	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315			DRAWN	K.R.R.	06.12.17		
UPTO 10	10-50	50-120	OVER 120-400								CHECKED	PKC		REF DRG NO:	REV 0
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5			APPROVED	JMK	DRG. NO	IPR/17/A3/RFQ/19030001	SHEET 1 OF 1

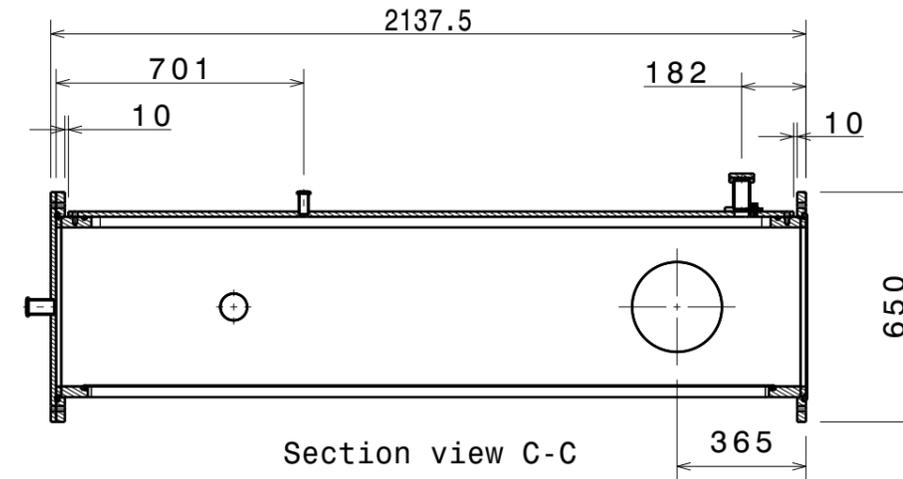
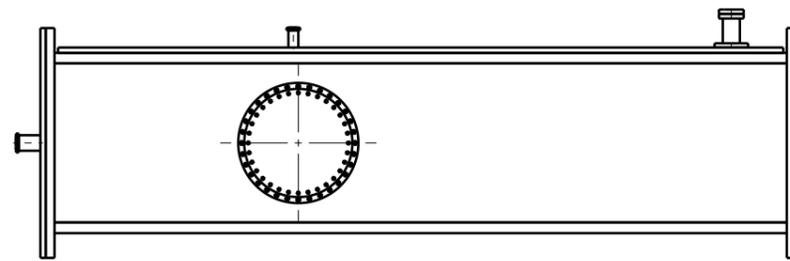
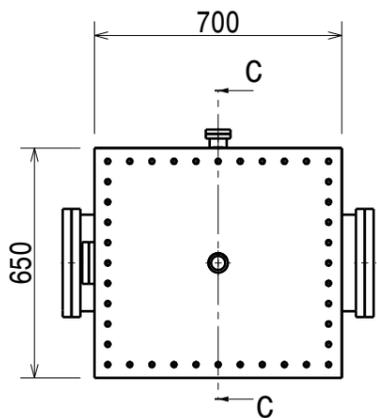
ALL DIMENSIONS ARE IN MM



ITEM NO.	PART NAME	MATERIAL	DESCRIPTION	QTY
01	BOTTOM PLATE -1	AL6061-T6	DRG.#19030012	01
02	SIDE PLATE -1	AL6061-T6	DRG.#19030015	01
03	SIDE PLATE -2	AL6061-T6	DRG.#19030016	01
04	TOP PLATE -1	AL6061-T6	DRG.#19030020	01
05	END FLANGE	AL6061-T6	DRG.#19030005	02
06	DN250 VACUUM PORT	SS304L	DRG.#19030027	02
07	KF25 PORT	AL6061-T6	DRG.#19030025	01
08	TOP PLATE COVER	AL6061-T6	DRG.#19030023	01
09	O-RING -1	VITON	DRG.#19030009	02
10	O-RING -2	VITON	DRG.#19030011	01
11	END FLANGE COVER -1	AL6061-T6	DRG.#19030007	01
12	CF40 PORT	SS304L	DRG.#19030026	01
13	DN75 RF PORT	SS304L	DRG.#19030028	01
14	O-RING -3	VITON	DRG.#19030010	01
15	40KF PORT	SS304L	DRG.#19030029	01
16	M12-LIFITING BOLTS	STD	- -	04
17	BOLTS AND NUTS	SS304	DRG.#19010003	AS PER BOM

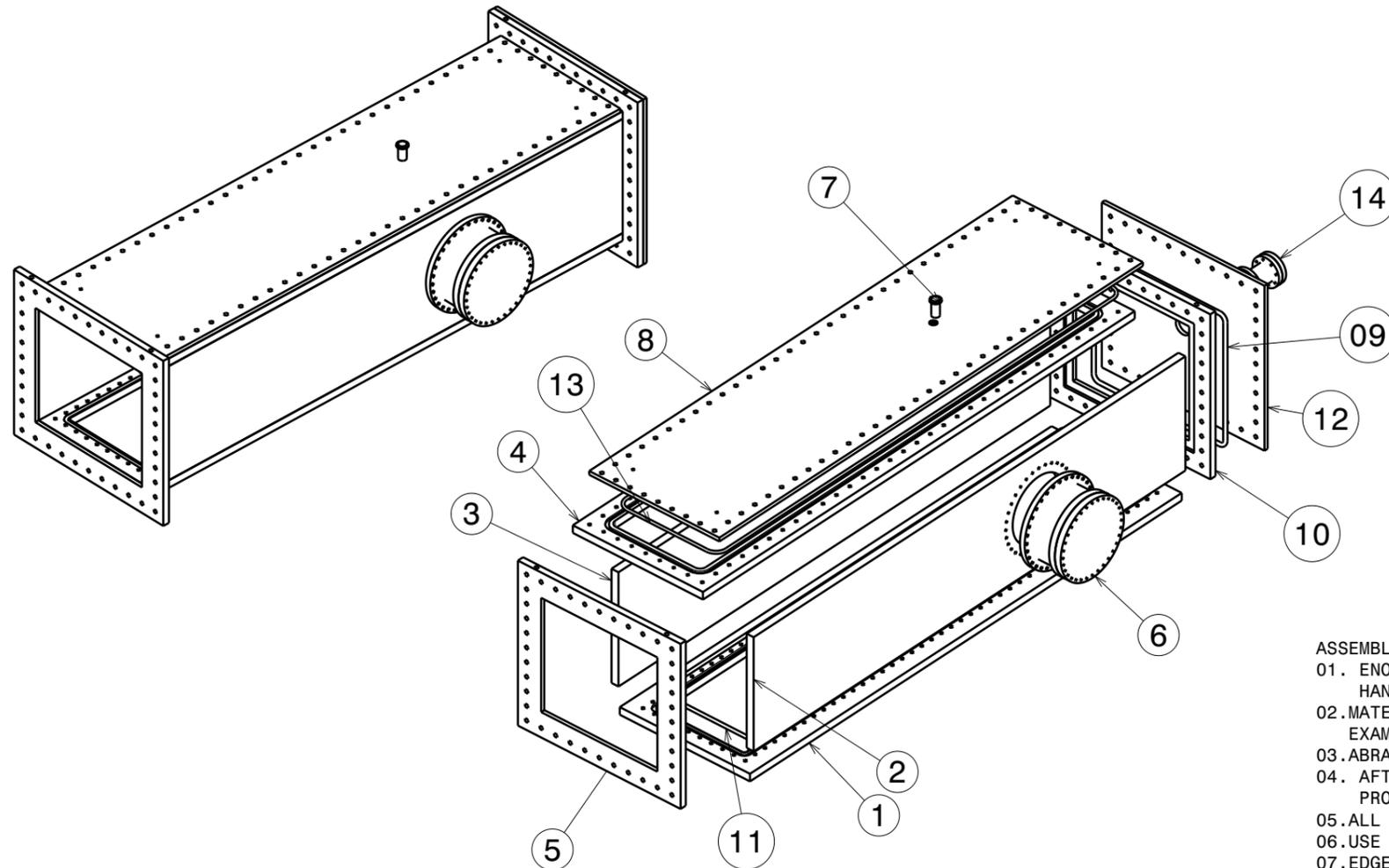
ASSEMBLY NOTES:-

- 01. ENOUGH CARE SHALL BE TAKEN TO AVOID DAMAGE (DENT AND SCRATCHES) DURING HANDLING AND STORING OF RAW MATERIAL, SEMI FINISHED PRODUCT AND FINISHED PRODUCTS.
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- 05. ALL SHARP CORNER SHALL BE ROUNDED OFF.
- 06. USE FIXTURES DURING WELDING, MACHINING AND HEAT TREATMENT.
- 07. EDGE PREPARATION OF WELD JOINT BETWEEN END FLANGE AND SIDE PLATE, TOP PLATE, BOTTOM PLATE.
- 08. AFTER SUCCESSFUL TRAIL ASSEMBLY, ACCEPTANCE TEST AND BEFORE REMOVAL OF ASSEMBLY, THE REFERENCE POINT, CO-ORDINATES, MATCH MARKING BETWEEN VANE, STEM, BASE PLATE AND VACUUM VESSEL SHALL BE DONE AS REFERENCE FOR SITE ASSEMBLY.



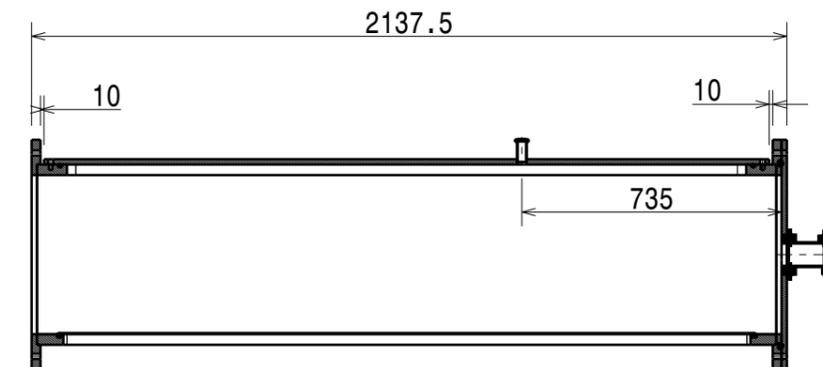
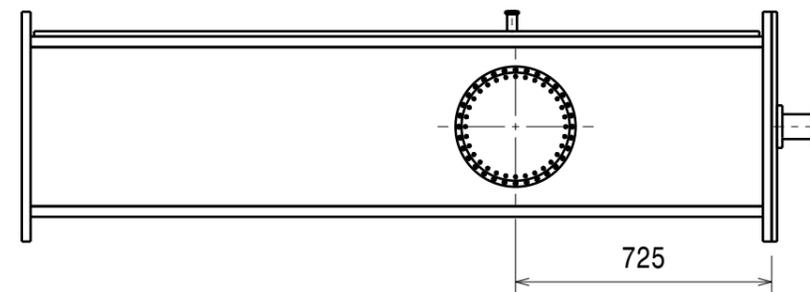
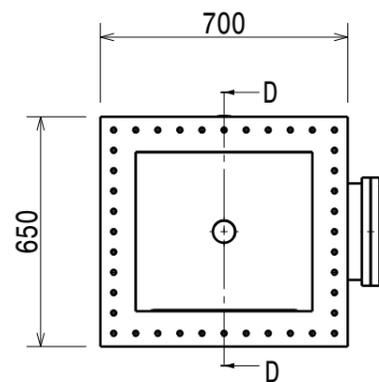
DRG. NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					RFQ GROUP:			 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)		
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED				TITLE
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	VACUUM VESSEL - 1 ASSEMBLY REF DRG NO: DRG. NO IPR/17/A3/RFQ/19030002 REV 0 SHEET 1 OF 1
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	27.11.17	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	PKC		
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED	JMK			

ALL DIMENSIONS ARE IN MM



ITEM NO.	PART NAME	MATERIAL	DESCRIPTION	QTY
01	BOTTOM PLATE-2	AL6061-T6	DRG.#19030013	01
02	SIDE PLATE-3	AL6061-T6	DRG.#19030017	01
03	SIDE PLATE-4	AL6061-T6	DRG.#19030018	01
04	TOP PLATE-2	AL6061-T6	DRG.#19030021	01
05	END FLANGE-2	AL6061-T6	DRG.#19030006	01
06	DN250CF VACUUM PORT	SS304L	DRG.#19030027	01
07	KF25 PORT	AL6061-T6	DRG.#19030025	01
08	TOP PLATE COVER-2	AL6061-T6	DRG.#19030024	01
09	O-RING-1	VITON	DRG.#19030009	01
10	END FLANGE-1	AL6061-T6	DRG.#19030005	01
11	O-RING-3	VITON	DRG.#19030011	01
12	END FLANGE COVER-2	AL6061-T6	DRG.#19030008	01
13	O-RING-2		DRG.#19030010	01
14	DN63CF PORT	SS304L	DRG.#19030030	01
15	BOLTS AND NUTS	SS304	DRG.#19010003	AS PER BOM
16	M12-LIFTING LUGS	STD	--	04

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Section view D-D

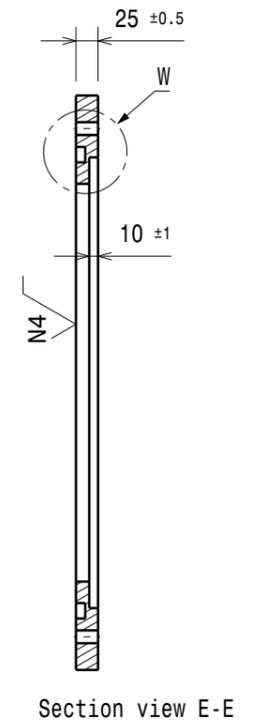
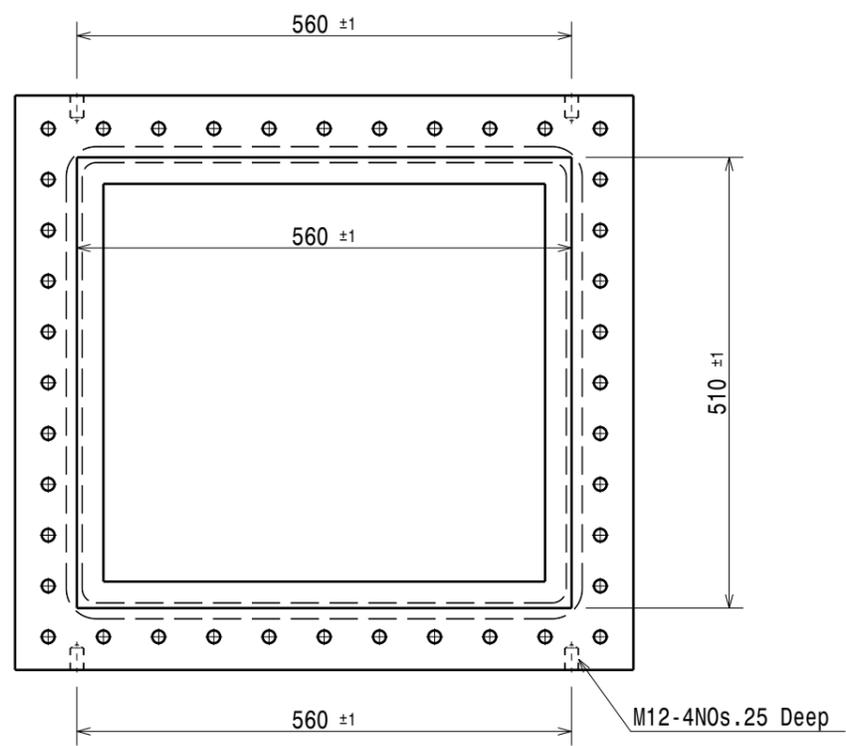
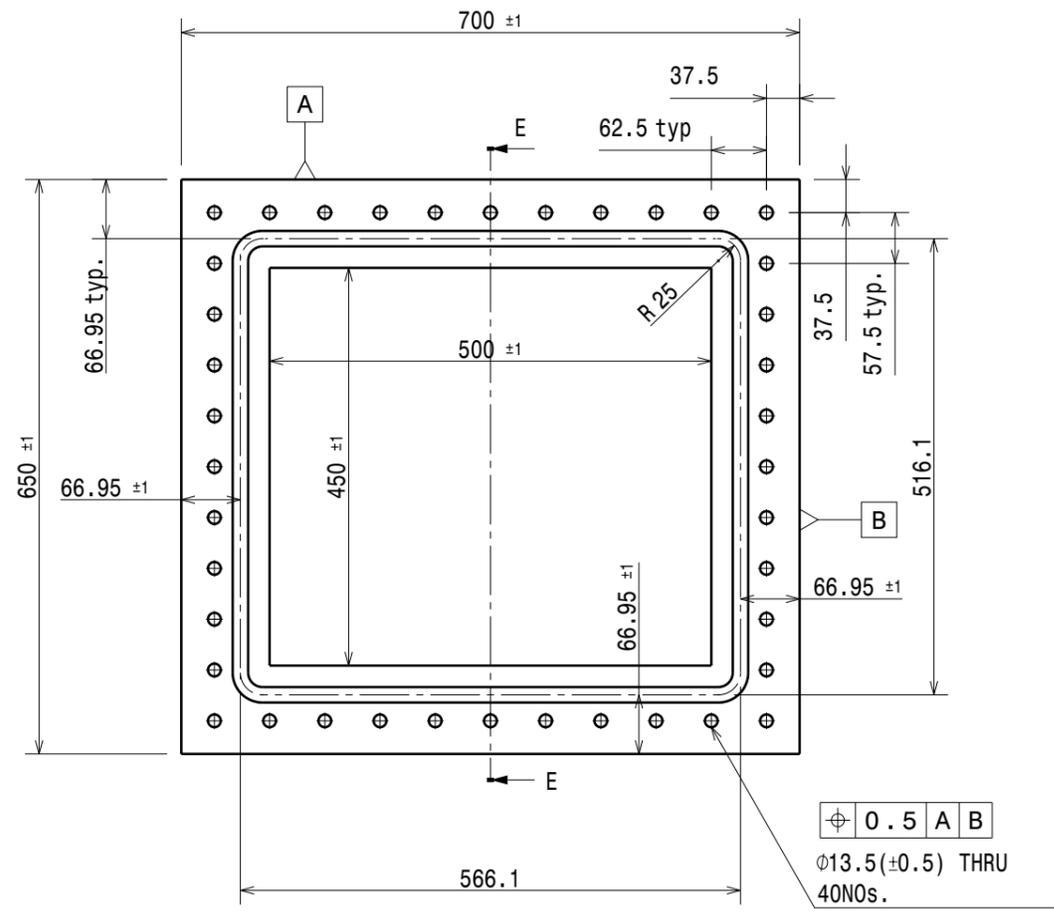
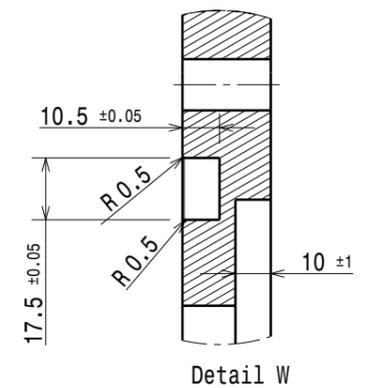
DRG. NO				REVISION COLUMN				RFQ GROUP:						
▽ 8-25				▽▽ 1.6-8				▽▽▽ 0.025-1.6			▽▽▽▽ < 0.025			
CO-ORDINATED BY				REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS										SCALE	1:1	DATE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	01/12/17
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	PKC	
+1°	+0°-30'	+0°-20'	+0°-10'							APPROVED	JMK		REF DRG NO:	REV 0
										DRG. NO	IPR/17/A3/RFQ/19030003		SHEET 1 OF 1	

Institute for Plasma Research
 प्लाज्मा अनुसंधान संस्थान
 Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)

TITLE
VACUUM VESSEL -2 ASSEMBLY

- NOTE :-
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASEMBLY
 03. USE DRILL JIG FOR DRILLING OF HOLES.
 04. THREADING SHALL BE AS PER IS4218
 05. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE

ALL DIMENSIONS ARE IN MM

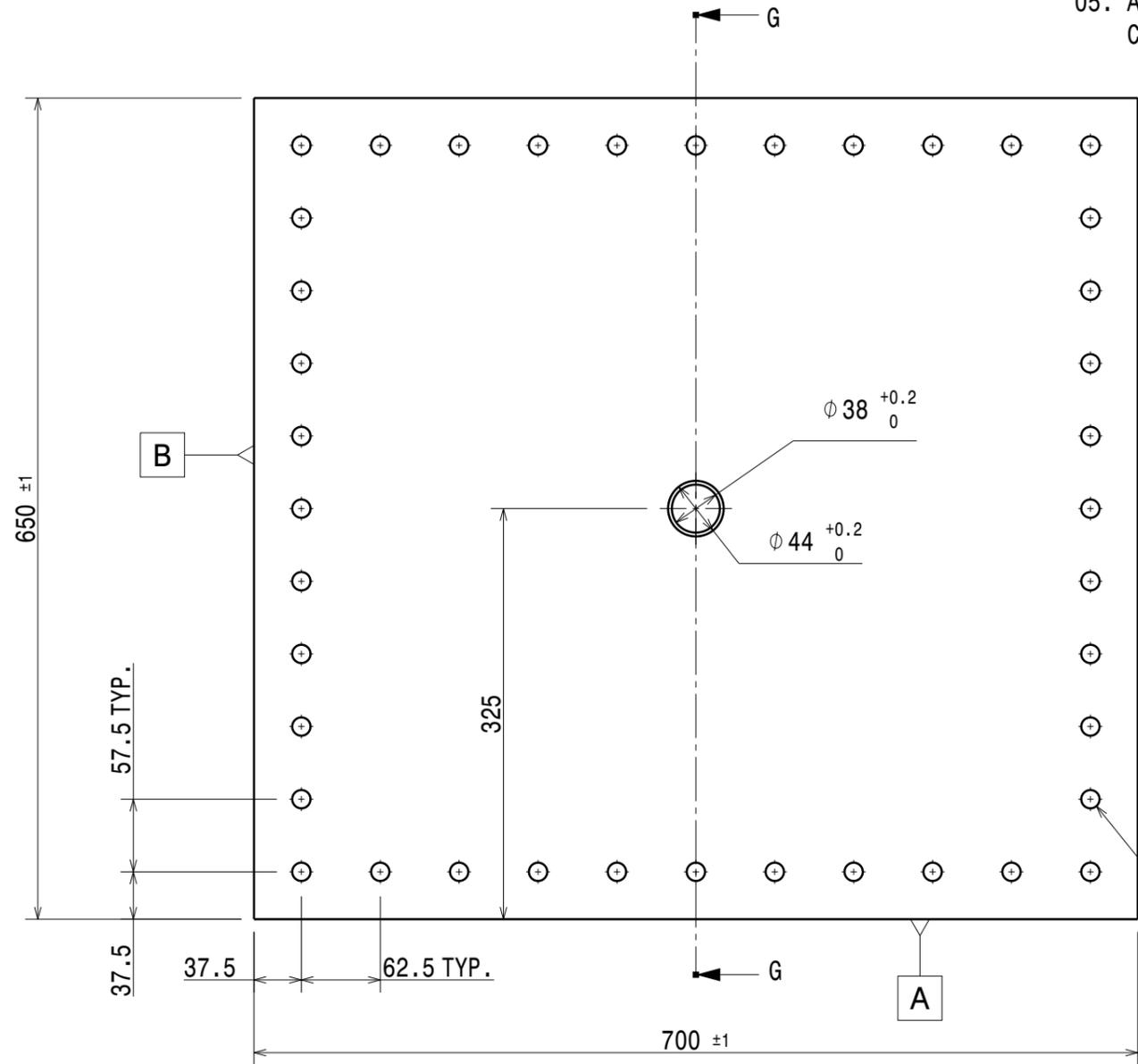


DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					RFQ GROUP:			Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)			
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MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:1	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	END FLANGE - 1	
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC		REF DRG NO:	
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5			APPROVED	JMK		DRG.NO	IPR/17/A3/RFQ/19030005	REV 0
												SHEET 1 OF 1				

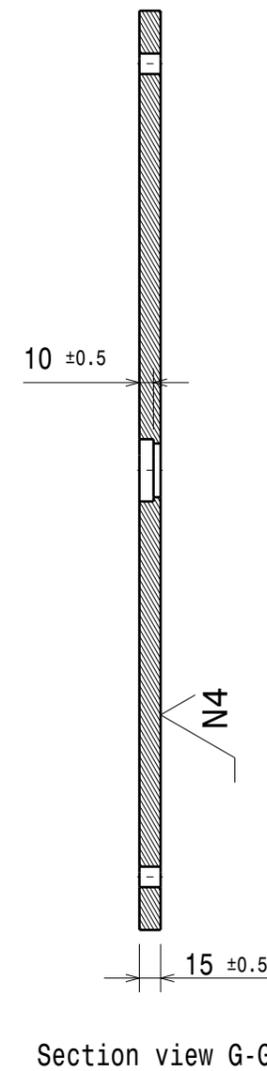
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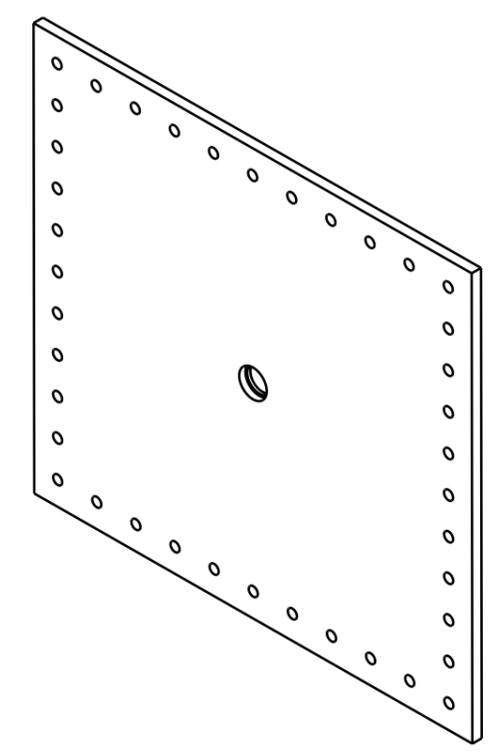


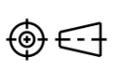
⊕ 0.5 A B
 Ø13.5(±0.5)
 THRU 40 NOS.



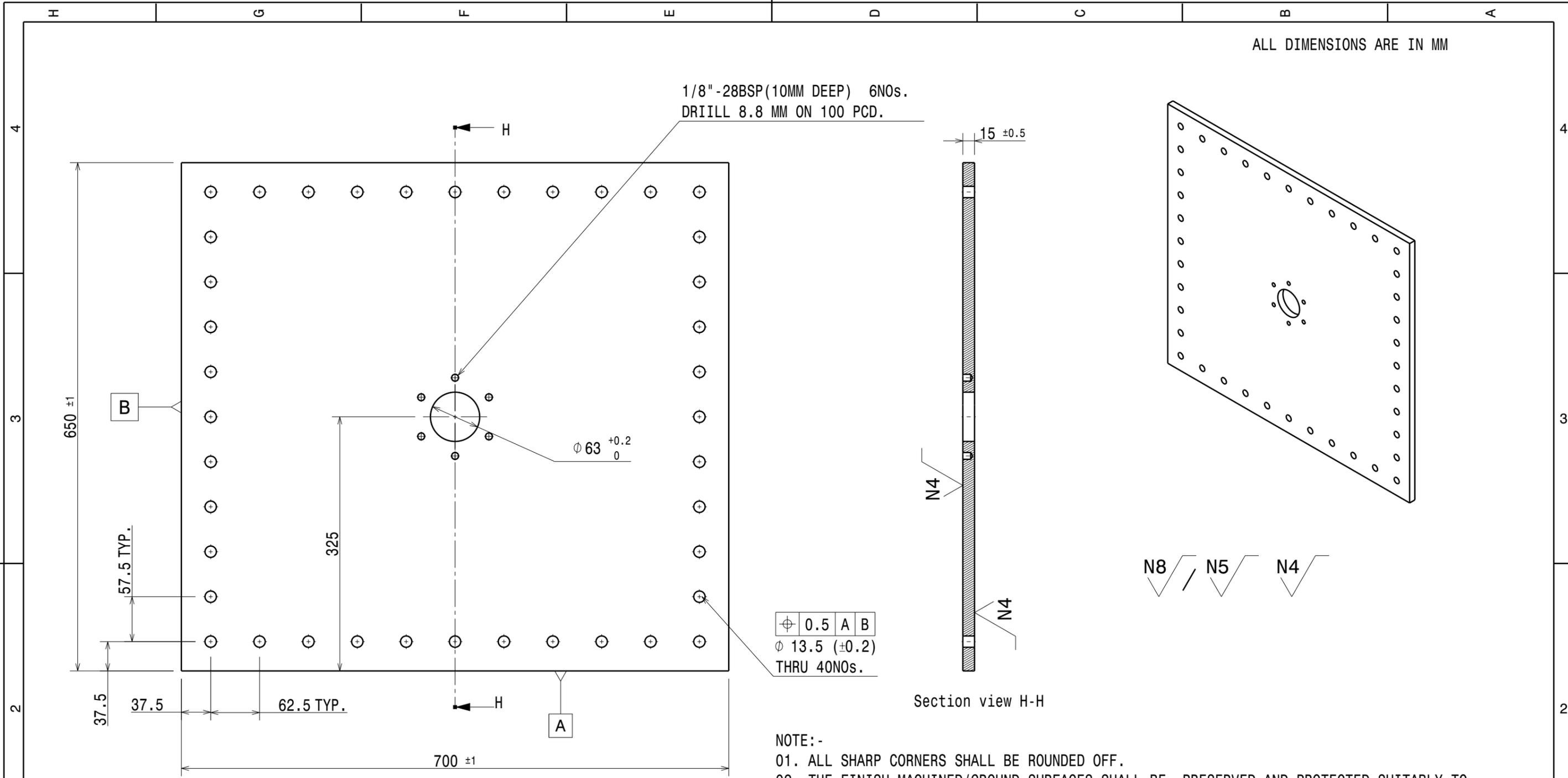
Section view G-G

N8 / N5 / N4



DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)					
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED			ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE		
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	 END FLANGE COVER-1		
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC			REF DRG NO:	REV 0
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED	JMK		DRG.NO	IPR/17/A3/RFQ/19030007	SHEET 1 OF 1

ALL DIMENSIONS ARE IN MM



1/8"-28BSP(10MM DEEP) 6NOs.
DRILL 8.8 MM ON 100 PCD.

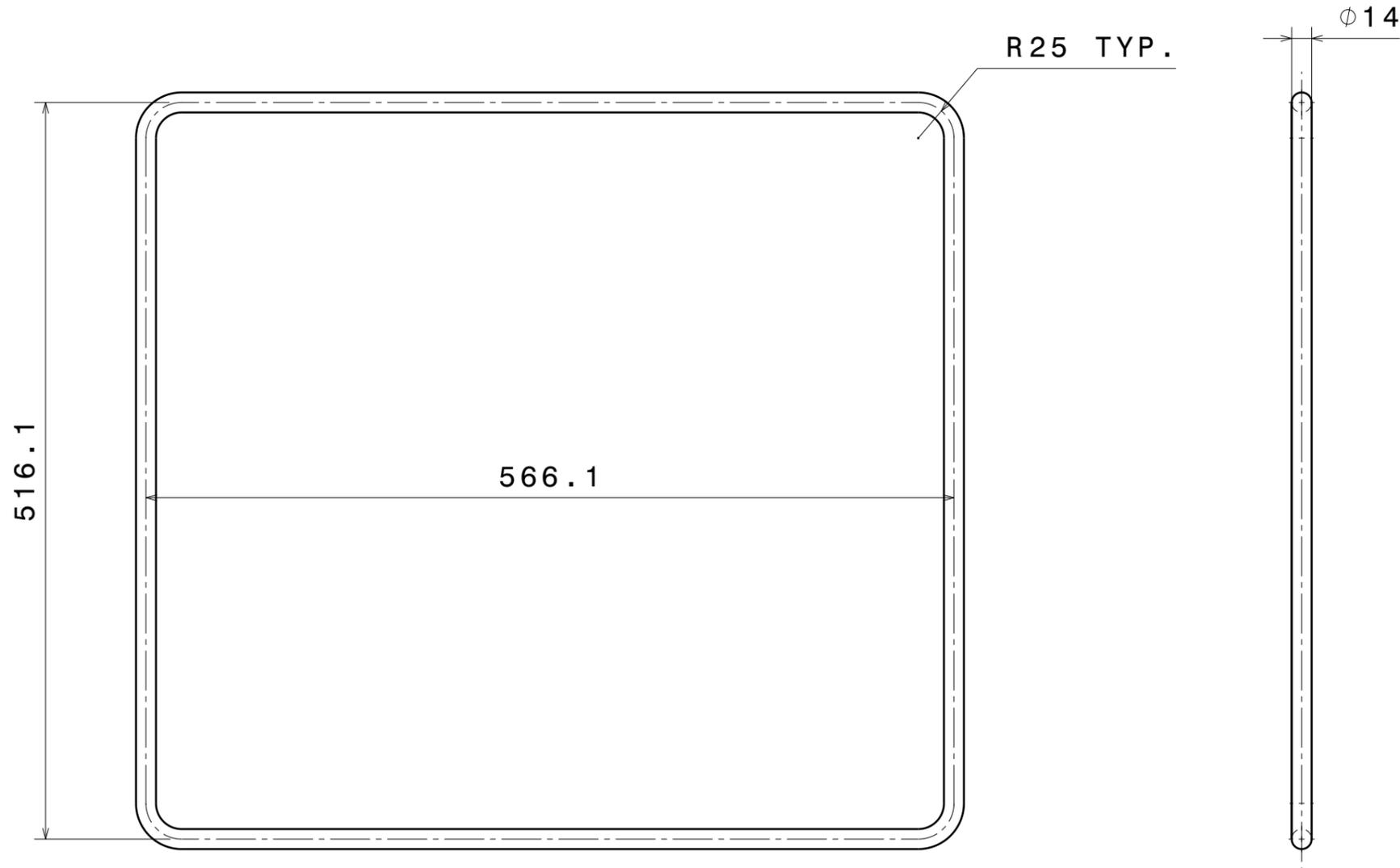
Ø 63 ^{+0.2}/₀

⊕ 0.5 A B
Ø 13.5 (±0.2)
THRU 40NOs.

Section view H-H

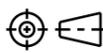
- NOTE:-
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASEMBLY
 03. USE DRILL JIG FOR DRILLING OF HOLES.
 04. THREADING SHALL BE AS PER IS4218
 05. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE

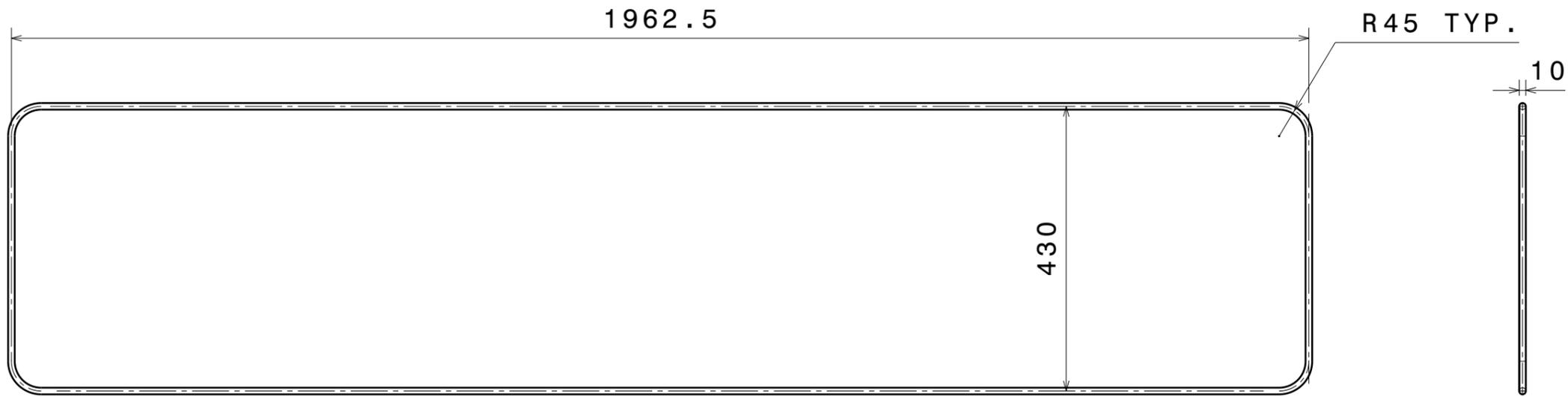
DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED			ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	END FLANGE COVER-2	
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC		REF DRG NO:	REV 0
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED	JMK	DRG.NO	IPR/17/A3/RFQ/19030008	SHEET 1 OF 1



NOTES: DRAWING FOR REFERENCE ONLY
ACTUAL O-RING SHOULD MATCH WITH GROOVE

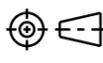
MAT: VITON

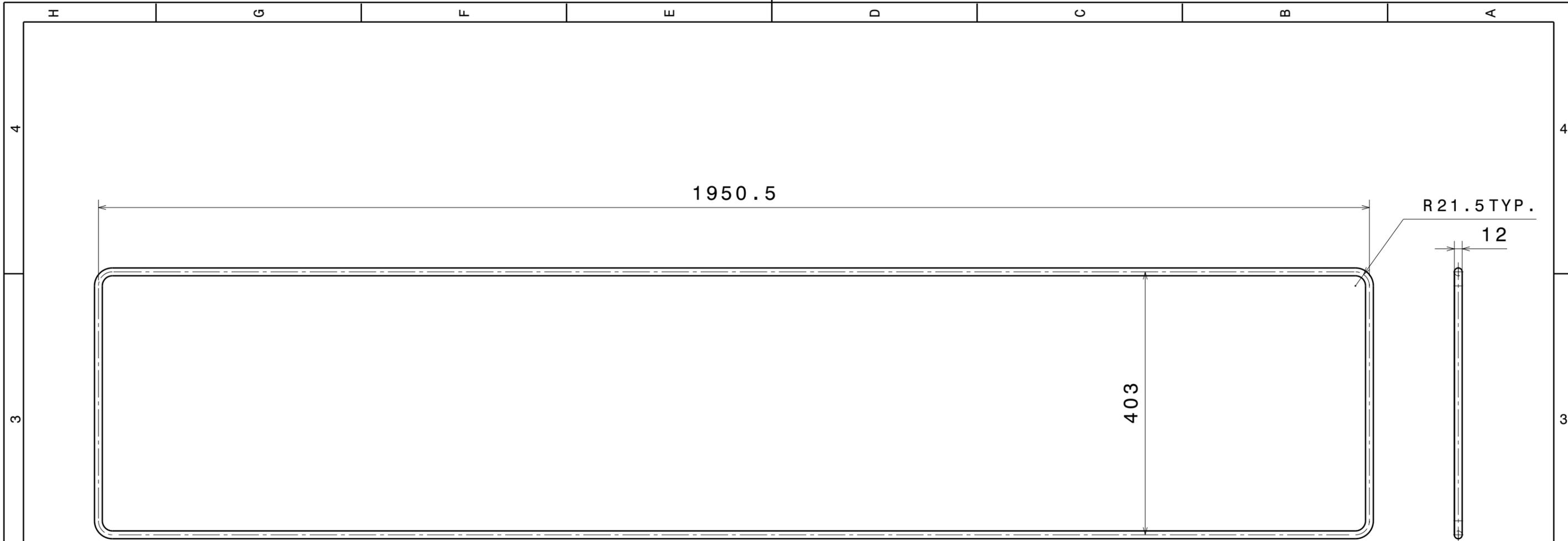
DRG.NO		▽ 8-25	∇ 1.6-8	∇∇ 0.025-1.6	∇∇∇ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	 O-RING-1 END FLANGE	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	PKC			REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED	JMK		DRG.NO	IPR/17/A3/RFQ/19030009	REV 0
H		G		F		E		D		C		B		A		



NOTES: DRAWING FOR REFERENCE ONLY
 ACTUAL O-RING SHOULD MATCH WITH GROOVE

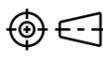
MAT: VITON

DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	 O-RING-2 FOR TOP PLATE-1	
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC			REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED	JMK		REV 0	
DRG.NO		IPR/17/A3/RFQ/19030010			SHEET 1 OF 1											



NOTES: DRAWING FOR REFERENCE ONLY
ACTUAL O-RING SHOULD MATCH WITH GROOVE

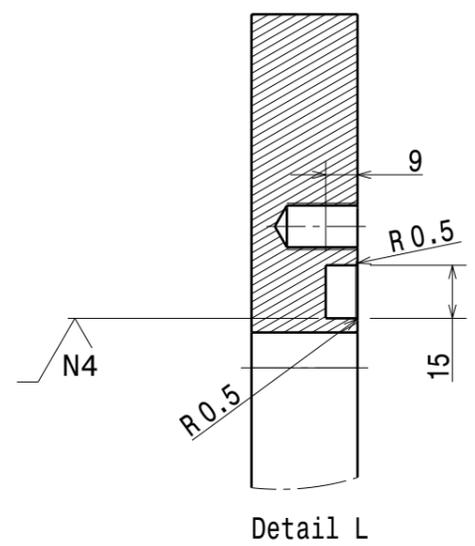
MAT: VITON

DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				ASS'Y GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)				
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED			
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	 O-RING-3 FOR BOTTOM PLATE - 1	
UPTO 10	10-50	50-120	OVER 120-400		+0.1	+0.2	+0.3	+0.5				CHECKED	PKC			REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED	JMK		DRG.NO	IPR/17/A3/RFQ/19030011	SHEET 1 OF 1

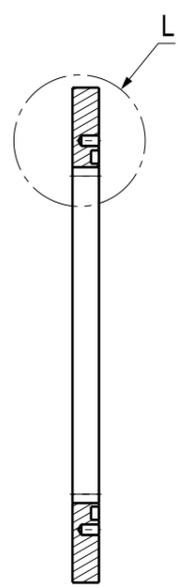
ALL DIMENSIONS ARE IN MM

N8 / N5 / N4

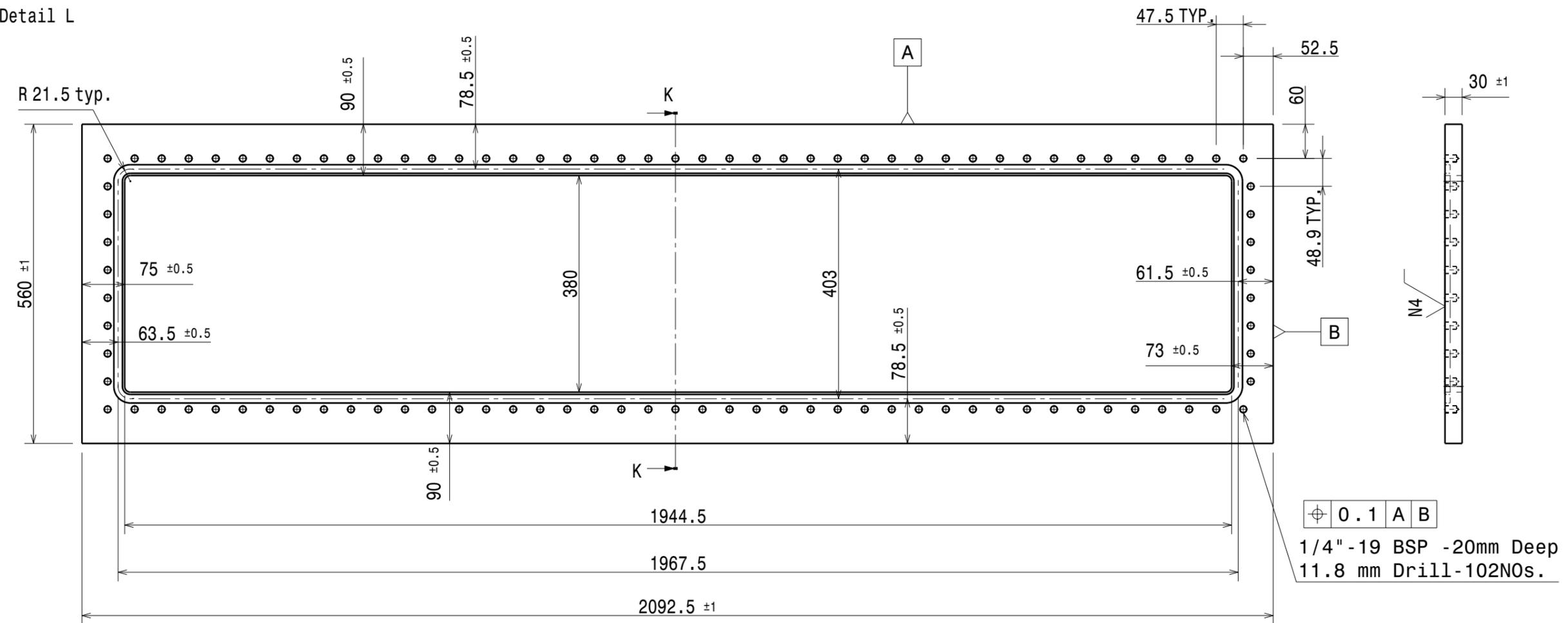
- NOTE:-
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASEMBLY
 03. USE DRILL JIG FOR DRILLING OF HOLES.
 04. THREADING SHALL BE AS PER IS4218
 05. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE
 06. DRILLING OF BOTTOM PLATE AND BASE PLATE HOLE SHOULD BE DONE USING JIG PLATE.



Detail L



Section view K-K

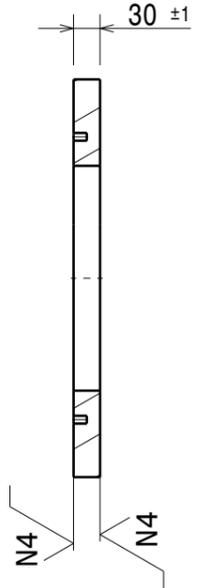
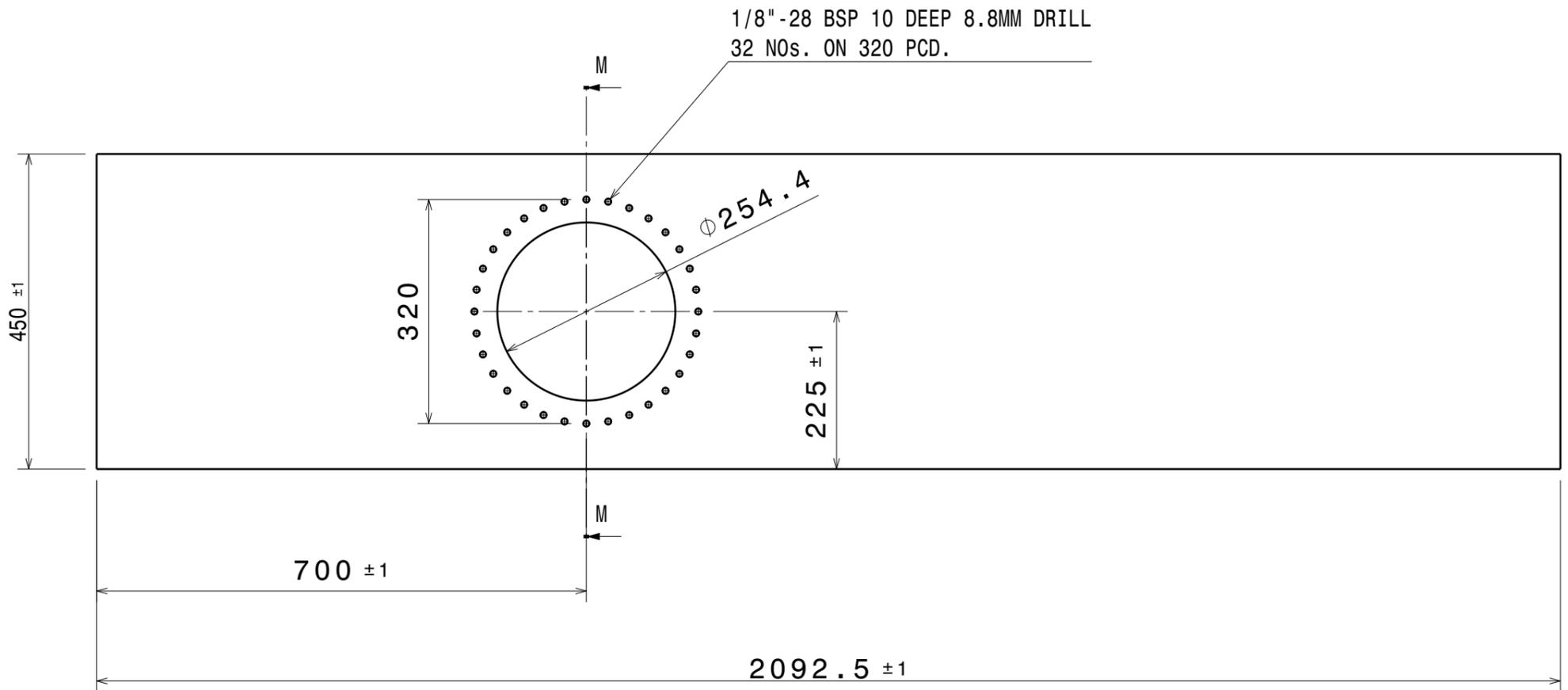


DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN					RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)			
CO-ORDINATED BY					REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED	ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED				
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS											SCALE	1:1	DATE	TITLE	
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	BOTTOM PLATE - 2
UPTO 10	10-50	50-120	OVER 120-400		UPTO 0.1	+0.2	+0.3	+0.5				CHECKED	PKC		REF DRG NO:
+1°	+0°-30'	+0°-20'	+0°-10'								APPROVED	JMK		DRG.NO	SHEET 1 OF 1
														IPR/17/A3/RFQ/19030013	

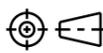
ALL DIMENSIONS ARE IN MM

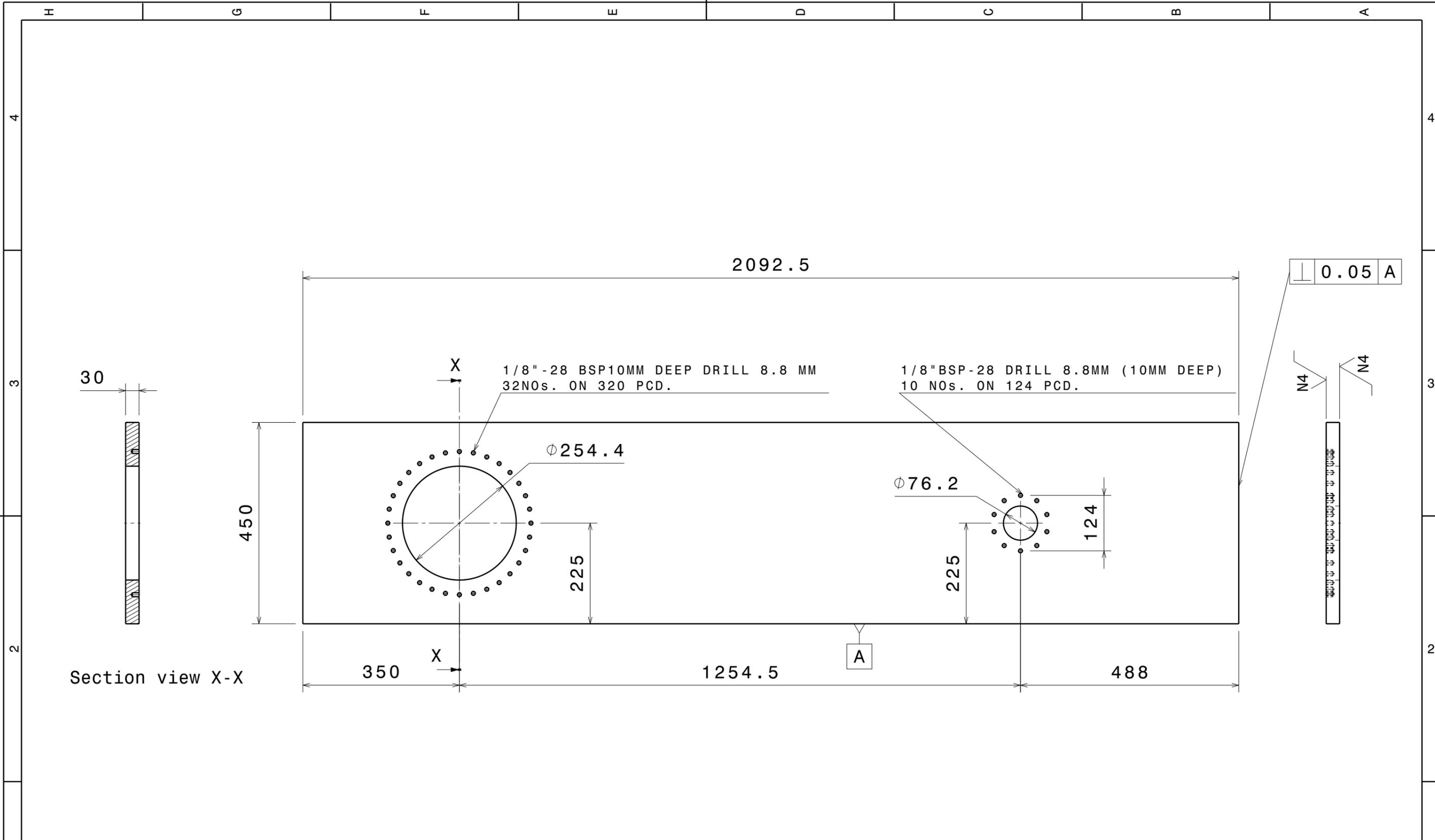
N8 $\sqrt{\quad}$ N5 $\sqrt{\quad}$ N4 $\sqrt{\quad}$

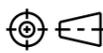
- NOTE:-
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASSEMBLY
 03. USE DRILL JIG FOR DRILLING OF HOLES.
 04. THREADING SHALL BE AS PER IS4218
 05. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE



Section view M-M

DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				RFQ GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	21.11.17	 SIDE PLATE - 1
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC		
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED	JMK		REV 0
DRG.NO		IPR/17/A3/RFQ/19030015		SHEET 1 OF 1											



DRG.NO		▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025	REVISION COLUMN				ASS'Y GROUP:		 Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)			
CO-ORDINATED BY						REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED		ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED		
MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS												SCALE	1:1	DATE	TITLE
LENGTH IN mm OF SHORTER SIDE OF ANGLES				LENGTH OR DIA	UPTO 6	6-30	30-120	120-315				DRAWN	K.R.R.	07.12.17	 SIDE PLATE - 2
UPTO 10	10-50	50-120	OVER 120-400									CHECKED	PKC		
+1°	+0°-30'	+0°-20'	+0°-10'		+0.1	+0.2	+0.3	+0.5				APPROVED	JMK		REV 0
DRG.NO		IPR/17/A3/RFQ/19030016		SHEET 1 OF 1											