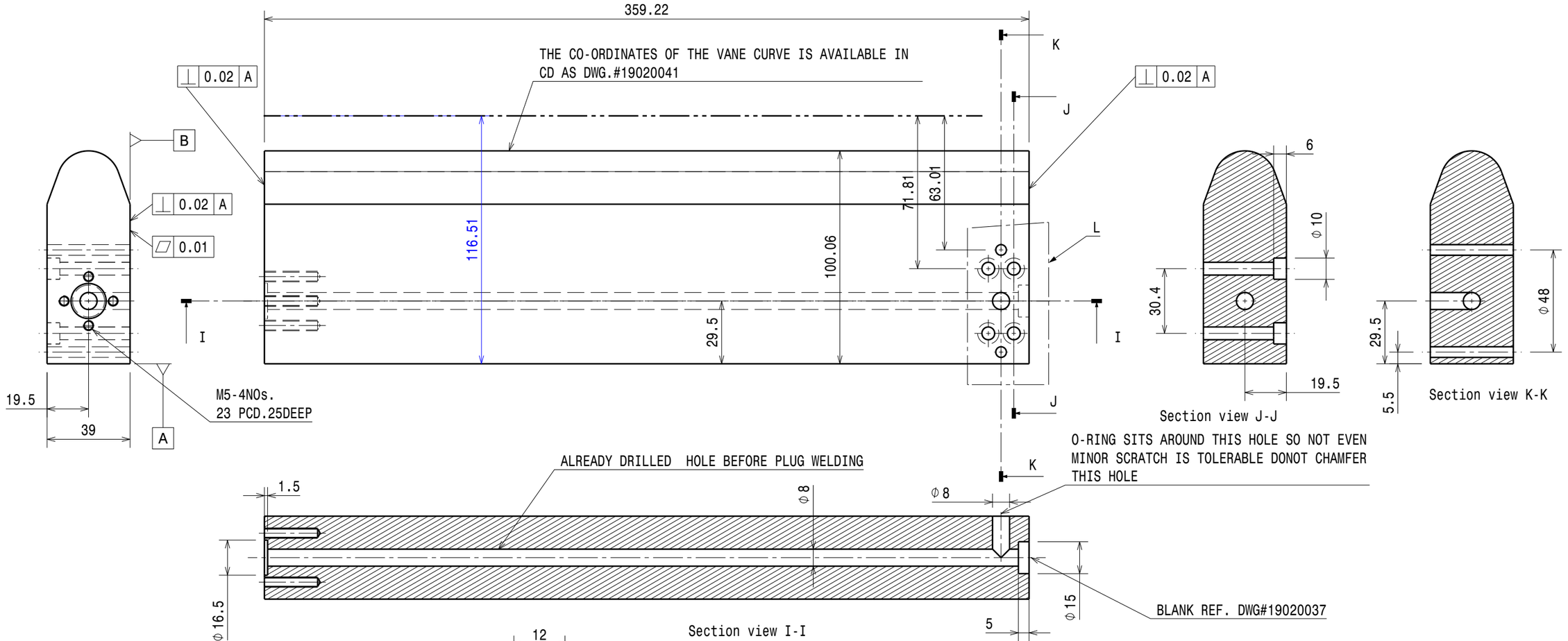

NOTE:
1. LENGTH OF THIS COMPONENT HAS BEEN MACHINED AFTER WELDING AND LEAK CHECKING,SO DO NOT MACHINE OR GRIND THIS SURFACES.
2. OVER ALL SURFCE FINISH: N5-N6 GRADE/Ra- 0.4-0.8μm.
3. NO SCRATCH OR DENT IS TOLERABLE ANY WHERE.
4. PROFILE OF EVERY VANE CURVE IS DIFFERENT.
5. R14.82 ON THE PROFILE IS CONSTANT 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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	11.01.18
CHECKED	PKC	
APPROVED	JMK	

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

TITLE: VER. ROD UPPER SEGMENT 5-PROTOTYPE

REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19020035

SHEET 1 OF 1

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	Φ5 DOWEL PIN	SS 304	FOR STEM TO BASE PLATE	30
15	END FLANGE COVER-2	AS PER DWG.	DRG.#19030008	01	43	Φ5 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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	10.01.18
CHECKED	PKC	
APPROVED	JMK	

Institute for **Plasma Research**
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Bhat, Near Indira Bridge,Gandhinagar 382428,Gujarat (India)

TITLE: BILL OF MATERIAL

REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19010003

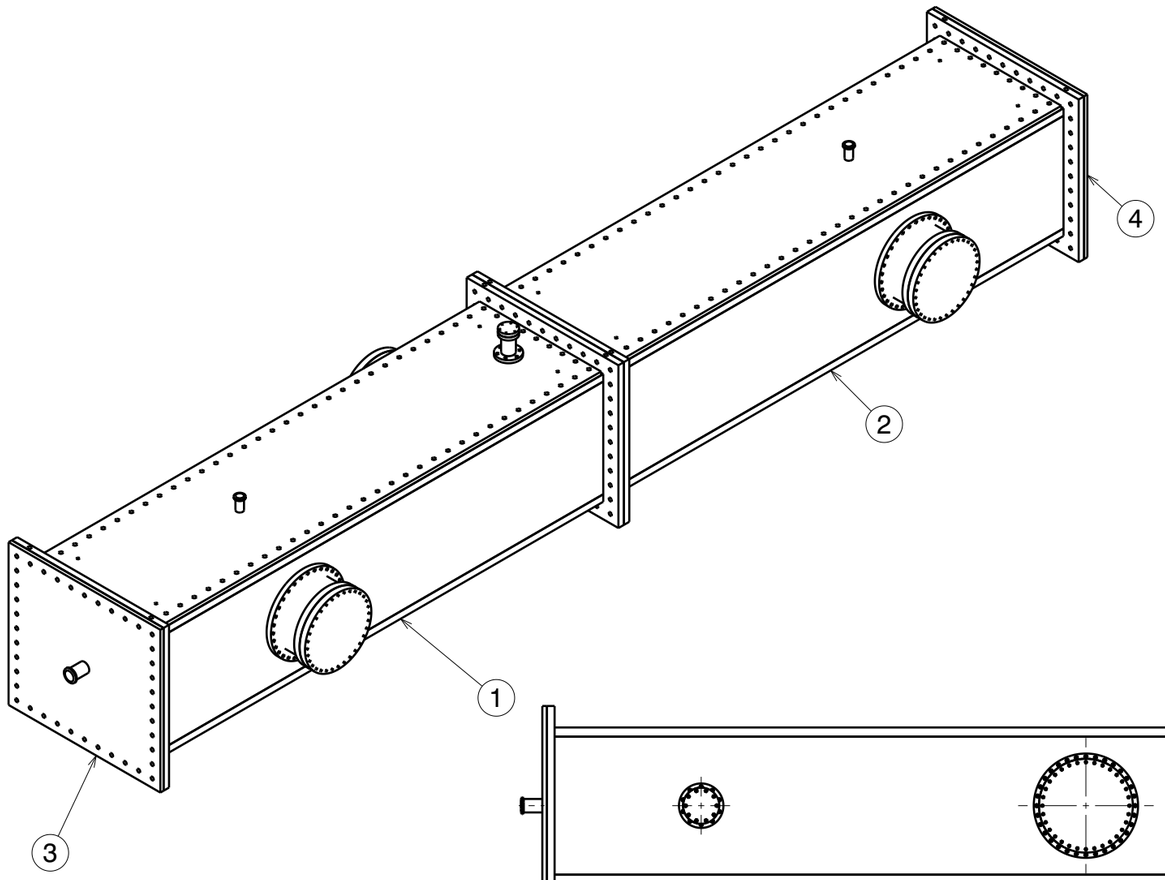
SHEET 1 OF 1

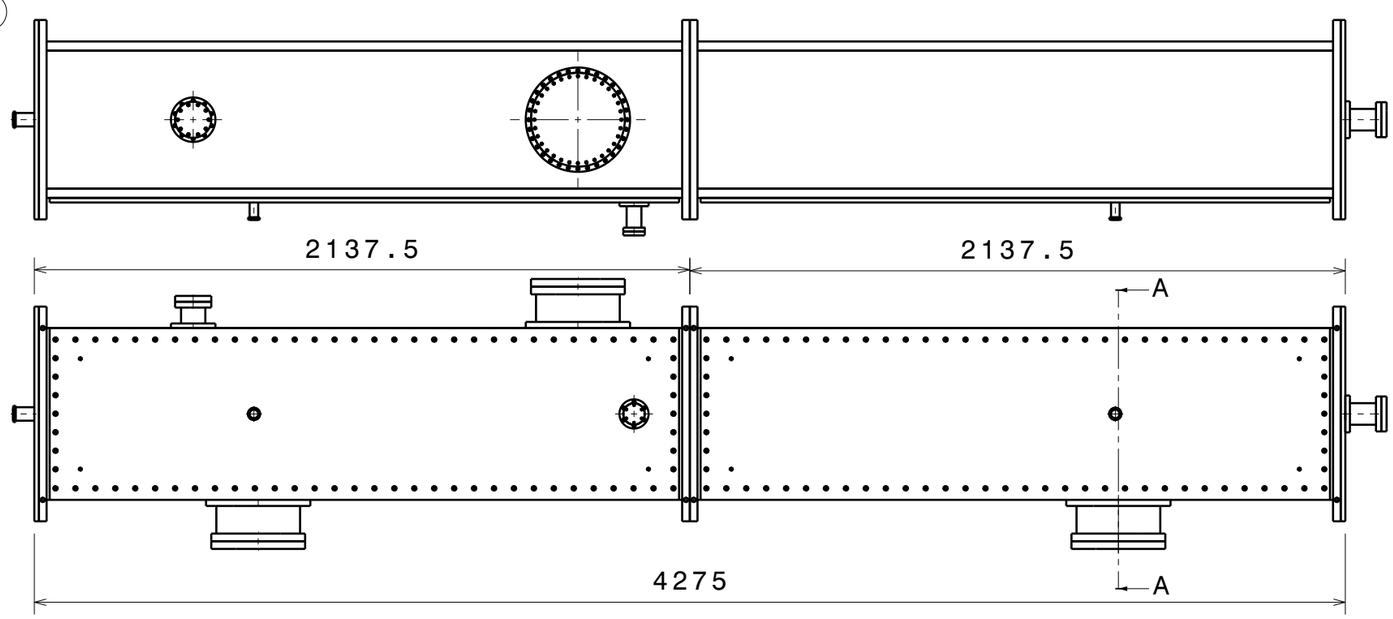
ALL DIMENSIONS ARE IN MM

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 PROCEDUES,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 SUCCESSFULL 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 PREARATION OF WELD JOINT BETWEEN END FLANGE AND SIDE PLATE,TOP PLATE,BOTTOM PLATE.
08. AFTER SUCESSFUL 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.

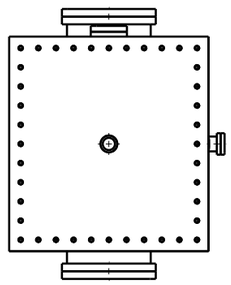
ITEM NO.	PART NAME	MATERIAL	DESCRIPTION	QTY
01	VACUUM CHAMBER-1	AS PER DWG.	DRG.#19030002	01
02	VACUUM CHAMBER-2	AS PER DWG.	DRG.#19030003	01
03	FLANGE COVER-1	AS PER DWG.	DRG.#19030007	01
04	FLANGE COVER-2	AS PER DWG.	DRG.#19030008	01

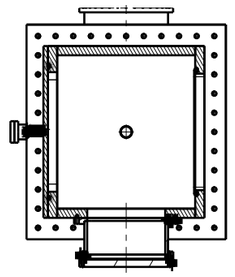




RADIAL MATCHING SIDE

FRINGE FIELD SIDE





Section view A-A

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ. GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	06.12.17
CHECKED	PKC	
APPROVED	JMK	

Institute for **Plasma Research**
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Bhat, Near Indira Bridge,Gandhinagar 382428,Gujarat (India)

TITLE
VACUUM VESSEL ASSEMBLY

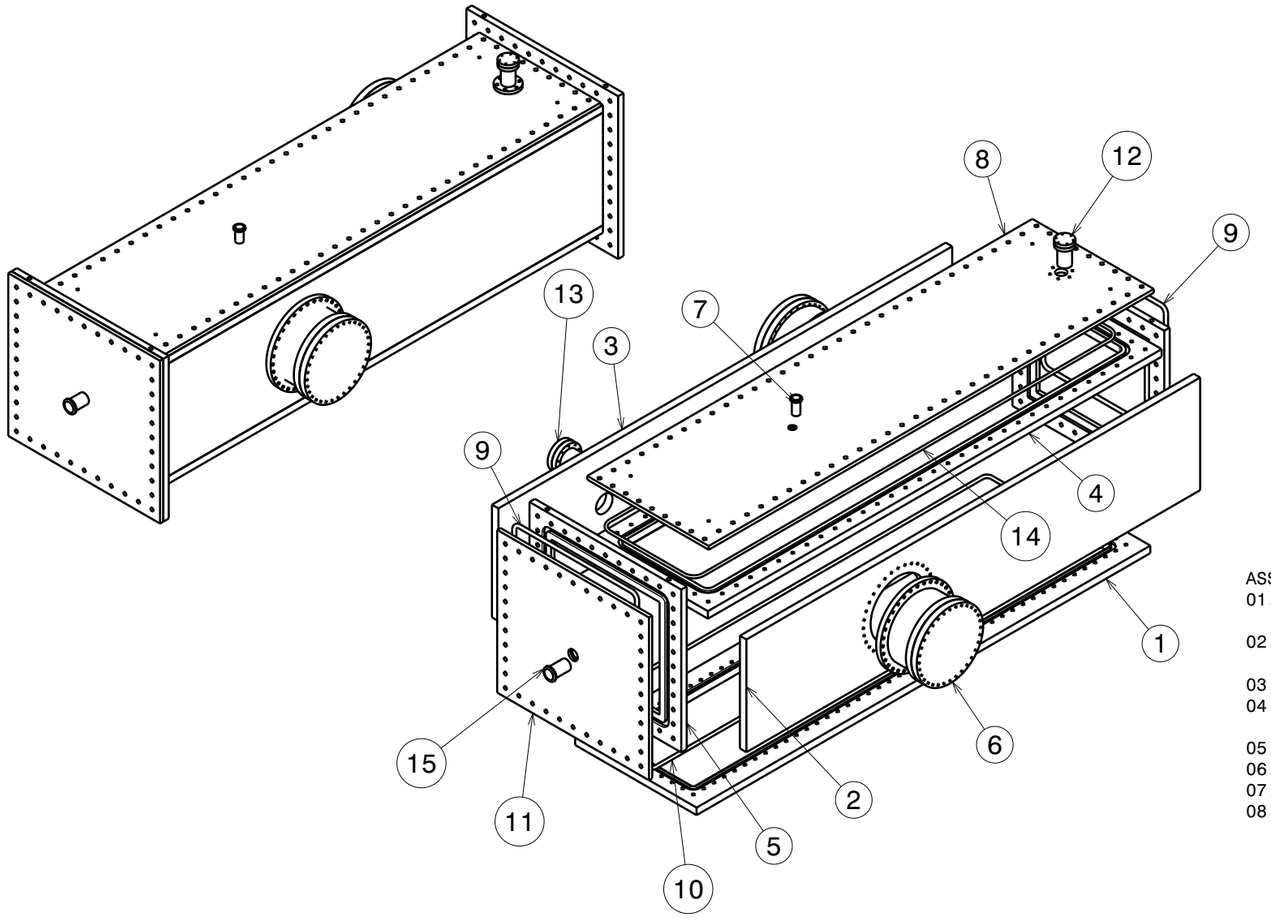
REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030001

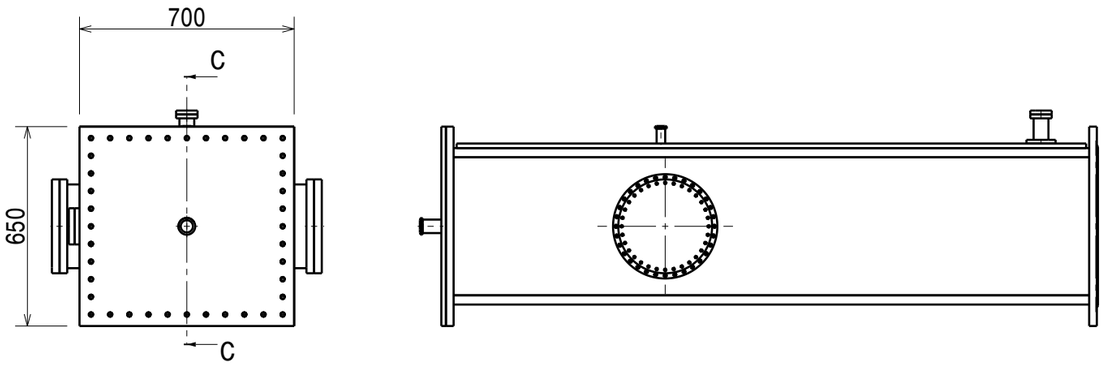
SHEET 1 OF 1

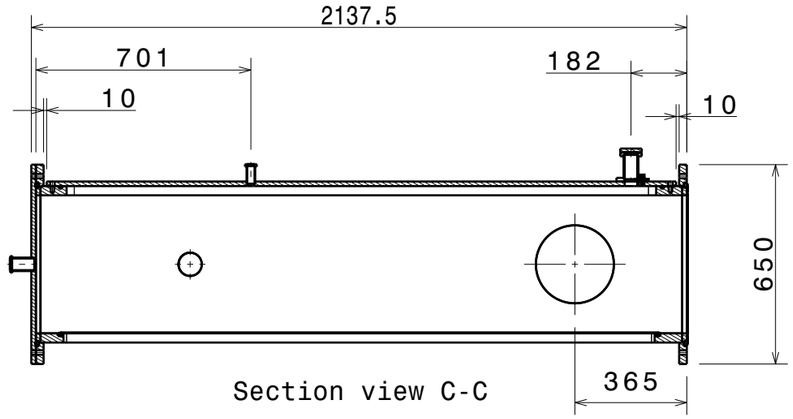
ALL DIMENSIONS ARE IN MM



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.
02.MATERIALS,WELDING PROCEDUES,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 SUCCESSFULL 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 PREARATION OF WELD JOINT BETWEEN END FLANGE AND SIDE PLATE,TOP PLATE,BOTTOM PLATE.
08.AFTER SUCESSFUL 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.





Section view C-C

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	27.11.17
CHECKED	PKC	
APPROVED	JMK	

Institute for **Plasma Research**
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Bhat, Near Indira Bridge,Gandhinagar 382428,Gujarat (India)

TITLE
VACUUM VESSEL-1 ASSEMBLY

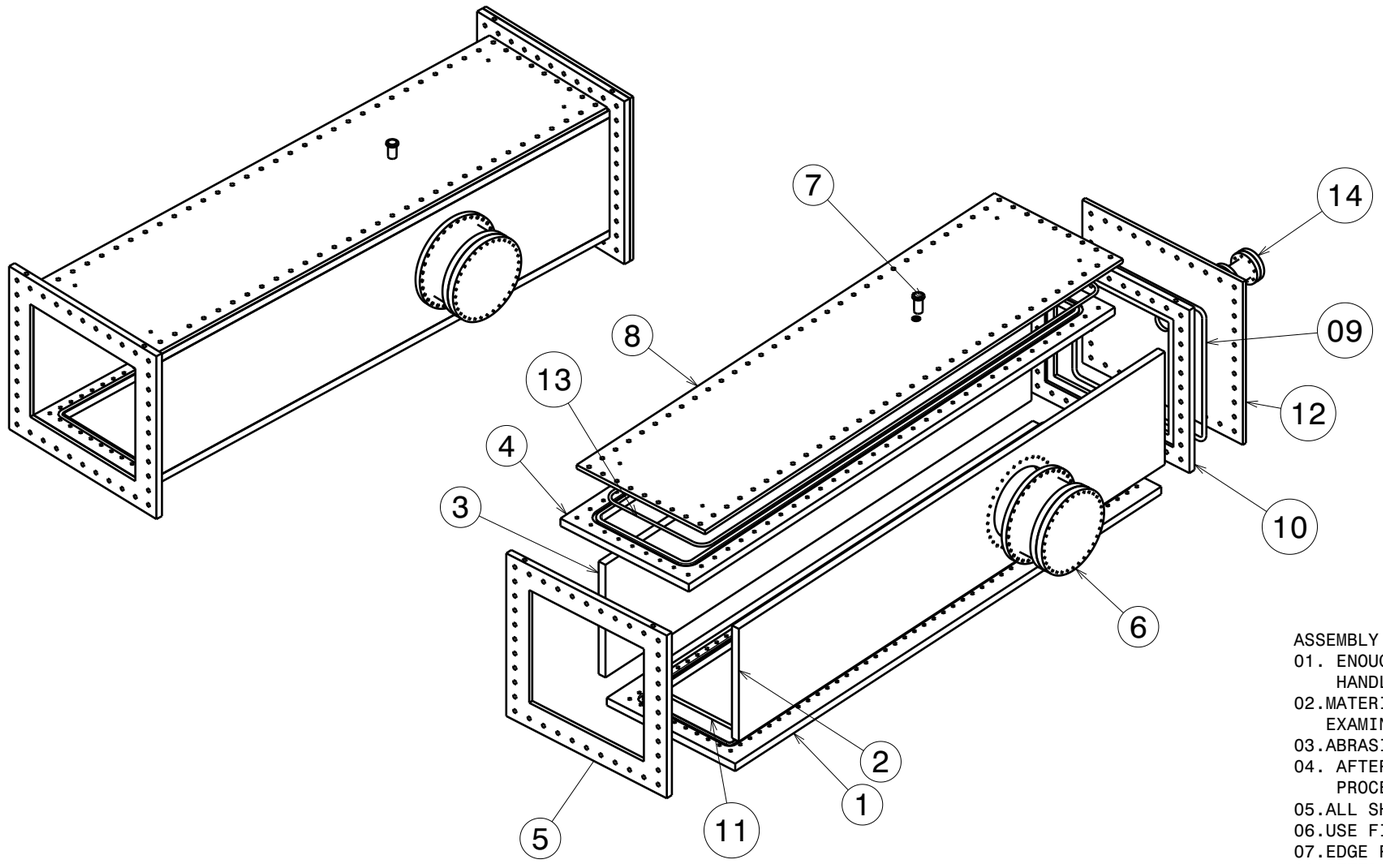
REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030002

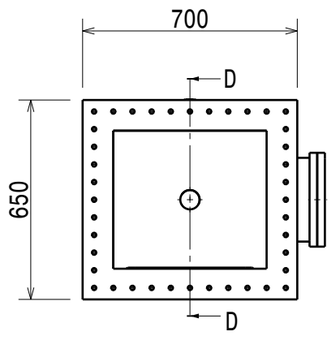
SHEET 1 OF 1

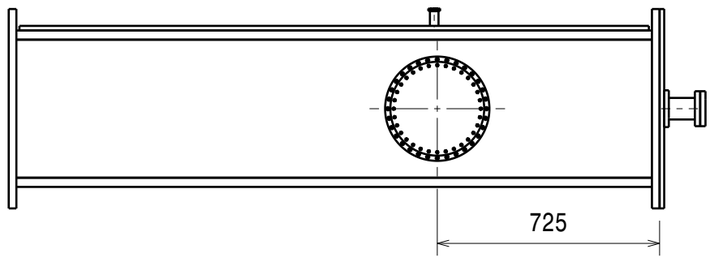
ALL DIMENSIONS ARE IN MM

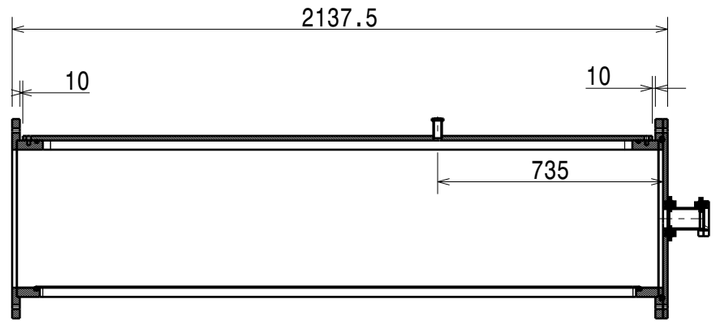


ITEM NO.	PART NAME	MATERIAL	DESCRIPTION	QTY
01	BOTTOM PLATE-2	AL6061-T6	DRG.#19030013	01
02	SIDE PLATE-3	AL6061-T6	DRG.#19030017	01
03	SIDE PLATE-4	AL6061-T6	DRG.#19030018	01
04	TOP PLATE-2	AL6061-T6	DRG.#19030021	01
05	END FLANGE-2	AL6061-T6	DRG.#19030006	01
06	DN250CF VACUUM PORT	SS304L	DRG.#19030027	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

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 PROCEDUES,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 SUCCESSFULL 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 PREARATION OF WELD JOINT BETWEEN END FLANGE AND SIDE PLATE,TOP PLATE,BOTTOM PLATE.
08.AFTER SUCESSFUL 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.







Section view D-D

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:		
ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED		
SCALE	1:1	DATE
DRAWN	K.R.R.	01/12/17
CHECKED	PKC	
APPROVED	JMK	

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

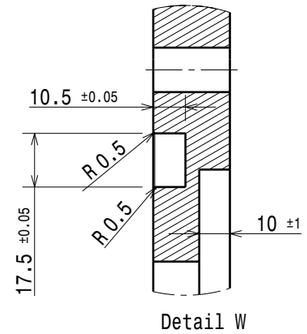
TITLE
VACUUM VESSEL -2 ASSEMBLY

REF DRG NO:	REV 0
DRG.NO IPR/17/A3/RFQ/19030003	SHEET 1 OF 1

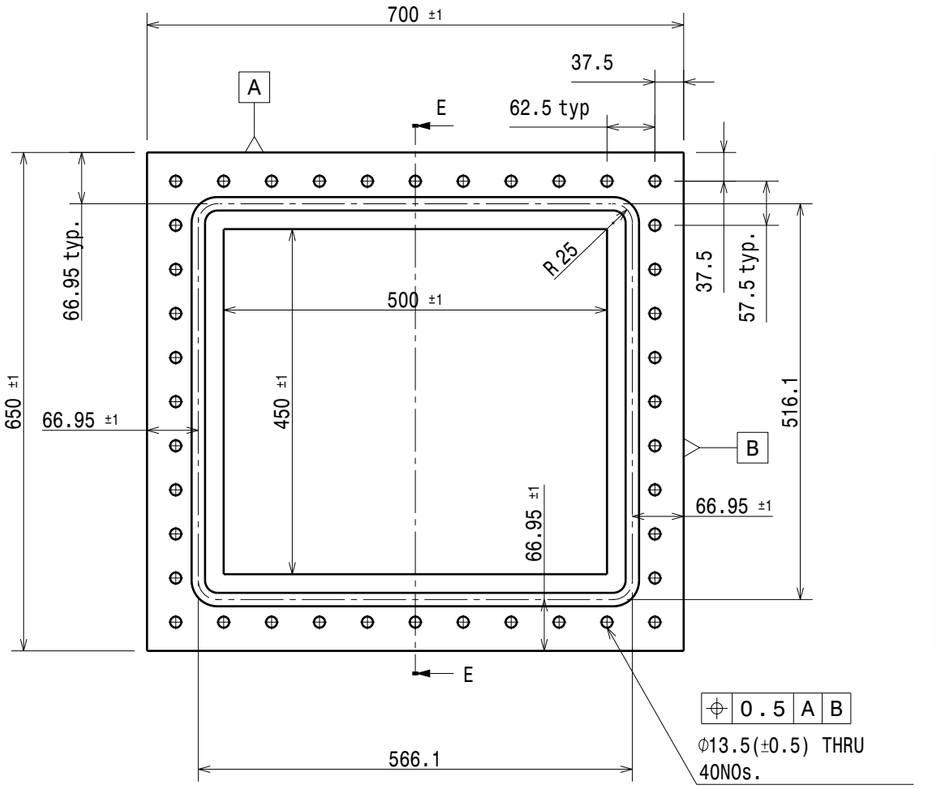
NOTE:-
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASEMBLY
03. USE DRILL JIG FOR DRILLING OF HOLES.
04. THREADING SHALL BE AS PER IS4218
05. AFTER MACHINING THE COMPONENT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

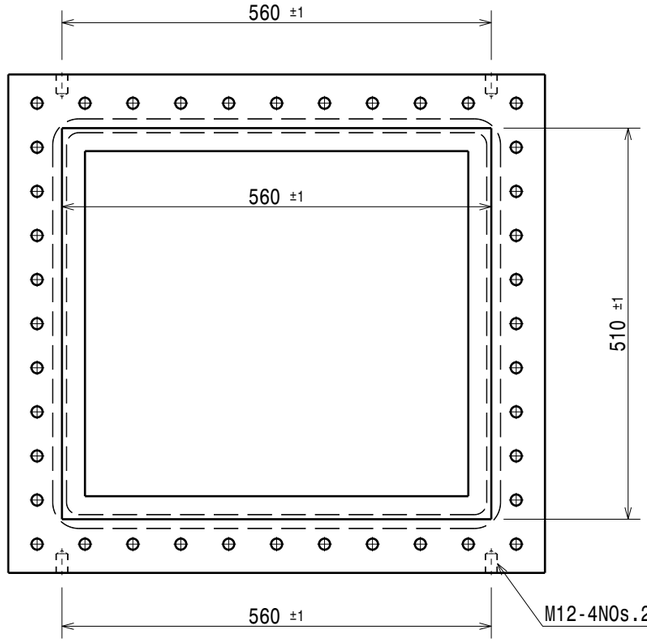
N8 / N5 N4

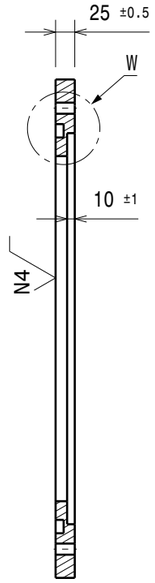
ALL DIMENSIONS ARE IN MM



Detail W







Section view E-E

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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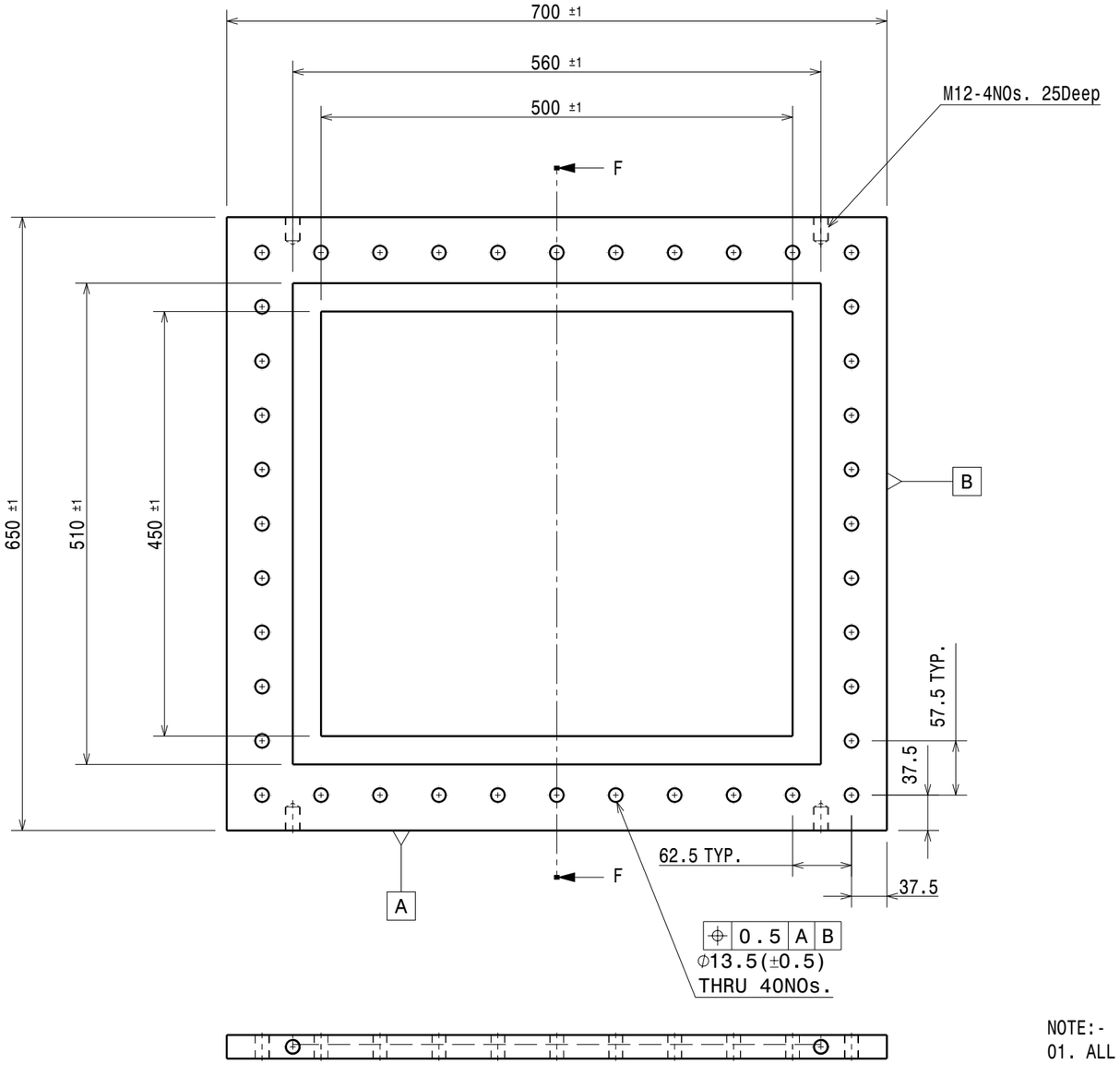
TITLE
END FLANGE -1

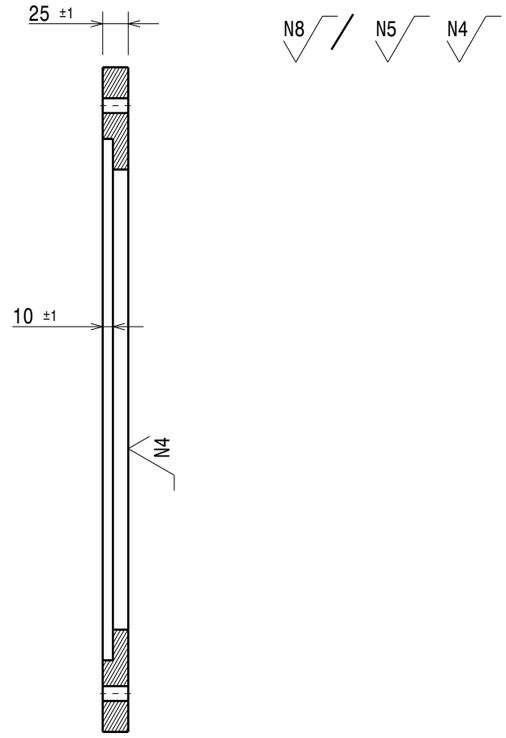
REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030005

SHEET 1 OF 1





Section view F-F

ALL DIMENSIONS ARE IN MM

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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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TITLE
END FLANGE-2

REF DRG NO:

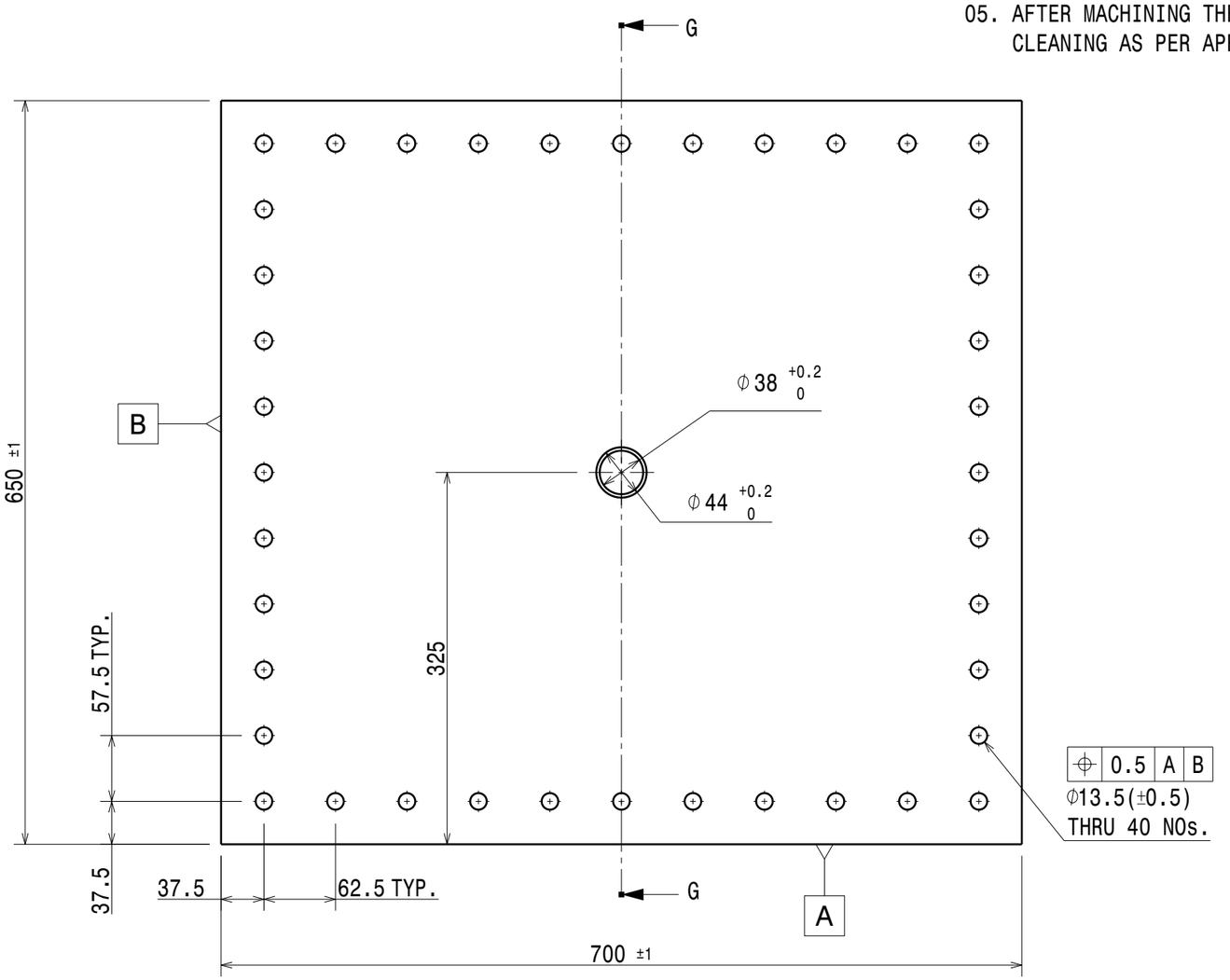
REV 0

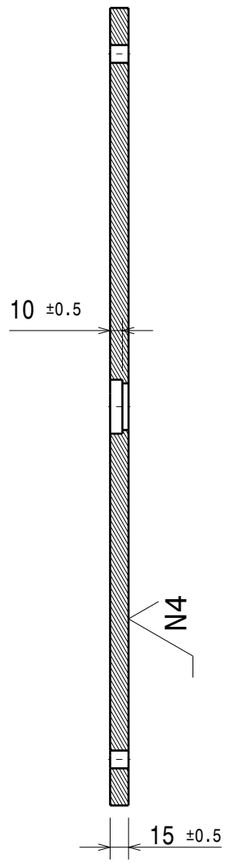
DRG.NO IPR/17/A3/RFQ/19030006

SHEET 1 OF 1

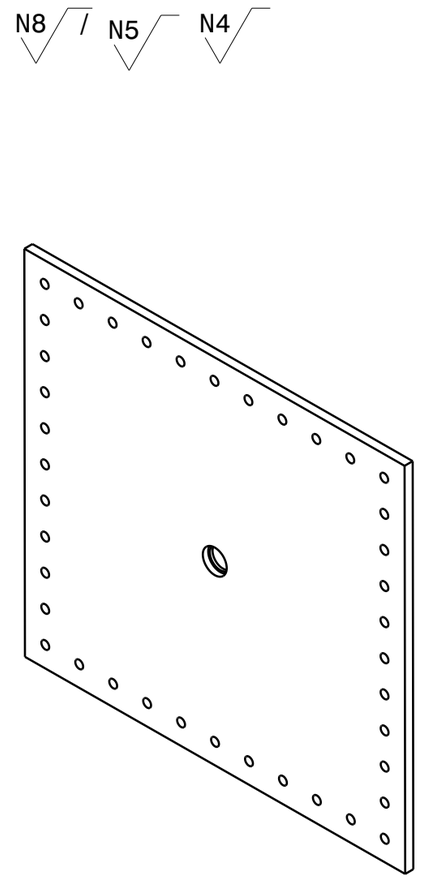
ALL DIMENSIONS ARE IN MM

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





Section view G-G



DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:		
ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED		
SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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TITLE
END FLANGE COVER-1

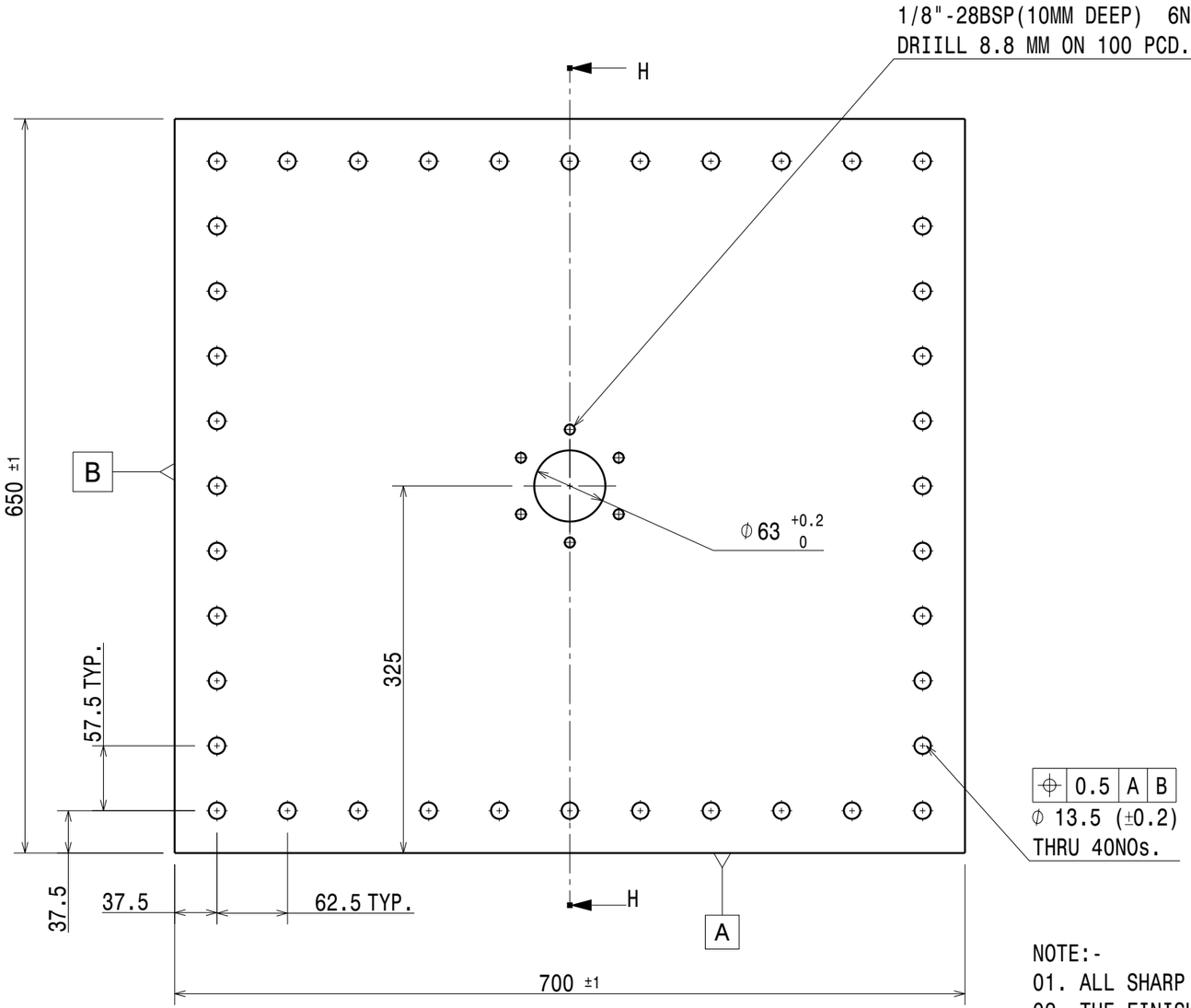
REF DRG NO:

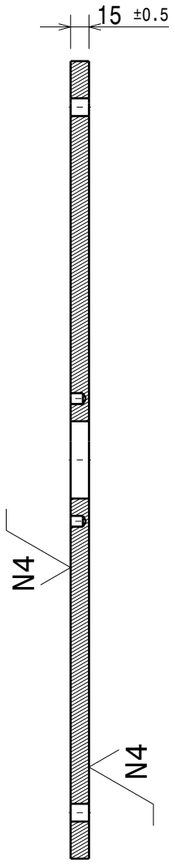
REV 0

DRG.NO IPR/17/A3/RFQ/19030007

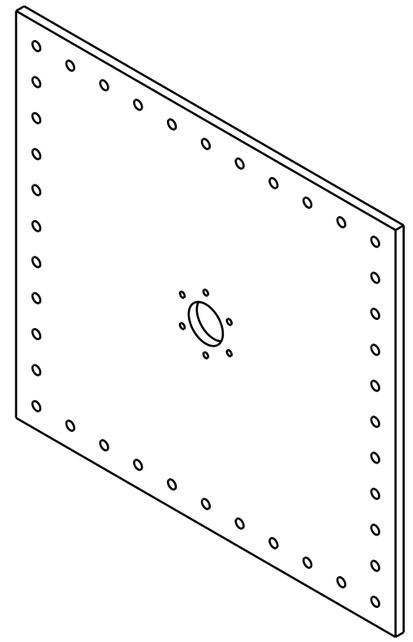
SHEET 1 OF 1

ALL DIMENSIONS ARE IN MM





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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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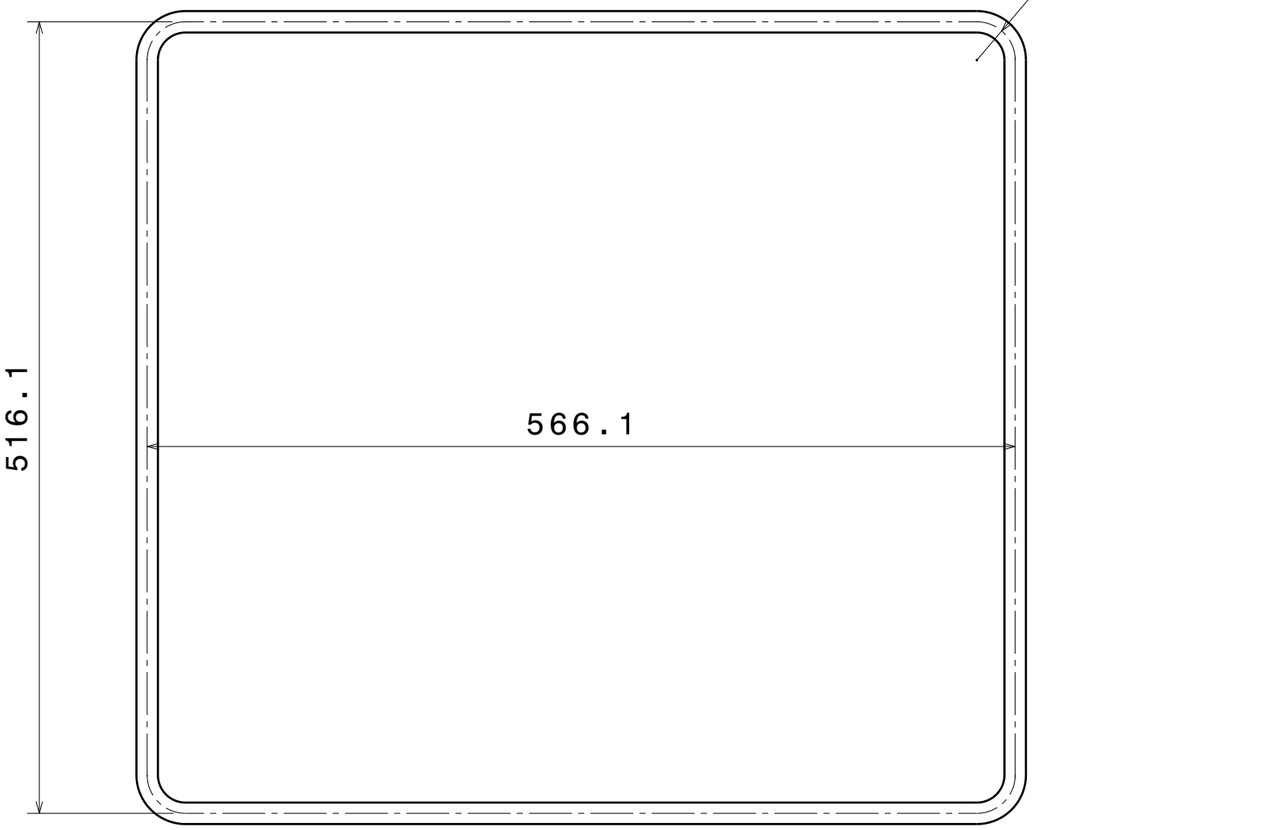
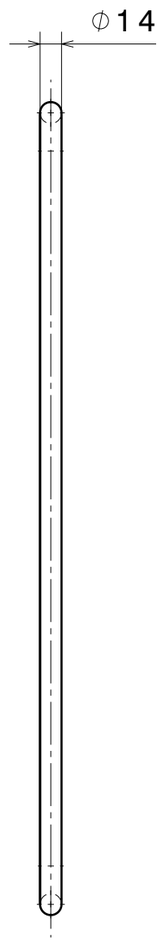
TITLE
END FLANGE COVER-2

REF DRG NO: REV 0

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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN

REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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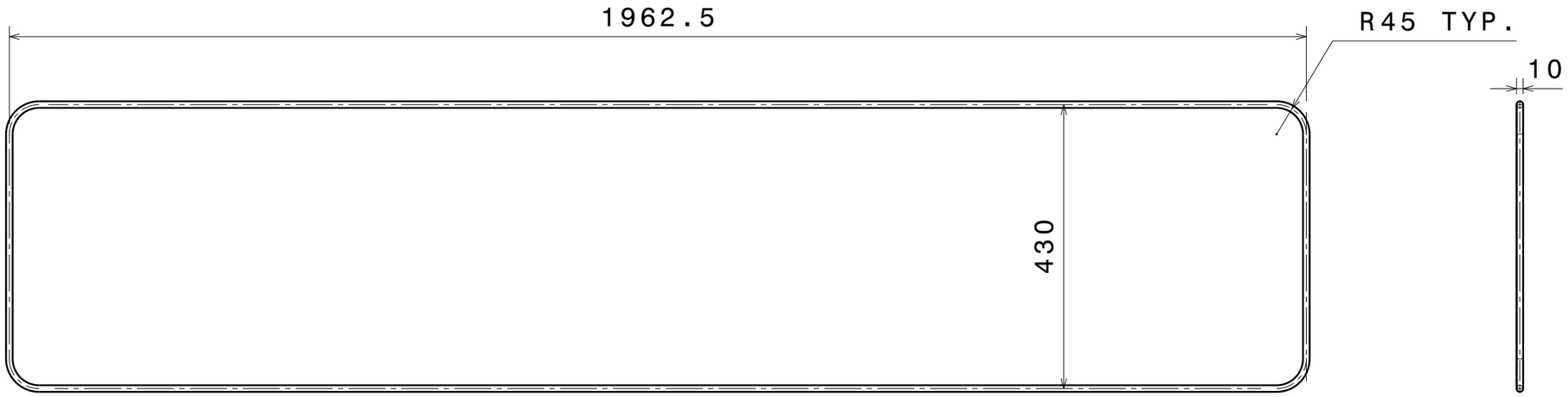
TITLE
O-RING-1 END FLANGE

REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030009

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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:		
ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED		
SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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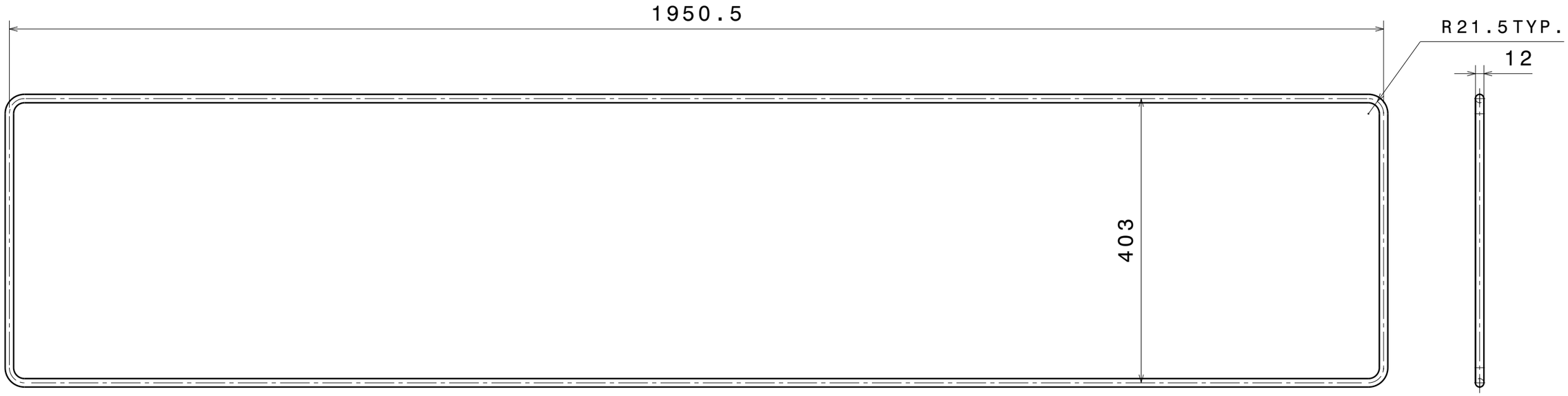
TITLE
O-RING-2 FOR TOP PLATE-1

REF DRG NO:	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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

ASS'Y GROUP:		
ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED		
SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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TITLE
O-RING-3 FOR BOTTOM PLATE-1

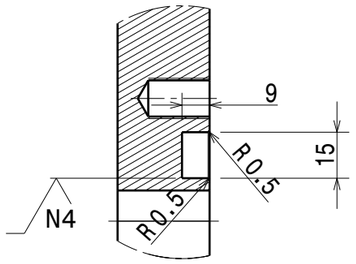
REF DRG NO: | REV 0

DRG.NO IPR/17/A3/RFQ/19030011 | SHEET 1 OF 1

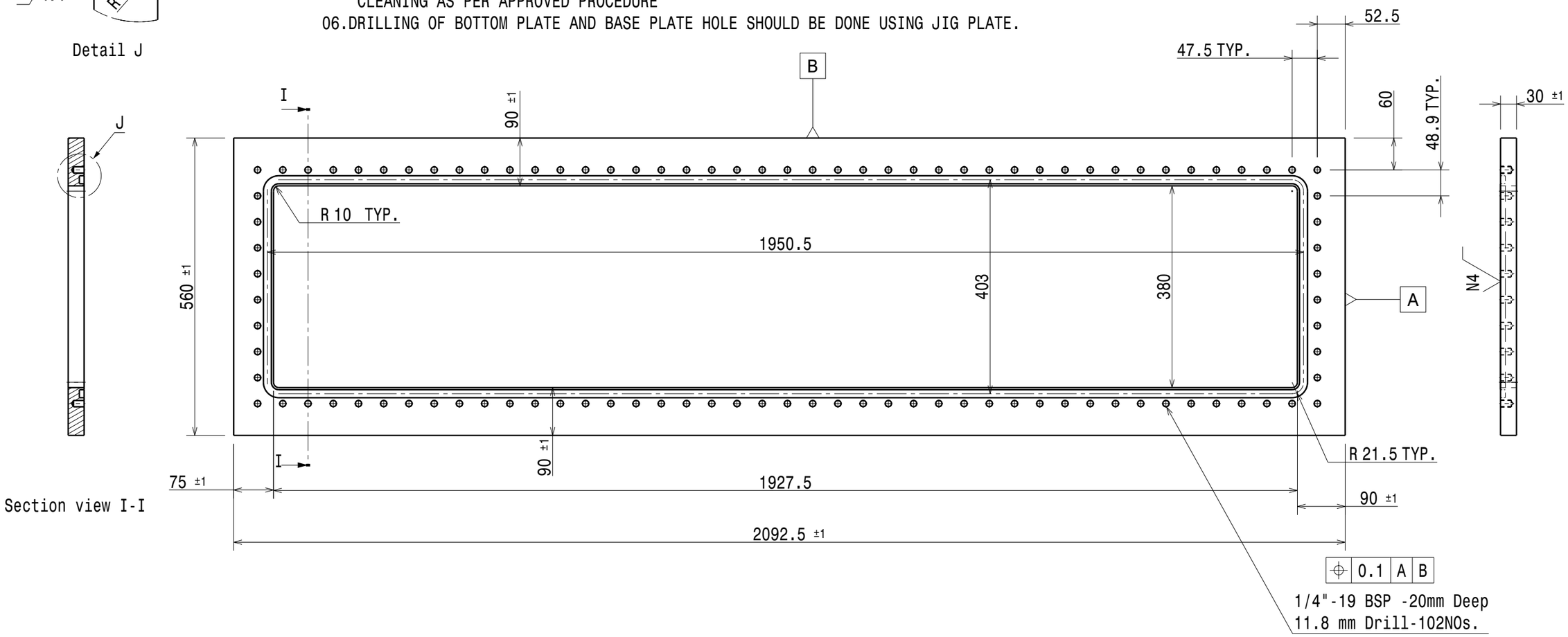
ALL DIMENSIONS ARE IN MM

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 J



Section view I-I

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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TITLE
BOTTOMPLATE-1

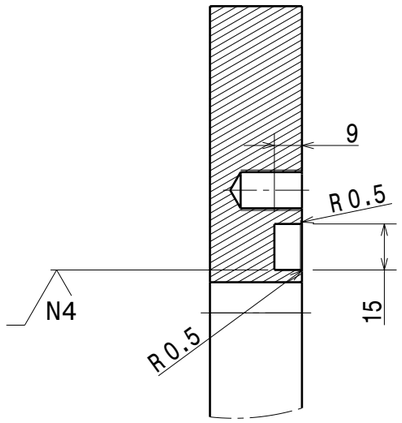
REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030012

SHEET 1 OF 1

ALL DIMENSIONS ARE IN MM

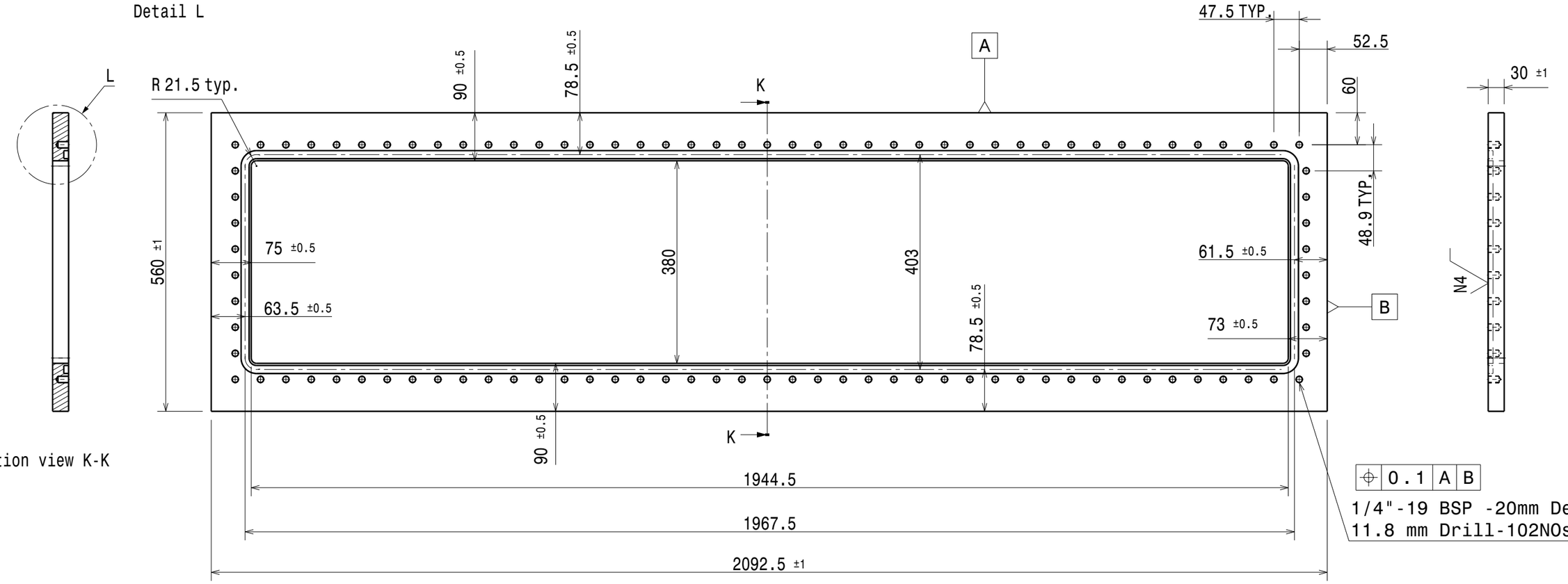


Detail L

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.

N8 / N5 N4



Section view K-K

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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TITLE: BOTTOM PLATE-2

REF DRG NO:

REV 0

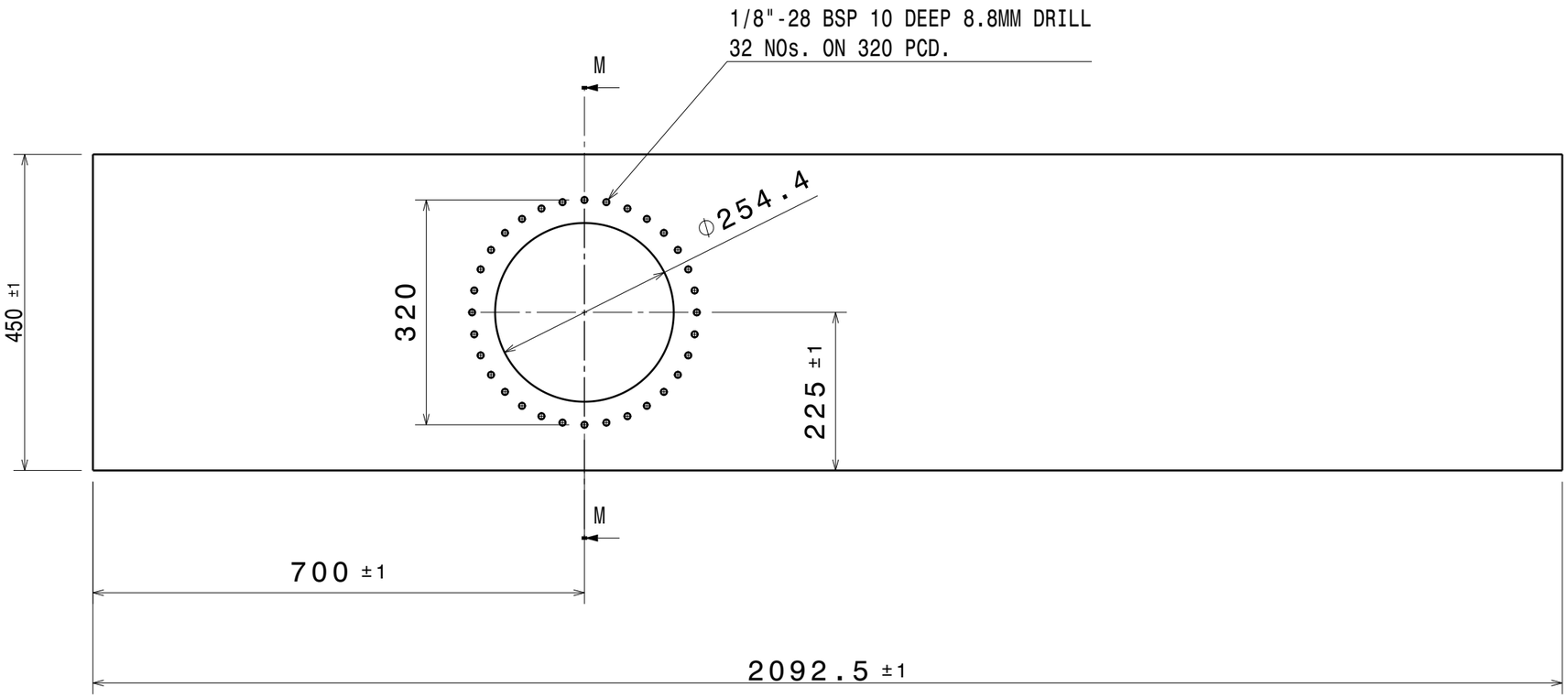
DRG.NO IPR/17/A3/RFQ/19030013

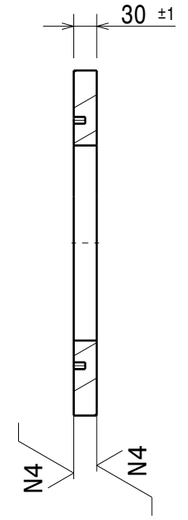
SHEET 1 OF 1

ALL DIMENSIONS ARE IN MM

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

N8 N5 N4





Section view M-M

DRG.NO	▽ 8-25	▽▽ 1.6-8	▽▽▽ 0.025-1.6	▽▽▽▽ < 0.025
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

RFQ GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	21.11.17
CHECKED	PKC	
APPROVED	JMK	

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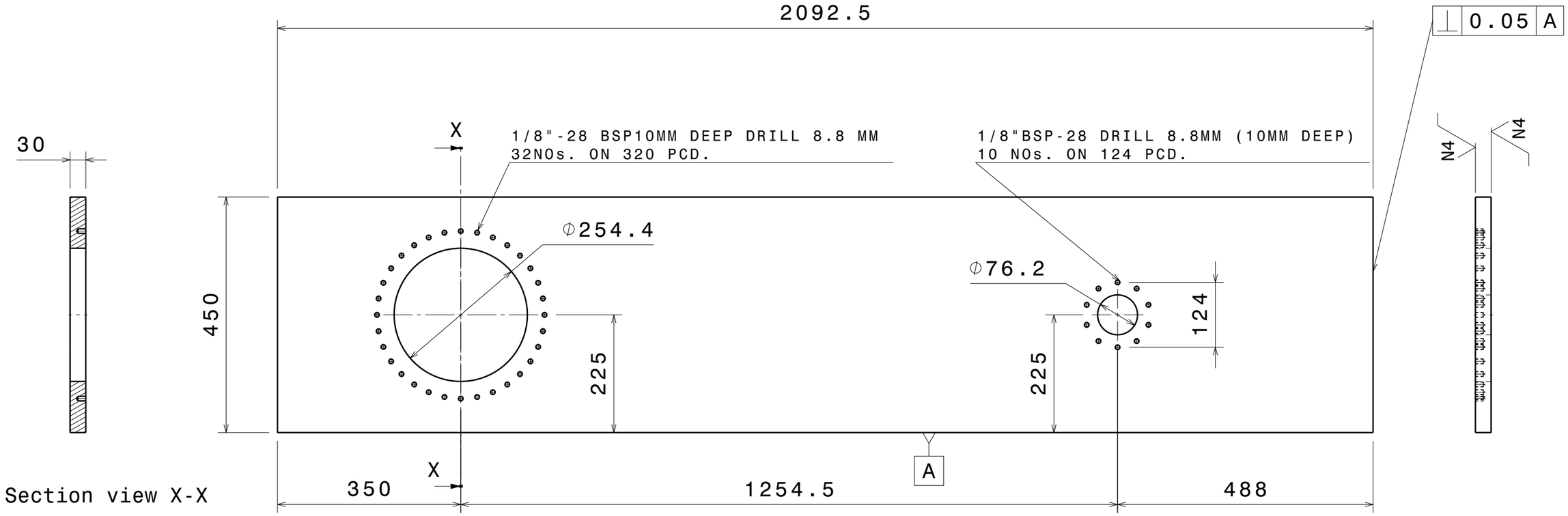
TITLE
SIDE PLATE-1

REF DRG NO:

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
CO-ORDINATED 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
UPTO 10	10-50	50-120	OVER 120-400					
±1°	±0°-30'	±0°-20'	±0°-10'		±0.1	±0.2	±0.3	±0.5

REVISION COLUMN					
REV	ZONE	DESCRIPTION	DATE	REMARKS	APPROVED

ASS'Y GROUP:

ALL DIMENSIONS ARE IN `mm' UNLESS OTHERWISE STATED

SCALE	1:1	DATE
DRAWN	K.R.R.	07.12.17
CHECKED	PKC	
APPROVED	JMK	

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Bhat, Near Indira Bridge,Gandhinagar 382428,Gujarat (India)

TITLE
SIDE PLATE-2

REF DRG NO:

REV 0

DRG.NO IPR/17/A3/RFQ/19030016

SHEET 1 OF 1