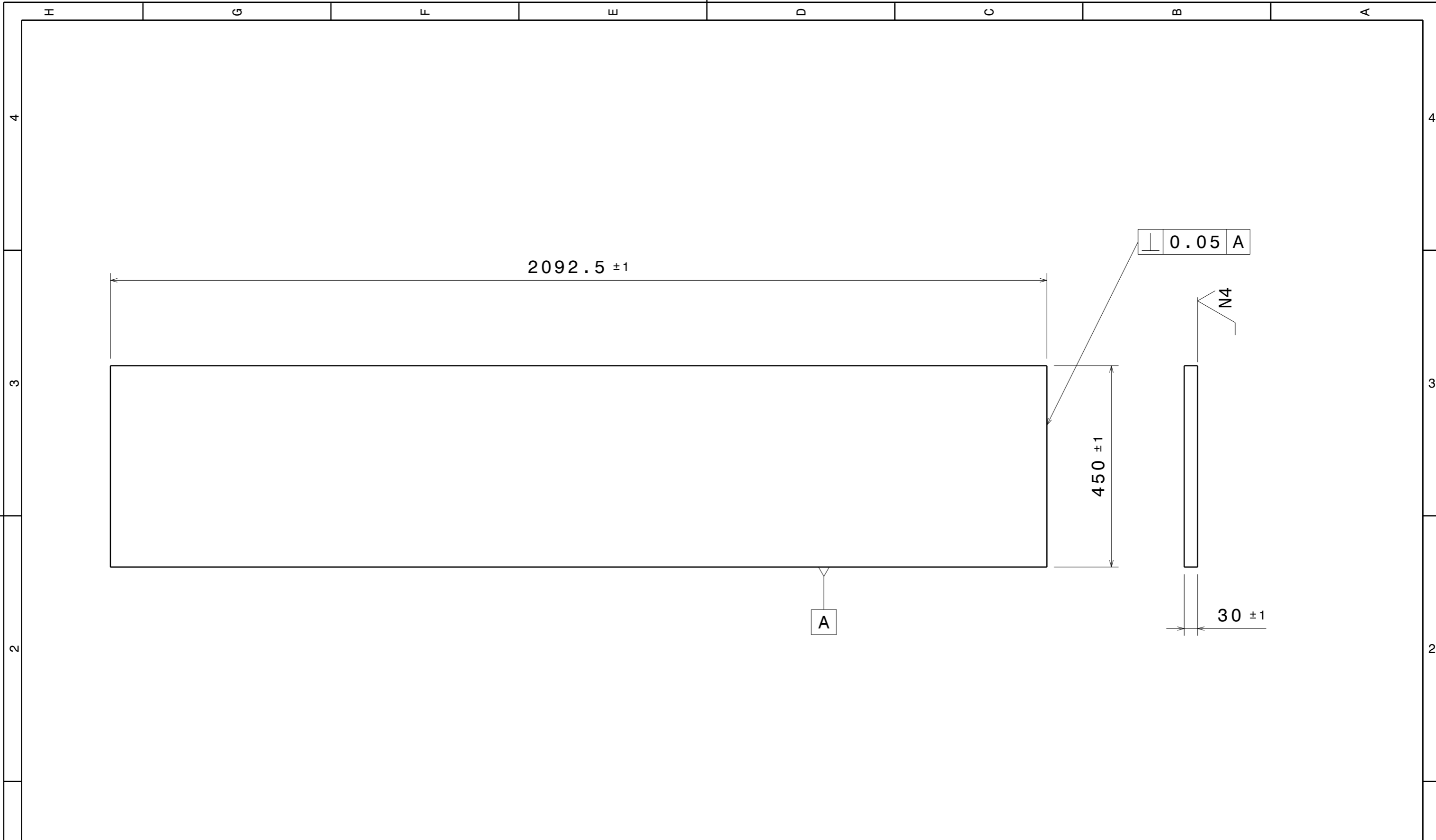

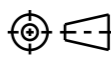
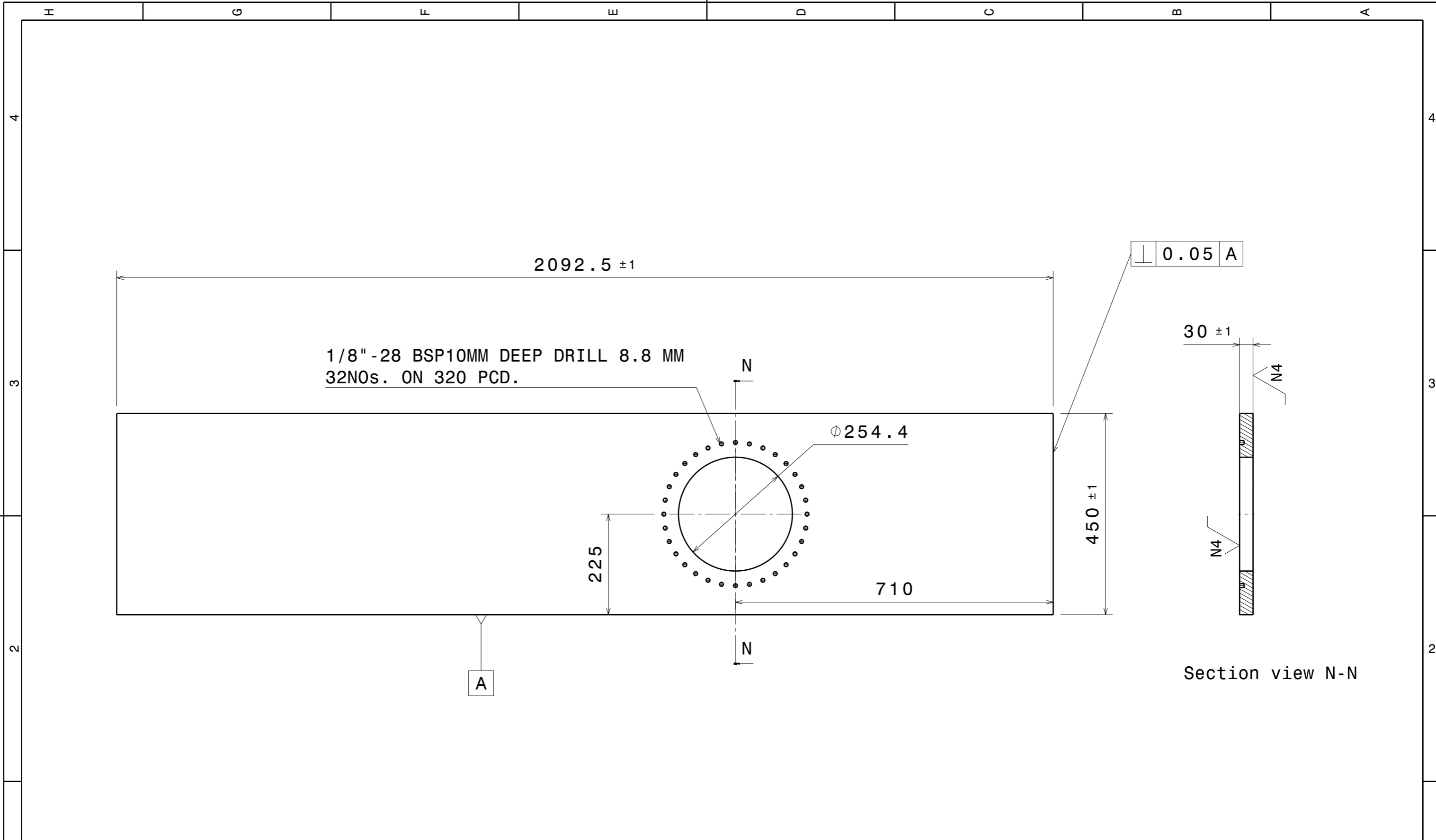



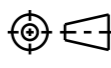
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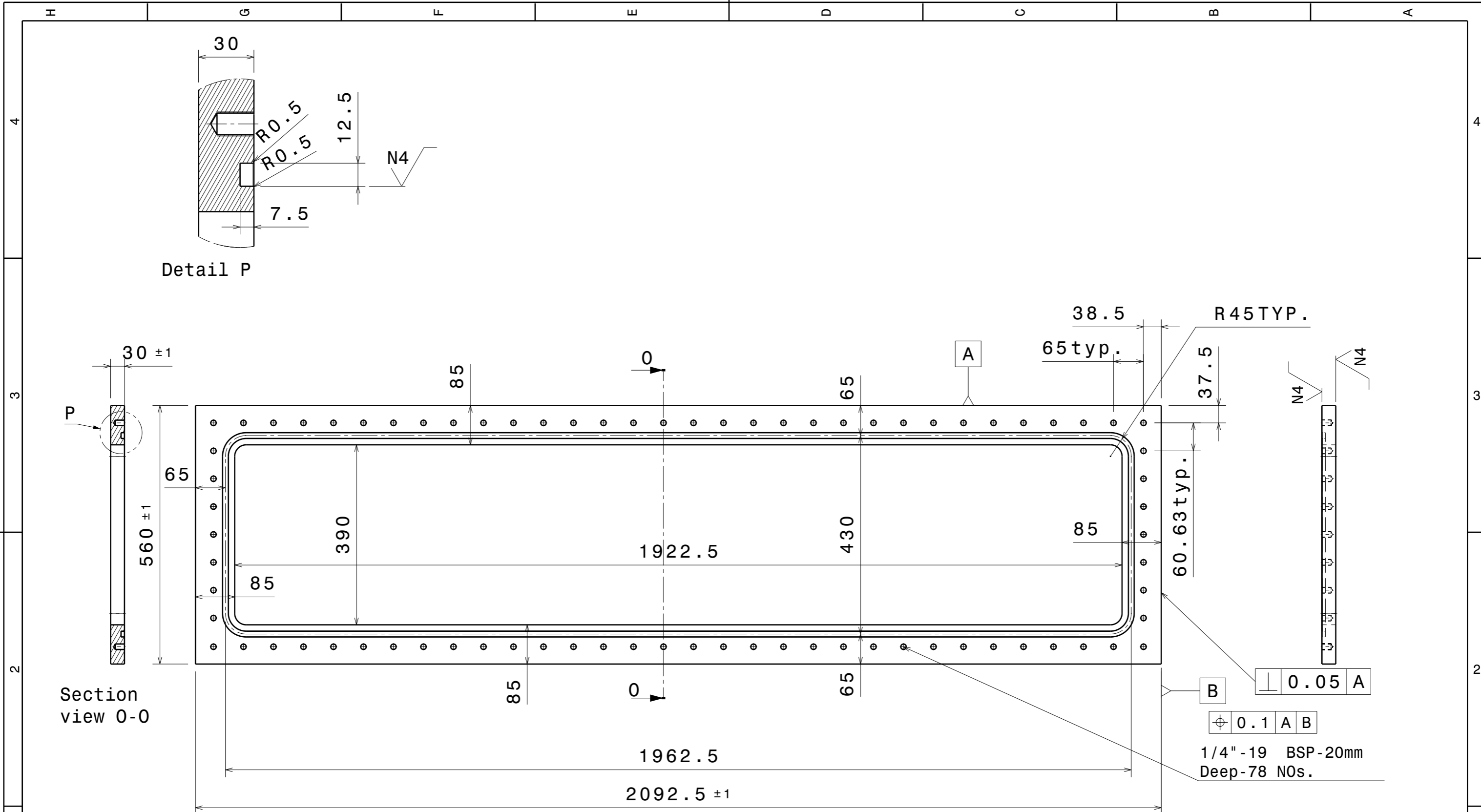
To view the reconstructed contents, please SCROLL DOWN to next page.



| | | | | | | | | | | | | | | | |
|--|---------|------------------------|--------------|---------------|--------------|-----------------|--------|-------------|------|------------|----------|--|--|----------|---|
| 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. | 07.12.17 |  SIDE PLATE - 3 |
| 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/19030018 | | SHEET 1 OF 1 | | | | | | | | | | | |




| | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|---------|------------|--|----------|--|------------------------|---|
| 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. | 07.12.17 |  SIDE PLATE - 4 |
| 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/19030019 | SHEET 1 OF 1 |

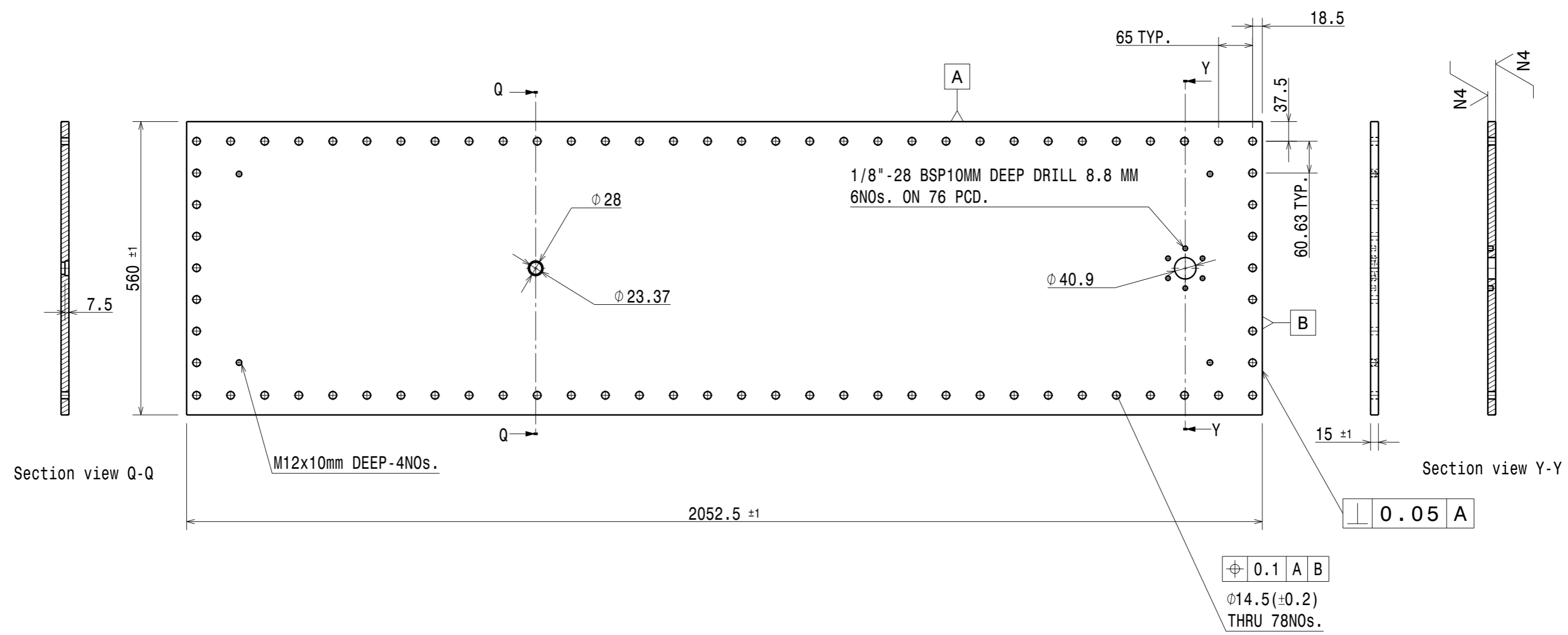
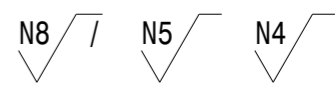


| | | | | |
|--|---------|----------|---------------|--------------|
| DRG.NO | ▽ 8-25 | ▽▽ 1.6-8 | ▽▽▽ 0.025-1.6 | ▽▽▽▽ < 0.025 |
| CO-ORDINATED BY | | | | |
| MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS | | | | |
| LENGTH IN mm OF SHORTER SIDE OF ANGLES | | | | LENGTH |
| UPTO 10 | 10-50 | 50-120 | OVER 120-400 | UPTO 6 |
| +1° | +0°-30' | +0°-20' | +0°-10' | OR DIA |
| | | | | +0.1 |
| | | | | +0.2 |
| | | | | +0.3 |
| | | | | +0.5 |

| REVISION COLUMN | | | | | |
|-----------------|------|-------------|------|---------|----------|
| REV | ZONE | DESCRIPTION | DATE | REMARKS | APPROVED |
| | | | | | |
| | | | | | |
| | | | | | |

| | | | | |
|--|--|--|--|-------------|
| RFQ GROUP: | | |  Institute for Plasma Research प्लाज्मा अनुसंधान संस्थान Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India) | |
| ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED | | | SCALE | 1:1 |
| DRAWN | | | K.R.R. | DATE |
| CHECKED | | | PKC | |
| APPROVED | | | JMK | |
| TITLE | | | | REF DRG NO: |
| TOP PLATE - 1 | | | | REV 0 |
| DRG.NO | | | | SHEET |
| IPR/17/A3/RFQ/19030020 | | | | 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

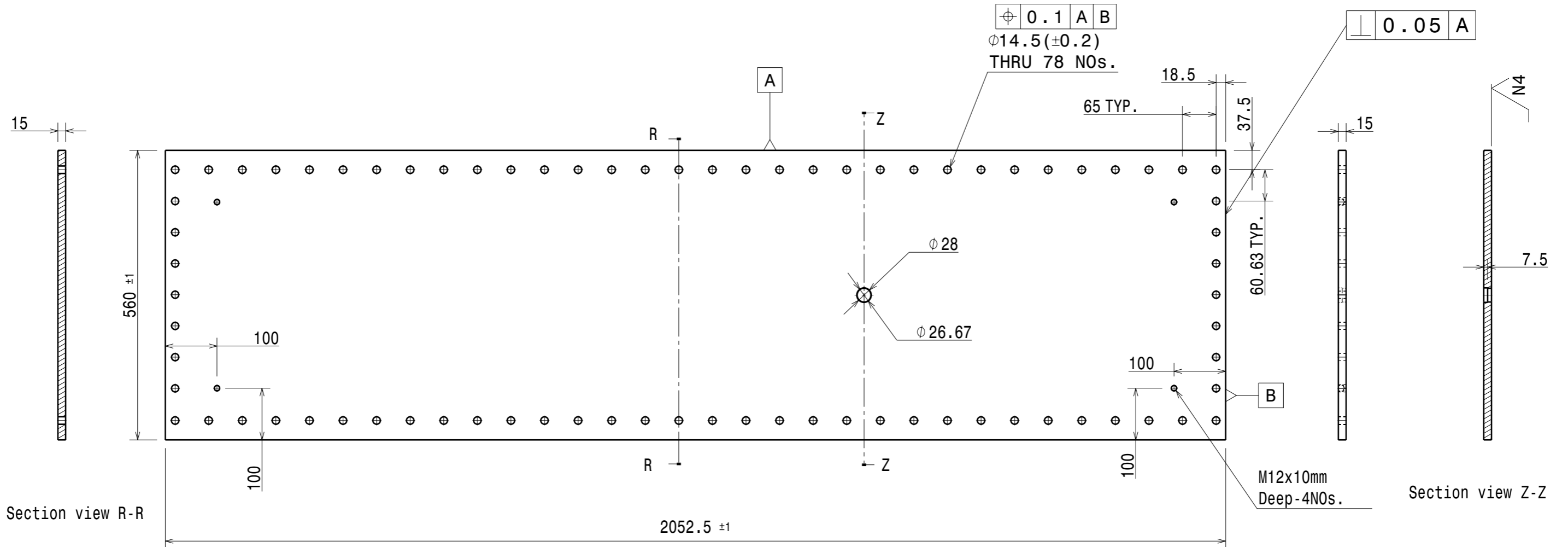



| | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|---------|------------|--|---------|--|----------|------------------------|
| DRG.NO | ▽ 8-25 | ▽▽ 1.6-8 | ▽▽▽ 0.025-1.6 | ▽▽▽▽ < 0.025 | REVISION COLUMN | | | | | 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. | 27.11.17 | TOP PLATE COVER-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/19030023 |
| | | | | | | | | | | | | REV | 0 | | |
| | | | | | | | | | | | | 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

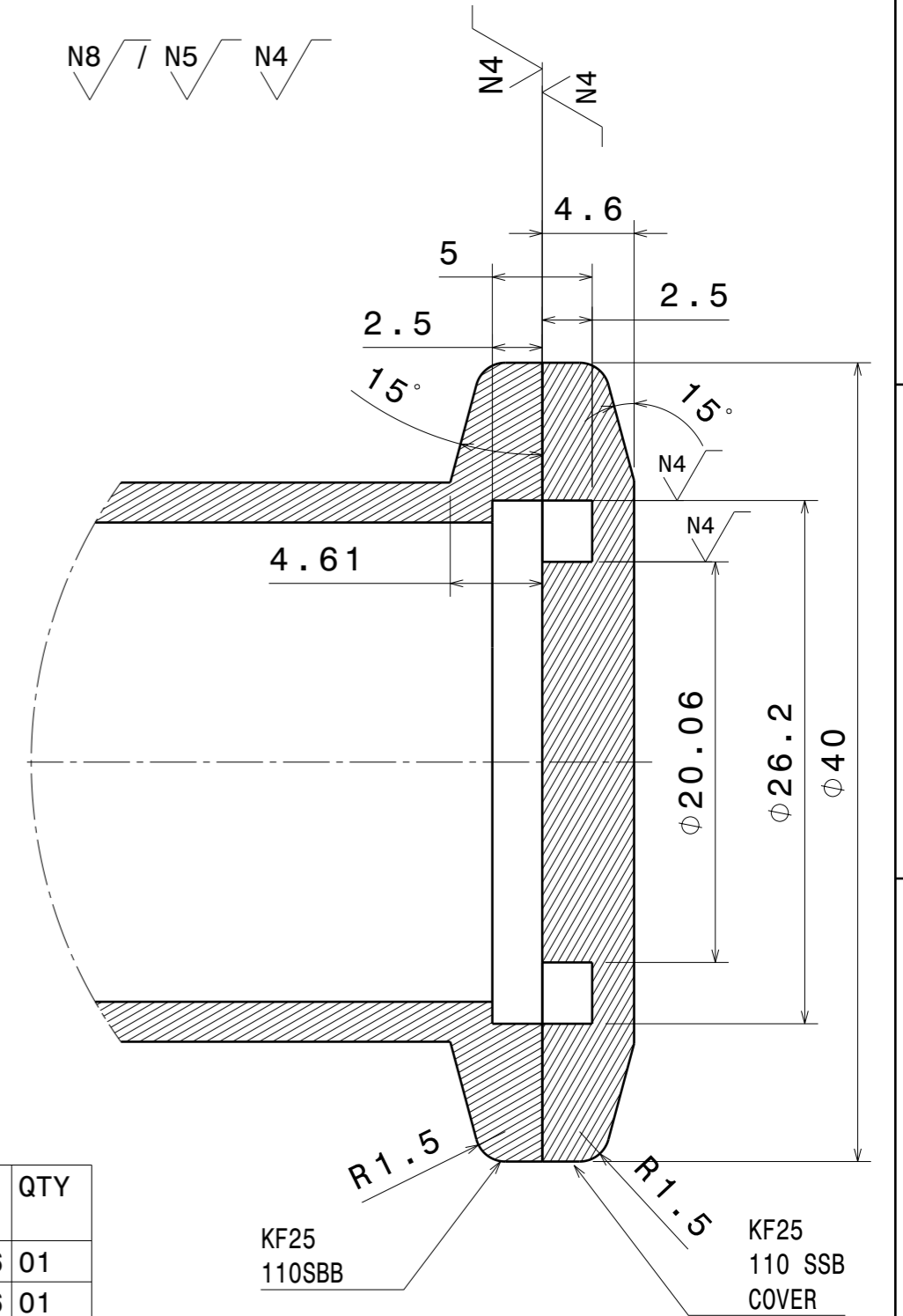
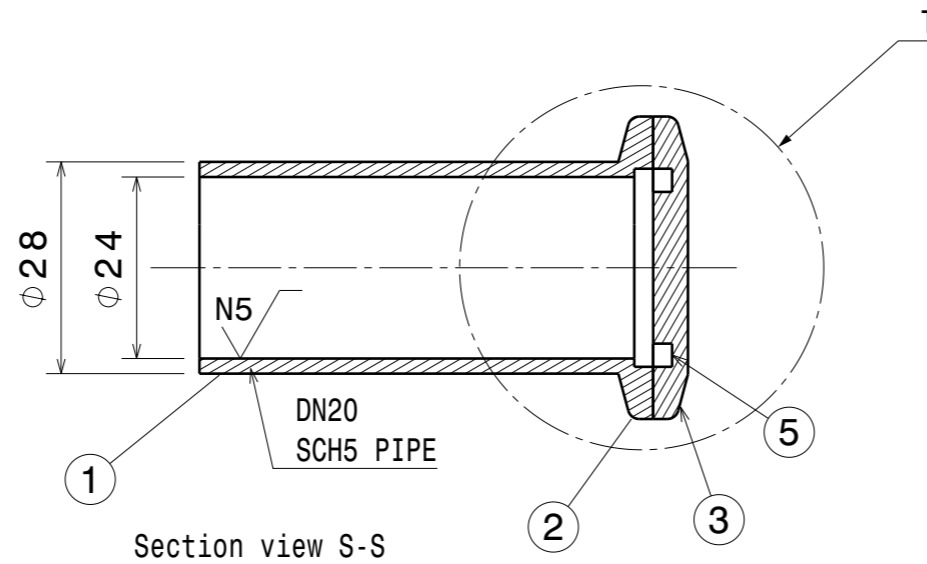
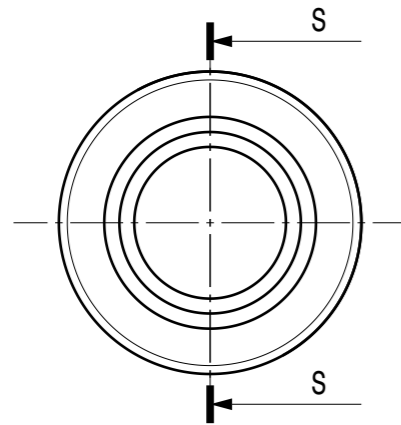
N8 $\sqrt{1}$ N5 $\sqrt{1}$ N4 $\sqrt{1}$



| | | | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|---------|------------|--|---------|--|----------|------------------------|--------------|-------|
| 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. | 27.11.17 | TOP PLATE 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/19030024 | SHEET 1 OF 1 | |

NOTE:-

01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
02. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE



| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|-------------------------------|-----------|-----|
| 1 | DN20 SCH5 PIPE_73.45L | AL6061 T6 | 01 |
| 2 | KF 25 FLANGE | AL6061 T6 | 01 |
| 3 | KF25 FLANGE COVER | AL6061 T6 | 01 |
| 4 | CLAMP | SS304 | 01 |
| 5 | CENTERING RING SS WITH O-RING | VITON | 01 |

Detail T

| DRG.NO | | | | REVISION COLUMN | | | | RFQ GROUP: | | | | |
|--|---------|---------|--------------|-----------------|--------|-------------|--------|-------------------------------|--------------|--|-------|--|
| ▽ 8-25 | | | | ▽▽ 1.6-8 | | | | ▽▽▽ 0.025-1.6 | | | | |
| ▽▽▽ < 0.025 | | | | REV | ZONE | DESCRIPTION | DATE | REMARKS | APPROVED | ALL DIMENSIONS ARE IN 'mm' UNLESS OTHERWISE STATED | | |
| CO-ORDINATED BY | | | | | | | | SCALE 1:1 DATE 01/08/17 | | | | |
| MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS | | | | | | | | DRAWN K.R.R. | | | | |
| LENGTH IN mm OF SHORTER SIDE OF ANGLES | | | | LENGTH | UPTO 6 | 6-30 | 30-120 | 120-315 | CHECKED PKC | | | |
| UPTO 10 | 10-50 | 50-120 | OVER 120-400 | OR DIA | +0.1 | +0.2 | +0.3 | +0.5 | APPROVED JMK | | | |
| +1° | +0°-30' | +0°-20' | +0°-10' | | | | | | REF DRG NO: | | REV 0 | |
| | | | | | | | | DRG.NO IPR/17/A3/RFQ/19030025 | | | | |
| | | | | | | | | SHEET 1 OF 1 | | | | |

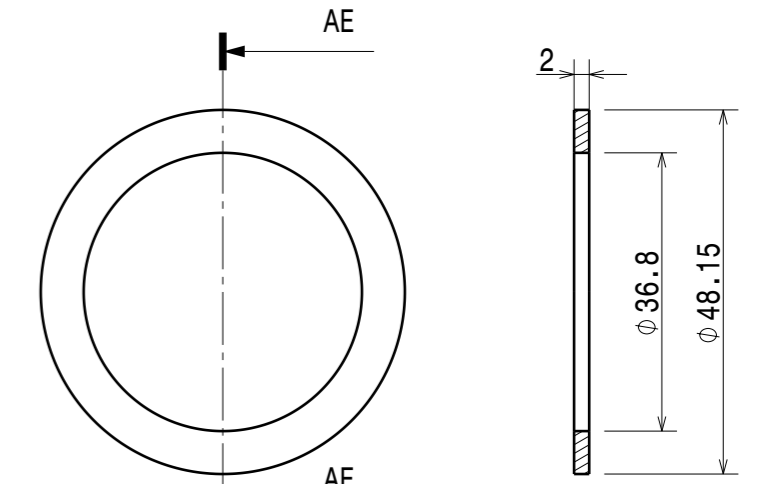
Institute for Plasma Research
 प्लाज्मा अनुसंधान संस्थान
 Bhat, Near Indira Bridge, Gandhinagar 382428, Gujarat (India)

TITLE
 KF25 PORT

NOTE:-

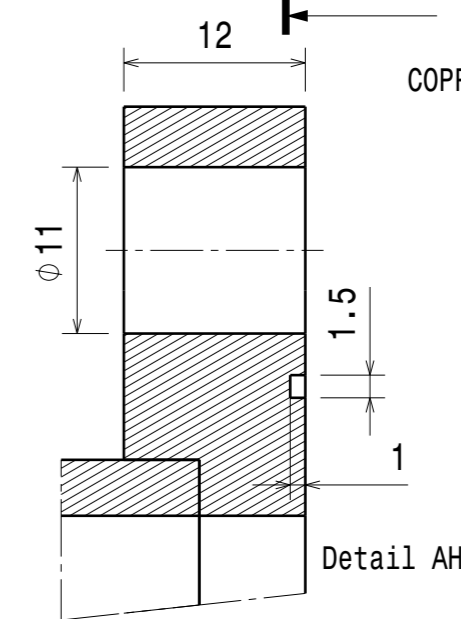
01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
02. THE FINISH MACHINED/GROUND SURFACES SHALL BE PRESERVED AND PROTECTED SUITABLY TO AVOID ANY DAMAGE DURING HANDLING TRANSIT AND ASEMBLY
03. USE DRILL JIG FOR DRILLING OF HOLES.
04. THREADING SHALL BE AS PER IS4218
05. AFTER MACHINING THE COMPONENT SHALL BE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

N8 / N5 / N4



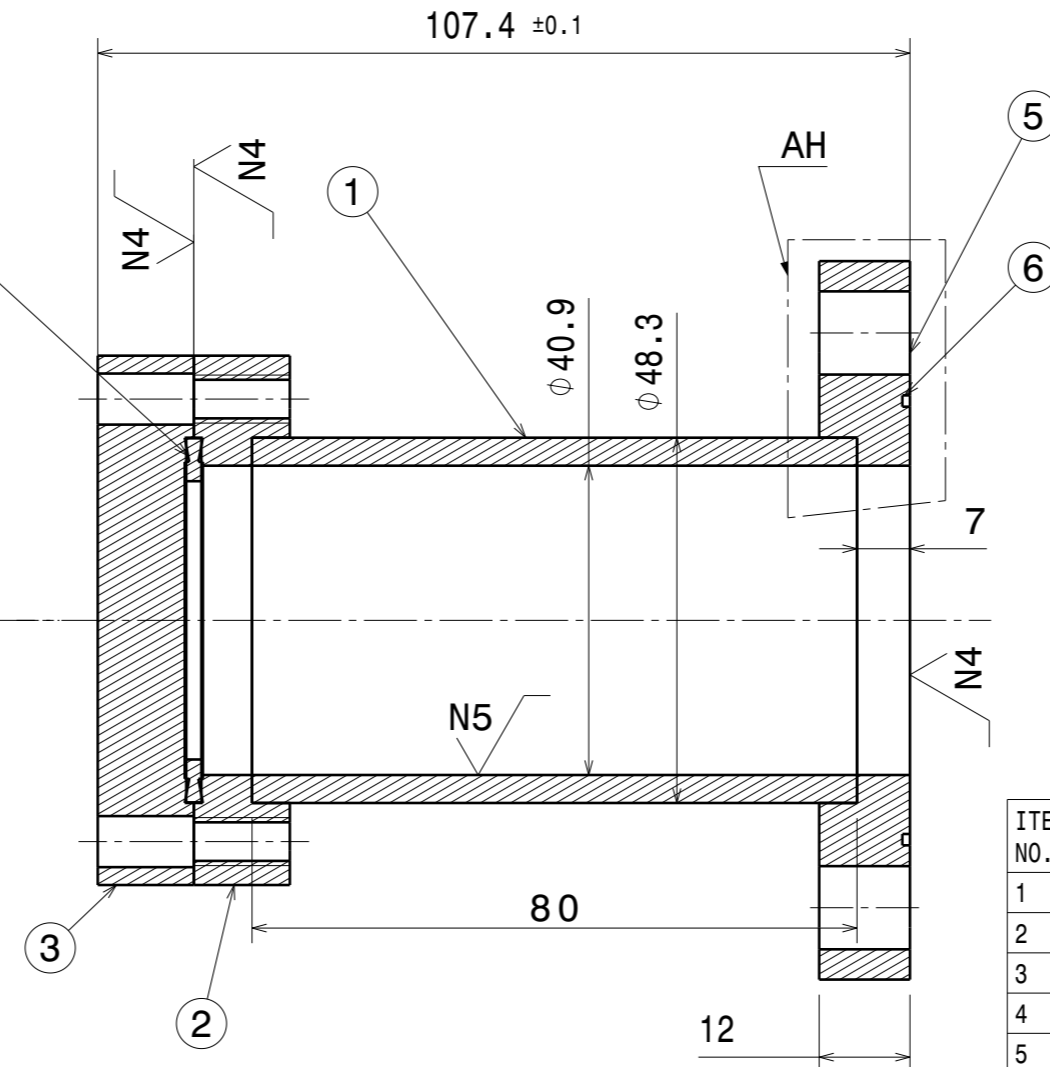
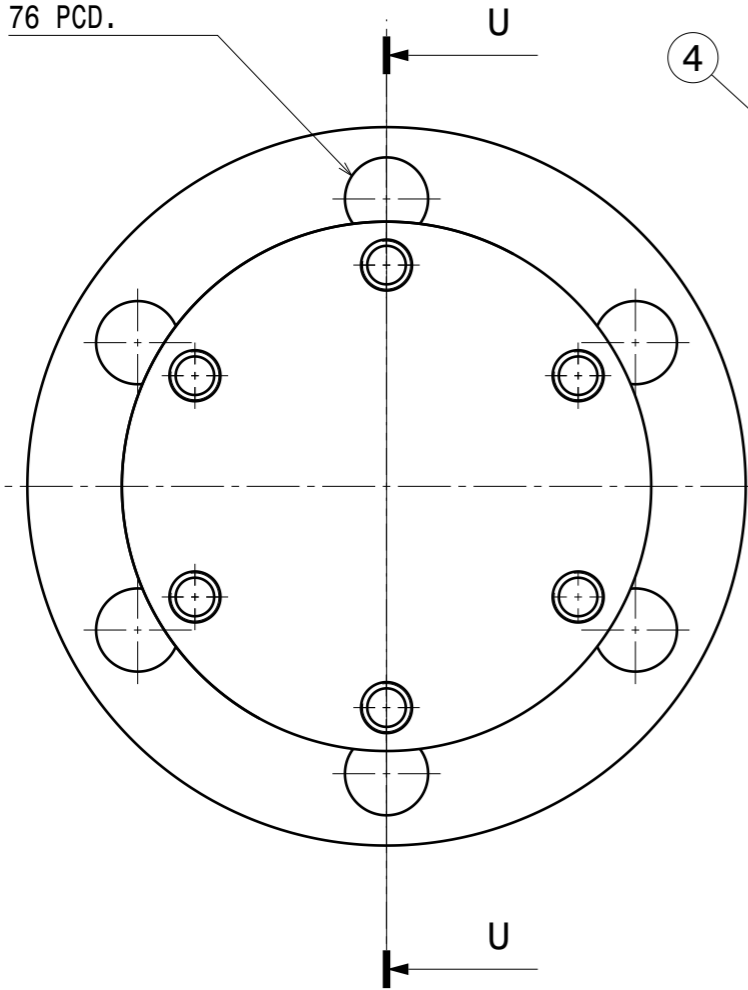
Section view AE-AE

COPPER GASKET




Detail AH

Φ11-6NOS. ON
76 PCD.



Section view U-U

| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|------------------------------------|--------|-----|
| 1 | DN50 SCH5 STD PIPE_80L | SS304L | 01 |
| 2 | DN40CF BORED TAPPED FIXED FLANGE | SS304L | 01 |
| 3 | DN40CF FIXED BLANK FLANGE | SS304L | 01 |
| 4 | COPPER ANNELED GASKET FOR CF | COPPER | 01 |
| 5 | FLANGE Φ95x12MM THICK | SS304L | 01 |
| 6 | HELICOFLEX SEAL FOR DN40CF | STD | 01 |
| 7 | 1/8" -28 BSP BOLTS ,NUT,WASHER | SS304 | 06 |
| 8 | 1/4" -28 UNCx30L BOLTS WITH WASHER | SS304 | 06 |

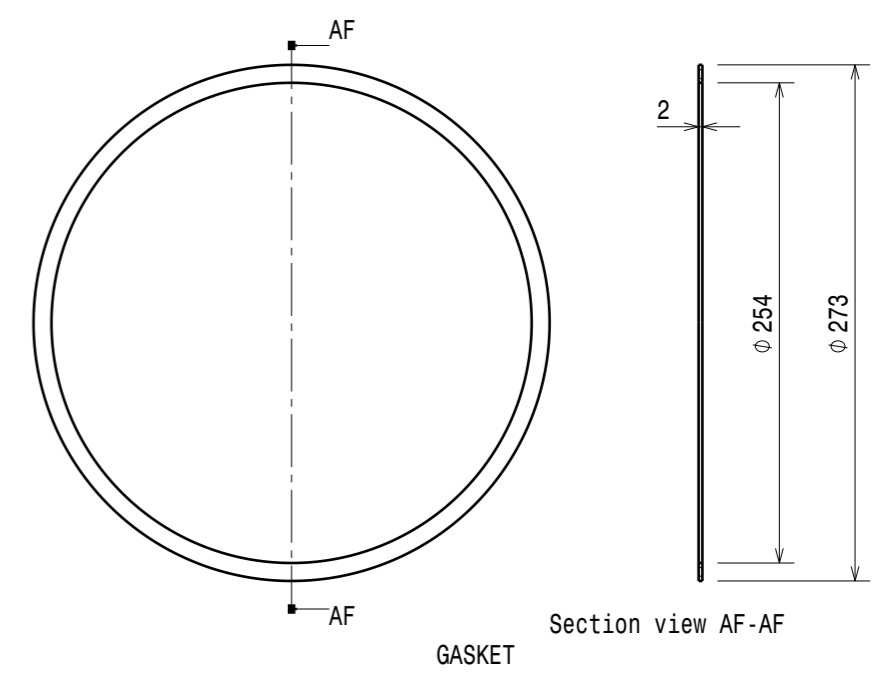
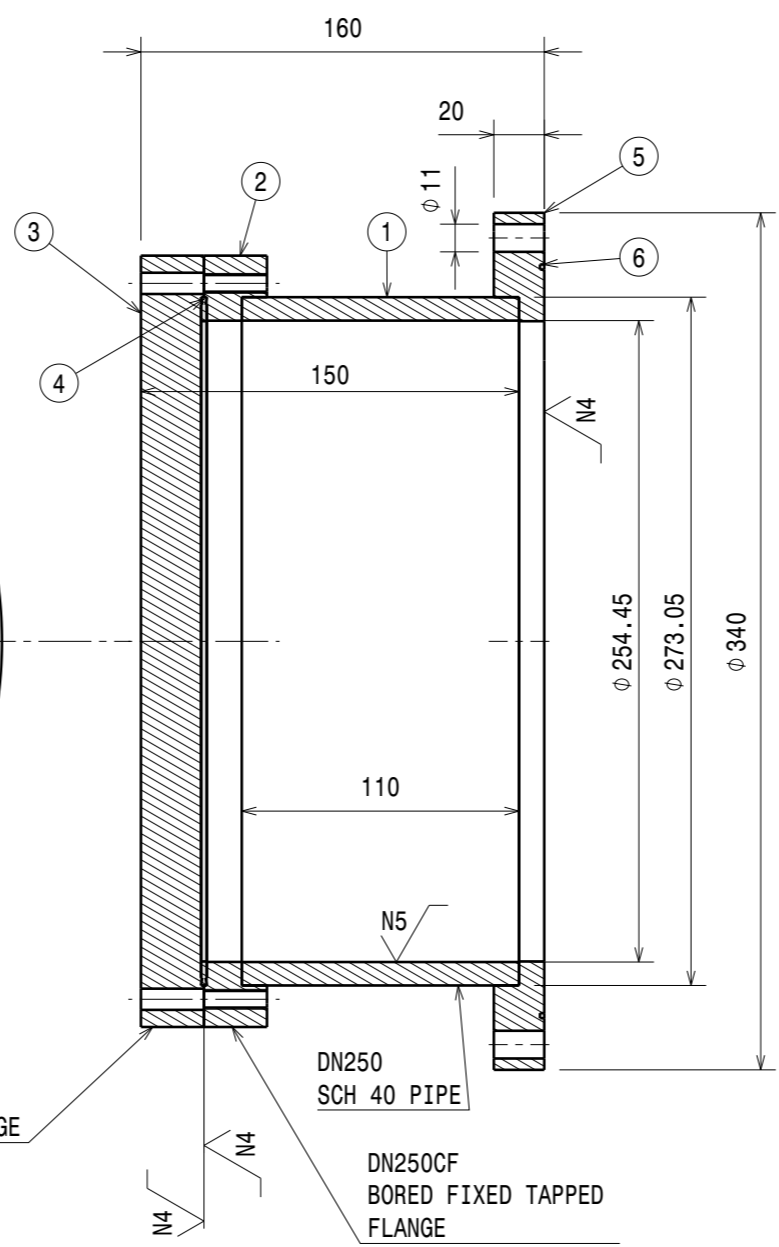
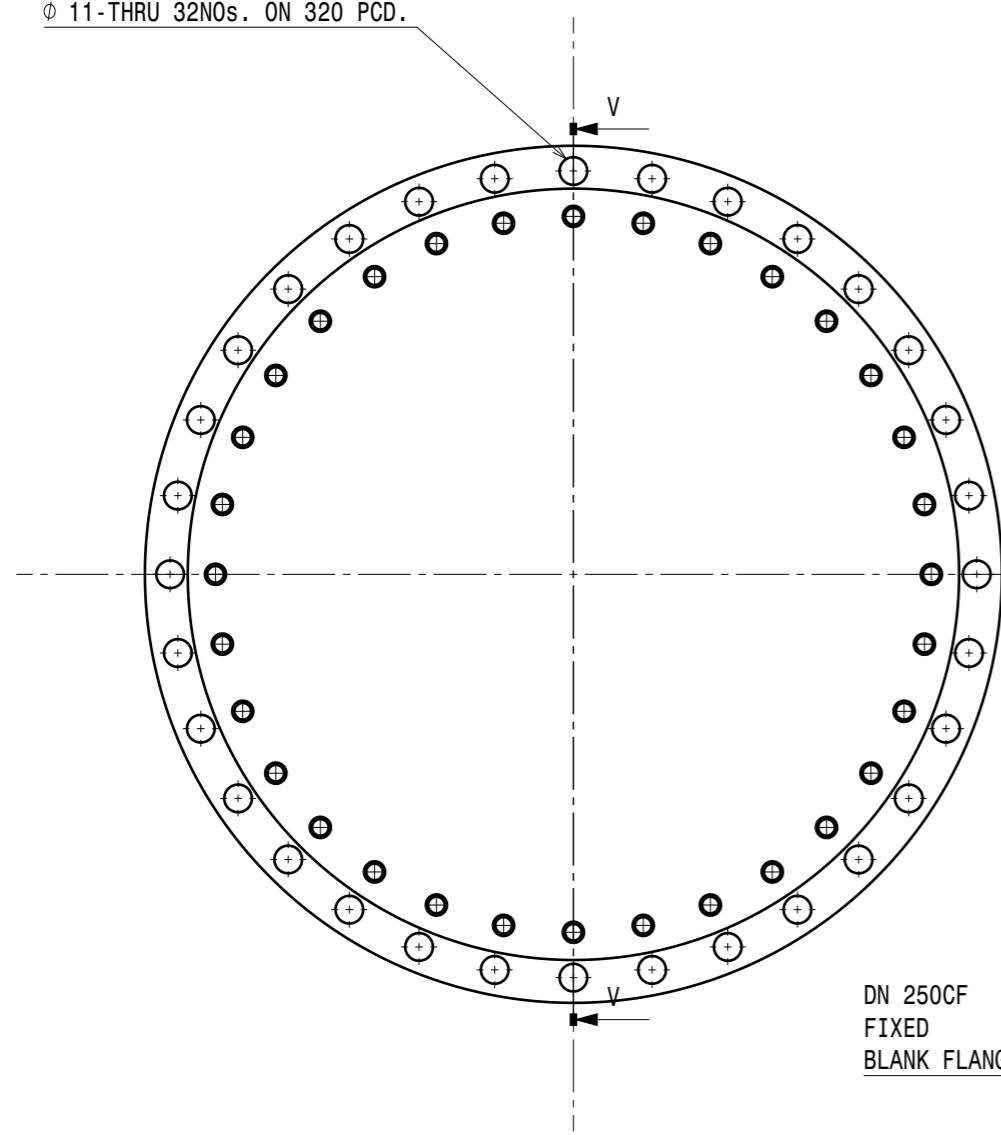
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|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|------------|----------|--|---|----------|-------------|------------------------|--------------|
| DRG.NO | ▽ 8-25 | ▽▽ 1.6-8 | ▽▽▽ 0.025-1.6 | ▽▽▽▽ < 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. | 01/12/17 | CF40 PORT | | |
| 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/19030026 | 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

Ø 11-THRU 32NOS. ON 320 PCD.



| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|---|--------|-----|
| 1 | DN250 SCH40 PIPE | SS304L | 01 |
| 2 | DN250CF BORED FIXED TAPPED FLANGE | SS304L | 01 |
| 3 | DN250CF FIXED BLANK FLANGE | SS304L | 01 |
| 4 | COPPER ANNELED GASKET FOR CF | COPPER | 01 |
| 5 | Ø340x20 FLANGE | SS304L | 01 |
| 6 | HELICOFLEX SEAL FOR DN 250CF | STD | 01 |
| 7 | 1/8" -28 BSP BOLTS WITH NUTS, WASHERS | SS304 | 32 |
| 8 | 5/16" -24 UNC x55L BOLTS AND WITH WASHERS | SS304 | 32 |

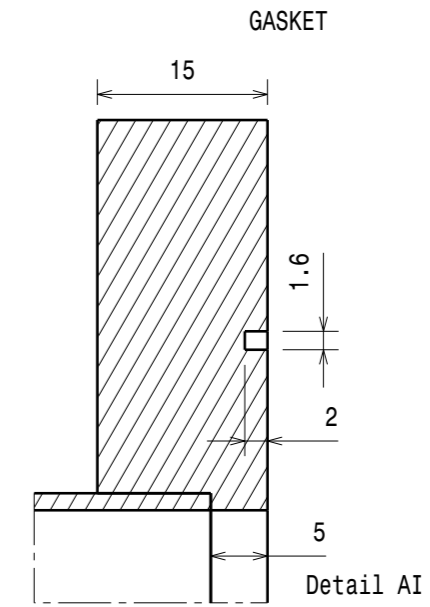
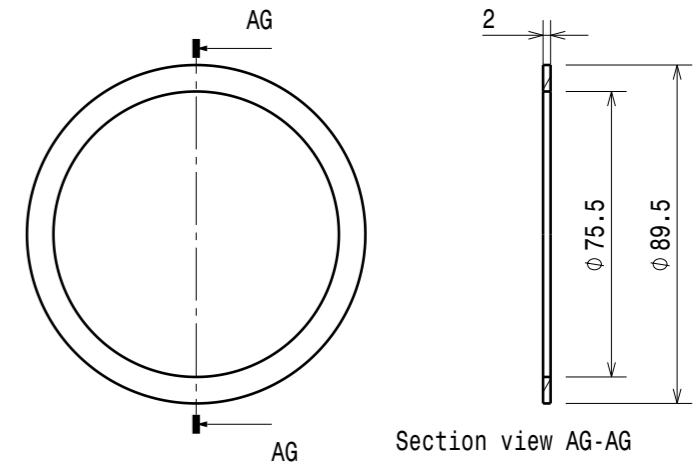
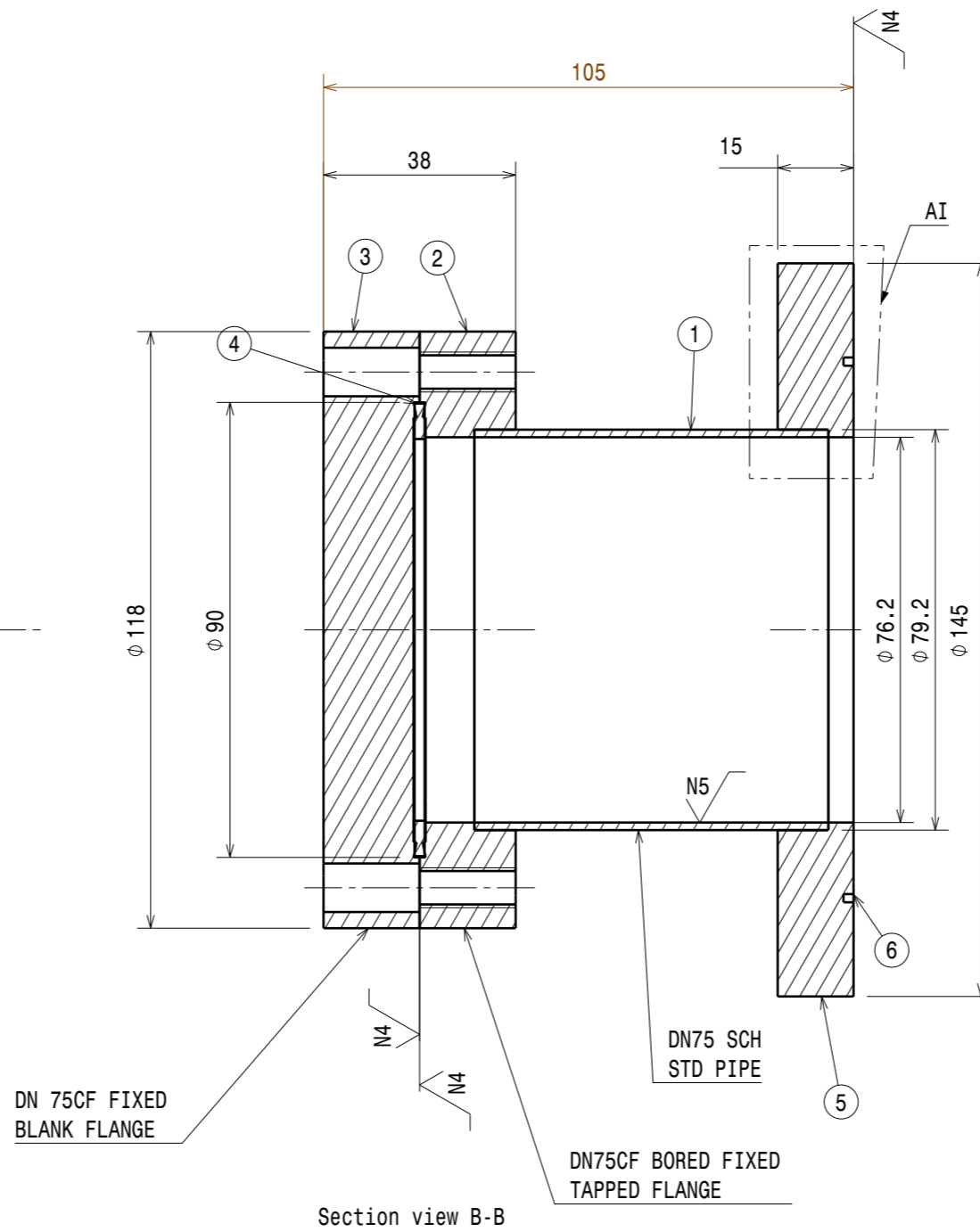
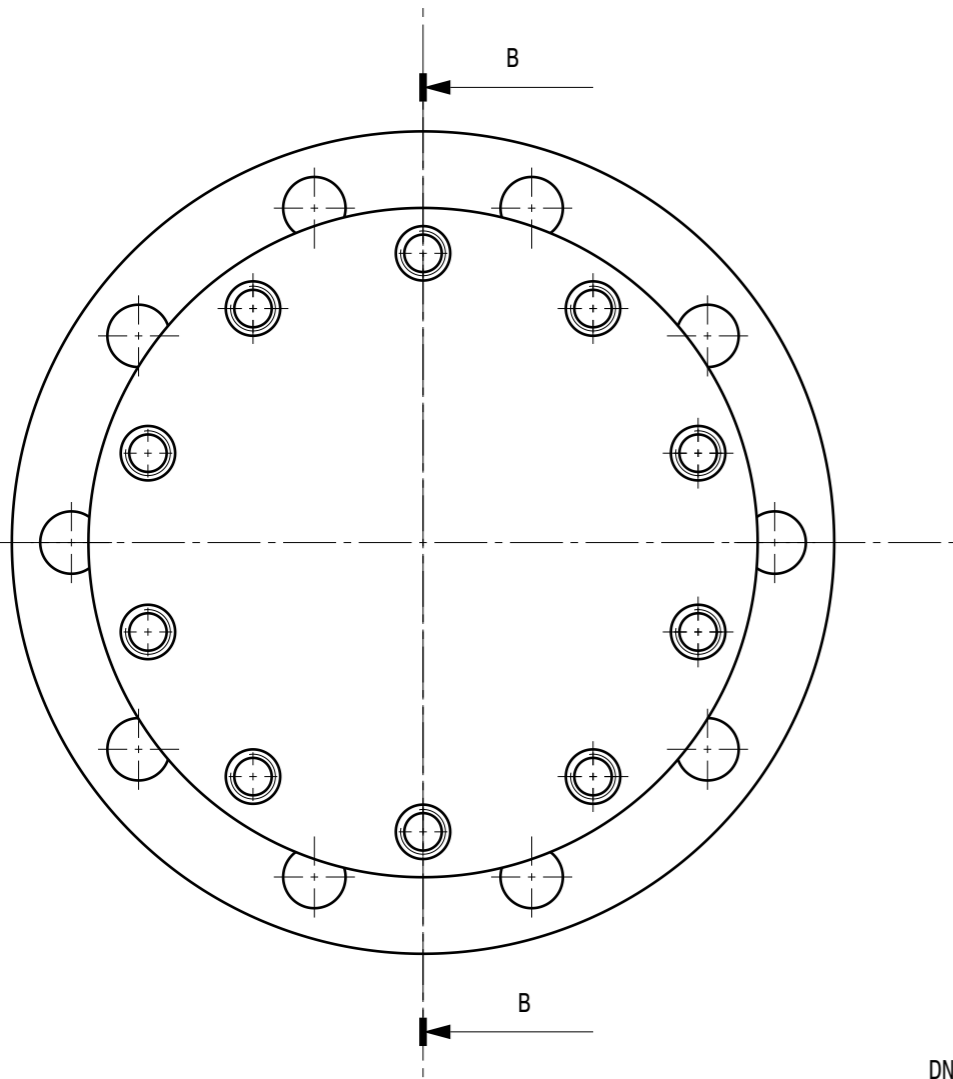
Section view V-V

| | | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|------------|----------|--|---|----------|-------------------|------------------------|--------------|
| 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. | 01/12/17 | DN250 VACUUM PORT | | |
| 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/19030027 | 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



| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|--|--------|-----|
| 01 | DN 75CF FIXED BLANK FLANGE | SS304L | 01 |
| 02 | DN 75CF BORED FIXED TAPPED FLANGE | SS304L | 01 |
| 03 | DN75 SCH STD PIPE | SS304L | 01 |
| 04 | COPPER ANNELED GASKET FOR CF | COPPER | 01 |
| 05 | Ø145x15 FLANGE | SS304L | 01 |
| 06 | HELICOFLEX SEAL FOR DN75 CF | STD | 01 |
| 07 | 1/8" -28 BSP BOLTS WITH NUTS AND WASHERS | SS304 | 10 |
| 08 | 5/16-24 UNCx45L BOLTS WITH WASHER | SS304 | 10 |

| | | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|-------|-------------|--------------|------------|----------|--|---|--------|----------|------------------------|--------------|
| 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. | 04/12/17 | DN75 RF PORT | |
| UPTO 10 | 10-50 | 50-120 | OVER 120-400 | | 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/19030028 | SHEET 1 OF 1 |

4

3

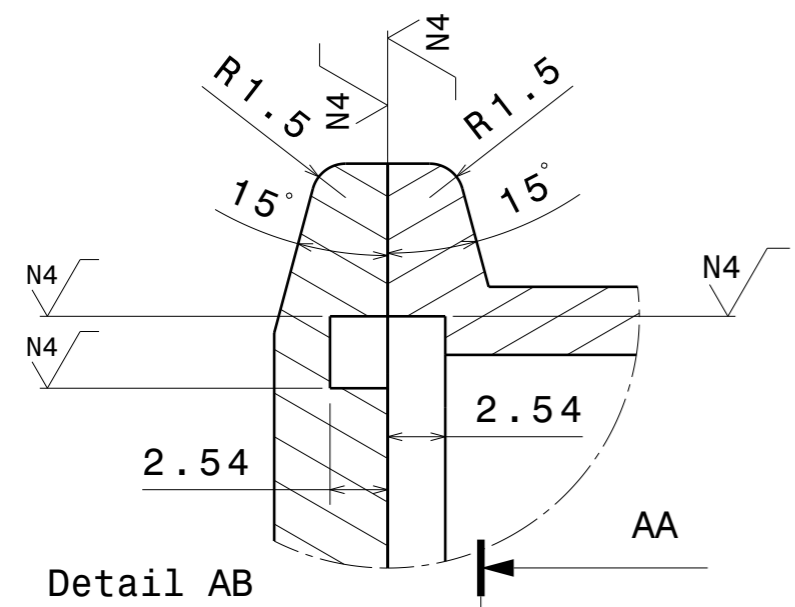
2

4

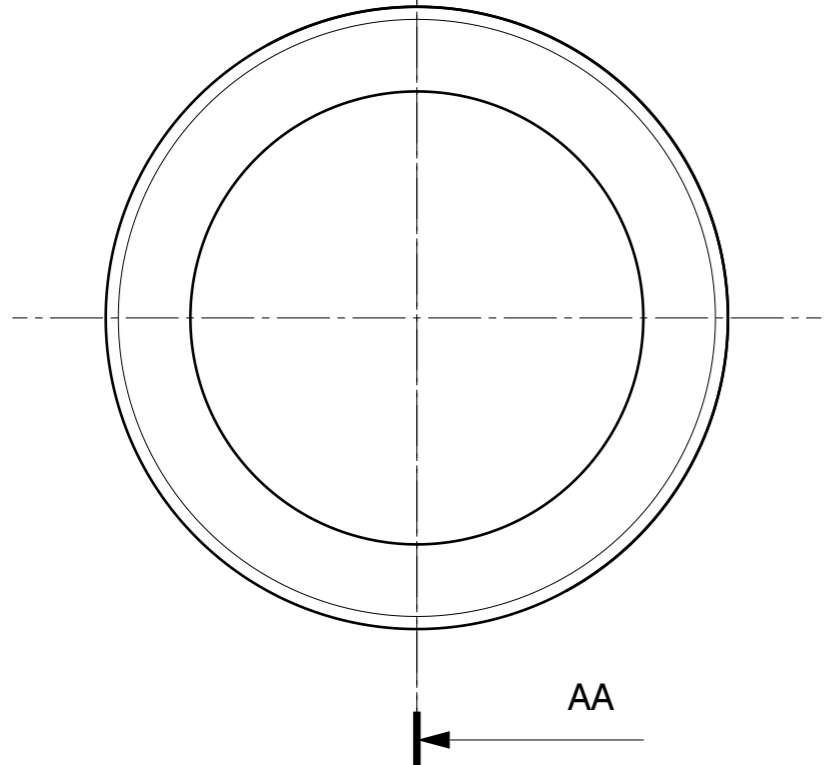
3

2

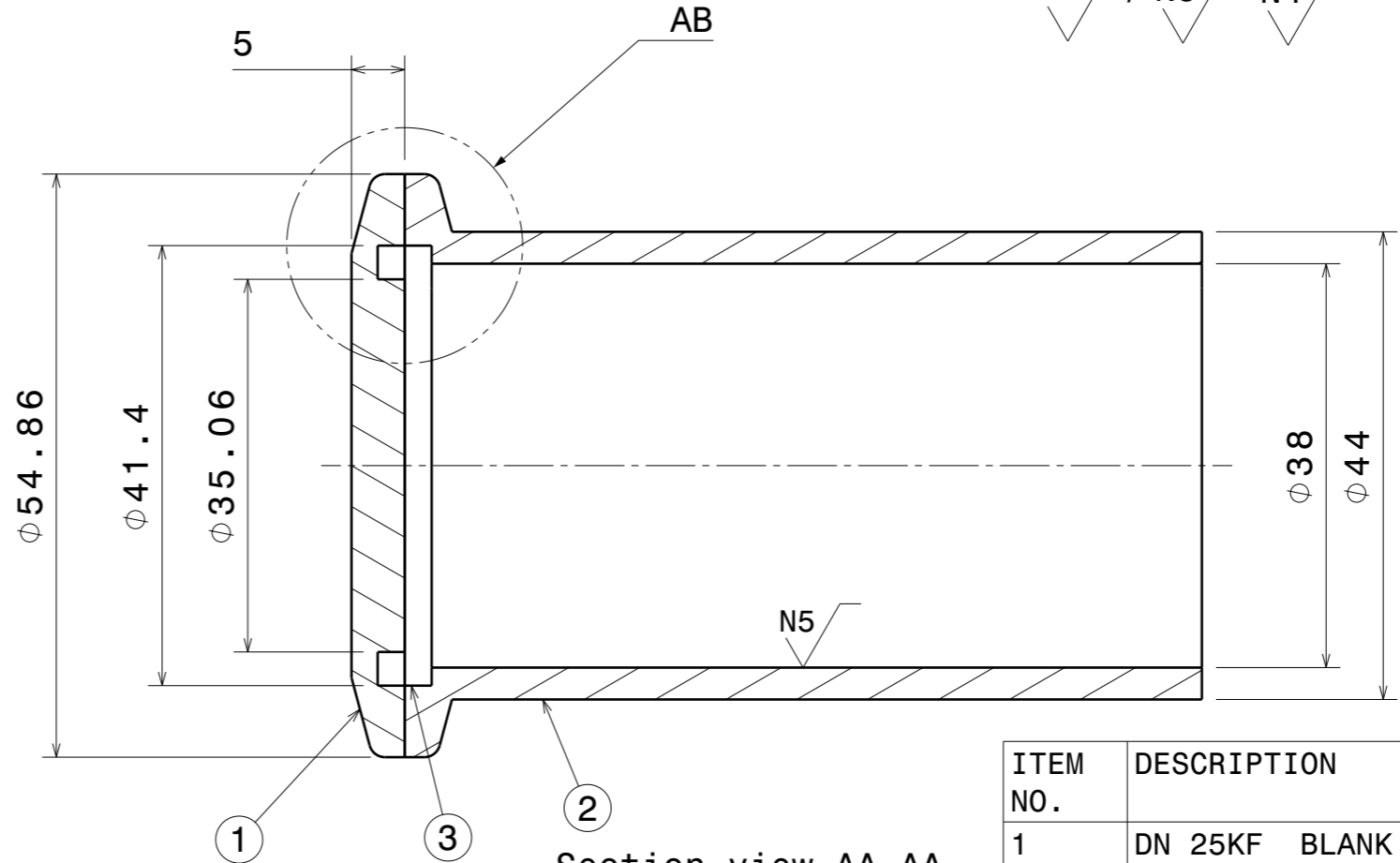
NOTE:-
 01. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 05. AFTER MACHINING THE COMPONENT SHALL BE SUBJECTED TO SOLUTION CLEANING OR ULTRASONIC CLEANING AS PER APPROVED PROCEDURE



Detail AB




AA



Section view AA-AA

N8 / N5 N4

| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|-------------------------------|-----------|-----|
| 1 | DN 25KF BLANK FLANGE | AL6061-T6 | 01 |
| 2 | DN 25KF PIPE WITH FLANGE | AL6061-T6 | 01 |
| 3 | CENTERING RING SS WITH O-RING | VITON | 01 |
| 4 | CLAMP | STD | 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 SCALE: 1:1 DATE: 06/12/17 DRAWN: K.R.R. CHECKED: APPROVED: REF DRG NO: DRG.NO: IPR/17/A3/RFQ/19030029 | |
| MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS | | | | | TITLE: DN 40KF PORT | | | | | | | |
| 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' | | | | | | | | REV 0 | SHEET 1 OF 1 |

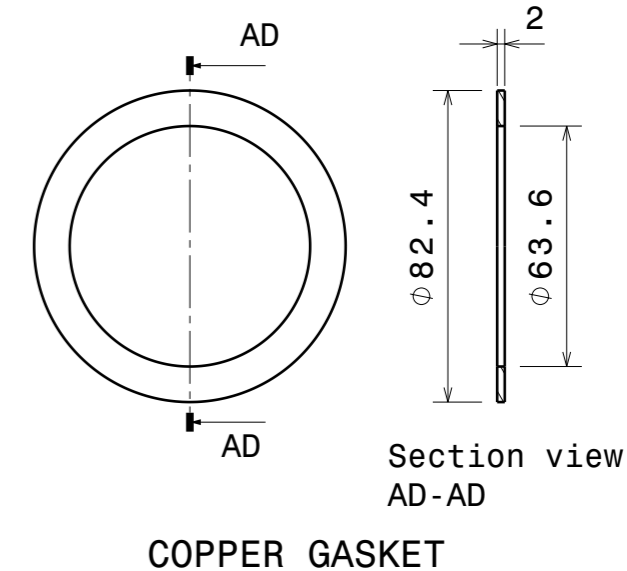
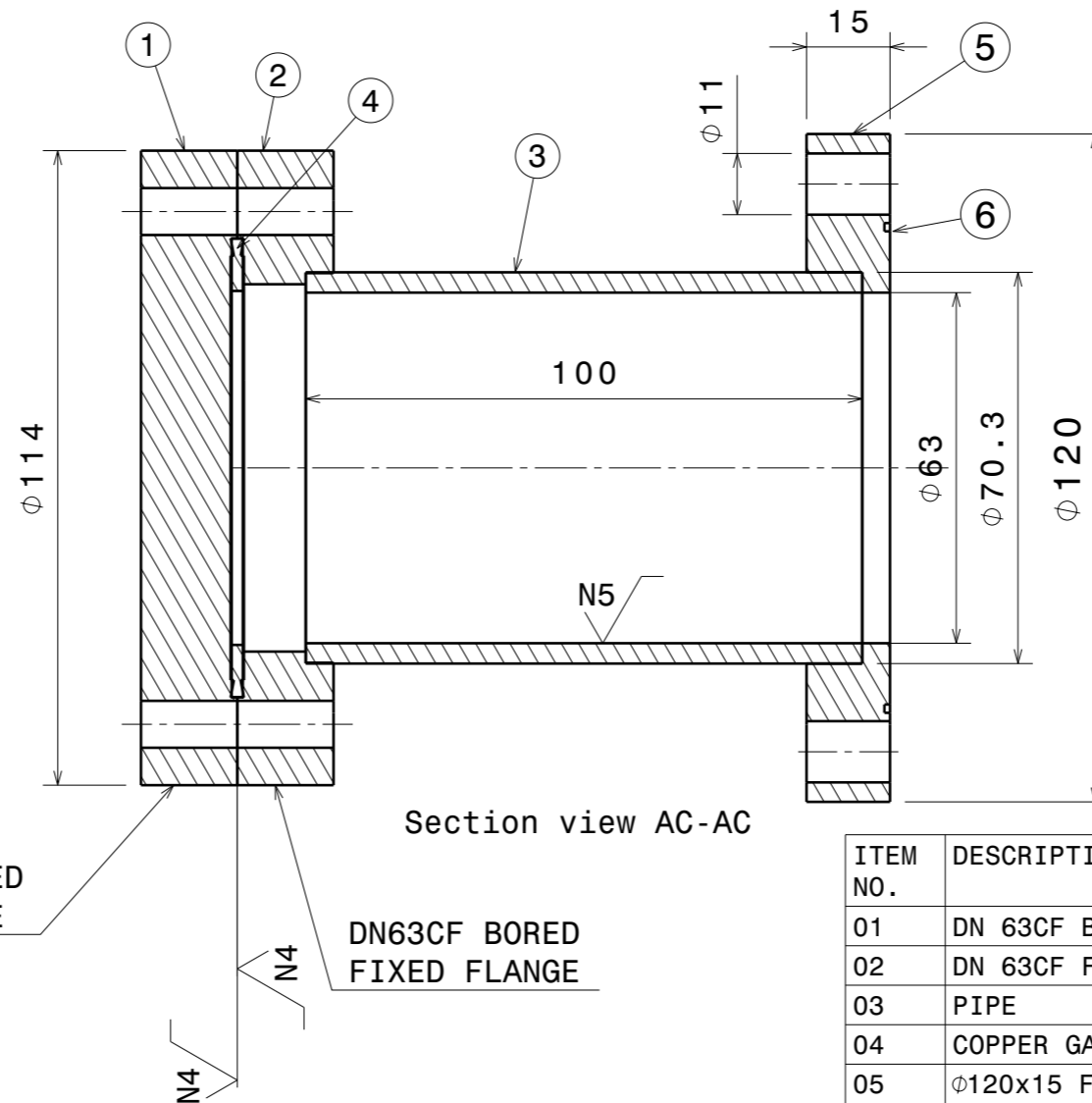
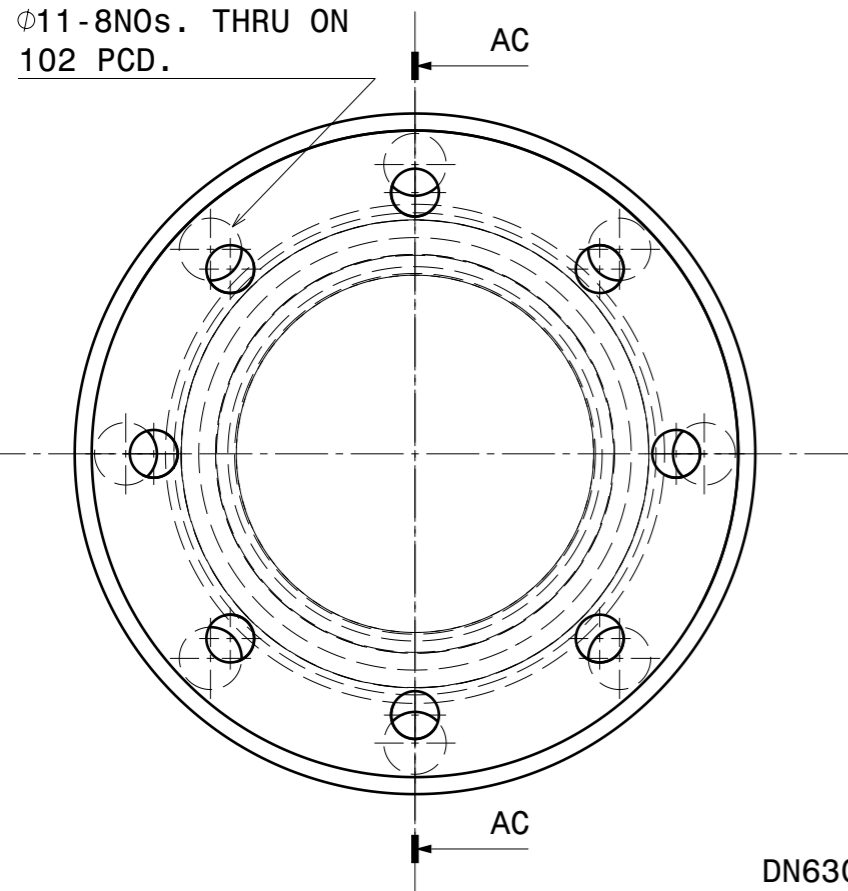
NOTE:-

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

ALL DIMENSIONS ARE IN MM

N8 / N5 N4

Ø11-8NOs. THRU ON 102 PCD.



DN63CF FIXED BANK FLANGE


DN63CF BORED FIXED FLANGE

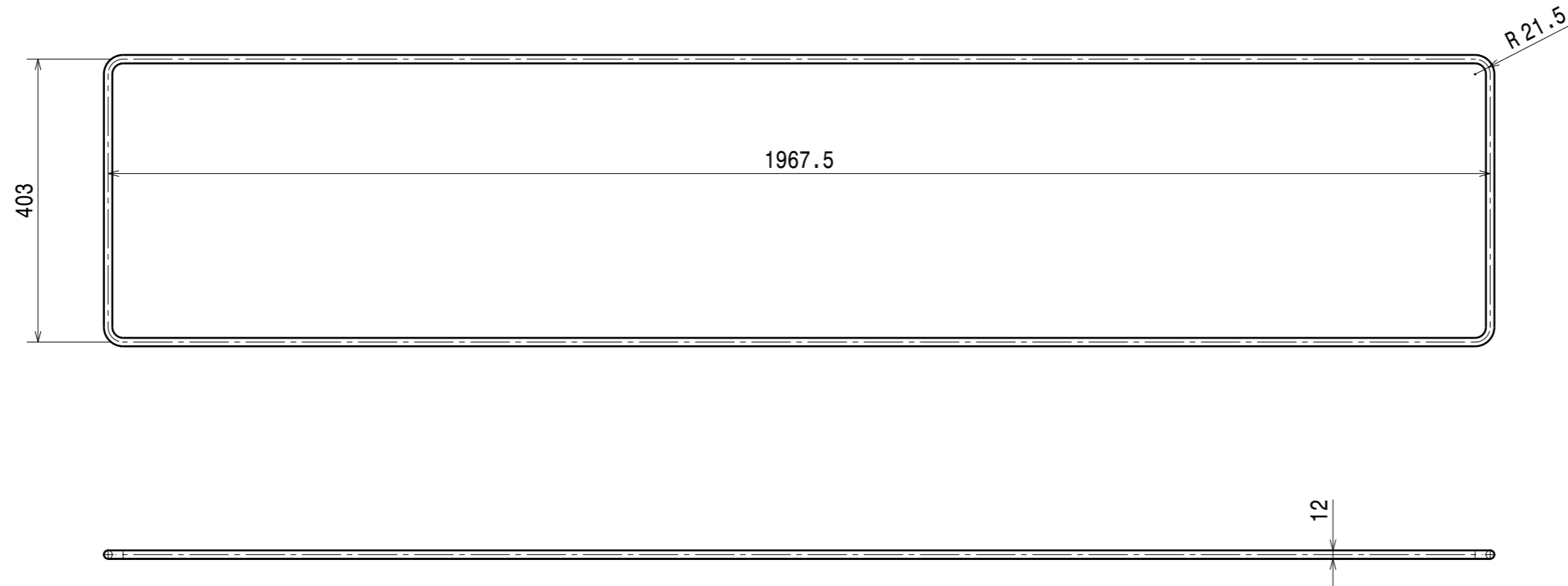
COPPER GASKET

Section view AC-AC

Section view AD-AD


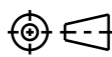
| ITEM NO. | DESCRIPTION | MAT | QTY |
|----------|---|--------|-----|
| 01 | DN 63CF BLANK FLANGE | SS304L | 01 |
| 02 | DN 63CF FIXED FLANGE | SS304L | 01 |
| 03 | PIPE | SS304L | 01 |
| 04 | COPPER GASKET | COPPER | 01 |
| 05 | Ø120x15 FLANGE | SS304L | 01 |
| 06 | HELICOFLEX SEAL FOR DN63CF | STD | 01 |
| 07 | 1/8" -28 BSP NUTS WITH BOLTS WITH NUTS | SS304 | 08 |
| 05 | M8x60L BOLTS WITH DOUBLE NUTS AND WASHERS | SS304 | 08 |

| | | | | | | | | | | | | | | | |
|--|---------|----------|---------------|---------------|-----------------|------|-------------|---------|------------|----------|--|---|--------|--------------|------------------------|
| 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. | 05.12.17 | DN 63CF PORT |
| UPTO 10 | 10-50 | 50-120 | OVER 120-400 | | UPTO 6 | 6-30 | 30-120 | 120-315 | | | | 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/19030030 |
| | | | | | | | | | | | | | | REV 0 | |
| | | | | | | | | | | | | | | 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. | 09.01.18 |  O-RING 4 FOR 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 | IPR/17/A3/RFQ/19030031 | REV 0 |
| SHEET 1 OF 1 | | | | | | | | | | | | | | | | |

| SR NO. | DRAWING DESCRIPTION | DRAWING NO. | SHEET NO. | SR NO. | DRAWING DESCRIPTION | DRAWING NO. | SHEET NO. |
|--------|---|--------------------------|-----------|--------|------------------------------------|-------------|-----------|
| 01 | RFQ ASSEMBLY | 19010001 | 01 OF 01 | 35 | TOP PLATE | 19030020 | 01 OF 01 |
| 02 | ROD STEM BASE PLATE ASSEMBLY | 19020001 | 01 OF 01 | 36 | TOP PLATE COVER-1 | 19030023 | 01 OF 01 |
| 03 | BASE PLATE-1 | 19020004 | 01 OF 01 | 37 | TOP PLATE COVER-2 | 19030024 | 01 OF 01 |
| 04 | BASE PLATE-2 | 19020003 | 01 OF 01 | 38 | KF25 PORT | 19030025 | 01 OF 01 |
| 04 | STEM-1 | 19020007 | 3 SHEETS | 39 | CF 40 PORT | 19030026 | 01 OF 01 |
| 05 | STEM-2 | 19020008 | 3 SHEETS | 40 | DN250 VACUUM PORT | 19030027 | 01 OF 01 |
| 06 | STEM-3 | 19020009 | 2 SHEETS | 41 | DN75 RF PORT | 19030028 | 01 OF 01 |
| 07 | HORIZONTAL ROD LEFT SEGMENT(1 TO 6) | 19020011 TO 19020016 | 01 OF 01 | 42 | KF40 PORT | 19030029 | 01 OF 01 |
| 08 | HORIZONTAL ROD RIGHT SEGMENT(1 TO 6) | 19020017 TO 19020022 | 01 OF 01 | 43 | CF63 PORT | 19030030 | 01 OF 01 |
| 09 | VERTICAL ROD LOWER SEGMENT(1 TO 6) | 19020023 TO 19020027&29 | 01 OF 01 | 44 | COOLING ARRANGEMENT-1 PROTOTYPE | 19020038 | 01 OF 01 |
| 10 | VERTICAL ROD UPPER SEGMENT(1 TO 6) | 19020030 TO 19020034 &36 | 01 OF 01 | 45 | COOLING ARRANGEMENT-2 PROTOTYPE | 19020039 | 01 OF 01 |
| 11 | RFQ ASSEMBLY PROTOTYPE | 19010002 | 01 OF 01 | 46 | VANE CROSS SECTION | 19020010 | 01 OF 01 |
| 12 | VANE STEM BASE PLATE ASSEMBLY PROTOTYPE | 19020002 | 01 OF 01 | 47 | DETAILS OF BLANK WELDING FOR VANES | 19020037 | 01 OF 01 |
| 13 | VERTICAL ROD LOWER SEGMENT-5 PROTOTYPE | 19020028 | 01 OF 01 | 48 | STEM SLOT COVER FOR PROTOTYPE | 19020040 | 01 OF 01 |
| 14 | VERTICAL ROD UPPER SEGMENT-5 PROTOTYPE | 19020035 | 01 OF 01 | 49 | CD FOR VANE PROFILE DATA | 19020041 | 01 OF 01 |
| 15 | VACUUM CHAMBER ASSEMBLY | 19030001 | 01 OF 01 | 50 | BILL OF MATERIAL | 19010003 | 01 OF 01 |
| 16 | VACUUM CHAMBER-1 ASSEMBLY | 19030002 | 01 OF 01 | 51 | DRAWING LIST OF RFQ | 19030032 | 01 OF 01 |
| 17 | VACUUM CHAMBER-2 ASSEMBLY | 19030003 | 01 OF 01 | | | | |
| 18 | END FLANGE -1 | 19030005 | 01 OF 01 | | | | |
| 19 | END FLANGE -2 | 19030006 | 01 OF 01 | | | | |
| 20 | END FLANGE COVER-1 | 19030007 | 01 OF 01 | | | | |
| 21 | END FLANGE COVER-2 | 19030008 | 01 OF 01 | | | | |
| 22 | END FLANGE COVER-PROTOTYPE | 19030014 | 01 OF 01 | | | | |
| 23 | O RING-1 | 19030009 | 01 OF 01 | | | | |
| 24 | O RING-2 | 19030010 | 01 OF 01 | | | | |
| 25 | O RING-3 | 19030011 | 01 OF 01 | | | | |
| 26 | O RING-4 | 19030031 | 01 OF 01 | | | | |
| 27 | O RING-5 | 19020005 | 01 OF 01 | | | | |
| 28 | O RING-6 | 19020006 | 01 OF 01 | | | | |
| 29 | BOTTOM PLATE -1 | 19030012 | 01 OF 01 | | | | |
| 30 | BOTTOM PLATE -2 | 19030013 | 01 OF 01 | | | | |
| 31 | SIDE PLATE -1 | 19030015 | 01 OF 01 | | | | |
| 32 | SIDE PLATE -2 | 19030016 | 01 OF 01 | | | | |
| 33 | SIDE PLATE -3 | 19030018 | 01 OF 01 | | | | |
| 34 | SIDE PLATE -4 | 19030019 | 01 OF 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 | | | TITLE | | |
| MACHINING DEVIATIONS FOR NON-TOLERANCED DIMENSIONS | | | | | | | | | | | SCALE | 1:1 | DATE | LIST OF DRAWINGS FOR RFQ | | |
| 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 | | |
| 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 | SHEET 1 OF 1 |
| | | | | | | | | | | | | | | | | |