

TATA INSTITUTE OF FUNDAMENTAL RESEARCH, HYDERABAD

An Autonomous Institution of the Department of Atomic Energy, Government of India (A Deemed University)

Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad, Telangana, India. PIN 500 107

, 0,hone: 040-20203020, Email: jrathna@tifrh.res.in

ENQUIRY
(Limited)

Ref: TIFR/PD/CA25-11/250178

May 26, 2025

1. M/s. FOURVAC TECHNOLOGIES (FVTS)
2. M/s. HHV THERMAL TECHNOLOGIES PVT. LTD (HHVT)
3. M/s. MANSHA VACUUM TECHNOLOGIES PVT LTD (MANS)
4. M/s. PRECISE VACUUM SYSTEMS PVT LTD (PRVA)
5. M/s. RANVAC TECHNOLOGIES (RANV)
6. M/s. VACUUM TECHNIQUES PVT. LTD. (VTPL)

Dear Sirs

Please let us have your **Quotation** for the following:

S.No.	Item Code	Description	Qty	UOM
1	LCQVP000131	<p>PW Beam Switching Chamber for TRISHUL Facility. Description: TIFR-Hyderabad is going to start relativistic laser-plasma interaction activity driven by Petawatt femtosecond laser. For guiding the PW laser into different beam lines, a cylindrical shape HV Vacuum chamber (Approximate size: 0.9m (diameter) & 0.85m (height) is planned to be manufactured and installed. The desired vacuum level to be achieved should be better than low 10⁻⁶ mbar. The global leak rate of chamber without any known injected gas should be <10⁻⁸ mbar. Regarding the material, the cylindrical vessel for the PW Beam switching chamber should be made of SS-304. The independent circular optical breadboard (~ 0.85m (diameter) & 0.03m (thickness)) should be made of Aluminium (grade: 5083 or similar). All supporting legs should be made of Mild Steel with powder coating. In order to minimize undesired vibration coupling to the optics, cylindrical vacuum chamber will be vibrationally isolated from the optical breadboard. The general requirements are mentioned below. For detailed description of individual components and sections please refer to the attached drawings. Specification for fabricating and testing the Beam Switching Vacuum Chamber: 1) Base vacuum of chamber is 1e-6mbar. 2) Global leak rate of chamber without any known injected gas is <1e-8mbar. 3) To achieve the desired vacuum entire SS TIG welding must be carried out from inside. Welding strategy (Joints, thickness, current setting etc.) may be finalized in coordination with Institute Engineers. 4) Material for the breadboard will be either Al. 5083 or Al. 6061-T6. If any coating required on the breadboard will be informed before machining. Payment will be made as per actuals for this. 5) If any additional drawings are required for fabrication such as detailed section drawings of any part, welding joints etc. should be prepared by the vendor. 6) Sealing surfaces should be protected during movement of parts from one place to the other. 7) Chamber should be free from, dents, scratch, etc. 8) O-rings grooves are open for discussion. 9) Two sets of joint less Viton O-rings should be provided by the vendor for the complete assembly</p>	1.00	NO

- LCQVP000131
- 10) Chamber should be free from sharp edges unless it is specified in the drawing.
 - 11) Machined parts should be free from debris, grease, and oil at the welding zone before doing the welding.
 - 12) Vacuum side welding should be continuous.
 - 13) All the pipes should be seamless.
 - 14) Discontinuity in welding should be avoided.
 - 15) Fabrication of chamber should follow UHV guidelines.
 - 16) Surface finish on all vacuum side surfaces should be 3-delta finish
 - 17) Matt finish is required on both inside and outside surfaces of the chamber to reduce the scattering of light.
 - 18) Non-mating surfaces of all mild steel parts should be powder coated. The choice of color should be discussed with buyer.

NOTE :

Kindly refer the Technical Specifications in Annexure - A of the attached tender Documents and local content Certificate as per attached Annexure - B. Duly filled on your letterhead signed and stamped along with the Quotation.

Please mention your GST Registration numbers on the quotation, proforma Invoice and Bills.

Quotation should indicate make, delivery period, guarantee/warranty exact taxes applicable, etc.

The payment will be made only after delivery of the supply, satisfactory installation, commissioning and performance of the item/equipment. No Advance payment will be made except in case of furnishing valid Bank Guarantee from any nationalized/scheduled bank the B. G. shall be valid till the complete delivery is made at the site.

Time is the essence of the contract. The delivery of Goods or performance of the Services shall be made by the Supplier in accordance with the time schedule specified in the Purchase Order/Contract.

If the Supplier fails to deliver any or all of the Goods or to perform services within the period(s) specified in the Purchase Order/Contract, the Purchaser shall, without prejudice to other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 0.5% per week and the maximum deduction is 5% of the contract price.

Quotation sent by hand delivery / courier are to be deposited in the Tender Box kept at the Main Gate after obtaining stamp, date and signature of the Security Officer.

Quotation should be submitted in sealed envelope duly superscribing our enquiry reference and due date.

Due Date for submitting your offer is 16/06/2025.

(Up to 1 PM)

Yours faithfully



J.RATHNA

Administrative Officer (D)



Copy to: Prof. / Dr. / Mr. / Mrs. / Ms. / Shri / Smt. PRASHANT KUMAR SINGH (TCIS-19P2148)
Your Indent Req. No.PKS1150022 Dated:29/04/2025 refers.

टाटा मूलभूत अनुसंधान संस्थान हैदराबाद /
TATA INSTITUTE OF FUNDAMENTAL RESEARCH HYDERABAD
प्लॉट नंबर 36/पी, गोपनपल्ली गांव, सेरिलिंगमपल्ली मंडल, रंगा रेड्डी जिला, हैदराबाद - 500 107, तेलंगाना, भारत.
Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District,
Hyderabad - 500 107, Telangana, India

टेलीफोन /Telephone: +91-40-2020 3020

ई-मे /Email: purchasegroup@tifrh.res.in

वेबसाइट /Website: www.tifrh.res.in

तारीख /Date: 26.05.2025

Notice Inviting Tender cum Tender Document (**Two Part Limited Tender**) for the following items:

Supply, Installation, and Commissioning of Petawatt Beam Switching Chamber. As per technical specifications in Annexure A.

लनलवदा संख्या / Tender No.	TIFR/PD/CA25-11/250178
प्रकाशन की लतिल / Date of Publishing	26-05-2025
प्री-लबड मीलटंग की लतिल / Pre-Bid Meeting Date	02-06-2025 at 11.00 Hrs. (Through ZOOM-Zoom link details please visit our website https://www.tifrh.res.in/tender/ / Direct Visit at TIFR, Hyderabad premises)
लनलवदा शुल्क/ Tender Fees	Rs. 00 (USD 00)
ईएमडी / EMD (Earnest Money Deposit)	Rs. 40,000 (USD 470)
अनुमालनत मूल्य / Estimated Cost (Estimated cost up to TIFR, Hyderabad premises inclusive of all applicable charges, taxes, duties etc.)	Rs. 20,06,000.00
बोली जमा करने की अंतिम तिथि / Last Date for Submission of Bid	16-06-2025 upto 13.00 Hrs.
बोलियाँ खोलने की तिथि (भाग ए)/ Date of Opening Bids (Part A)	16-06-2025 at 15.00 Hrs.

निविदा सीलबंद लिफाफे में जमा की जानी चाहिए जिसके ऊपर मोटे अक्षरों में निविदा संख्या, देय तिथि लिखी होनी चाहिए / **Tender should be submitted in sealed enveloped super scribed with the Tender No., Due Date in Bold Letters.**

अधिक जानकारी, विशिष्टताओं, नियम और शर्तों आदि के लिए कृपया हमारी वेबसाइट पर जाएँ।

For more information, specifications, terms and conditions etc., please visit our website:
<https://www.tifrh.res.in/tender/>

प्री-बिड मीटिंग ऑनलाइन आयोजित की जाएगी। बोलीदाताओं से अनुरोध है कि वे प्री-बिड मीटिंग जूम लिंक के लिए टीआईएफआर हैदराबाद वेबसाइट निविदा पृष्ठ देखें। बोलीदाता टीआईएफआर, हैदराबाद परिसर में निर्धारित तिथि और समय पर बैठक में शामिल हो सकते हैं।

Pre- Bid meeting will be conducted through online. Bidders are requested to refer TIFR Hyderabad website tender page for pre-bid meeting zoom link. Bidder may also join the meeting on scheduled date and time at TIFR, Hyderabad premises.

Note: All future corrigendum/addendum will be published in TIFR Hyderabad Website / CPPP

All prospective bidders are requested to visit our website regularly for any such updates/Corrigendum.

प्रशासी अधिकारी / ADMINISTRATIVE OFFICER
(क्रय अनुभाग) / (PURCHASE SECTION)
टीआईएफआर हैदराबाद / TIFR HYDERABAD

ANNEXURE – A

Description: TIFR-Hyderabad is going to start relativistic laser-plasma interaction activity driven by Petawatt femtosecond laser. For guiding the PW laser into different beam lines, a cylindrical shape HV Vacuum chamber (Approximate size: 0.9m (diameter) × 0.85m (height)) is planned to be manufactured and installed. The desired vacuum level to be achieved should be better than low 10⁻⁶ mbar. The global leak rate of chamber without any known injected gas should be <10⁻⁸ mbar. Regarding the material, the cylindrical vessel for the PW Beam switching chamber should be made of SS-304. The independent circular optical breadboard (~ 0.85m (diameter) × 0.03m (thickness)) should be made of Aluminum (grade: 5083 or similar). All supporting legs should be made of Mild Steel with powder coating. In order to minimize undesired vibration coupling to the optics, cylindrical vacuum chamber will be vibrationally isolated from the optical breadboard. The general requirements are mentioned below. For detailed description of individual components and sections please refer to the attached drawings.

Specification for fabricating and testing the Beam Switching Vacuum Chamber:

- 1) Base vacuum of chamber is 1e-6mbar.
- 2) Global leak rate of chamber without any known injected gas is <1e-8mbar.
- 3) To achieve the desired vacuum entire SS TIG welding must be carried out from inside. Welding strategy (Joints, thickness, current setting etc.) may be finalized in coordination with Institute Engineers.
- 4) Material for the breadboard will be either Al. 5083 or Al. 6061-T6. If any coating required on the breadboard will be informed before machining. Payment will be made as per actuals for this.
- 5) If any additional drawings are required for fabrication such as detailed section drawings of any part, welding joints etc. should be prepared by the vendor.
- 6) Sealing surfaces should be protected during movement of parts from one place to the other.
- 7) Chamber should be free from, dents, scratch, etc.
- 8) O-rings grooves are open for discussion.
- 9) Two sets of joint less Viton O-rings should be provided by the vendor for the complete assembly
- 10) Chamber should be free from sharp edges unless it is specified in the drawing.
- 11) Machined parts should be free from debris, grease, and oil at the welding zone before doing the welding.
- 12) Vacuum side welding should be continuous.
- 13) All the pipes should be seamless.
- 14) Discontinuity in welding should be avoided.
- 15) Fabrication of chamber should follow UHV guidelines.
- 16) Surface finish on all vacuum side surfaces should be 3-delta finish
- 17) Matt finish is required on both inside and outside surfaces of the chamber to reduce the scattering of light.
- 18) Non-mating surfaces of all mild steel parts should be powder coated. The choice of color should be discussed with buyer.
- 19) All SS fasteners required for the assembly, other than mentioned in the BOQ should be provided by the vendor.
- 20) A dedicated engineer will be deputed time to time at the vendor's site for follow up, discussions and inspection during the fabrication, assembly, and testing of the chamber.
- 21) Inspection reports of the parts and the assembly should be provided by the vendor.
- 22) Cleaning of vacuum components should be followed as per attached "Annexure-1"
- 23) Complete assembly, vacuum testing should be demonstrated by the vendor at their site.
- 24) Compatible packing and transport of chamber (in a cleaned condition) from the vendor site to the buyer site (TIFR, Hyderabad) will be in the vendor scope.
- 25) Final assembly, testing of the chamber at the buyer site will be in the vendor scope.

26) If any additional mechanical component required for the testing at the vendor site will be arranged by the buyer.

27) Vacuum pumps, gauges etc. required for testing will be in the vendor scope during the pre-delivery inspection.

General terms and conditions:

1) The vendor should satisfy themselves with the design and the fabrication drawings enclosed herewith before the bidding.

2) The vendor may ask for any design clarification or may suggest changes to suit fabrication before bidding. The buyer reserves the right to accept or to partially accept or to reject suggested changes.

3) The buyer reserves the right to modify, to correct or to cancel any part or assembly before or during its fabrication after mutual discussion. In such a condition, machining charges of the unfabricated and cancelled part will not be paid by the buyer.

4) The final acceptance of the chamber should happen at the buyer site (TIFR-Hyderabad) after full commissioning of the complete vacuum chamber assembly, including demonstrating the base vacuum, leak rate and other specified parameters by the vendor. The vacuum pumps, gauges, connectors, blank flanges with O-ring for all the ports required for the testing will be arranged by the buyer.

5) Warranty: 1 Year from the date of successful Installation and Acceptance.

Technical evaluation will be done based on below criteria:

	Description	Max. Marks	Marks Obtained	Remarks
1	Availability of in-house machining and fabrication facility	30		
2	Quality checks on the previously delivered systems	15		
3	In-house design capability	10		
4	Presentation on detailed fabrication strategy for the above required chamber design	20		
5	History of fabricating any cylindrical/polygon shaped vacuum chamber	10		
6	Achieving flatness(0.2mm/meter) and parallelism (1mm) on breadboard or any part of size 1meter in diameter or equivalent	10		
7	Achieving angular precision (+/-0.3deg) between ports on any vacuum chamber of size around 1mtr	5		

Note: The above evaluation will be done either by factory visit or through online mode based on the decisions made by the committee members.

Cleaning Procedure:

Procedure should be followed for cleaning the vacuum components of PW Beam Switching Chamber:

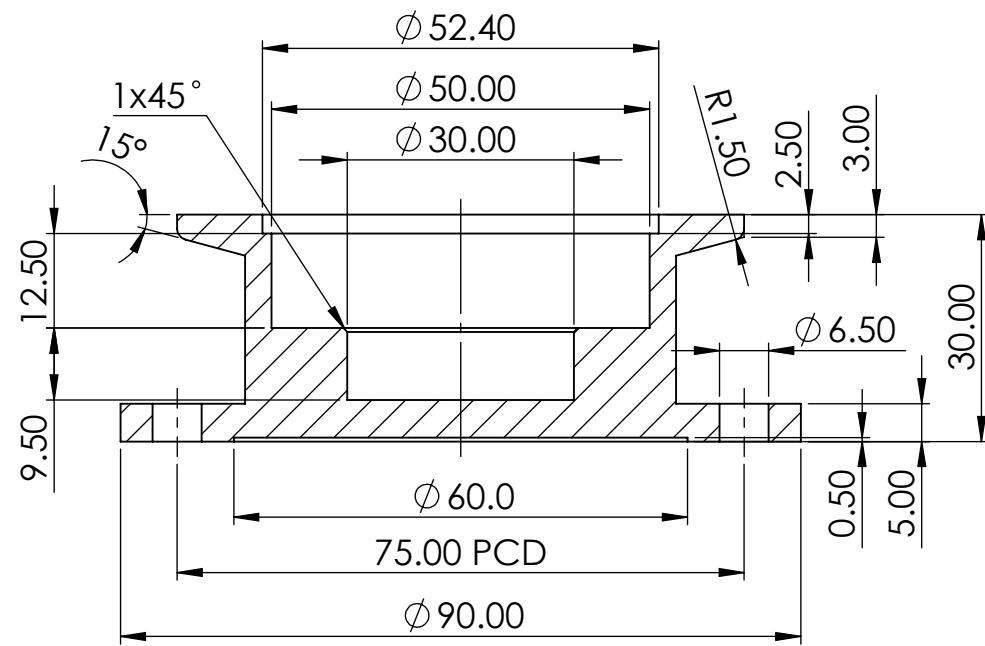
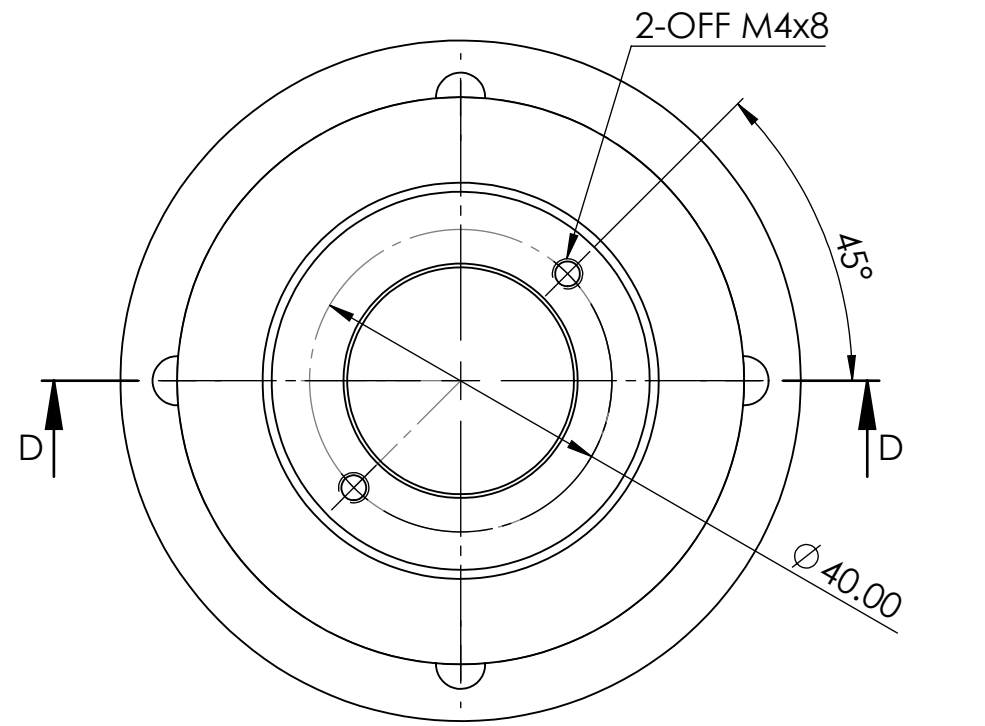
- 1) Scrub all surface of the components with degreasing liquid (dilute mixture; brand: PRIL)
- 2) Swab all the internal holes, small features etc using micro brush with the same degreasing liquid
- 3) Rinse the cleaned part with De-mineralized water; scrub small features like blind/through tapped holes under pressure using a syringe.
- 4) Repeat the above steps for two more times or more until one see non swarf or grease on the part
- 5) Finally rinse the parts by scrubbing all the surfaces using nylon scrubber to take away the soap water
- 6) Dry surfaces using lint-free cloth, and internal features like blind holes using hot air blower.
- 7) Wrap components with Al. foil
- 8) During the assembly, the components surface will be wiped with an Iso-propanol using lint free cloth or tissue.

For fasteners:

- 1) Soak the screws with degreasing liquid for about 10min
- 2) Scrub all the screws individually using brush
- 3) Rinse and immerse all screws in de-mineralized water for 10-15min
- 4) Finally, clean with Iso-propanol or Acetone using ultrasonic bath.

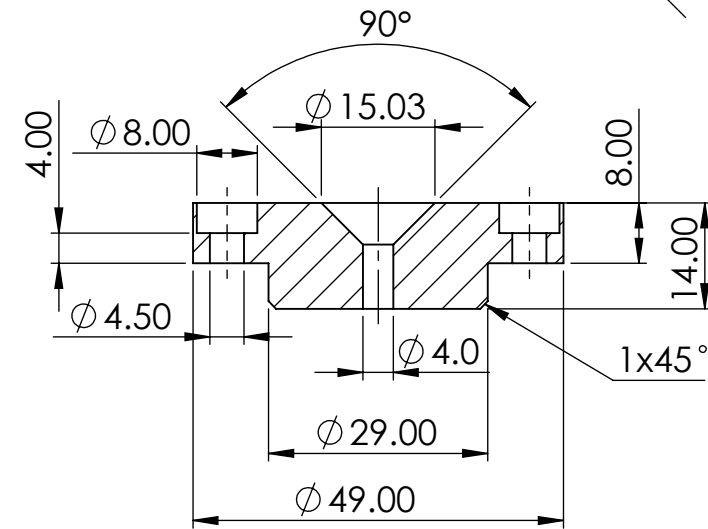
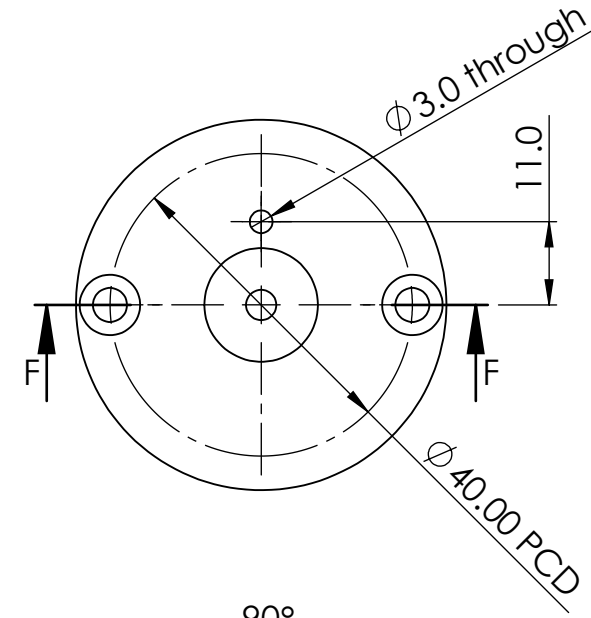
DRAWINGS

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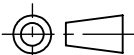


SECTION D-D

MP-1062018
Matl: SS304
Qty: 04

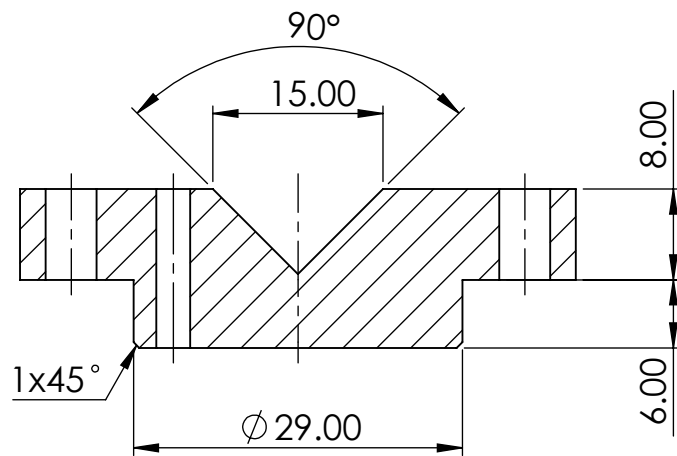
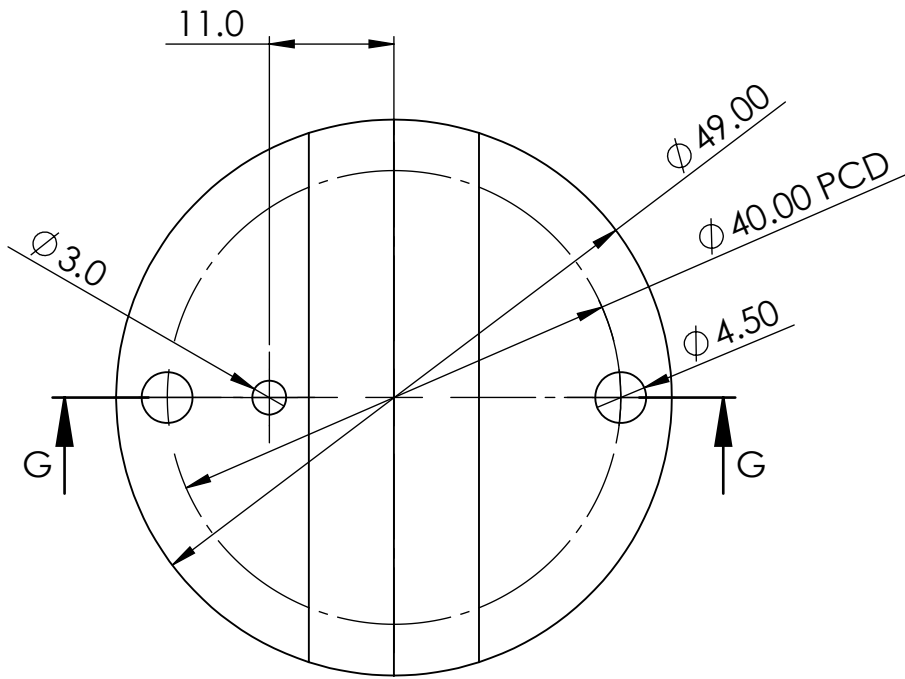


SECTION F-F

MP-1062019
Matl: SS304
Qty: 01

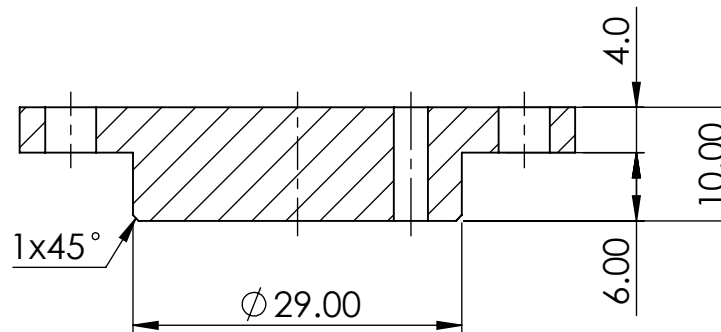
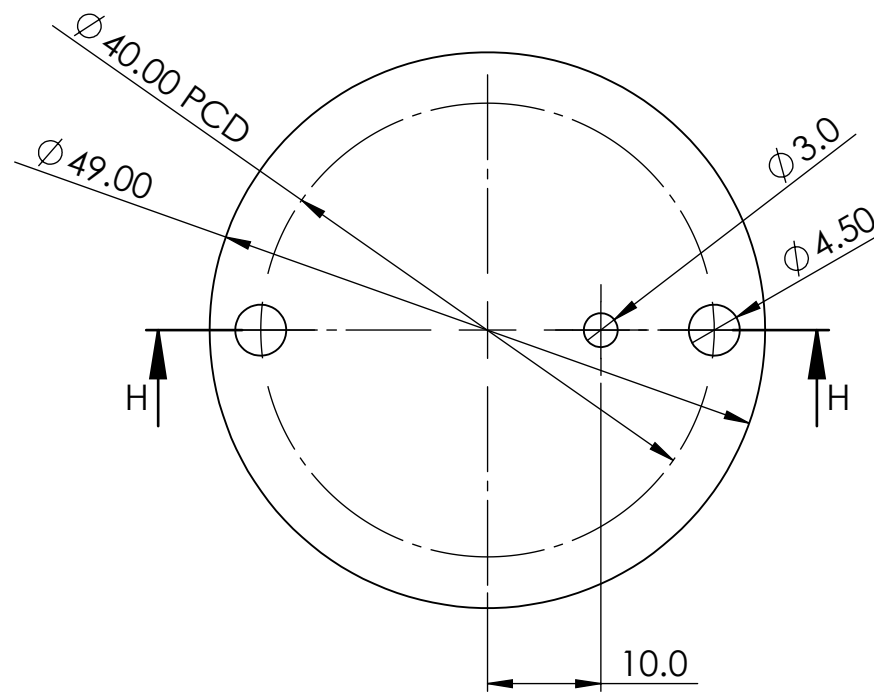
		Dimensions are in mm unless specified		 tifr Hyderabad		Petawatt Laser Facility		
Designer BSM		Checked PKS		Title Beam Switching Chamber Breadboard Assembly Levelling feet parts				
Drawn BSM		Approved PKS						
Material		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2						
Grade		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS MP-1062018 & 19		Rev A
		Status ISSUED		Date of Issue 10-04-2025		A3 Sheet 1 of 1		Quantity --

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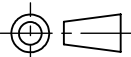

SECTION G-G

MP-1062020
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Qty: 01

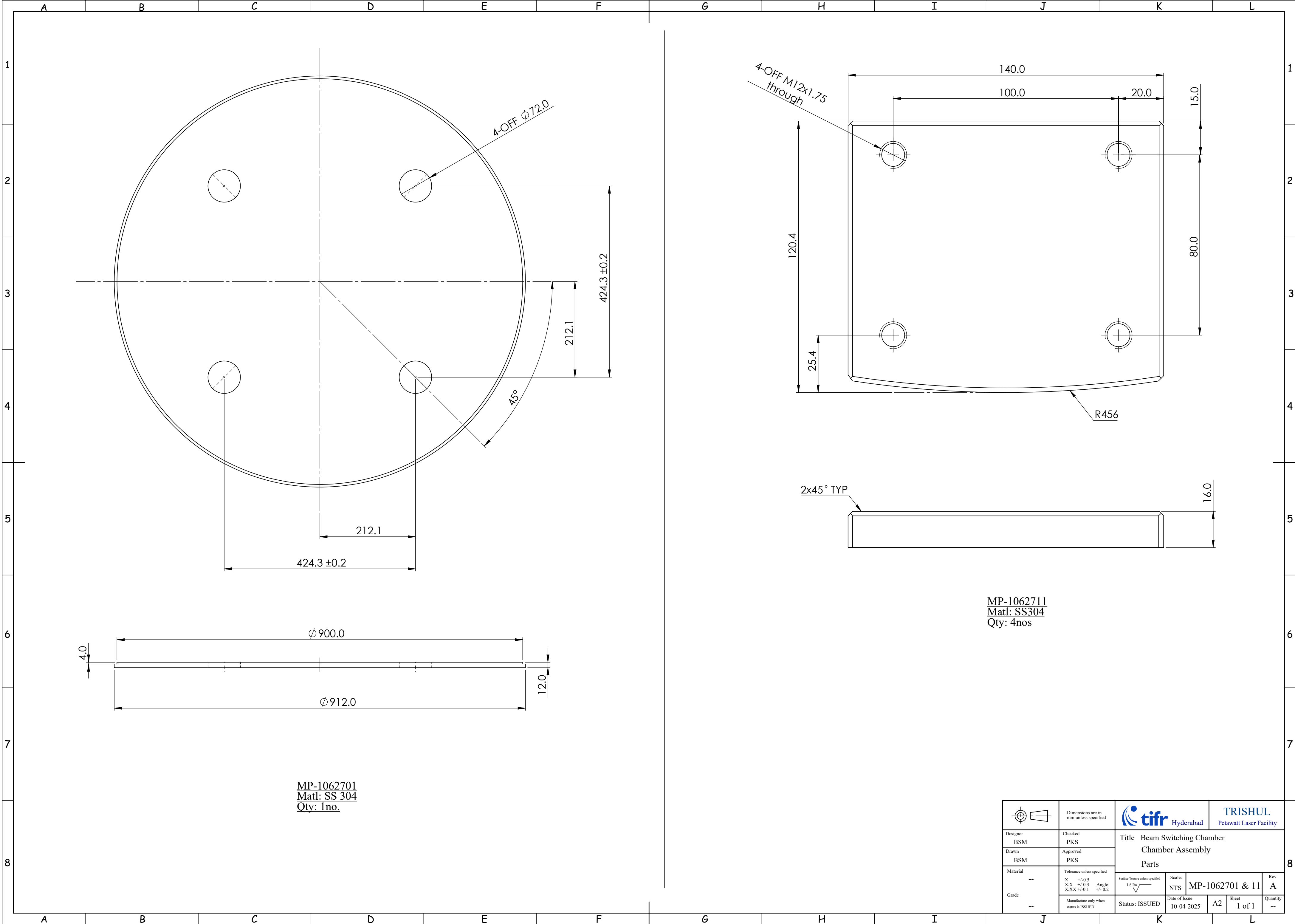


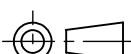


SECTION H-H

MP-1062021
Matl: SS304
Qty: 02

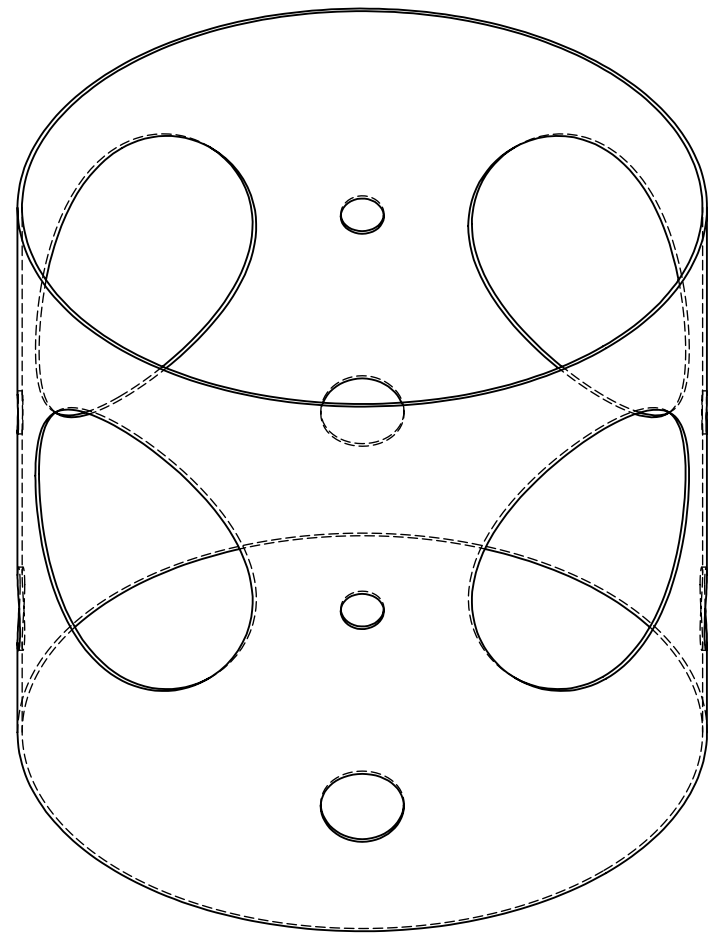
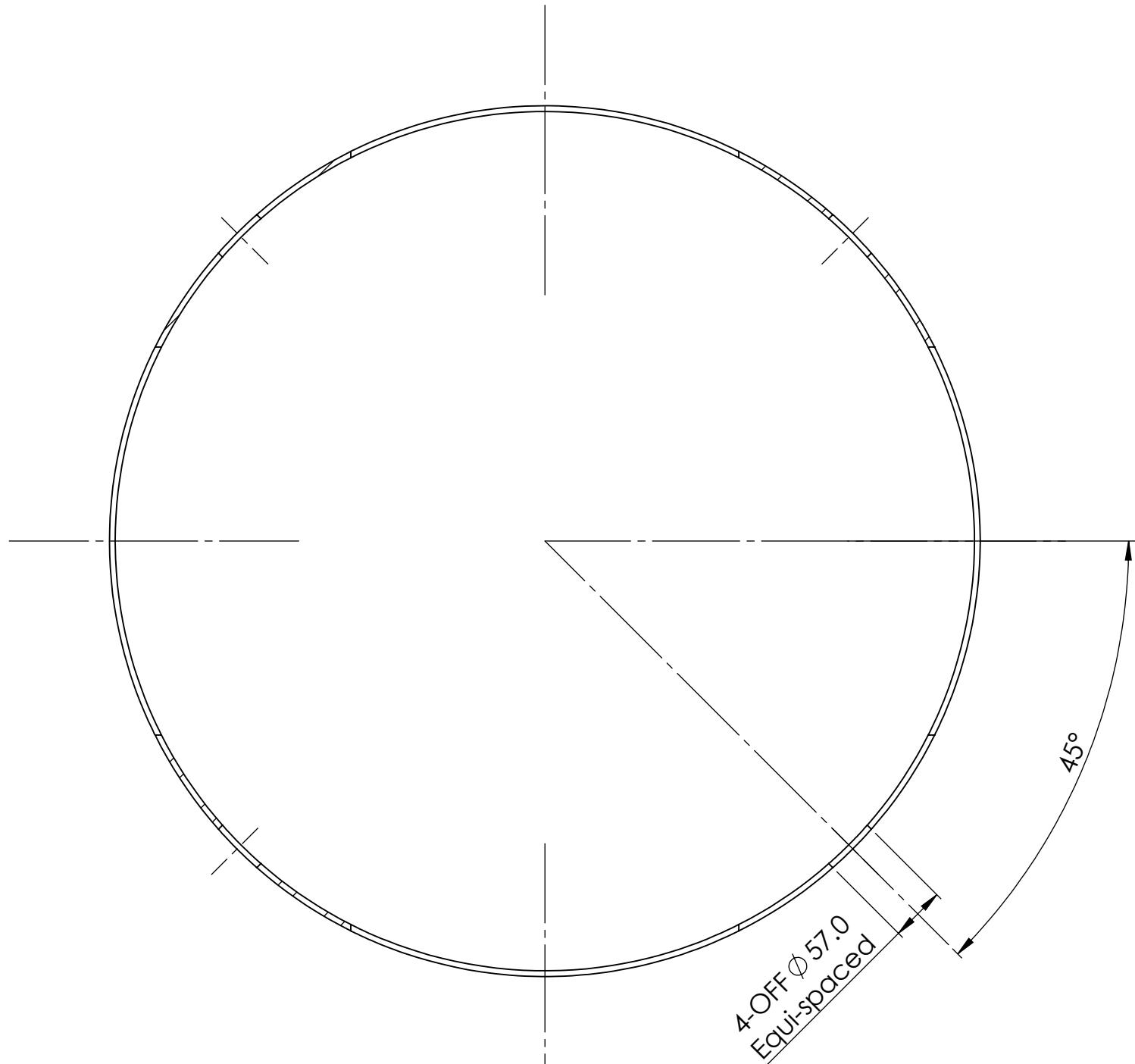
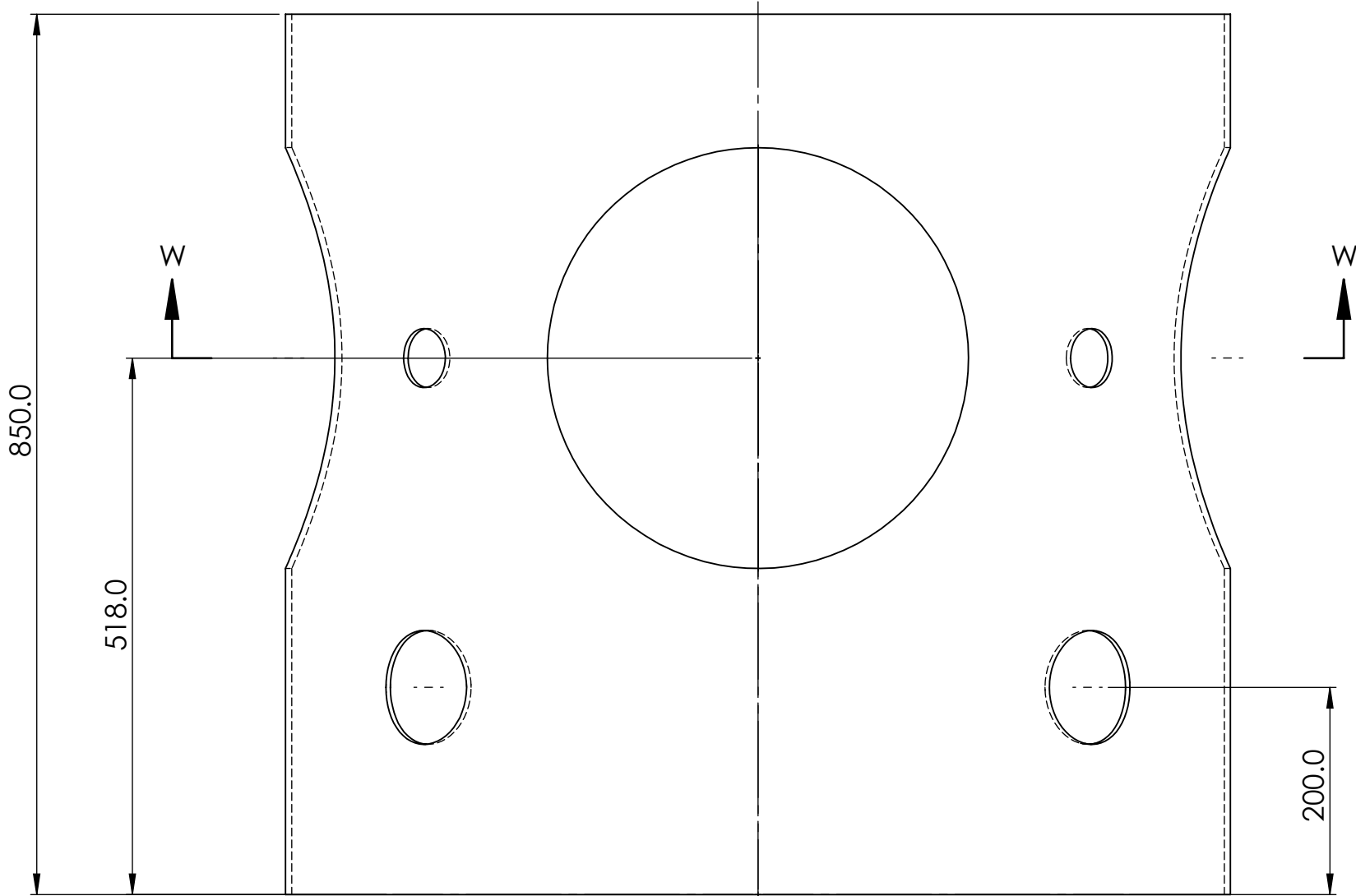
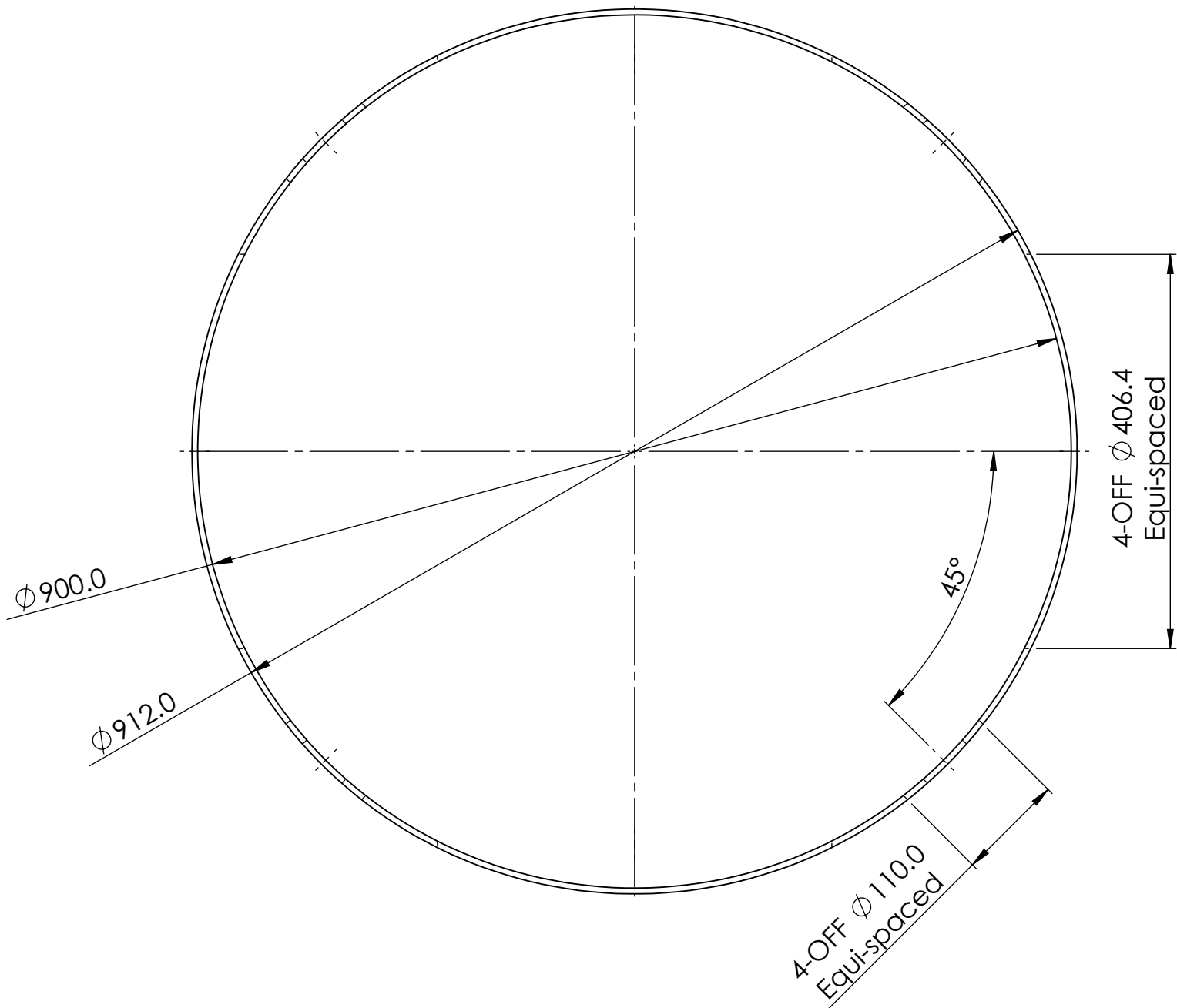
	Dimensions are in mm unless specified		<i>Petawatt Laser Facility</i>			
Designer BSM	Checked PKS	Title Beam Switching Chamber Breadboard Assembly Levelling feet parts				
Drawn BSM	Approved PKS					
Material	Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2					
Grade	Manufacture only when status is ISSUED	Status ISSUED	Date of Issue 10-04-2025	A3	Sheet 1 of 1	Quantity --

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		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility					
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Parts							
Drawn BSM		Approved PKS									
Material --		Tolerance unless specified X ± 0.5 X.X ± 0.3 Angle X.XX ± 0.1 ± 0.2									
Grade --		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062701 & 11		Rev A	
				Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1	
										Quantity --	

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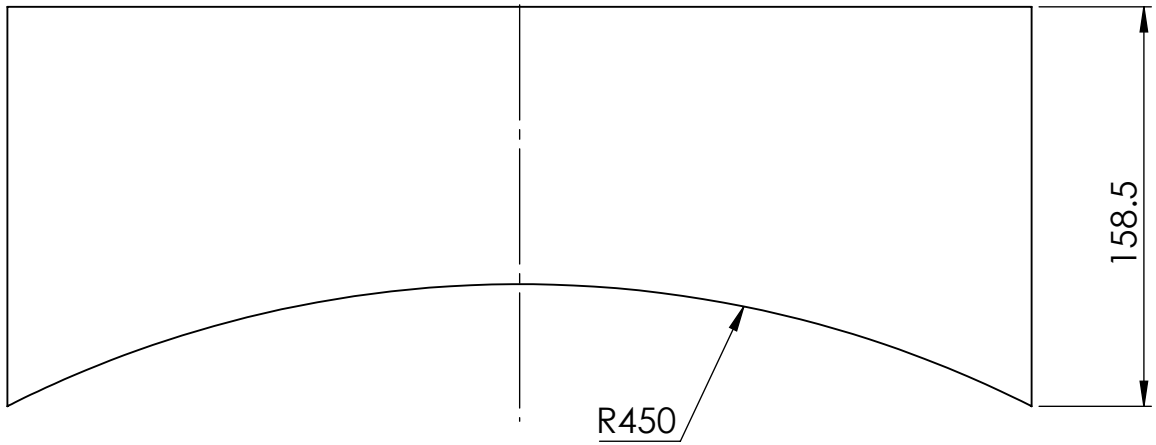
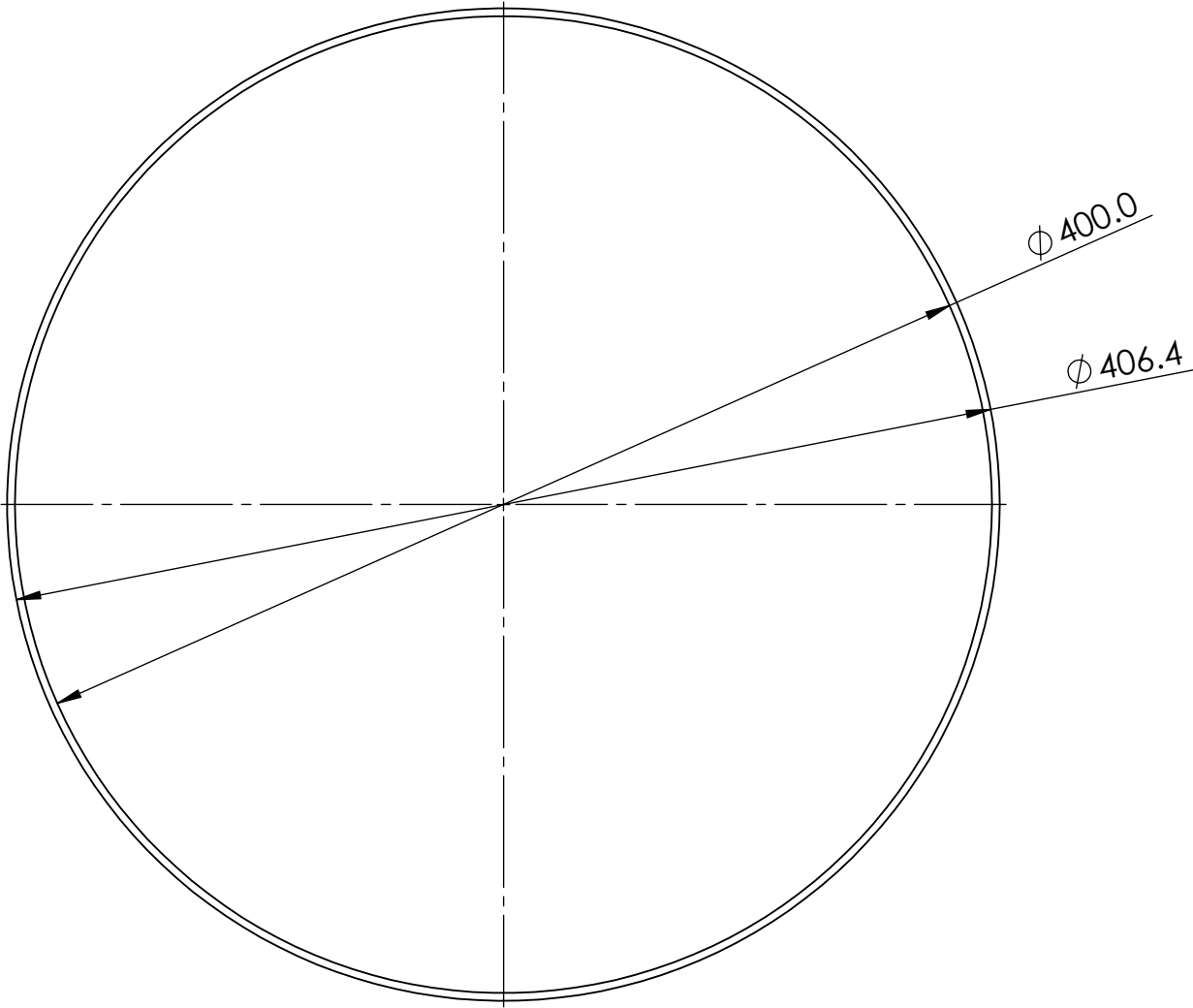


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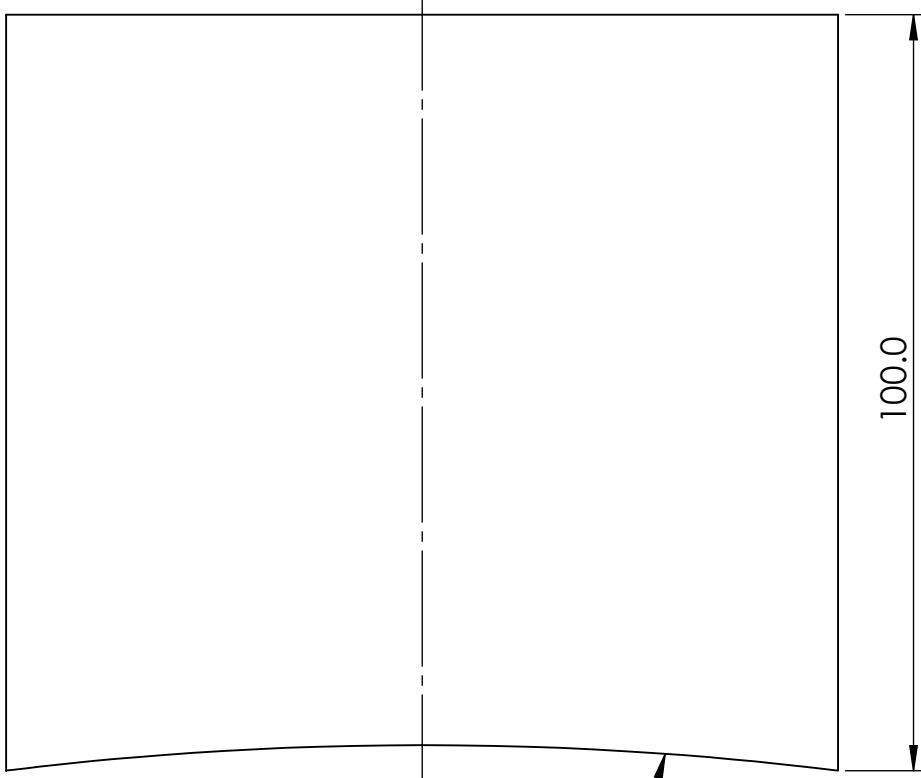
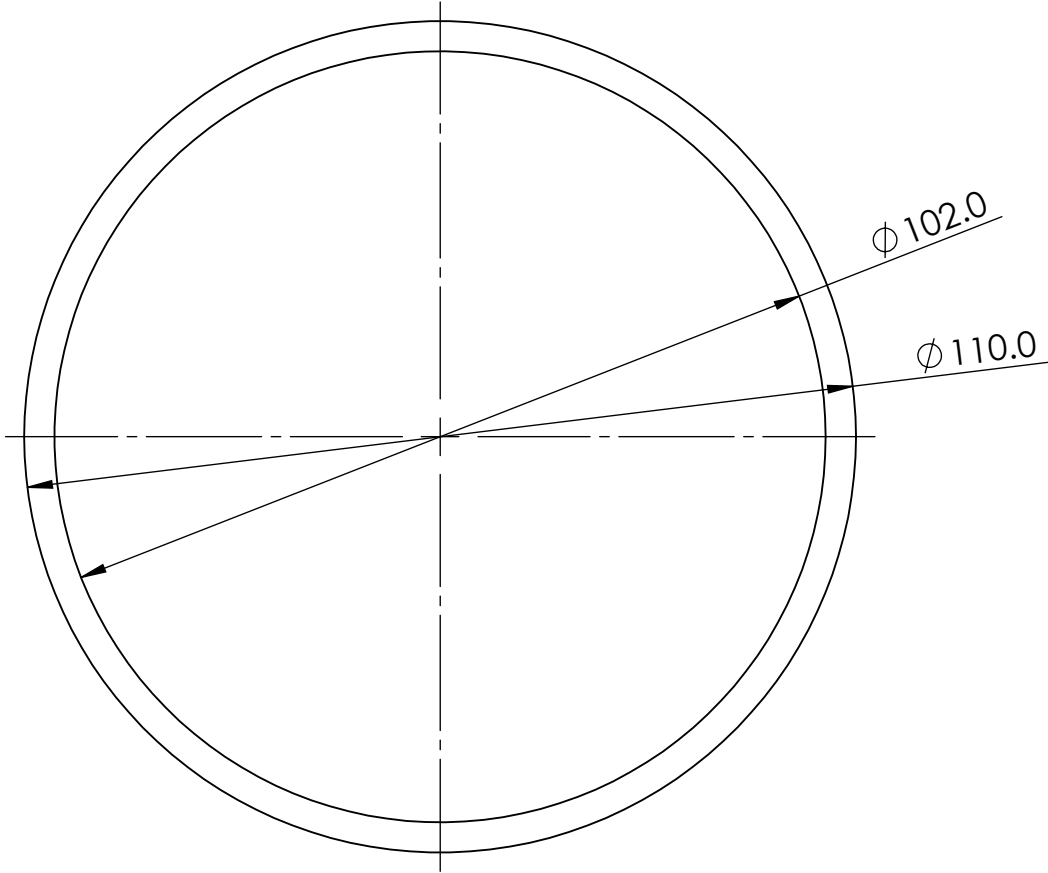
SECTION W-W
SCALE 1 : 6

	Dimensions are in mm unless specified		TRISHUL Petawatt Laser Facility
Designer BSM	Checked PKS	Title Beam Switching Chamber Chamber Assembly Main Cylinder	
Drawn BSM	Approved PKS		
Material Stainless Steel	Tolerance unless specified X ± 0.5 X.X ± 0.3 Angle X.XX ± 0.1 ± 0.2	Surface Texture unless specified 1.6 Ra	Scale: NTS
Grade 304	Manufacture only when status is ISSUED	Status: ISSUED	Date of Issue 10-04-2025
		A2	Sheet 1 of 1
		Quantity 01	Rev A

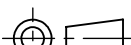


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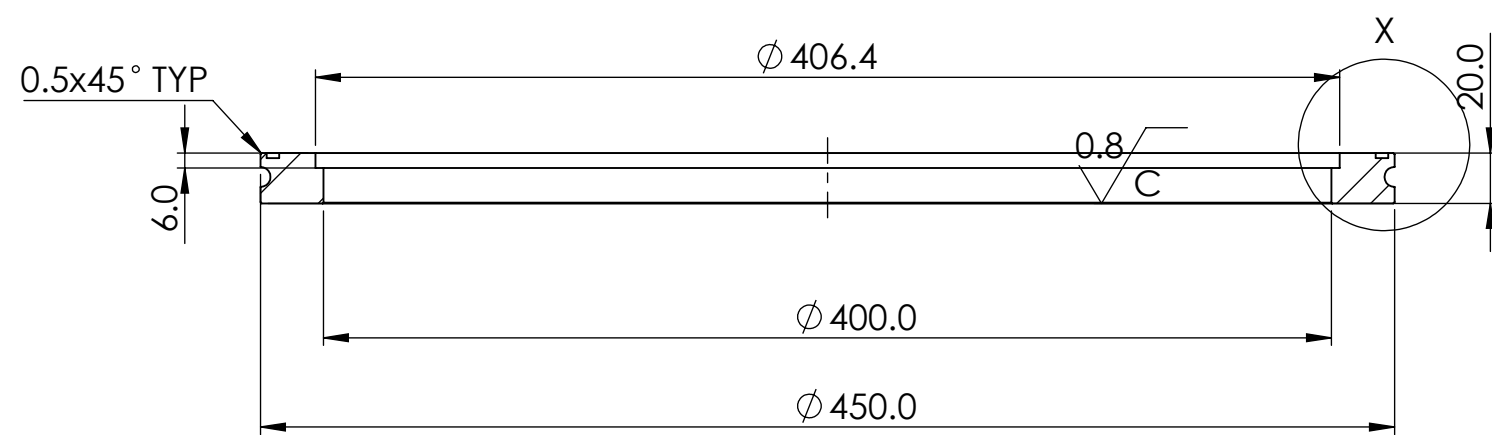
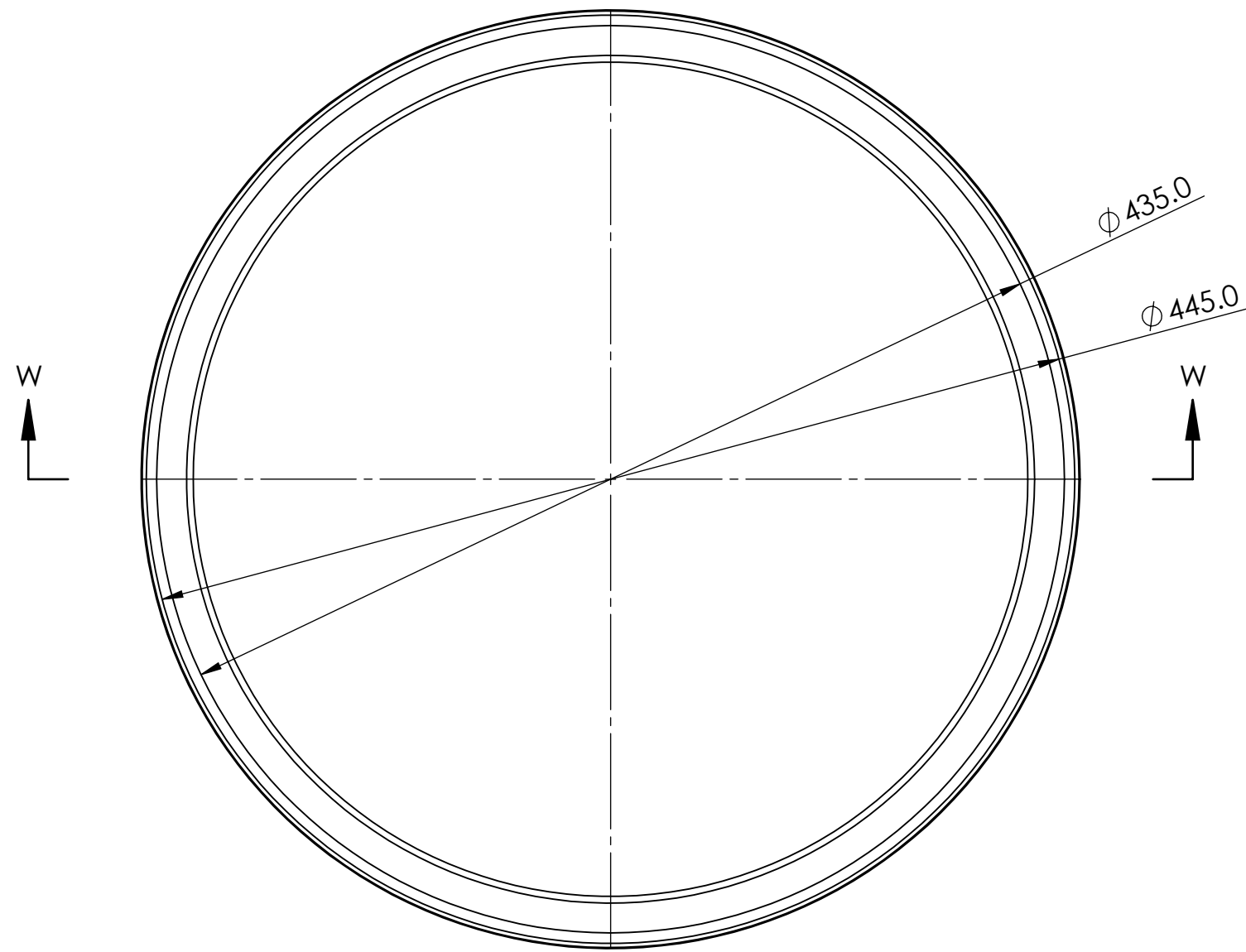
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Matl: SS304
Qty: 4nos.



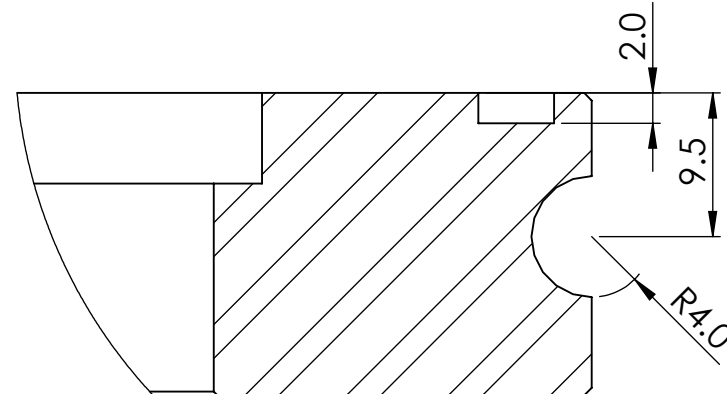
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Matl: SS304
Qty: 4nos.

		Dimensions are in mm unless specified		 Hyderabad		TRISHUL Petawatt Laser Facility							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Port pipe									
Drawn BSM		Approved PKS											
Material --		Tolerance unless specified X ± 0.5 X.X ± 0.3 Angle X.XX ± 0.1 ± 0.2											
Grade --		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062703 & 04		Rev A			
				Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity --	

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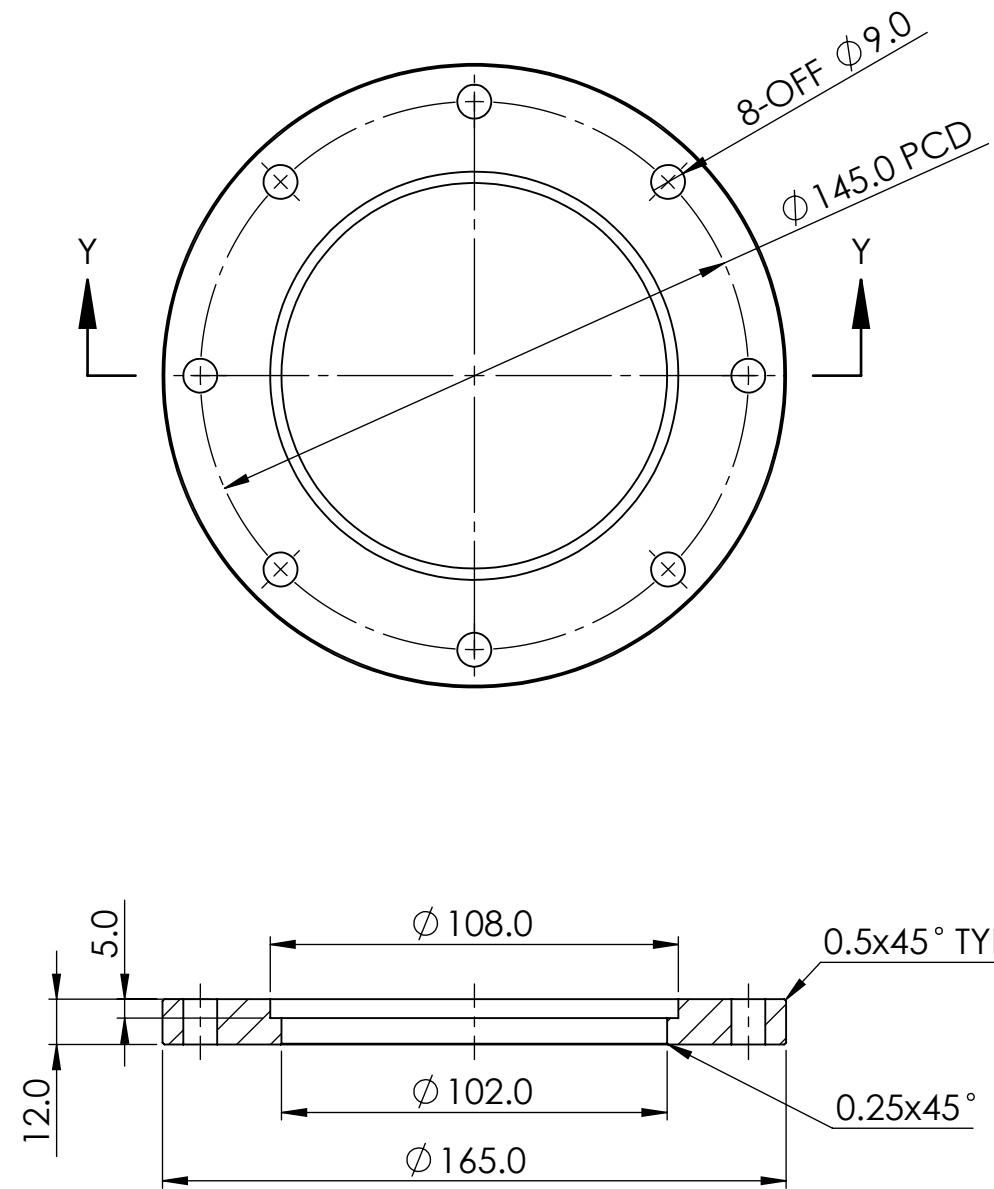


SECTION W-W
SCALE 1 : 3



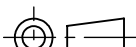


DETAIL X
SCALE 2 : 1

MP-1062705
Matl: SS304
Qty: 4nos.

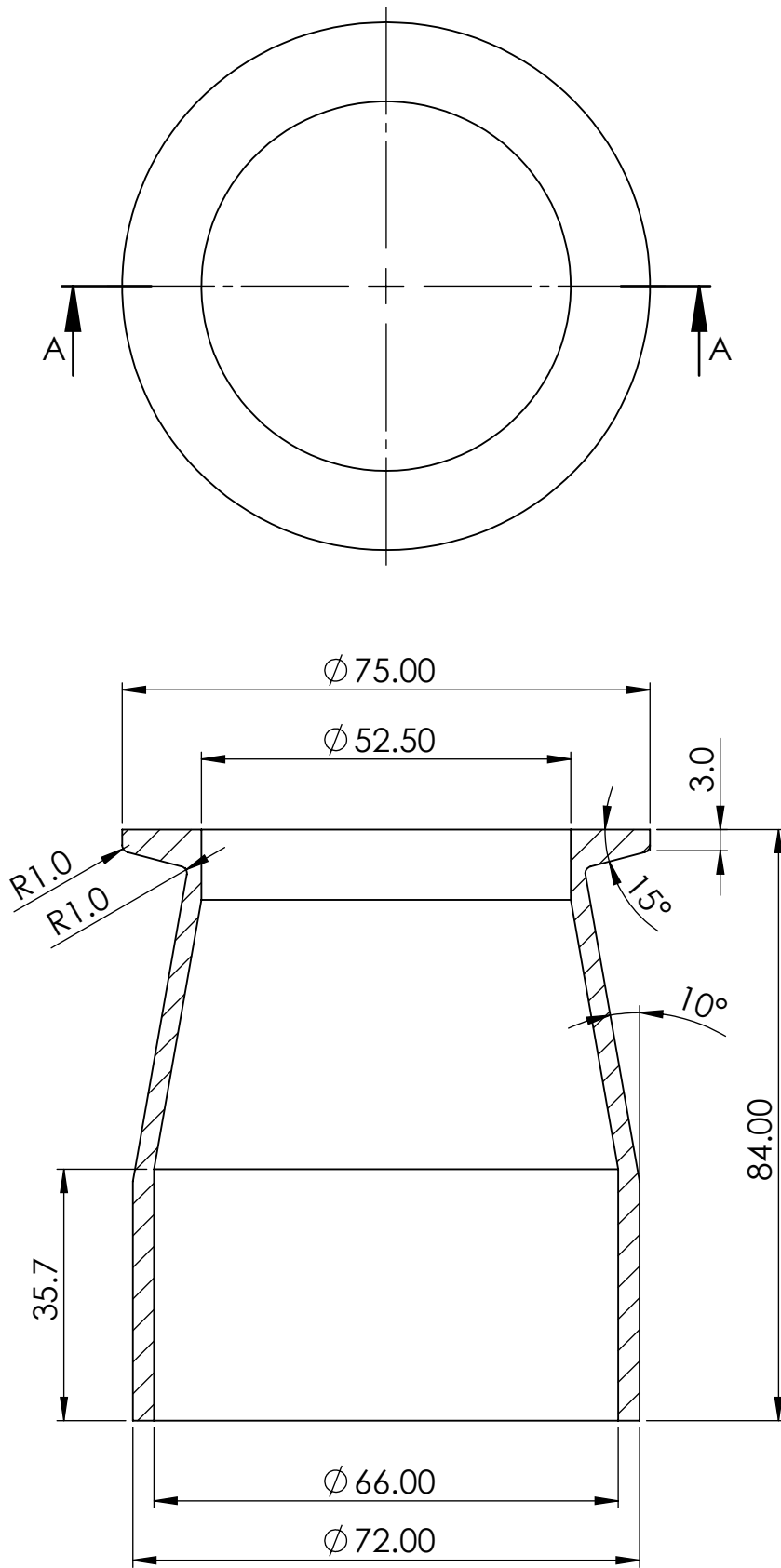


SECTION Y-Y
SCALE 1 : 2

MP-1062706
Matl: SS304
Qty: 4nos.

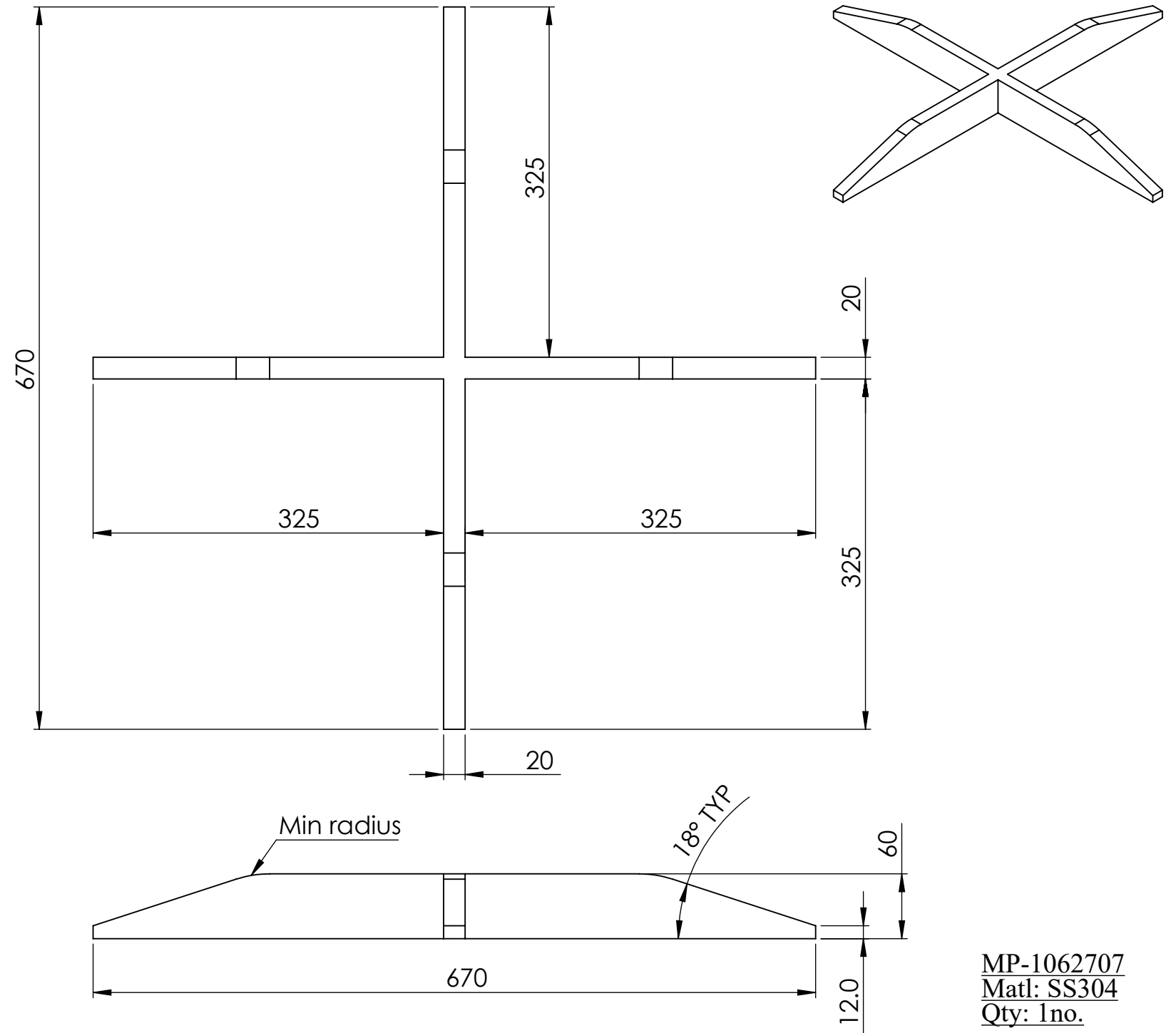
		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Port Flange									
Drawn BSM		Approved PKS											
Material --		Tolerance unless specified X ± 0.5 X.X ± 0.3 Angle X.XX ± 0.1 ± 0.2		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062705 & 06		Rev A			
Grade --		Manufacture only when status is ISSUED		Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity --	

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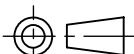


SECTION A-A

MP-1062710
Matl: SS304
Qty: 4nos.

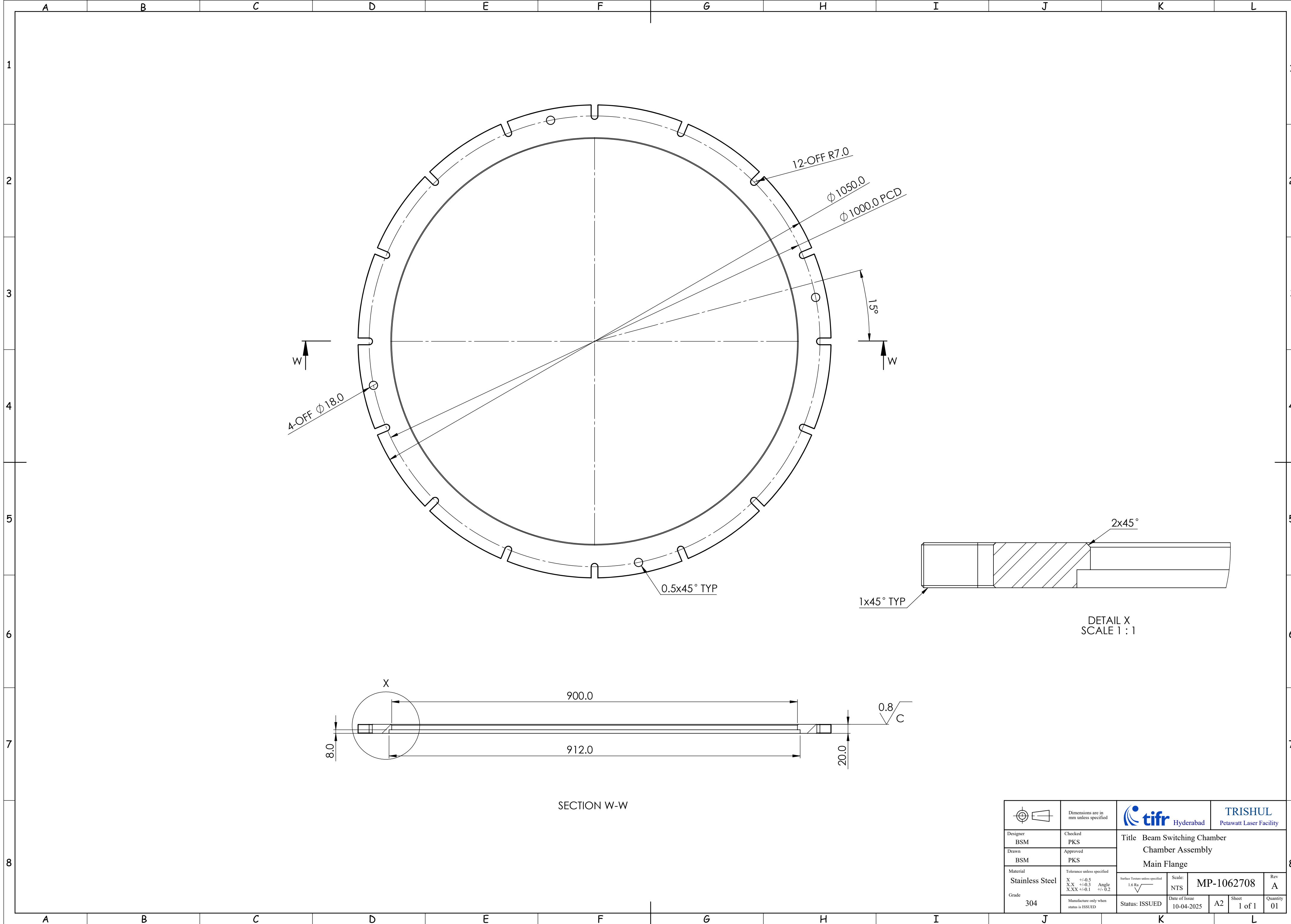


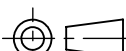


- Note:
- 1) Stiffener can be made by welding individual pieces
 - 2) Provide minimum chamfer to all edges

MP-1062707
Matl: SS304
Qty: 1no.

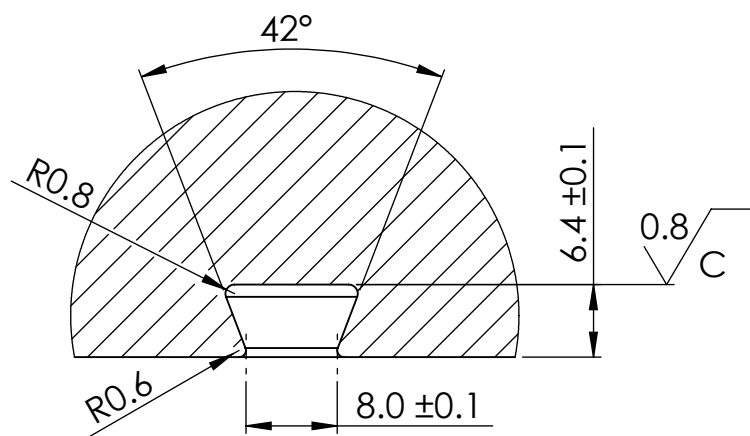
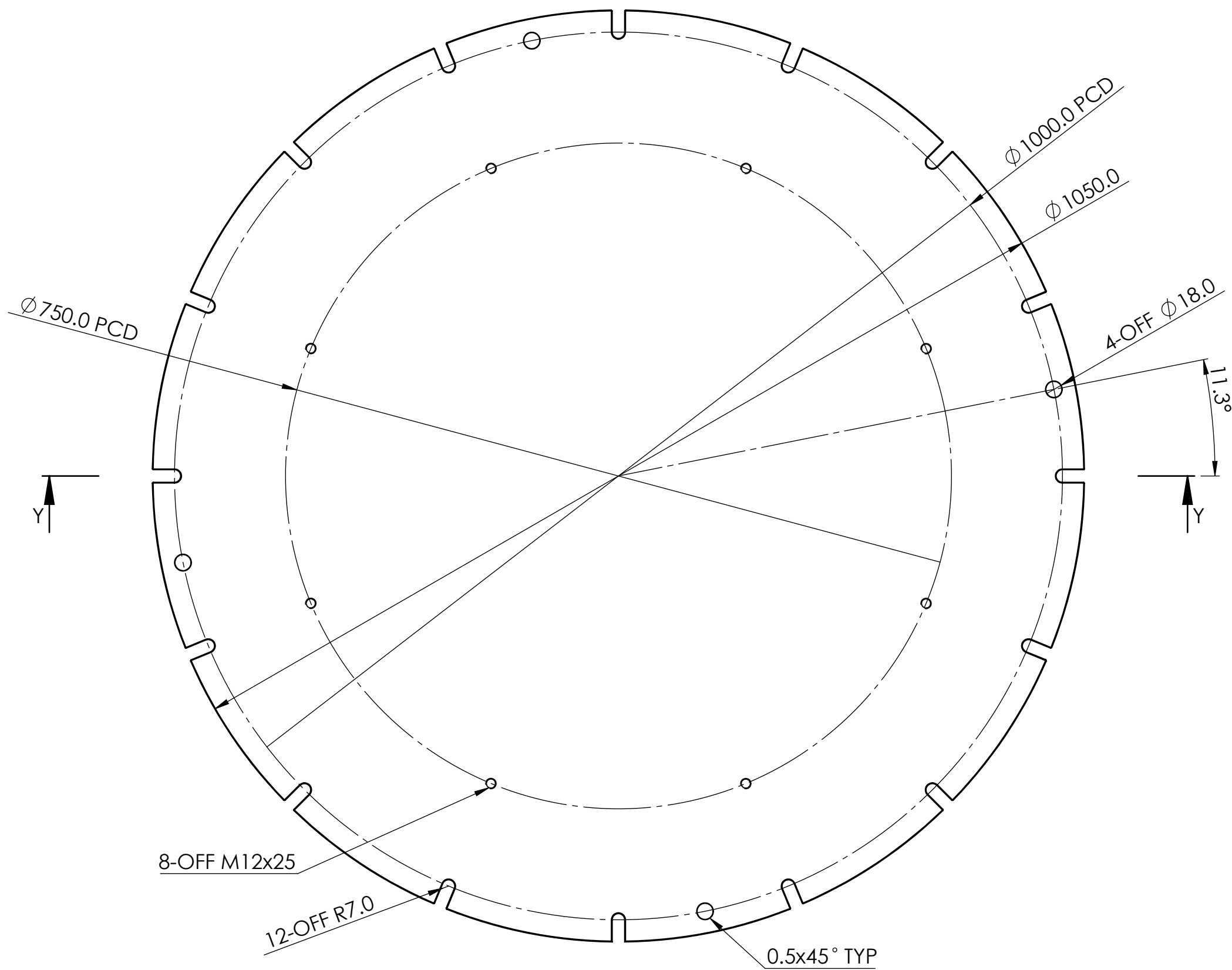
		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility	
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Part drawings			
Drawn BSM		Approved PKS					
Material --		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1					
Grade --		Manufacture only when status is ISSUED		Status: ISSUED		Rev A	
		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062707 & 10	
				Date of Issue 10-04-2025		A3	
				Sheet 1 of 1		Quantity --	

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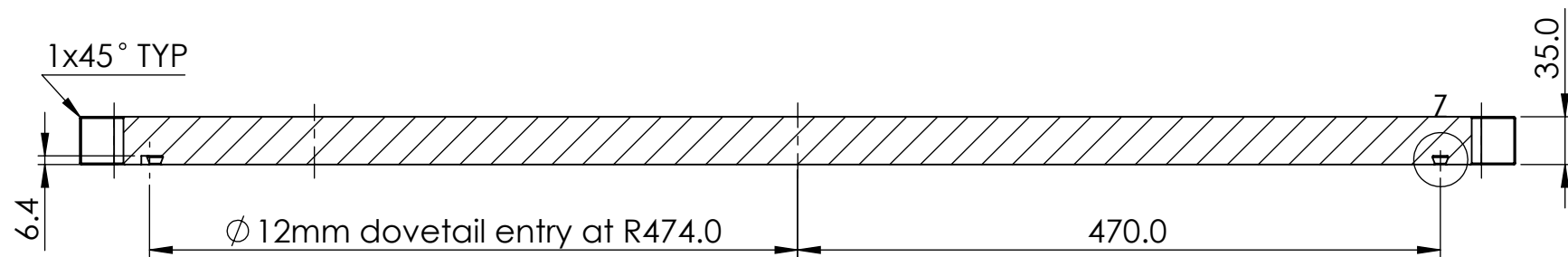


		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Main Flange									
Drawn BSM		Approved PKS											
Material Stainless Steel		Tolerance unless specified X ± 0.5 X.X ± 0.5 Angle X.XX ± 0.1 ± 0.2											
Grade 304		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062708		Rev A			
				Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity 01	

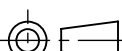


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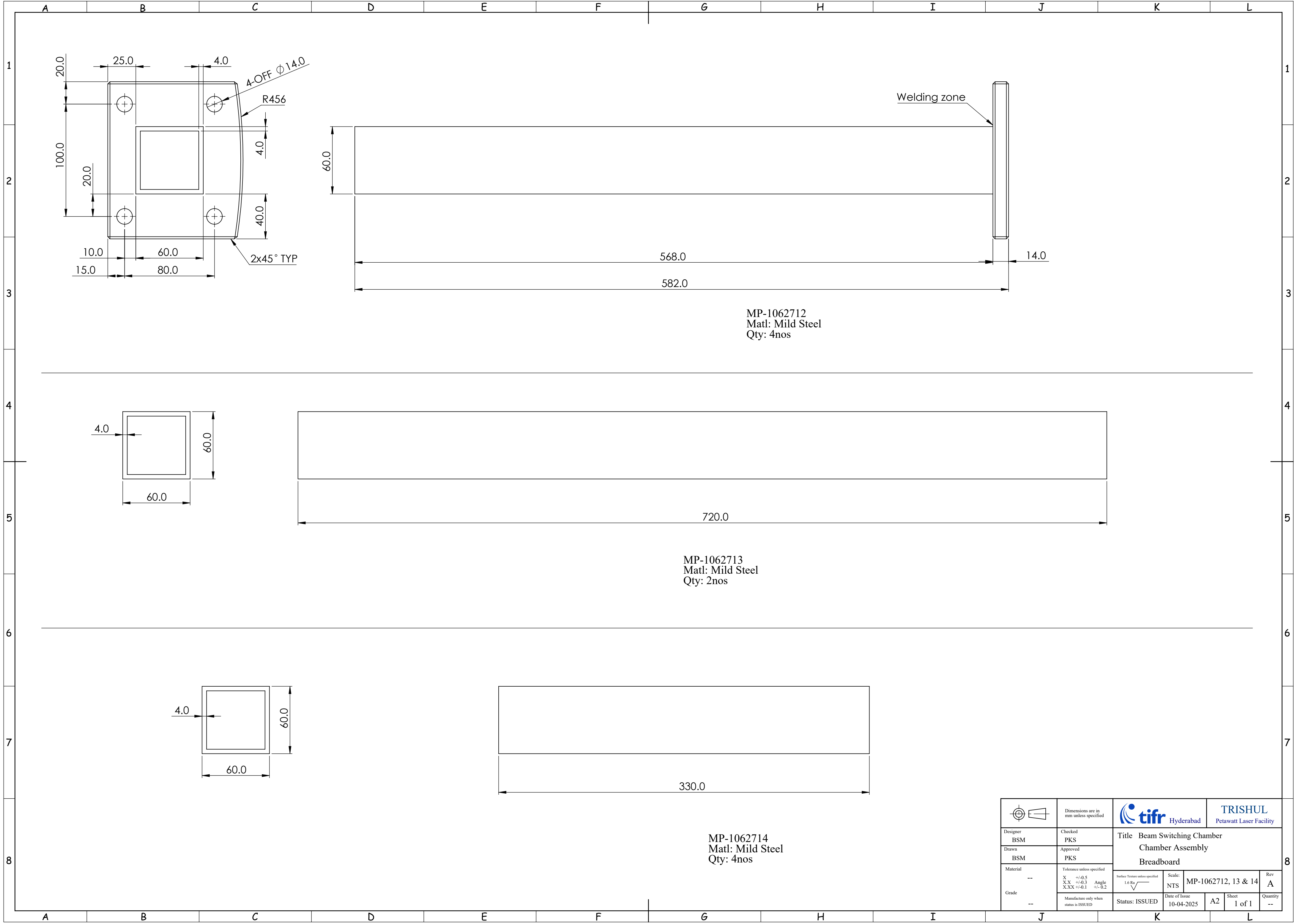
DETAIL Z
SCALE 1.5 : 1



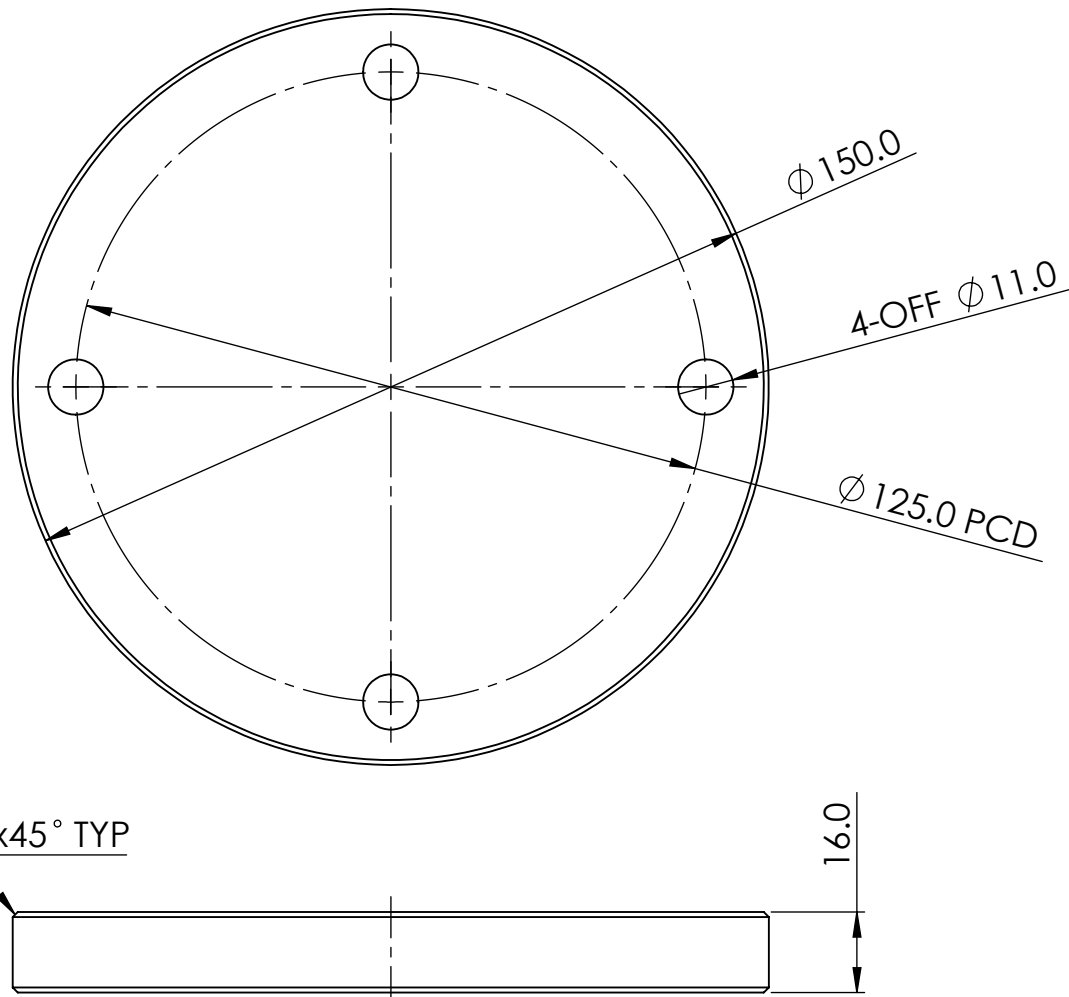
SECTION Y-Y

		Dimensions are in mm unless specified		 Hyderabad		TRISHUL Petawatt Laser Facility					
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Lid							
Drawn BSM		Approved PKS									
Material Aluminium		Tolerance unless specified X +/-0.5 X.X +/-0.5 Angle X.XX +/-0.1 +/- 0.2									
Grade 6061-T6		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062709		Rev A	
Status: ISSUED				Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity 01	

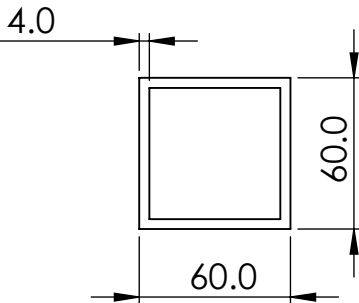
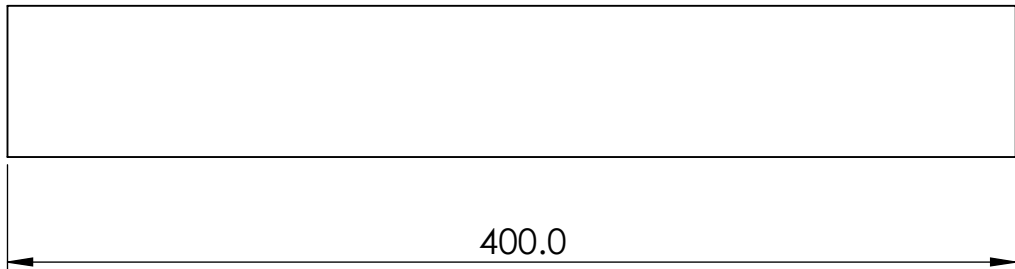
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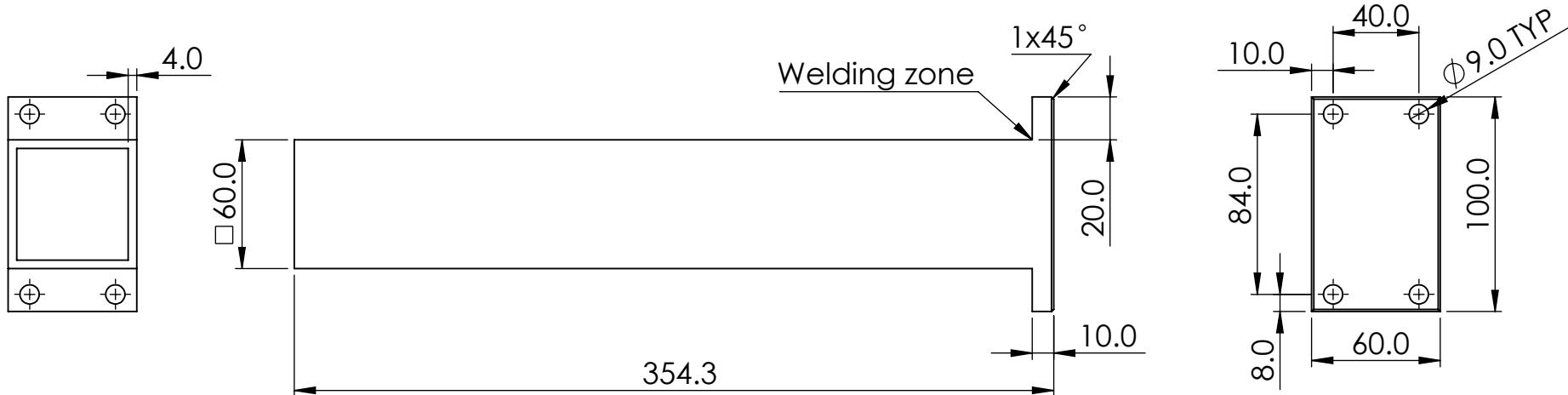
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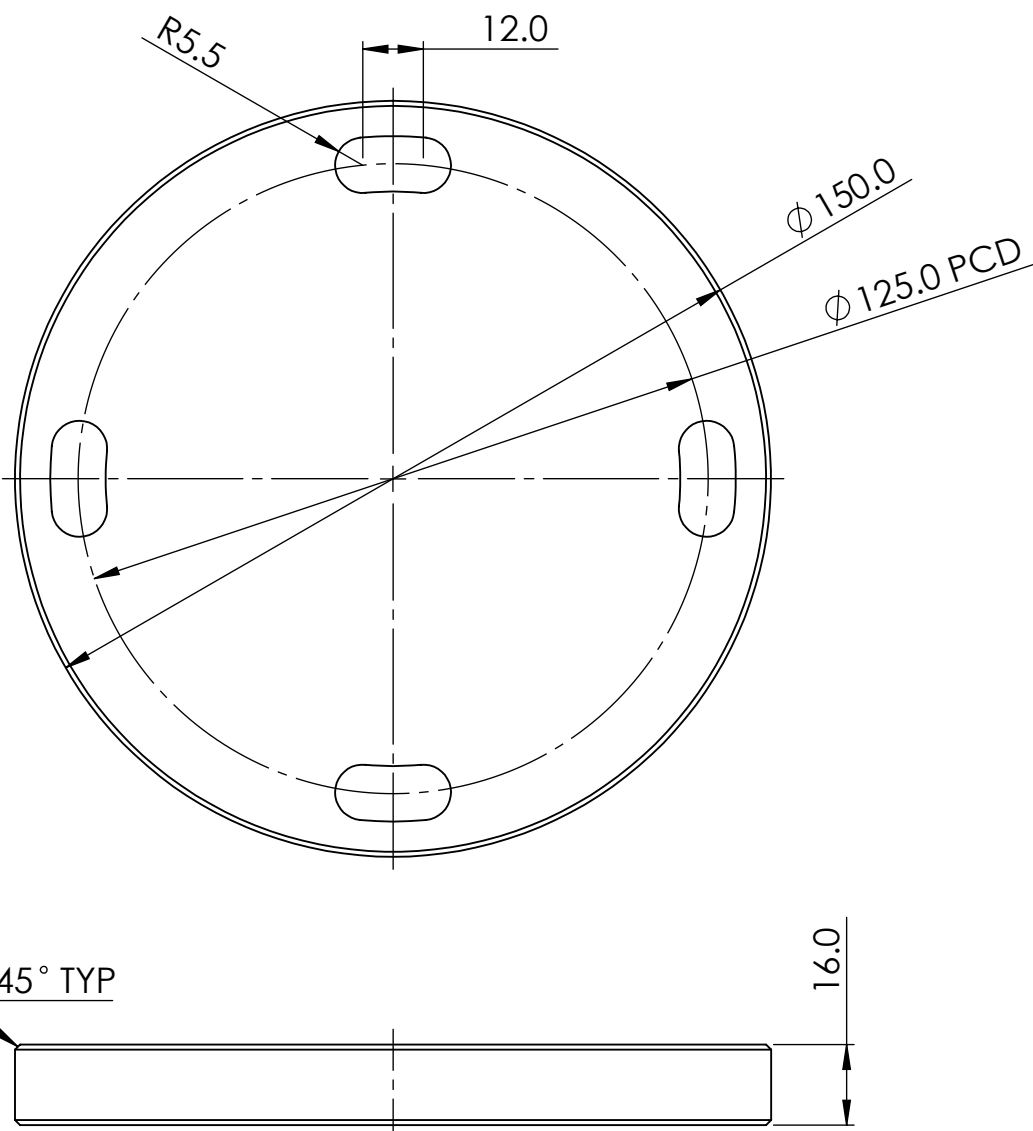
MP-1062721
Matl: Mild Steel
Qty: 04



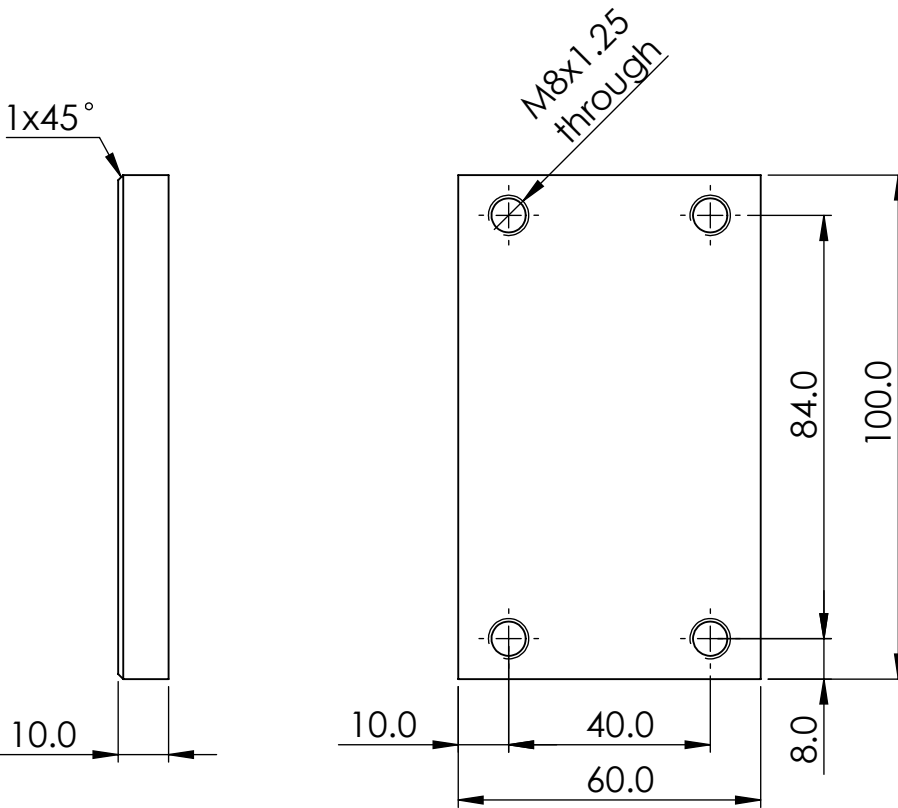
MP-1062723
Matl: Mild Steel
Qty: 04



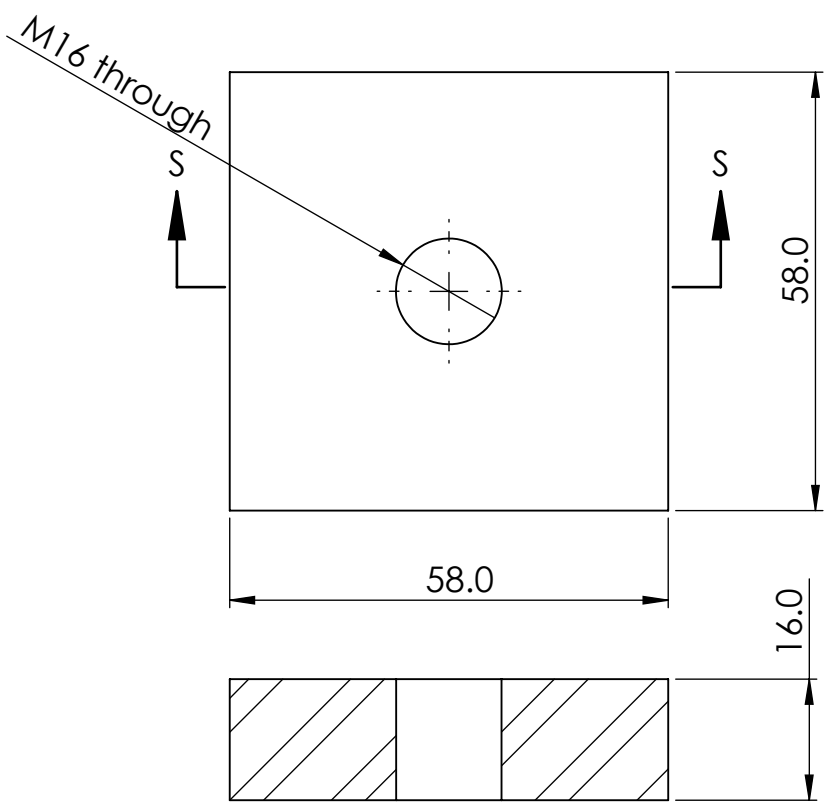
MP-1062724
Matl: Mild Steel
Qty: 08



MP-1062722
Matl: Mild Steel
Qty: 01






MP-1062725
Matl: Mild Steel
Qty: 08

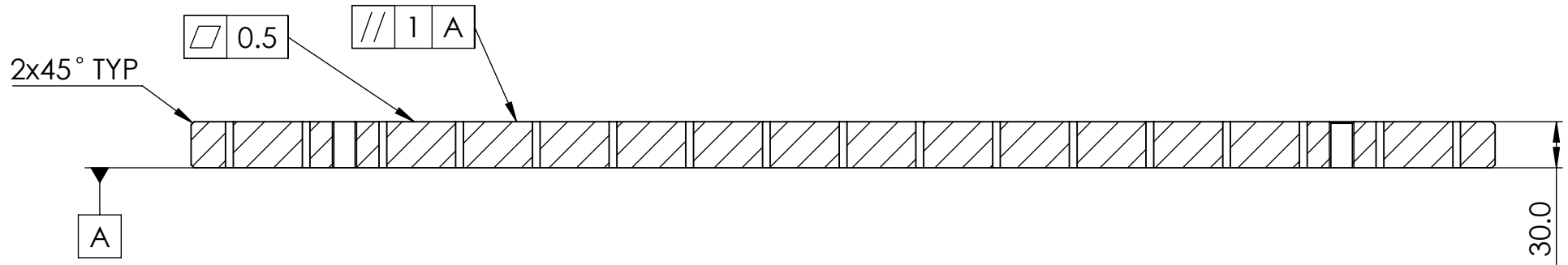
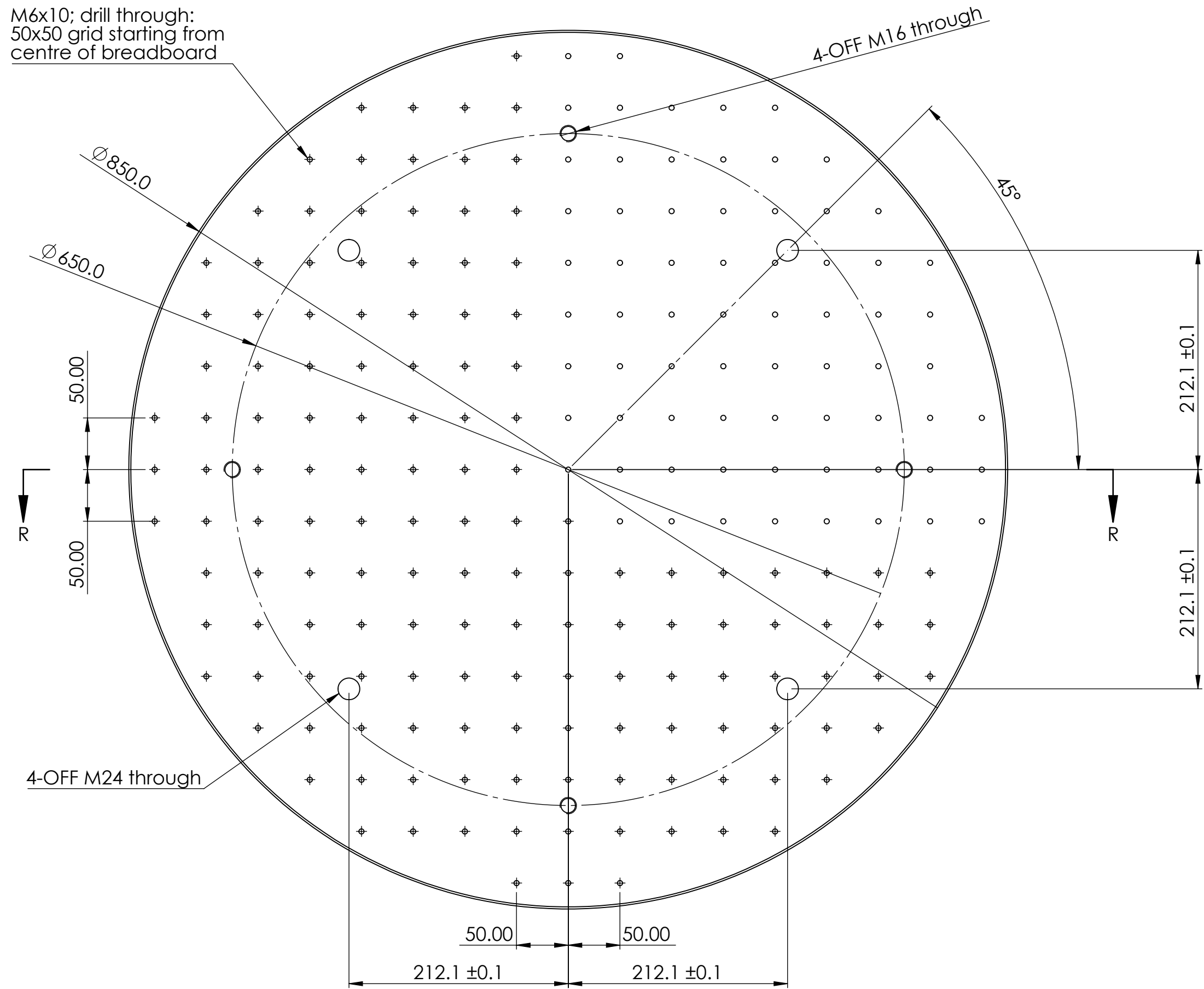


SECTION S-S

MP-1062715
Matl: Mild Steel
Qty: 08

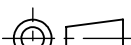


		Dimensions are in mm unless specified		 Hyderabad		TRISHUL Petawatt Laser Facility		
Designer	BSM	Checked	PKS	Title Beam Switching Chamber Chamber Assembly Parts				
Drawn	BSM	Approved	PKS					
Material	--	Tolerance unless specified X +/-0.5 X.X +/-0.5 Angle X.XX +/-0.1 +/-0.2						
Grade	--	Manufacture only when status is ISSUED		Surface Texture unless specified 16.8 		Scale: NTS	MP-1062715, 21, 22, 23, 24, & 25	Rev A
				Status: ISSUED		Date of Issue 10-04-2025	Sheet A2 1 of 1	Quantity --

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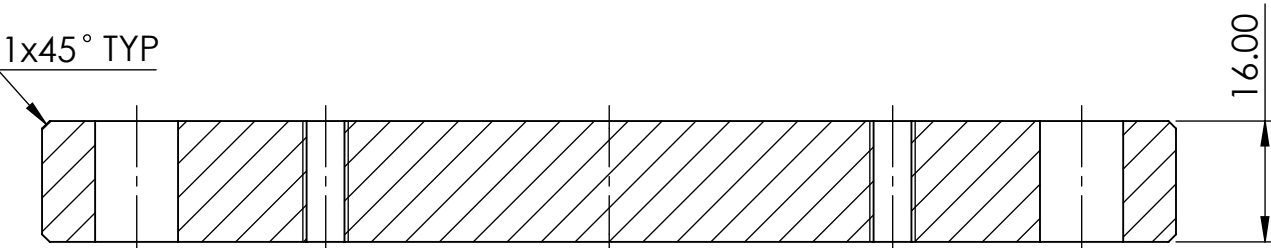
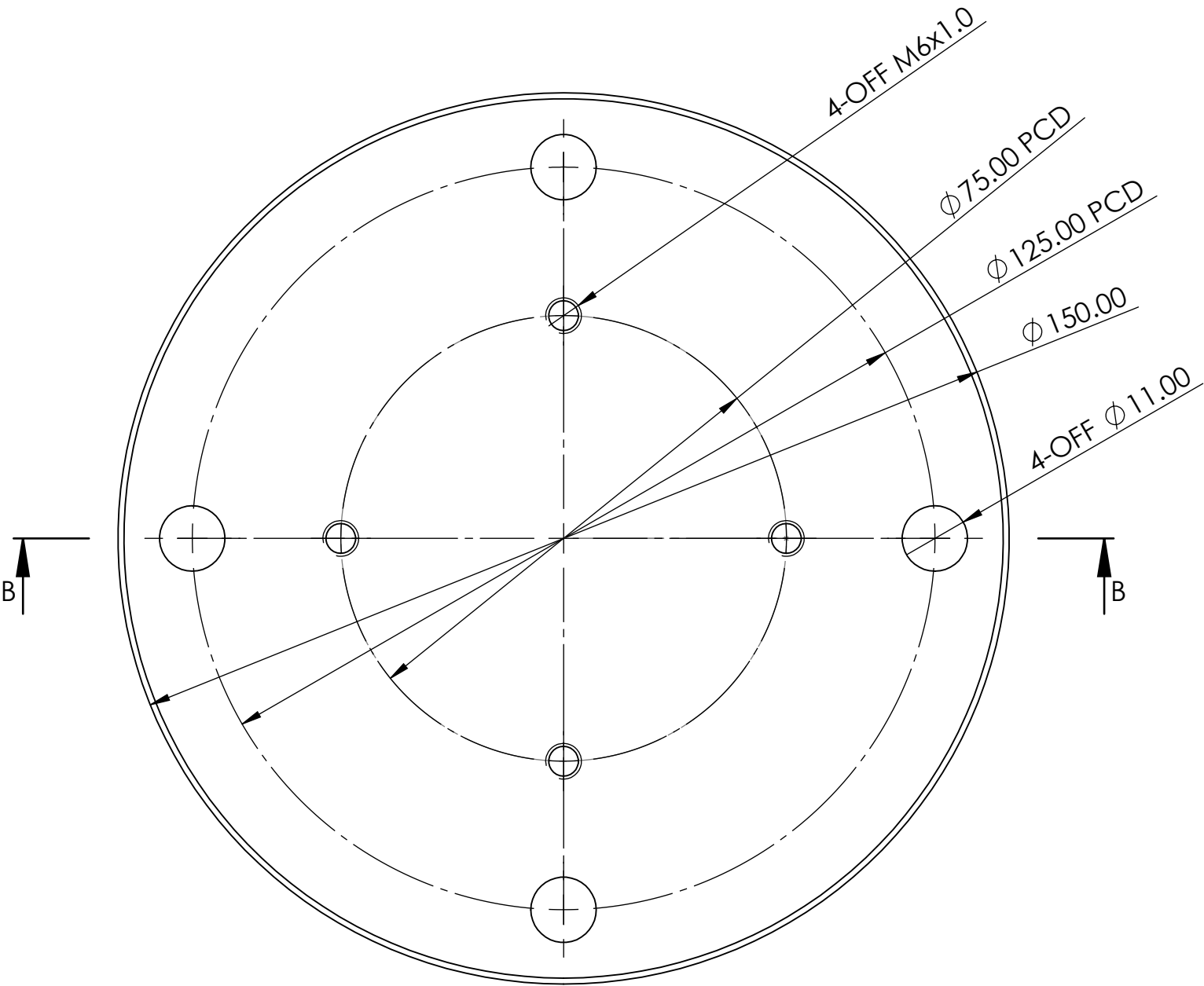


SECTION R-R
SCALE 1 : 4

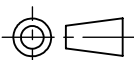


- Note:
- 1) This is a high vacuum component
 - 2) Remove sharp edges and burrs
 - 3) Provide minimum chamfer for each threaded hole
 - 4) There should not be any step marks on the machined surface
 - 5) There should not be any kind of warpage on the part

		Dimensions are in mm unless specified		 Hyderabad		TRISHUL Petawatt Laser Facility					
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Breadboard							
Drawn BSM		Approved PKS									
Material Al. Alloy		Tolerance unless specified X ± 0.5 X.X ± 0.5 Angle X.XX ± 0.1 ± 0.2									
Grade 5083 / 6061-T6		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062716		Rev A	
				Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1	
										Quantity 01	

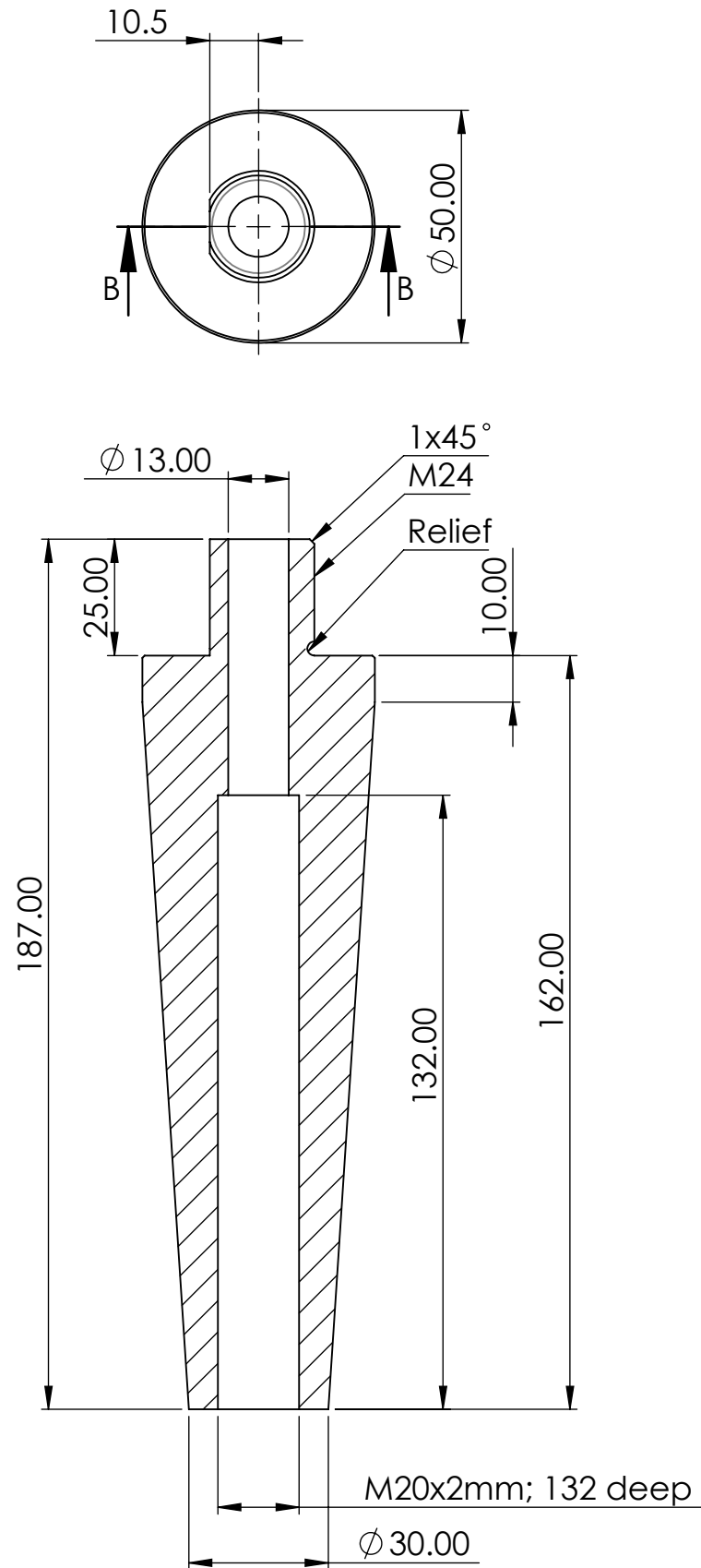
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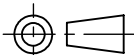




SECTION B-B
SCALE 1 : 1

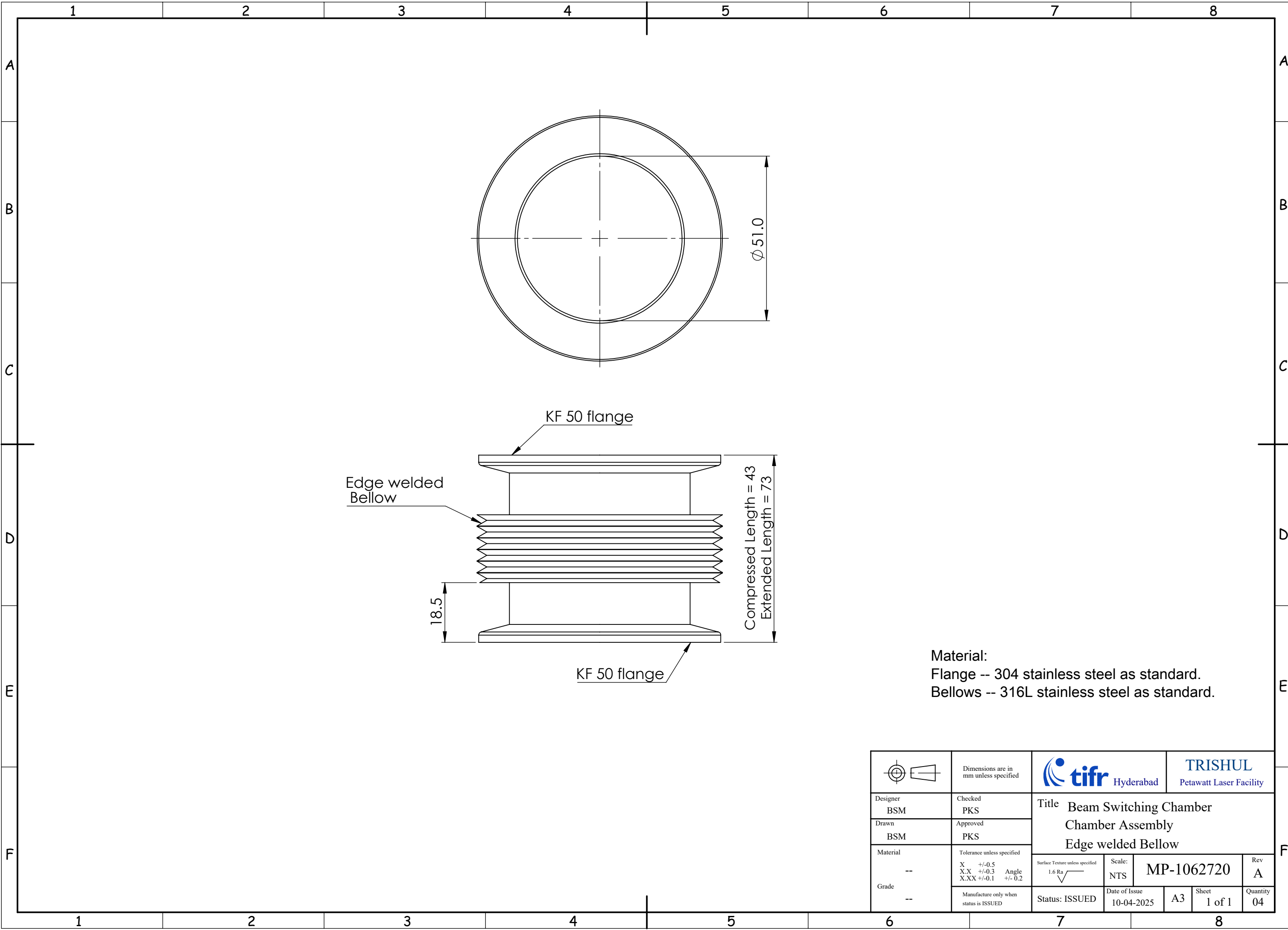
		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility					
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Part drawings							
Drawn BSM		Approved PKS									
Material Stainless Steel		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2									
Grade 304		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS MP-1062717		Rev A			
		Status: ISSUED		Date of Issue 10-04-2025		A3		Sheet 1 of 1		Quantity 04	

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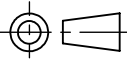




		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility			
Designer BSM		Checked PKS		Title Beam Switching Chamber Breadboard Assembly Levelling feet parts					
Drawn BSM		Approved PKS							
Material --		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2						Surface Texture unless specified 1.6 Ra 	
Grade --		Manufacture only when status is ISSUED		Status: ISSUED		Date of Issue 10-04-2025	A3	Sheet 1 of 1	Quantity --

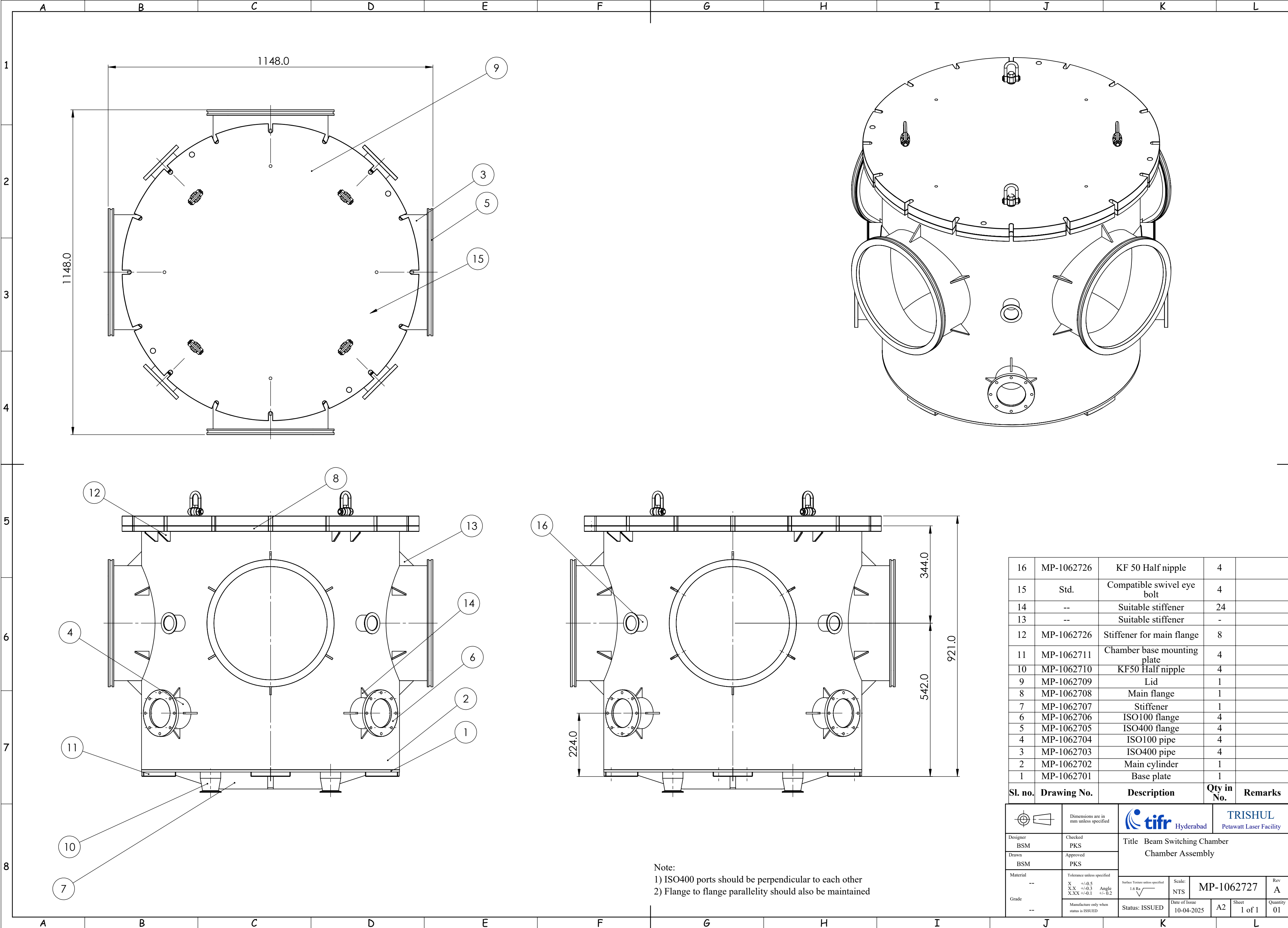
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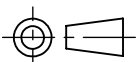



Material:
Flange -- 304 stainless steel as standard.
Bellows -- 316L stainless steel as standard.

		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility					
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Edge welded Bellow							
Drawn BSM		Approved PKS									
Material --		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2									
Grade --		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062720		Rev A	
		Status: ISSUED		Date of Issue 10-04-2025		A3		Sheet 1 of 1		Quantity 04	

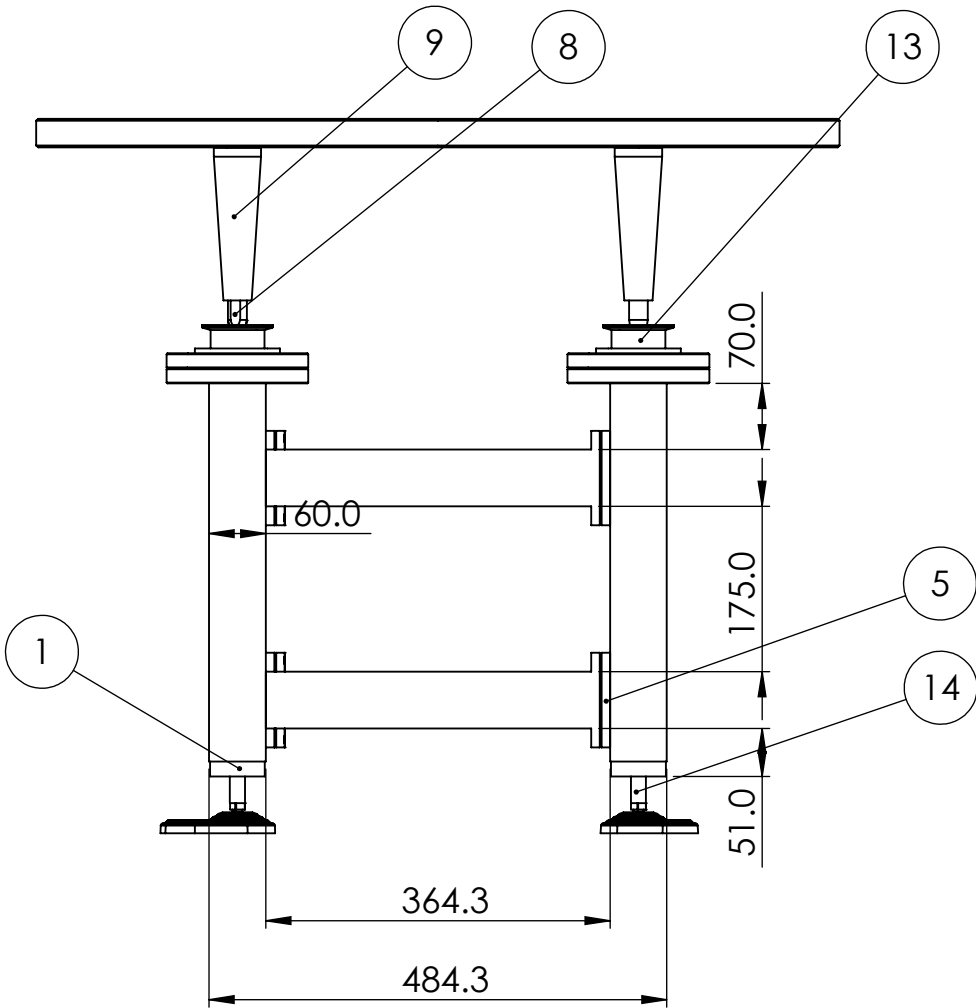
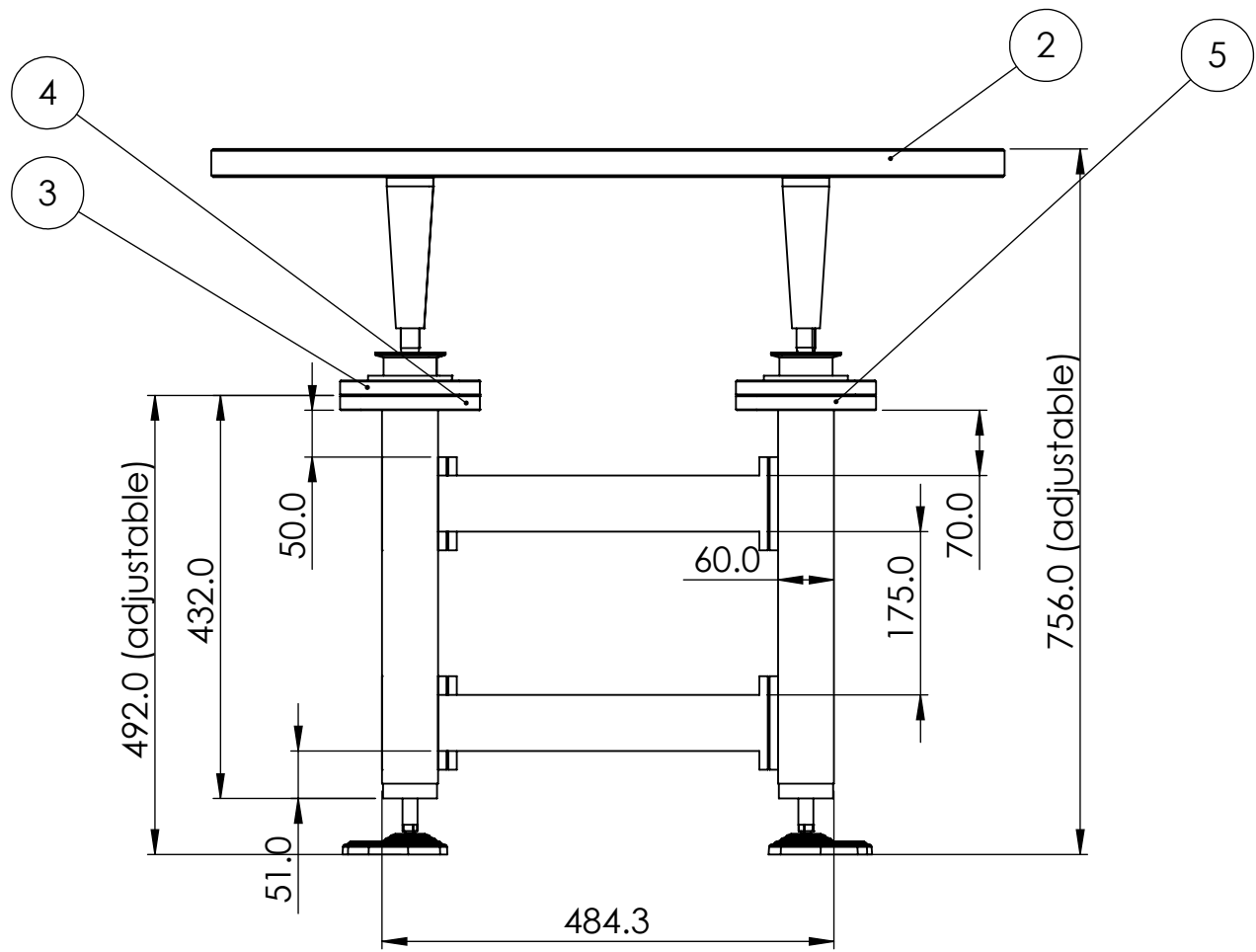
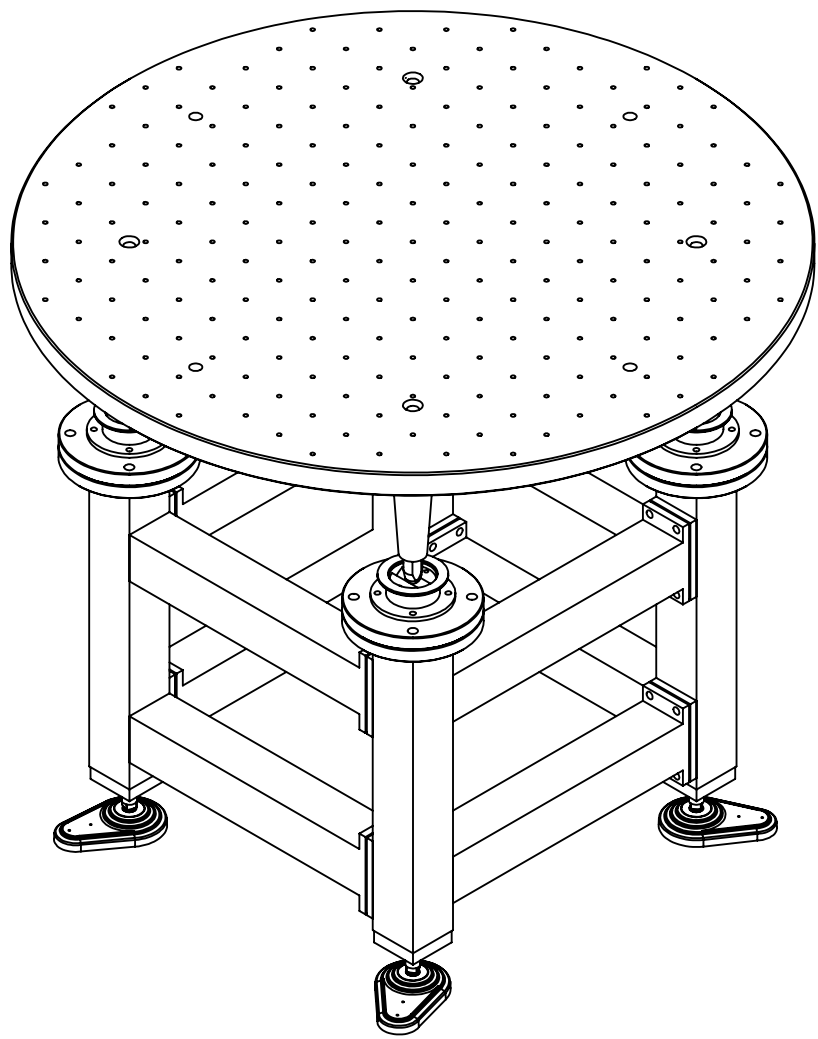
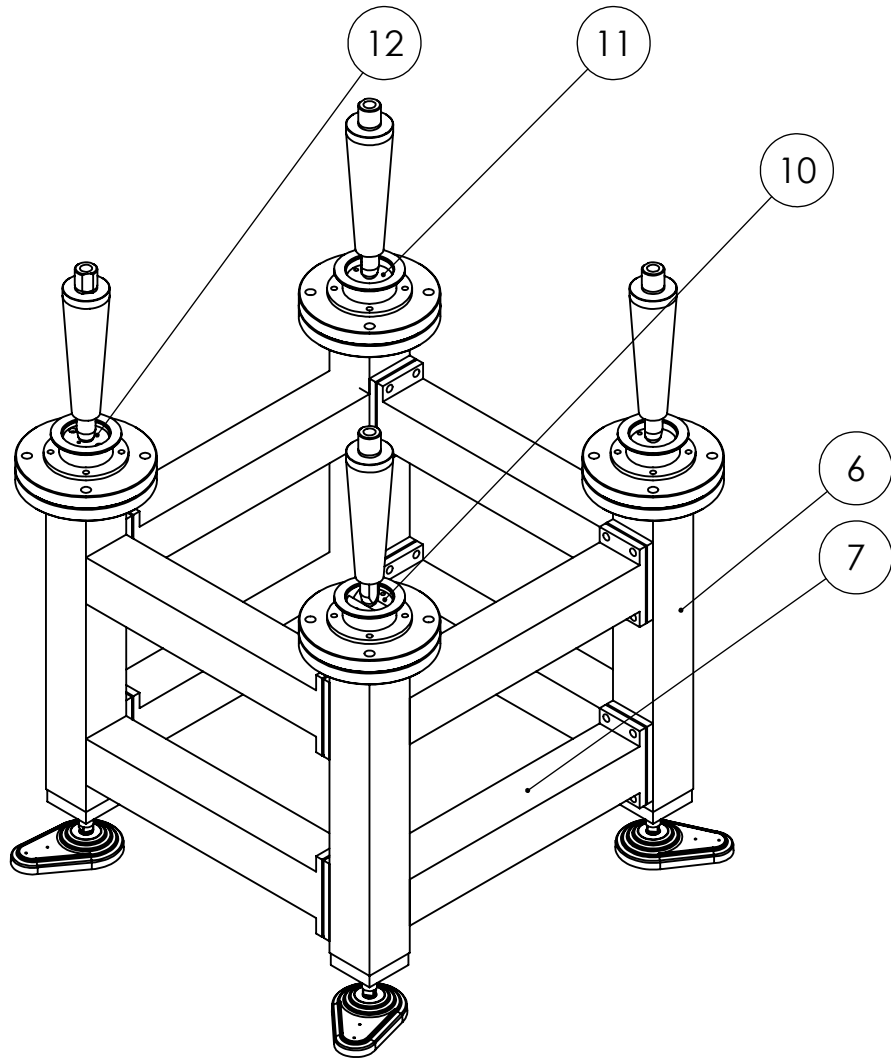
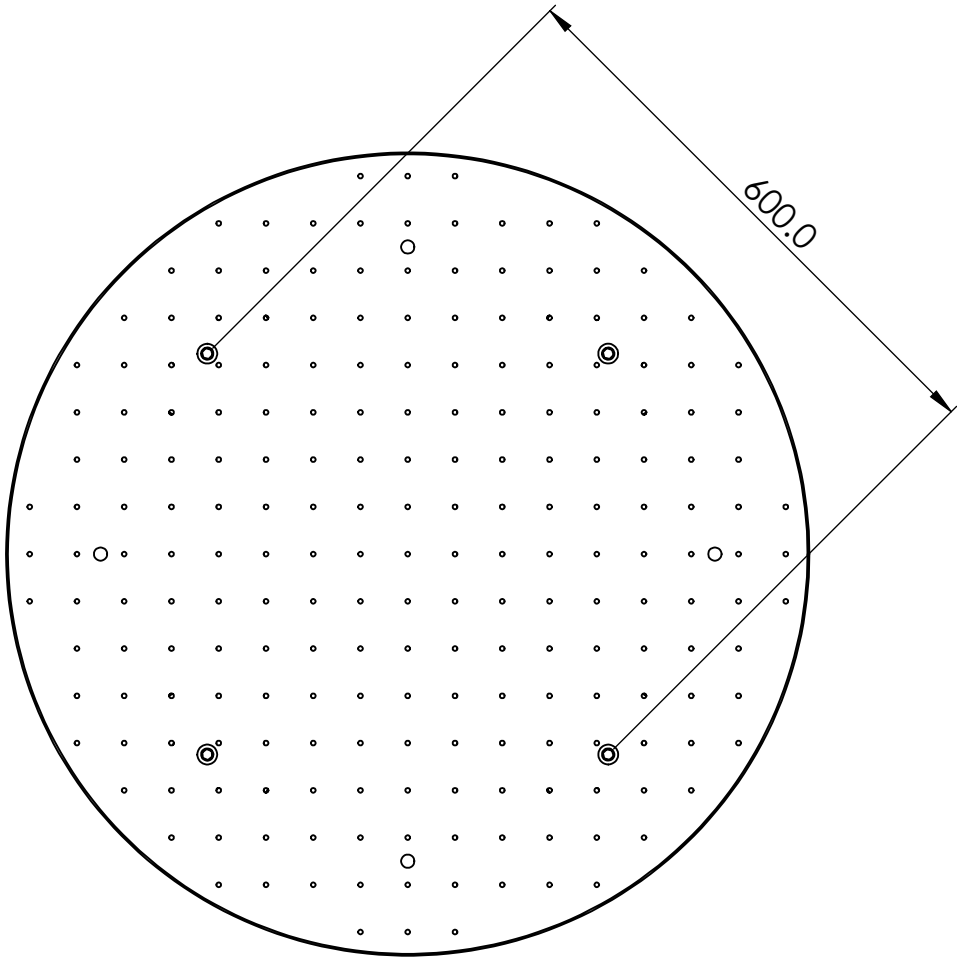
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
Note:
1) ISO400 ports should be perpendicular to each other
2) Flange to flange parallelity should also be maintained

16	MP-1062726	KF 50 Half nipple	4				
15	Std.	Compatible swivel eye bolt	4				
14	--	Suitable stiffener	24				
13	--	Suitable stiffener	-				
12	MP-1062726	Stiffener for main flange	8				
11	MP-1062711	Chamber base mounting plate	4				
10	MP-1062710	KF50 Half nipple	4				
9	MP-1062709	Lid	1				
8	MP-1062708	Main flange	1				
7	MP-1062707	Stiffener	1				
6	MP-1062706	ISO100 flange	4				
5	MP-1062705	ISO400 flange	4				
4	MP-1062704	ISO100 pipe	4				
3	MP-1062703	ISO400 pipe	4				
2	MP-1062702	Main cylinder	1				
1	MP-1062701	Base plate	1				
Sl. no.	Drawing No.	Description	Qty in No.	Remarks			
		Dimensions are in mm unless specified		 Hyderabad	 Petawatt Laser Facility		
Designer BSM	Checked PKS	Title Beam Switching Chamber Chamber Assembly					
Drawn BSM	Approved PKS						
Material --	Tolerance unless specified X ± 0.5 XX ± 0.3 XXX ± 0.1 Angle ± 0.2		Surface Texture unless specified 1.6 Ra 	Scale: NTS	MP-1062727		Rev A
Grade --	Manufacture only when status is ISSUED		Status: ISSUED	Date of Issue 10-04-2025	A2	Sheet 1 of 1	Quantity 01

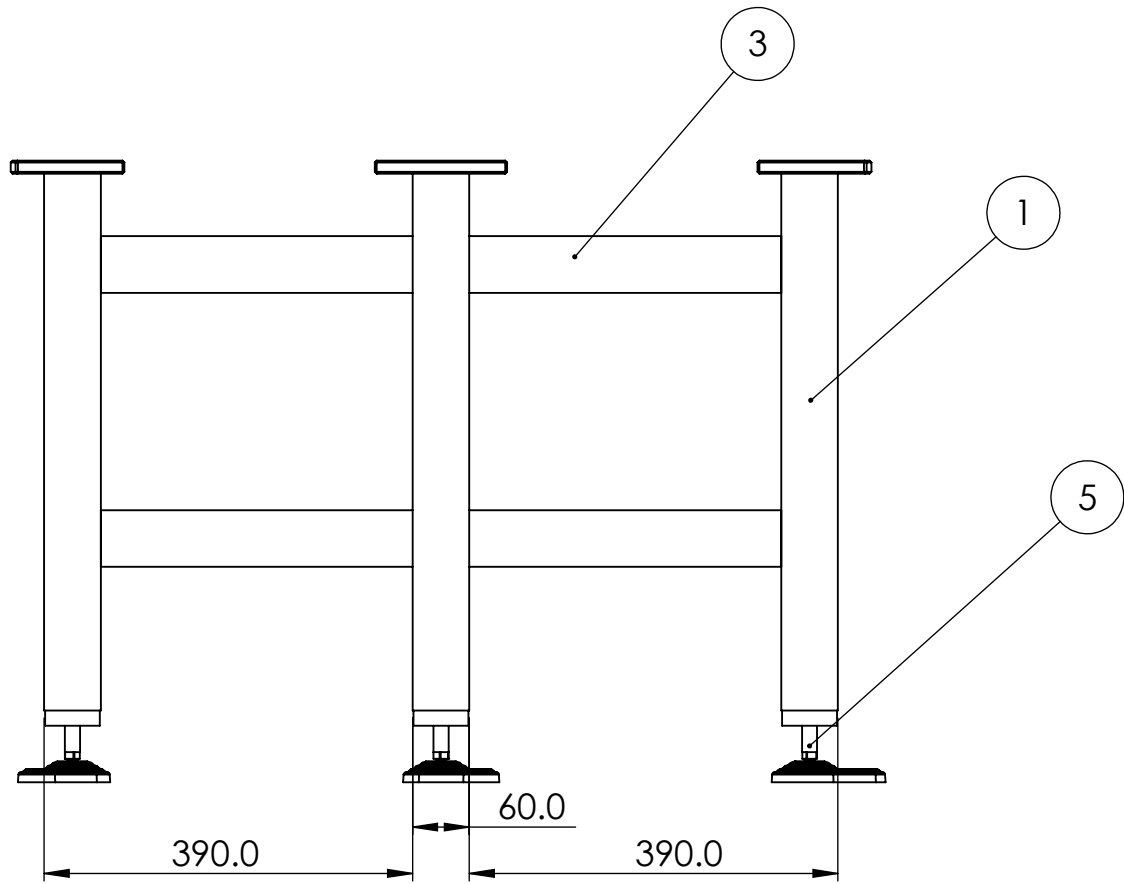
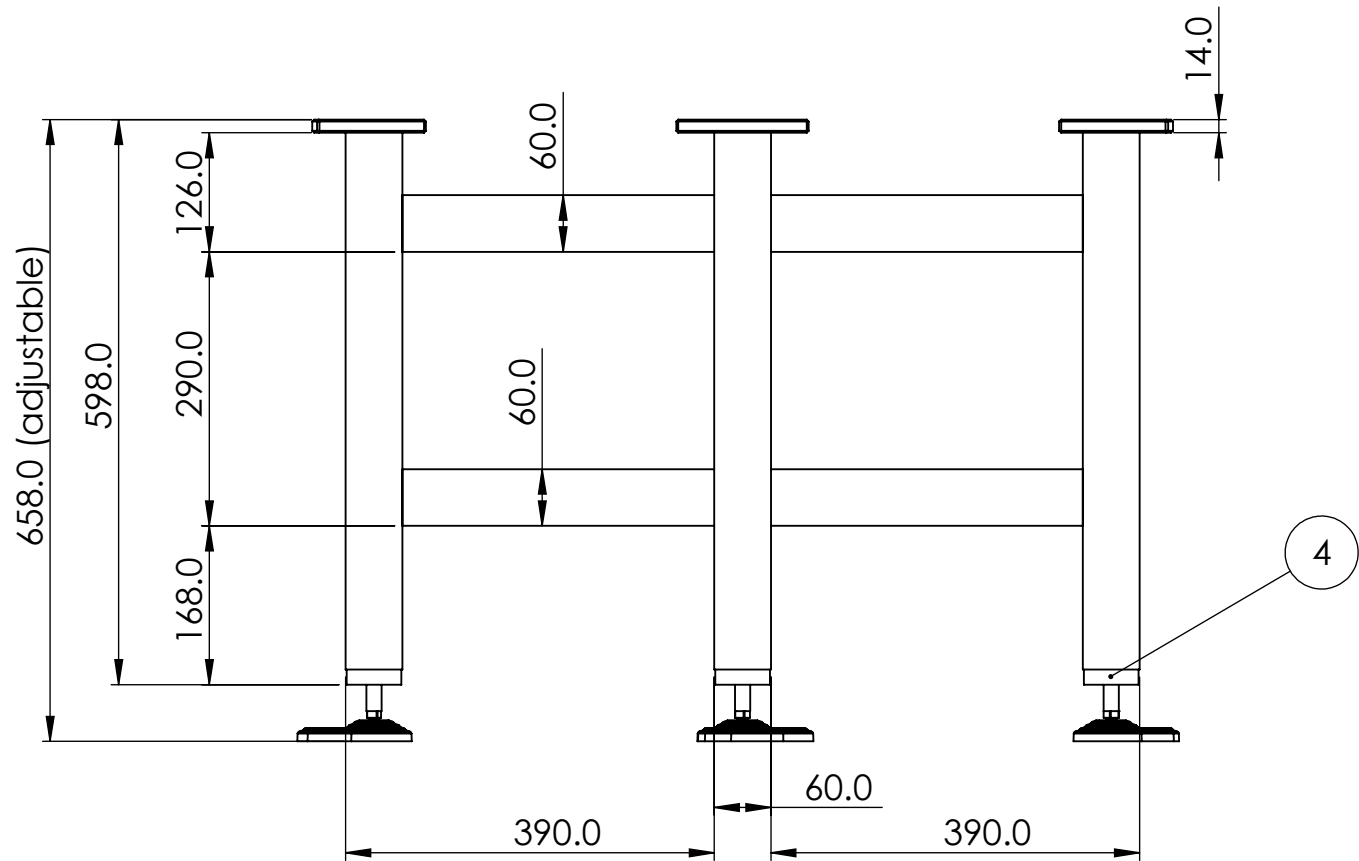
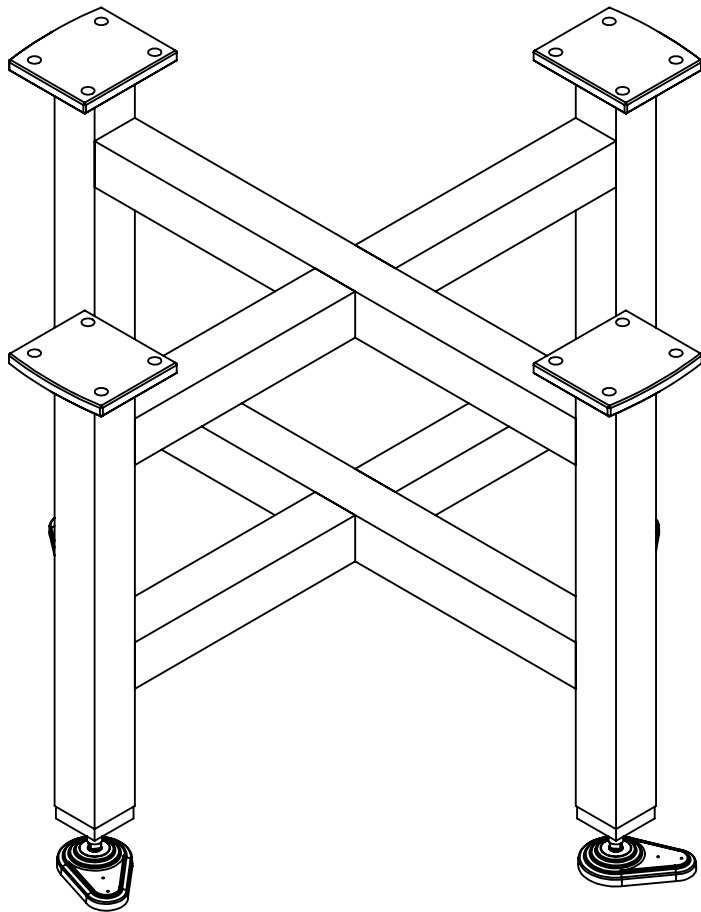
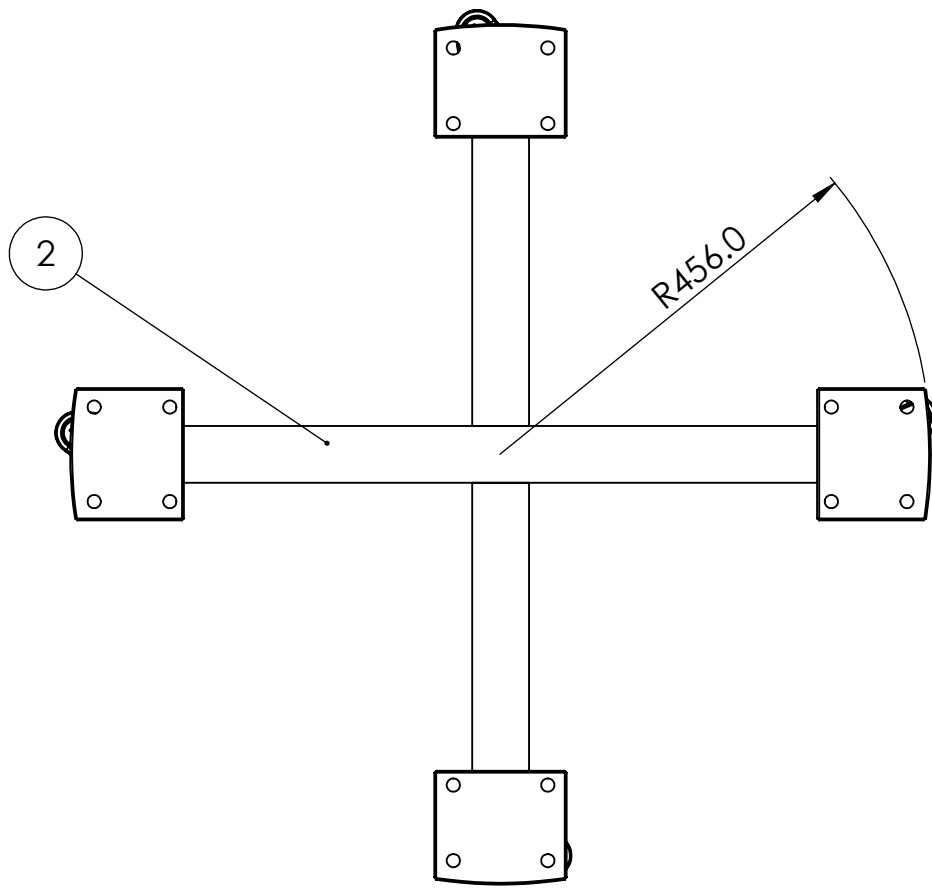
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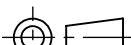


14	--	M16 levelling feet	4	Elasa+Ganter
13	MP-1062018	Levelling feet insert holder	4	
12	MP-1062019	Point insert	1	
11	MP-1062021	Plane insert	2	
10	MP-1062020	Line insert	1	
9	MP-1062718	Adjustable nut	4	
8	MP-1062719	M20 stud	4	
7	MP-1062724	Breadboard table pipe-2	8	
6	MP-1062723	Breadboard table pipe-1	4	
5	MP-1062722	Inner leg top pad-2	1	
4	MP-1062721	Inner leg top pad-1	3	
3	MP-1062717	Base for levelling feet insert	4	
2	MP-1062716	Breadboard	1	
1	MP-1062715	Levelling feet anchoring plate	4	
Sl. no.	Drawing No.	Description	Qty in No.	Remarks

		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Breadboard Assembly									
Drawn BSM		Approved PKS											
Material --		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062729		Rev A			
Grade --		Manufacture only when status is ISSUED		Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity 01	

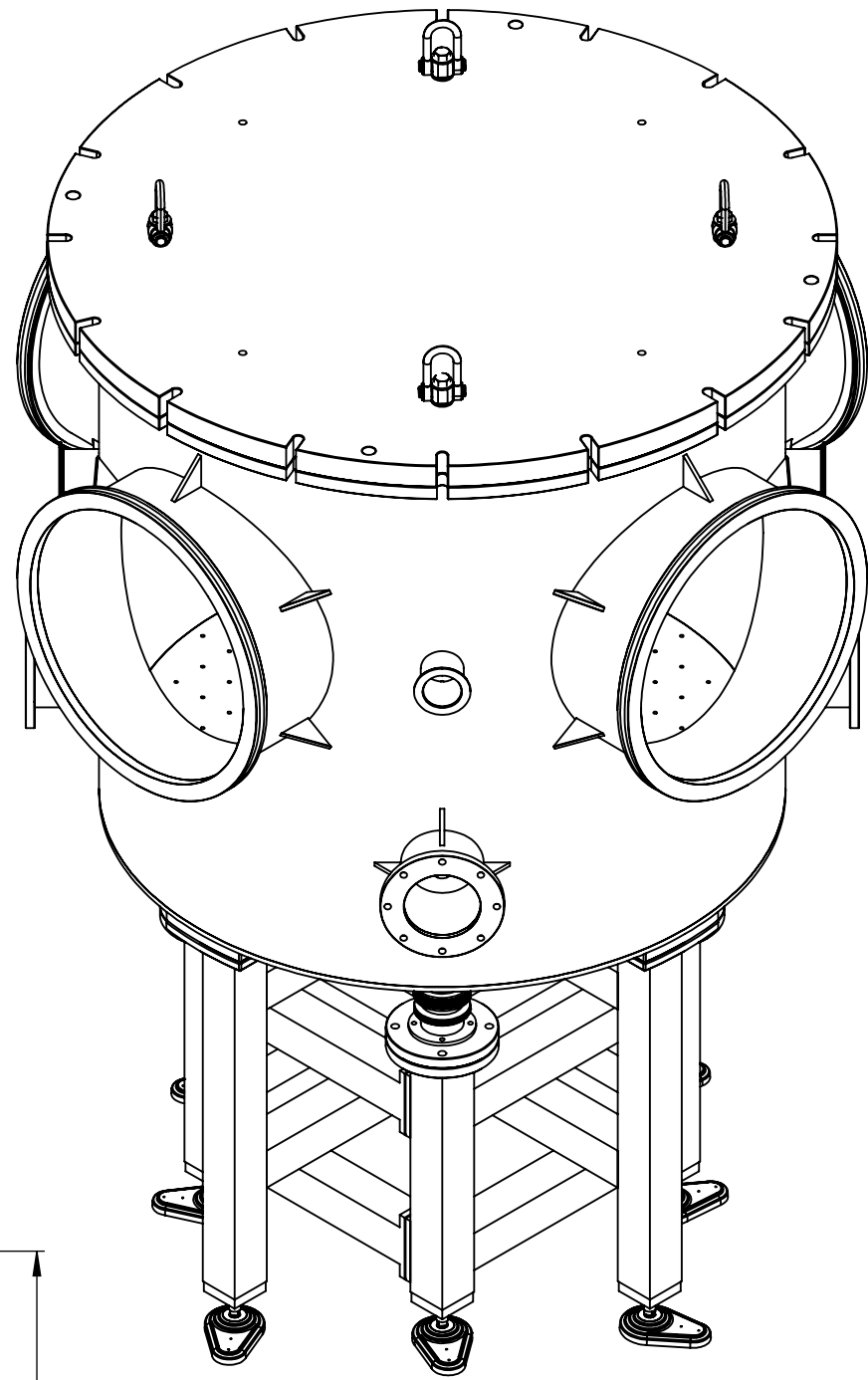
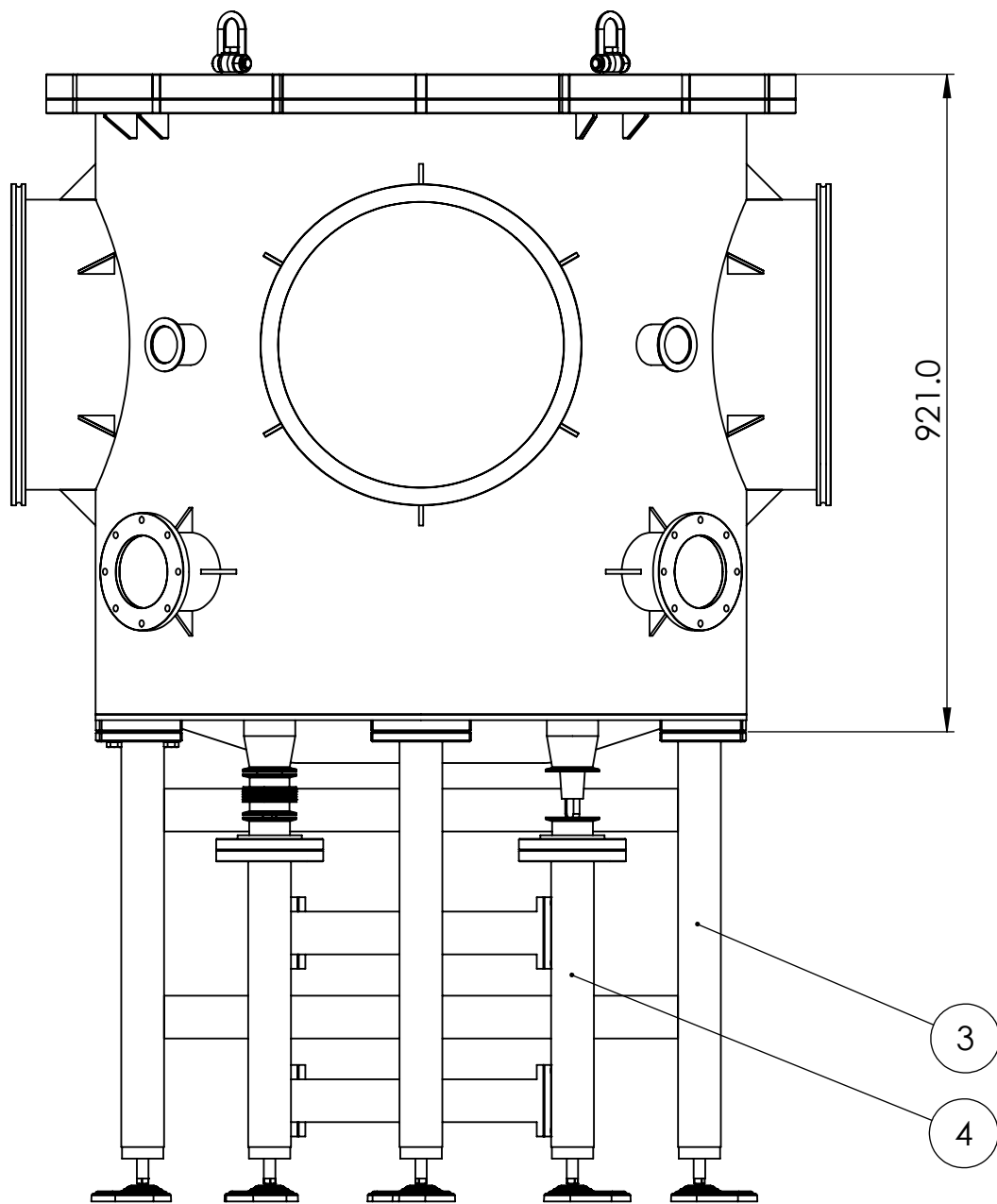
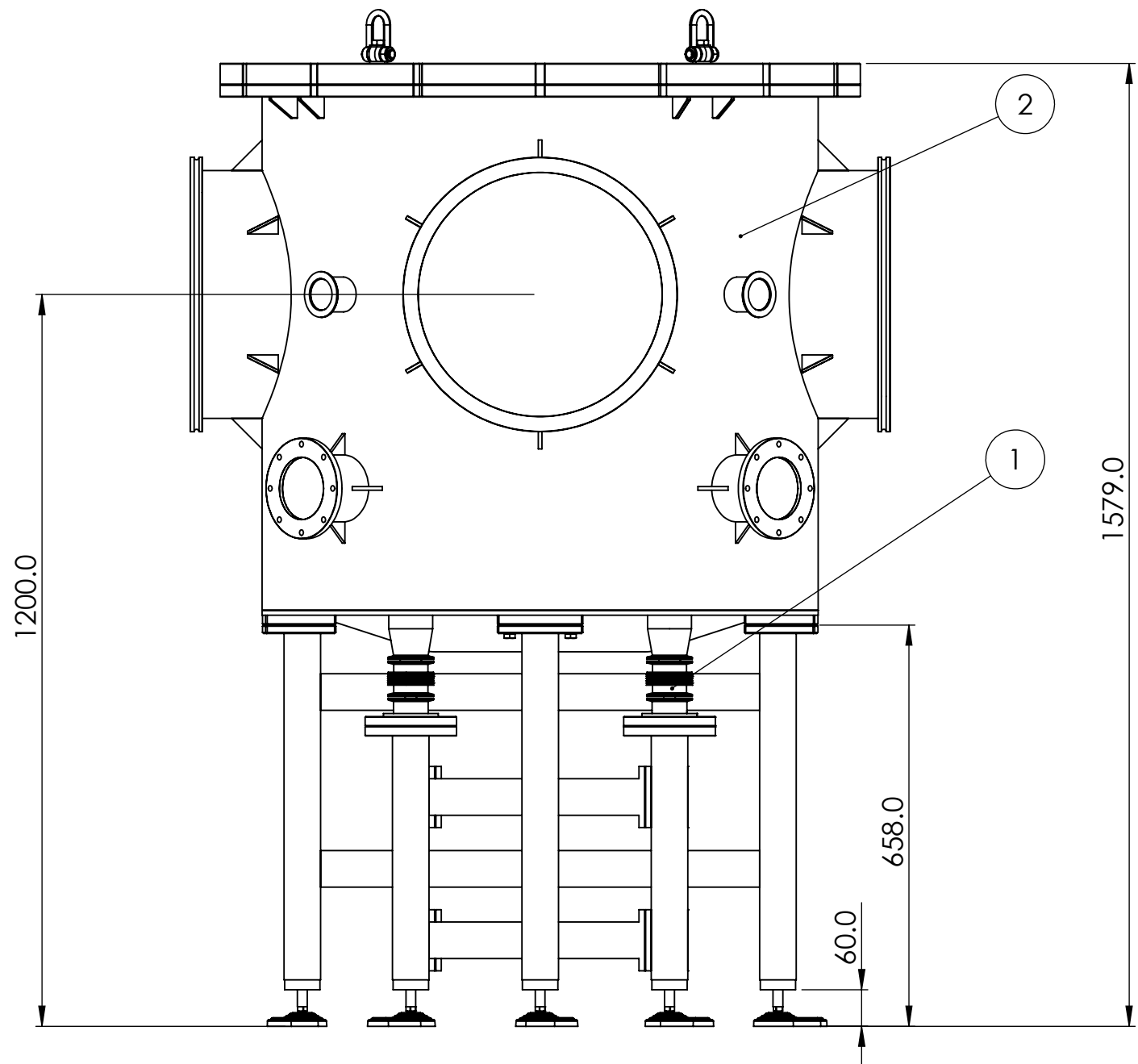
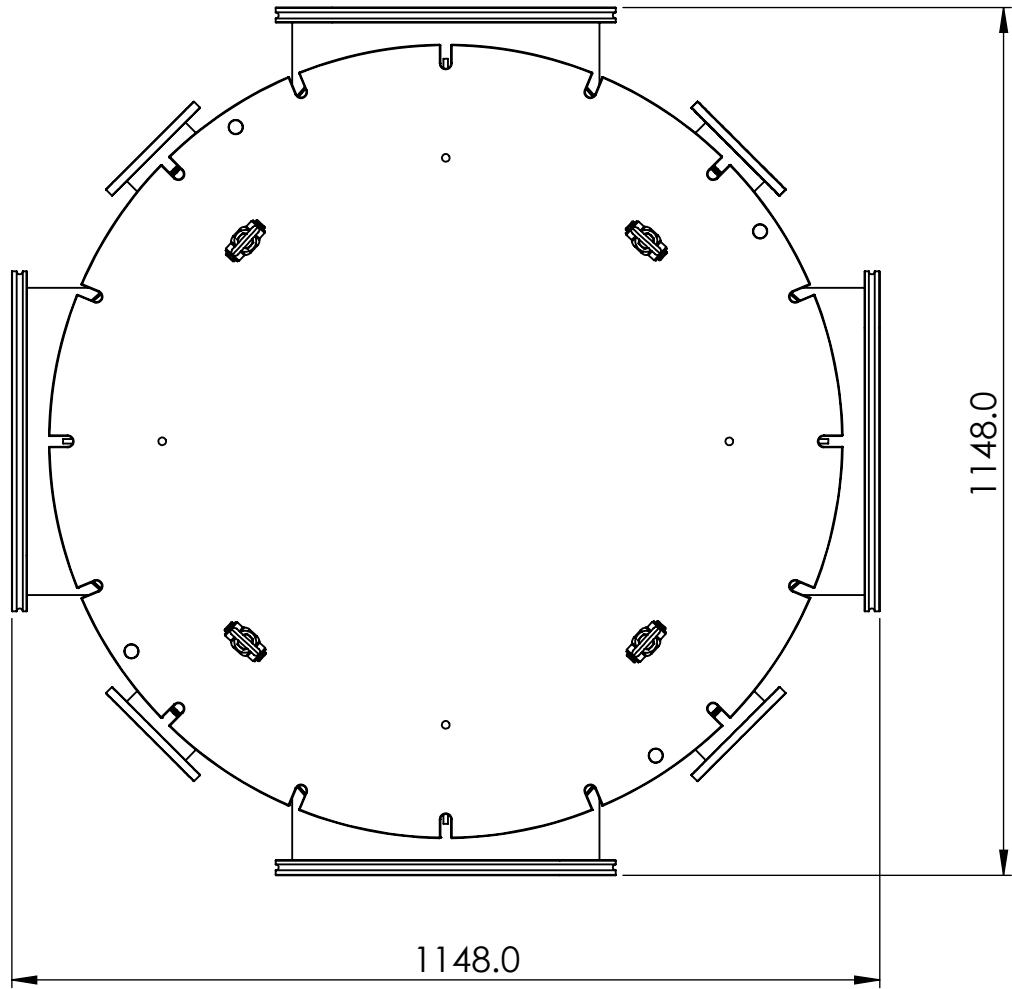
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5	--	M16 levelling feet	4	Elasa+Ganter
4	MP-1062715	Levelling feet anchoring plate	4	
3	MP-1062714	Chamber table pipe -3	4	
2	MP-1062713	Chamber table pipe -2	1	
1	MP-1062712	Chamber table pipe -1	1	
Sl. no.	Drawing No.	Description	Qty in No.	Remarks

		Dimensions are in mm unless specified		 tifr Hyderabad		TRISHUL Petawatt Laser Facility		
Designer	BSM	Checked	PKS	Title Beam Switching Chamber Chamber Assembly Table				
Drawn	BSM	Approved	PKS					
Material	--	Tolerance unless specified X +/-0.5 X.X +/-0.5 Angle X.XX +/-0.1 +/- 0.2						
Grade	--	Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 	Scale: NTS	MP-1062728	Rev A	
				Status: ISSUED	Date of Issue 10-04-2025	A2	Sheet 1 of 1	Quantity 01

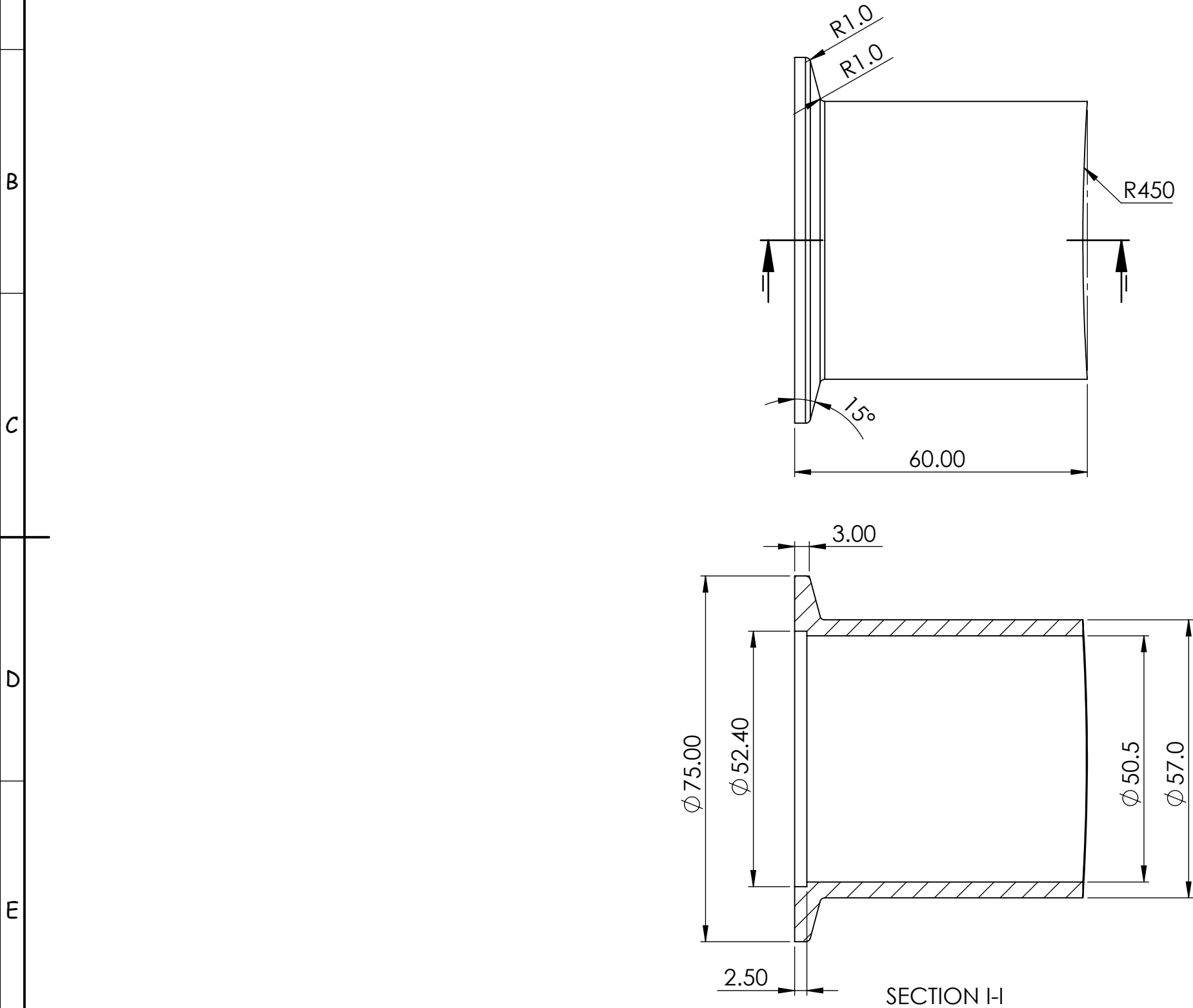
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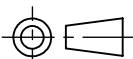



4	MP-1062729	Breadboard table assembly	1	
3	MP-1062728	Chamber table assembly	1	
2	MP-1062727	Chamber assembly	1	
1	MP-1062720	KF50 edge welded bellow	4	
Sl. no.	Drawing No.	Description	Qty in No.	Remarks

		Dimensions are in mm unless specified				Hyderabad							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly Full Assembly									
Drawn BSM		Approved PKS											
Material --		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle XXX +/-0.1 +/- 0.2		Surface Texture unless specified 1.6		Scale: NTS		MP-1062730		Rev A			
Grade --		Manufacture only when status is ISSUED		Status: ISSUED		Date of Issue 10-04-2025		A2		Sheet 1 of 1		Quantity 01	

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MP-1062731
Matl: SS304
Qty: 04

		Dimensions are in mm unless specified		 Hyderabad		 <i>Petawatt Laser Facility</i>							
Designer BSM		Checked PKS		Title Beam Switching Chamber Chamber Assembly KF 50 half nipple									
Drawn BSM		Approved PKS											
Material		Tolerance unless specified X +/-0.5 X.X +/-0.3 Angle X.XX +/-0.1 +/- 0.2											
Grade		Manufacture only when status is ISSUED		Surface Texture unless specified 1.6 Ra 		Scale: NTS		MP-1062731		Rev A			
				Status ISSUED		Date of Issue 10-04-2025		A3		Sheet 1 of 1		Quantity --	

NOTE:

*** The bidder should ensure to submit the following along with Technical Bid (Part I)**

1. The bidder should attach the point-by-point technical specification provided in Annexure-A of the tender document (with additional remarks if any) along with the Technical Bid.
2. Bid Security / EMD (Earnest Money Deposit) as per tender.
3. Certificate of Local Content- Attachment of Annexure - B.
4. Audited Annual Turnover Certified by CA - Attachment of Annexure - C
5. Supplier Purchase Order details with copy document along with the bid Attachment of Annexure - D.
6. The suppliers/bidders should submit all the applicable list of documents/enclosures/annexures as mentioned in the tender along with the local content certificate filled form as per annexure – B. The supplier should provide the local content details / local value addition details with the applicable value. TIFR Hyderabad reserves the right to reject any tender (or) all tenders if not submitted along with the documents/enclosures/annexures/certificate of local content.
7. Undertaking by the bidder as per Clause 12 of tender terms and conditions in letter head duly signed and stamped.
8. Undertaking for unconditional acceptance of tenders all terms and condition in letter head duly signed and stamped.

*** Price Bid/Finance Bid (Part II) - As per Annexure – E.**

**TATA INSTITUTE OF FUNDAMENTAL RESEARCH
HYDERABAD**

**Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad - 500
107, Telangana, India.
(PURCHASE SECTION)**

- 1. PART “A” (Technical Bid) consisting of Technical Bid with Commercial Terms and PART “B” (Financial Bid) consisting of only Price** shall be submitted in **separate** sealed envelopes duly superscribed with the tender enquiry number, and the due date in bold letters, addressed to the Administrative Officer, Tata Institute of Fundamental Research, Hyderabad, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The envelopes should be clearly marked on top as either PART “A” or PART “B”.

The two sealed covers should be further put in a master cover superscribed with the Tender Enquiry No., Due Date in bold letters, addressed to the Purchase Officer, Tata Institute of Fundamental Research, Hyderabad, Plot No.36/P, Gopanpally Village, Serilingampally Mandal, Ranga Reddy District. Hyderabad-500 107, Telangana, India. The sealed master envelop has to be delivered by hand/courier at the security Gate Office of TIFR Hyderabad on or before 13.00 hrs on the due date specified. The technical bid will be opened at 15.00 hrs. on the due date at Purchase Section, TIFR, Hyderabad. Tenders submitted after 13.00 hrs. on due date will not be considered.

Note: All future corrigendum/addendum will be published in TIFR Hyderabad Website / CPPP

All prospective bidders are requested to visit our website regularly for any such updates/Corrigendum.

Pre- Bid meeting will be conducted through online. Bidders are requested to refer TIFR Hyderabad website tender page for pre-bid meeting zoom link. Bidder may also join the meeting on scheduled date and time at TIFR Hyderabad premises.

- 2. In case the PART “A” and Part “B” bids are not sealed in separate envelopes the tender will be rejected.**
- 3. The technical bid should not contain any indication of the price. The bidder should take special care not to mention anything related to pricing and costing aspect of whatsoever nature. The technical bid should include/contain only technical specifications, technical literature, drawing, quantity, manufacturing and delivery schedule, mode and terms of payment, mode of dispatch, the quantum and percentage of statutory levies payable by the purchaser as extra and all related commercial terms and conditions for the supply and for the services like erection and commissioning to be rendered by the tenderer. The details of the validity of the tender should also be indicated along with the commercial details.**
- 4. After scrutiny of Technical Bids, Financial bids of only those bidders who are shortlisted on technical basis will be opened at on later date. The opening date, time and venue will be intimated to the technically successful bidder.**

5. All the bidders/contractors should provide Company Authorization Letter duly signed and stamped by Competent Authority to participate in the tender related meetings at TIFR Hyderabad.

6. **Tender Document Fee:**

Tender fee for Rs. 00/- (USD 00)

7. **Bid Security / EMD (Earnest Money Deposit):**

Earnest Money Deposit (EMD) for **40,000 (USD 470)** in the form of D.D. in favour of "Tata Institute of Fundamental Research", payable at Hyderabad to be enclosed along with the technical Bid (Part - A).

The Bid Security may be accepted in the form of Bank Guarantee from any of the Commercial Banks (or) Fixed Deposit Receipt (FDR) (or) Banker's Cheque from any of the Commercial Banks (or) Insurance Surety Bonds.

The Bid security should remain valid for a period of 45 days beyond the final bid validity period.

EMD shall be interest free and it will be refunded to the unsuccessful bidder without any interest. EMD will be forfeited if the bidder withdraws or amend impairs or derogates from the tender in any respect. **The technical bid received without payment of EMD/ documents for exemption of EMD shall be summarily rejected.**

8. The Micro and Small Enterprises/Startups suppliers / bidders whose firms are registered with Ministry of MSME /DPIIT and having a valid certificate for claiming exemption as per privilege rules of Government of India are exempted from paying Tender Fee and EMD (Earnest Money Deposit)

9. 9.1 The invitation for bids is open to Original Manufactures (OEM)/Authorized Dealers/Authorized Distributors/Subsidiary Indian Company of the OEM/Indian Agent on behalf of the Foreign Manufacturer or Principals of the tendered equipment. The bidder must be legal entity having a Permanent Account Number (PAN), Certificate of Incorporation and valid GST Registration Certificate is to be submitted.

9.2 When a firm sends quotation for an item manufactured by some different company, the firm is also required to attach its quotation, the manufacturer's authorization certificate.

9.3 Indian Agent cannot represent two different foreign principles for the same item in one tender.

9.4 Equipment's must be of the most recent series/models incorporating the latest improvements in design.

9.5 That the Bidder will assume total responsibility for fault free operation of equipment, application software, if any, and maintenance during the warranty period and provide necessary maintenance services after warranty period if required.

9.6 Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure , etc.

9.7 Any additional bid participation criteria/eligibility conditions etc. mentioned in the Technical Specifications sheet will also form part of the Qualification Requirements along with those mentioned in this.

9.8 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a

firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this invitation of Bids.

10. Bidders who have not accepted the job/order awarded to them or withdrawn from the tender process OR whose EMD/Security deposit has been forfeited in the past, their bids will not be considered and treated as ineligible / disqualified.

11. Micro and Small Enterprises (MSEs):

Micro and Small Enterprises (MSE) must, along with their offer, provide proof of their being registered as MSE (indicating the terminal validity date of their registration) with any agency mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME).

The Micro and Small Enterprises (MSE) are exempted from payment of earnest money and tender fees subject to furnishing of relevant valid certificate for claiming exemption as per privilege rules of Government of India. Public procurement Policy (PPP) for MSEs Order, 2012 is meant for procurement of only goods produced and services rendered by MSEs However, Traders, Distributors, Sole agents, work contracts are excluded from the purview of the PPP for MSE Order 2012 as per Ministry of MSME.

The Micro and Small Enterprises (MSE) bidder should submit valid UDYAM Registration certificate by Ministry of Micro Small and Medium Enterprises (MSME). The Micro and Small Enterprises (MSE) bidders who fail to submit valid UDYAM Registration certificate shall not be able to avail the benefits available to MSEs as contained in Public Procurement Policy for MSEs Order 2012 issued by MSME and further applicable Notification / Rule amended from time to time.

12. **Requirement from Bidders:** Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority as per order issued by the Government of India (Order No. F.No.6/18/2019-PPD dated 23rd July, 2020 and further applicable Notification / Rule amended from time to time).

"Bidder" means any person or firm or company, including any member of consortium or joint venture (that is an association of several persons, or firms or companies), every artificial Page 11 of 24 juridical person not falling in any of the descriptions of bidders stated herein before, including any agency branch or office controlled by such person, participating in a procurement process.

Necessary certificate/undertaking to be submitted.

13. Quotations must be valid for a period of 180 days from the date of opening the bid prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as nonresponsive.
14. Tenders containing correction, overwriting will not be considered. Late or delayed/Unsolicited quotations/offers shall not be considered at all. These will be returned to the firms as it is. Post tender revisions/corrections shall also not be considered.
15. Tenderer should sign on all the pages of the technical bid and the price bid.

16. All future corrigendum will be published in TIFR Hyderabad website only / CPPP and no separate advertisement will be released for the same.

All prospective bidders are requested to visit our website regularly for any such updates / Corrigendum. The Purchaser reserves the right to reject the bids if the bids are submitted without taking into account these amendments/clarifications. In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser, at its discretion, may extend the deadline for the submission of bids.

17. For Indigenous Items: Offer should be on FOR basis and mentioned separately using different table format showing all the applicable taxes/Duties like GST, Freight & Transportation charges and installation charges etc.

18. The price quoted for Import item must be on following basis:

- a. Ex-Work/factory duly packed airworthy/seaworthy and of international standard
- b. FOB/FCA
- c. CIF Hyderabad, Airport Port (all-inclusive i.e. Cost of Goods, Packing, Insurance, Inland transportation, freight etc.)

For local item /supply, offer should be on FOR basis (i.e. total landed cost for delivery at TIFR Hyderabad).

The dimension of the item (viz. H, W, L, weight etc.) shall be specifically stated and also mention whether the mode of shipping the item is Airworthiness / Seaworthiness or both. Accordingly the mode of shipment will be decided by TIFR Hyderabad.

Price must be quoted strictly in the Price Bid Format attached herewith as “Part –B” (Financial Bid).

19. Packing:

19.1 The Supplier shall provide packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit Page 12 of 24 and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

19.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any and in any subsequent instructions ordered by the Purchaser.

19.3 Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following: (i) Item Nomenclature (ii) Order/Contract No. (iii) Country of Origin of Goods (iv) Supplier's Name and Address (v) Packing list reference number

20. Insurance:

20.1 The Goods supplied under the Contract shall be fully insured against loss or damage Incidental to manufacture or acquisition, transportation, storage and delivery.

20.2 For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "Warehouse to warehouse" (Final destinations) on " All Risks" The Insurance shall be valid for a period of not less three months after installation and commissioning. However, in case of orders placed on EX-Works/FOB/FCA basis, the purchaser shall arrange insurance.

21. Delivery and Documents:

21.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the order within the period. The details of shipping and/or other documents to be furnished by the supplier are specified in 21.2.

21.2 Delivery period.

The delivery is to be strictly made as per the delivery schedule stated in the Purchase Order. The following documents are to be forwarded earlier to TIFR Hyderabad through email to purchasegroup@tifrh.res.in prior to 48 hours before dispatch of material.

- i) Supplier Invoice showing Purchase Order Number, goods' description, quantity, unit price, Total amount.
- ii) Packing List
- iii) Airway Bill/ Acknowledgement of receipt of goods from the consignee(s) by the Transport with item wise weight, unit of measurement, No of package, package size/Dimension
- iv) Insurance Certificate if applicable
- v) Manufacturer's / Supplier's warranty certificate.
- vi) Inspection Certificate issued by the nominated inspection agency, if any, and Certificate of Origin.
- vii) Country of Origin Certificate. (if applicable)
- viii) Product Catalogue/Brochure.

22. The Institute shall be under no obligation to accept the lowest or any other tender received in response to this tender notice and shall be entitled to reject any tender without assigning any reason whatsoever.

23. Order Acceptance: The successful bidder should submit acceptance of Purchase Order Immediately (within 15 days) from the date of issue of the Purchase Order failing which it shall be presumed that the vendor is not interested.

The Bidder should submitted the order acknowledgement, (details for opening L/C and documents if applicable) and documents if any to purchase section within 15 days from the date of issue of purchase order.

For Letter of Credit (L/C) payment, the Letter of Credit (L/C) will be opened as per purchase order terms and conditions only. The supplier should ensure to deliver and complete the installation as per purchase order terms and conditions within Letter of Credit (L/C) validity period. In case of any delay in supply or installation or submission of required documents by the supplier for Letter of Credit (L/C) payment, any applicable charges (LC amendment charges, Liquidated Damage Charges (LD) etc.) to be borne by the supplier only.

The Supplier should submit the invoice and packing list before dispatch of the material for confirmation of TIFR Hyderabad.

Any discrepancy like delay in supply/ short supply/delay in installation etc., TIFR Hyderabad has right not to process the payment in case of any such discrepancy.

24. **Performance Security:** The Successful bidder should deposit @ 5% of Purchase Order value as Performance Security. The Performance Security should be in the form of Demand Draft in favour of "Tata Institute of Fundamental Research" payable at Hyderabad from any of the Commercial Banks (or) Bank Guarantee from any of the Commercial Banks (or) Fixed Deposit Receipt (FDR) (or) Insurance Surety Bonds. The Performance Security @ 5% should be valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. In case Performance Security @ 5% is not provided, then 95% payment only would be released and balance after 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period. Vendor should clearly mention their acceptance to this effect in their quote.

25. **Payment Term :**

Payment Term for Import Item: Payment Term for Import Item: 80% payment shall be made through irrevocable Letter of Credit (L/C) against submission of clear and complete shipping documents and balance 20% of the amount shall be released through Bank Transfer (BT) after successful installation, acceptance of the equipment certified by TIFR Hyderabad and on submission of "Performance Security" for an amount equivalent to 5% of the Purchase Order Value.

Payment Terms for Local Supply Items: 100% payment shall be released after receipt of complete material as per purchase order in a single lot, successful installation and acceptance of the equipment certified by TIFR Hyderabad and on submission of "Performance Security" for an amount equivalent to 5% of the Purchase Order Value.

The Performance Security @ 5% should be valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty period.

26. In case of Letter of Credit (L/C) payment, the Letter of Credit (L/C) will be opened as per purchase order terms and conditions only. The supplier should ensure to deliver and complete the installation as per purchase order terms and conditions within Letter of Credit (L/C) validity period. In case of any delay in supply or installation or submission of required documents by the supplier for Letter of Credit (L/C) payment, any applicable charges to be borne by the supplier only. The Letter of Credit (L/C) amendment charges, Liquidated Damage charges (LD) if any due to delay of the supplier to be borne by the supplier only.
27. Partial shipment for foreign bids / Partial delivery of material for full INR bids will not be accepted by TIFR Hyderabad.
28. **Pre Inspection Report:** The successful bidder should submit the Pre Inspection Report / Manufacturer's Test Certificate with data sheet to TIFR Hyderabad before dispatch of the material at no extra cost to the purchaser. (If required by TIFR Hyderabad).
29. Repair / replacement if required any during the warranty period, necessary customs clearance charges / customs duty charges, freight charges for sending back the repair material to supplier and import freight charges of replacement should be borne by the supplier.
30. For Import cases: No Agency commission will be paid as per Govt. of India rules.
31. All bank charges outside India will be to supplier's account only.

- 32. Taxes:** TIFR Hyderabad is a Public Funded Research Institute. The exemption of Customs Duty under the notification No. 51/96 dated 23.07.1996 and amended time to time will be applicable.

GST with effect from 01.07.2017 and amended time to time will be applicable. The applicable TDS / other charges if any as per GST rule will be deducted as per new GST regime.

TIFR Hyderabad GST NO: 36AAATT3951F2ZG

Deduction of Indian Income Tax Deduction at Source: The Deduction of Indian Income Tax Deduction at source (TDS) will be deducted as per IT Act. The taxes at the time of actual utilization of service etc. will be deducted if applicable any.

Supplier shall be entirely responsible for all taxes, duties, license fees, road permits, etc., incurred until delivery of the contracted Goods to the purchaser. However, GST in respect of the transaction between the Purchaser and the Supplier shall be payable as agreed, if so stipulated in the order.

- 33. Delivery Period:** **Within 6-8 Months** from the date of release of Purchase Order.
- 34. Installation Period:** The Installation should be completed **within 15 Days** from the date of receipt of the material at TIFR Hyderabad.
- 35. Conversion to Single Currency:** To facilitate evaluation and comparison, the Purchaser will convert all bid prices are payable to Indian Rupees established by any bank in India as notified in the Newspapers/banks website on the date of Price/Finance Bid Opening.
- 36. Evaluation & Comparison of Bids:**
- 36.1 For the bids qualifying for the technical evaluation which have been found to be responsive the evaluation & comparison shall be made as under:
- (i) Indigenous Offers: The final landed cost of purchase after all discounts, freight, forwarding, insurance (warehouse to warehouse), custom clearing charges taxes etc. shall be the basis of evaluation.
 - (ii) Imported Offers: The CIP/CIF price shall be the basis of evaluation (warehouse to warehouse basis)
 - (iii) Imported Vs. Indigenous Offers:
The final landed cost (ware house to ware house) of purchase taking into account, freight, forwarding, insurance, taxes etc. (CIF/CIP with custom duty, customs clearance charges, Bank/LC charges, transportation, delivery up to the site of installation at TIFR Hyderabad as per available records with TIFR Hyderabad for imported goods) shall be the basis of evaluation.
- 36.2 Conditional tenders/discounts etc. shall not be accepted. Rates quoted without attached conditions (viz. Discount saving linkages to quantity, payment terms etc.) will only be considered for evaluation purpose. Thus conditional discounted rates linked to quantities and prompt/advance payment etc., will be ignored for determining inter-se position. The Purchaser however reserves the right to use the discounted rate/rates considered workable and appropriate for counter offer to the successful tenderers.
- 37. Contacting the Purchaser:** Any attempt by any Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the bid.

38. Purchaser's Right to Vary Quantities at Time of Award: The Purchaser reserves the right at the time of contract award to increase or decrease the quantity of goods and services originally specified in the schedule of Requirements without any change in unit price or other terms and conditions.

39. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids.

39.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract without there by incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

39.2 Evidence regarding credibility of stable performance and maintenance service capability must be provided. The purchaser reserves the right to make judgment on this and reject bids that, in the purchaser's view, do not carry sufficient credibility for performance and/or service.

40. Training:

40.1 The Supplier is required to train designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

40.2 The training shall be initially carried out during installation & commissioning for operating and maintaining the system. The specific training on application shall also to be imparted by the supplier. The duration of such training need to be finalized with the end user of the equipment. The supplier has to provide complete training at site for operation (including trouble shooting) of the instrument.

40.3 In case any supplier is not willing to impart such training, the bid shall be treated as non-responsive.

40.4 Bidders, please provide the PAN No., Bank Details, email ID, Contact person details, GST No etc.

41. The Supplier shall arrange to ship the ordered materials within the mutually agreed delivery period mentioned in the order unless extended with/without penalty. Please mention the Delivery Period Clearly in the Bid, however effort to be taken to deliver the materials at the earliest.

In case of delay in supply on part of the supplier, a penalty @0.5% per week of order value will be charged for delayed period subject to a maximum of 10% order value

If the delay in the shipment of the ordered materials attributable to the supplier exceeds agreed time period from the date of original agreed upon date of shipment and extended with/without penalty, the TIFR Hyderabad shall have the right to cancel the contract / purchase order and recover the liquidated damages from other dues of the party or by legal means. It will also affect the other/future business dealings with such suppliers.

The same rate of penalty shall be applicable for late installation of the equipment / instrument also.

42. Warranty: The supplier warrants that the Goods supplied under this contract are new, unused, of the most recent or current models and those they incorporate all recent improvements in design and materials, unless provided otherwise in the contract. The supplier further warrants that all Goods supplied under this contract shall have no defect arising from manufacturing, design, materials or workmanship (except when the design and /or materials is required by the Purchaser's Specification) or from any act or omission of the supplier, that may develop under normal use of the supplied

Goods in the conditions prevailing in the country of final destination.

This warranty shall remain valid (As stated in technical specifications/standard warranty) after the Goods or any portion thereof as the case maybe, have been delivered, installed & commissioned and accepted at the final destination indicated in the contract.

Warranty period shall be (As stated in technical specifications/standard warranty) from date of successful installation of equipment. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier's discretion shall apply making such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the contract at supplier own cost and expense and to carry out further performance tests.

If during the period of warranty any component or spare part is needed to be imported, all associated cost for replacement shall be borne by the supplier including the cost of customs duty, customs clearance charges etc.

43. Purchase Preference Policies.

i) The TIFR Hyderabad intends to give product reservation/purchase/price preference to local suppliers in line with current procurement policies of Govt. of India.

ii) For the above purpose, local supplier means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed in "Public Procurement (Preference to Make in India) order 2017 of GOI, Dept. of DIPP" (OM No. P-45021/2/2017-PP(BE-II) dated 04th June, 2020. Necessary certification for local content must be submitted by the prospective bidders strictly as per the Annexure - B attached with the tender document.

iii) Local content means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

44. Bidders may provide the details of registration at Government e -Marketplace (GeM) product details, confirmation on the product availability (or) non availability in GeM, registered bidder at GeM (or) not.

45. Micro and Small Enterprises (MSEs):

Micro and Small Enterprises (MSE) must, along with their offer, provide proof of their being registered as MSE (indicating the terminal validity date of their registration) with any agency mentioned in the notification of the Ministry of Micro, Small and Medium Enterprises (Ministry of MSME).

The Micro and Small Enterprises (MSE) are exempted from payment of earnest money and tender fees subject to furnishing of relevant valid certificate for claiming exemption as per privilege rules of Government of India. Public procurement Policy (PPP) for MSES Order, 2012 is meant for procurement of only goods produced and services rendered by MSEs However, Traders, Distributors, Sole agents, work contracts are excluded from the purview of the PPP for MSE Order 2012 as per Ministry of MSME.

The Micro and Small Enterprises (MSE) bidder should submit valid UDYAM Registration certificate by Ministry of Micro Small and Medium Enterprises (MSME). The Micro and Small Enterprises (MSE) bidders who fail to submit valid UDYAM Registration certificate shall not be able to avail the benefits available to MSEs as contained in Public Procurement Policy for MSEs Order 2012 issued by MSME and further applicable Notification / Rule amended from time to time.

46. COMMENCEMENT OF WARRANTY PERIOD: The warranty period of an item shall commence from the date of receipt of the item in good working condition and satisfactory installation /demonstration at the project site.

47. Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation has to be supported with the printed technical leaflet / literature of the quoted model of the item by the quoting party/manufacturer.

48. Supplier Integrity: The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

49. Force Majeure: The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, act of God and freight embargoes.

50. Termination for Default

50.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

(i) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser.

(ii) If the Supplier fails to perform any other obligation(s) under the Contract.

(iii) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

50.2 For the purpose of this Clause:

(i) "Corrupt practice" means the offering, giving, receiving or soliciting of gratification to influence the action of a public official(s) in the procurement process or in contract execution.

(ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the purchaser of the benefits of free and open competition;"

51. Resolution of Disputes:

The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

If, after thirty (30) days from commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a contractual dispute, either party may require that the dispute be referred for resolution to the formal mechanisms. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national (or) international forum, and national or international arbitration.

In case of Dispute or difference arising between the Purchaser and domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director TIFR Hyderabad and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of arbitrators appointed shall be final, conclusive and binding on all parties to this order.

In the case of dispute between the purchaser and Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub clause above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

- 52.** TIFR Hyderabad reserves the right to ask for or to provide any clarification, changes after the release of this tender. Any changes or clarifications provided by TIFR, Hyderabad maybe checked at TIFR Hyderabad website: <https://www.tifrh.res.in/index.php/commercialtenders>

ADMINISTRATIVE OFFICER
(PURCHASE SECTION)
TIFR, HYDERABAD

Annexure - B Certificate for Local Content

*We [name of manufacturer] hereby confirm in respect of quoted item(s) that Local Content is equal to or more than 50% and come under 'Class-I Local Supplier' Category. As being 'Class-I Local Supplier', we are eligible for Purchase Preference under 'Make in India' Policy vide Gol Order No.P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019 and 04.06.2020)

OR

*We [name of manufacturer] hereby confirm in respect of quoted items(s) that Local Content is more than 20% but less than 50% and come under 'Class-II Local Supplier' Category.

The details of the location (s) at which the local value addition made is /are as under:

- 1.....
- 2.....
- 3.....

*Strike out whichever is not applicable

Date:

Seal & Signature of the Bidder

NOTE:

- Self-certification that the item offered meets the minimum local content (as above) giving details of the location(s) at which the local value addition is made in case the bidder wishes to avail the benefits under the make in India policy, if applicable.
- In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content to avail the benefits under the make in India policy, if applicable.

Annexure – C
Audited Annual Turnover

S.No	Financial/ Accountin g Year	Profit (Currency)	Loss (Currency)	Annual Turnover (Currency)
1				
2				
3				

Authorized Signatory with Seal

Note: This Audited Annual Turnover (Annexure – B) for the last 3 years should be certified by Chartered Accountant (CA) as per the format given above duly signed and stamped by the CA on their letterhead.

Annexure – D

Supply, Installation, and Commissioning of Petawatt Beam Switching Chamber to other firms.

S.No.	Name of the company with full address	Name of the Project	Purchase Order No. & Date	Brief Item Description with Model No.	Item Value in Currency
Signature					
Name					
Designation					
Name of the Company					
Date					
Seal of the Company					

NOTE: Please attach the copy documents / purchase order copy for the above mentioned detail

Financial Bid for Supply, Installation, and Commissioning of Petawatt Beam Switching Chamber.

(Part – B)

Annexure – E

TIFR Hyderabad Enquiry No & Date: -----

Due date: -----

Bidder's Quotation Ref No. & Date: -----

Financial Bid (Bidders must quote their rates using this Format)

S.No.	Item Description as per tender	Make/ Brand/ Type	Qty (Nos)	Rate per unit (Currency)	Basic Cost of main item (Currency)
A.	Supply, Installation, and Commissioning of Petawatt Beam Switching Chamber. (Technical Specification as mentioned at Annexure A)				
B.	Ex-Works cost (Duly packed Airworthy/Seaworthy of international standard				
C.	FOB /FCA Cost (Name of Airport)				
D.	CIP/CIF Cost (Up to Hyderabad Airport)(all inclusive i.e. Cost of Goods, Packing, Insurance warehouse to warehouse, Inland transportation, freight etc.)				

Note:

1. All the column should be appropriately filled and not left blank.
2. Do not include any other charges, taxes, duties etc. in the Basic Cost of the item. The other charges, taxes, duties etc. to be shown separately.
3. Any accessories, optional items should be shown separately using above format.
4. Use separate sheet for detail description, specification of the item, Price breakup for the item(s) mentioned in technical specification but prices should be quoted in the same format.
5. Prices quoted in Indian Currency for indigenous items should be on F.O.R. basis and mention separately using different table format showing all the applicable taxes/Duties like GST, Freight & Transportation charges and installation charges etc. Use separate sheet for detail description, specification of the item, Price breakup for the item(s) mentioned in technical specification but prices should be quoted in the same format.
6. TIFR Hyderabad being educational & research institute, discounted price shall be offered.

Signature of the Bidder

Name, Address contact no
& email id of the bidder/

Company with company's Stamp or Seal Date: _____ **Date:**

Annexure – F
PERFORMANCE BANK GUARANTEE FORMAT

In consideration of the TATA INSTITUTE OF FUNDAMNETAL RESEARCH HYDERABAD (hereinafter called“THE TIFR”) having agreed under the terms and conditions of Purchase Order No.....

dated made between. TIFR...and M/s . (hereinafter called“ the said Contractor{s}”). For the Purchase Order (hereinafter called “the saidPurchase Order”) having agreed to production of an irrevocable bank Guarantee for Rs.Fromthe contractor(S) for compliance of his obligations in accordance with the terms and conditions in the said Purchase Order , we(indicate the name of the Bank) (here in after referred to as “the Bank”) hereby undertake to pay to the TIFR an amount not exceeding Rs.(Rs... ..only) on demand by the TIFR.

2. We (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the TIFR stating that the amount claimed is required to meet the recoveries due or likely to be due from the said Contractor(s). Any such demand made on the bank shall be However, our liability under this guarantee shall be restricted to an amount not exceeding Rs (Rupees... .. only).

3. We, the said bank, further undertake to pay to the TIFR any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit ot proceedingpending before any Court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.

4. We.....(indicate the name of Bank) further agree that the guarantee herein contained shall remain in full force and effect during period that would taken for the performance ofthe said Purchase Order and that itshall continue to be enforced till allthe dues of the TIFR under or by virtue of the Purchase Order have been fully paid and its claims satisfied or discharged or Purchase Officer ion behalf of the TIFR certified that the terms and conditions of the said Purchase Order have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.

5. We... (indicate the name of Bank) further agree with the TIFR that the TIFR shall have fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Purchase Order or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time to time any of the powers exercisable by the TIFR against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Purchase Order and we shall not be relieved from or liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of mission on the part of the TIFR or any indulgence by the TIFR to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).

7. We,.....(Indicate the name of Bank) lastly undertake not to revoke this guarantee except with the previous consent to the TIFR in writing

8. This guarantee shall be valid up tounless extended on demand by TIFR.

Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. (Rupees. only) and unless a claim in writing is

lodged with us within six months of the date of expiry of this guarantee, all our liabilities under this guarantee shall stand discharged.

Signed and sealed

Dated the day of for (indicate the name of Bank)