

IoLS Activities at CERN

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Outlook

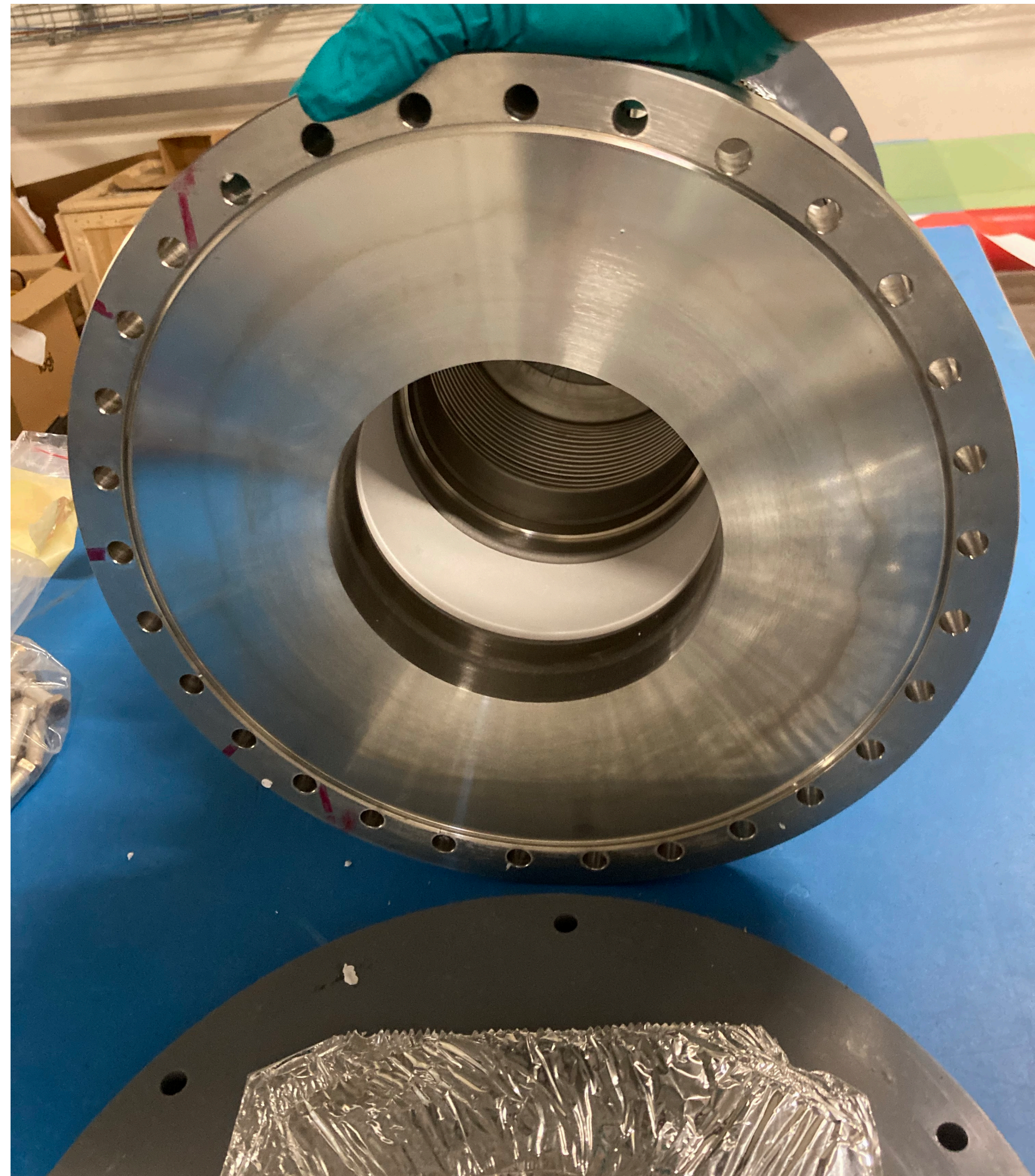
- Electrical break installation P-1, P-2
- Status of periscope locations
- Supports for laser stands
- IoLS Assembly Room

P-1 Electrical Break Installation

Opening

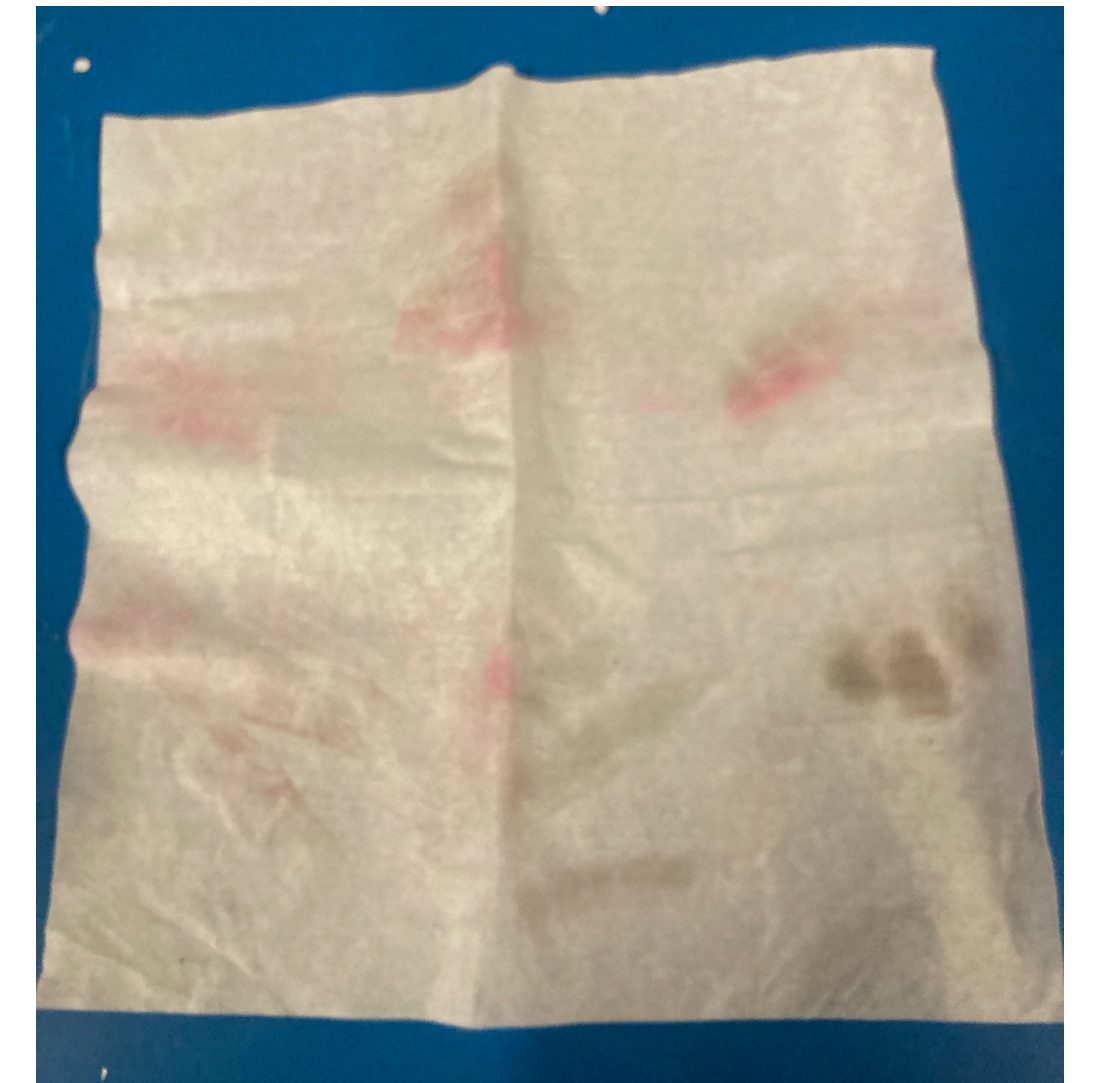
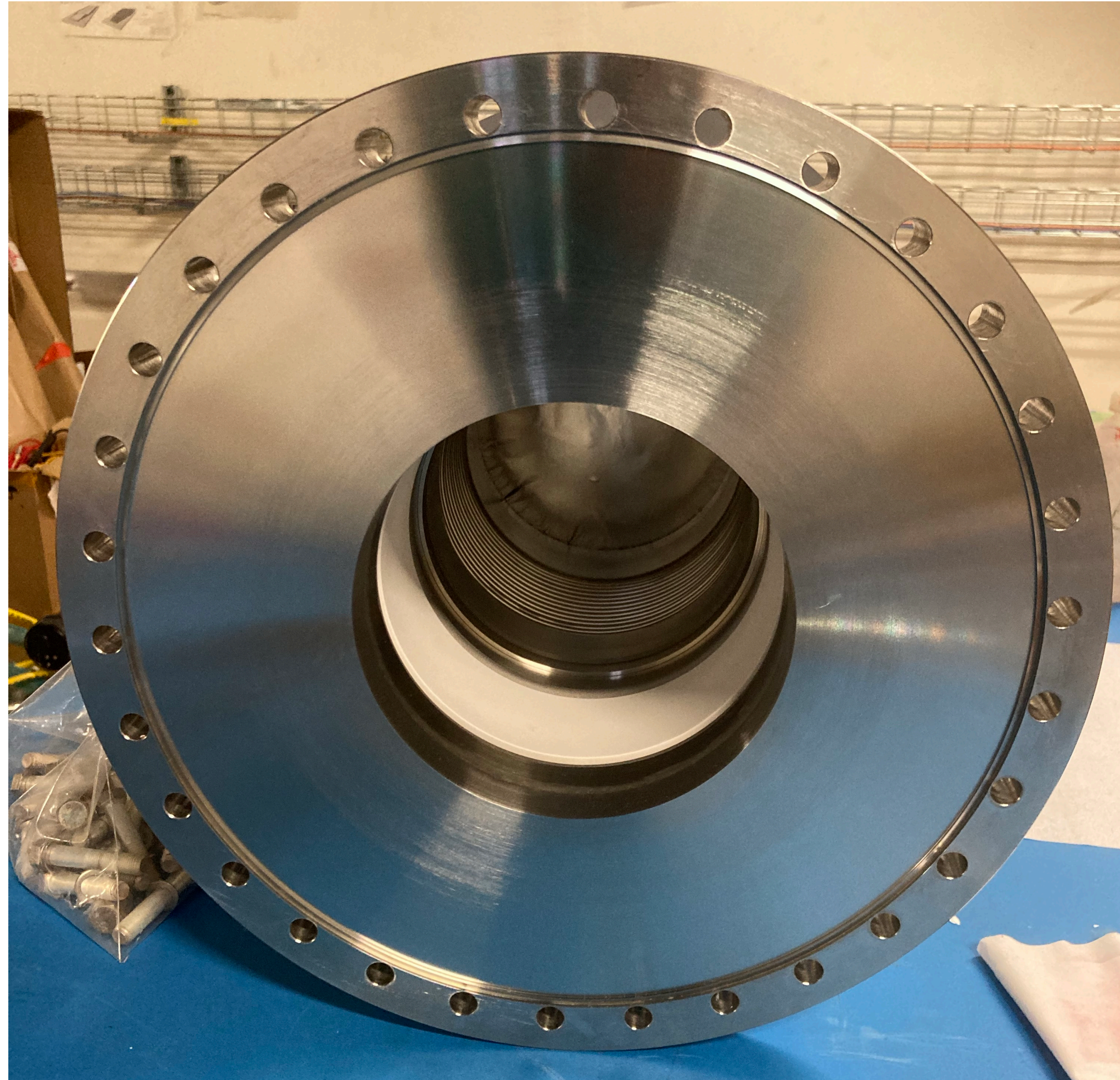


Inspection



Cleaning

- Texwipes
- Ethanol

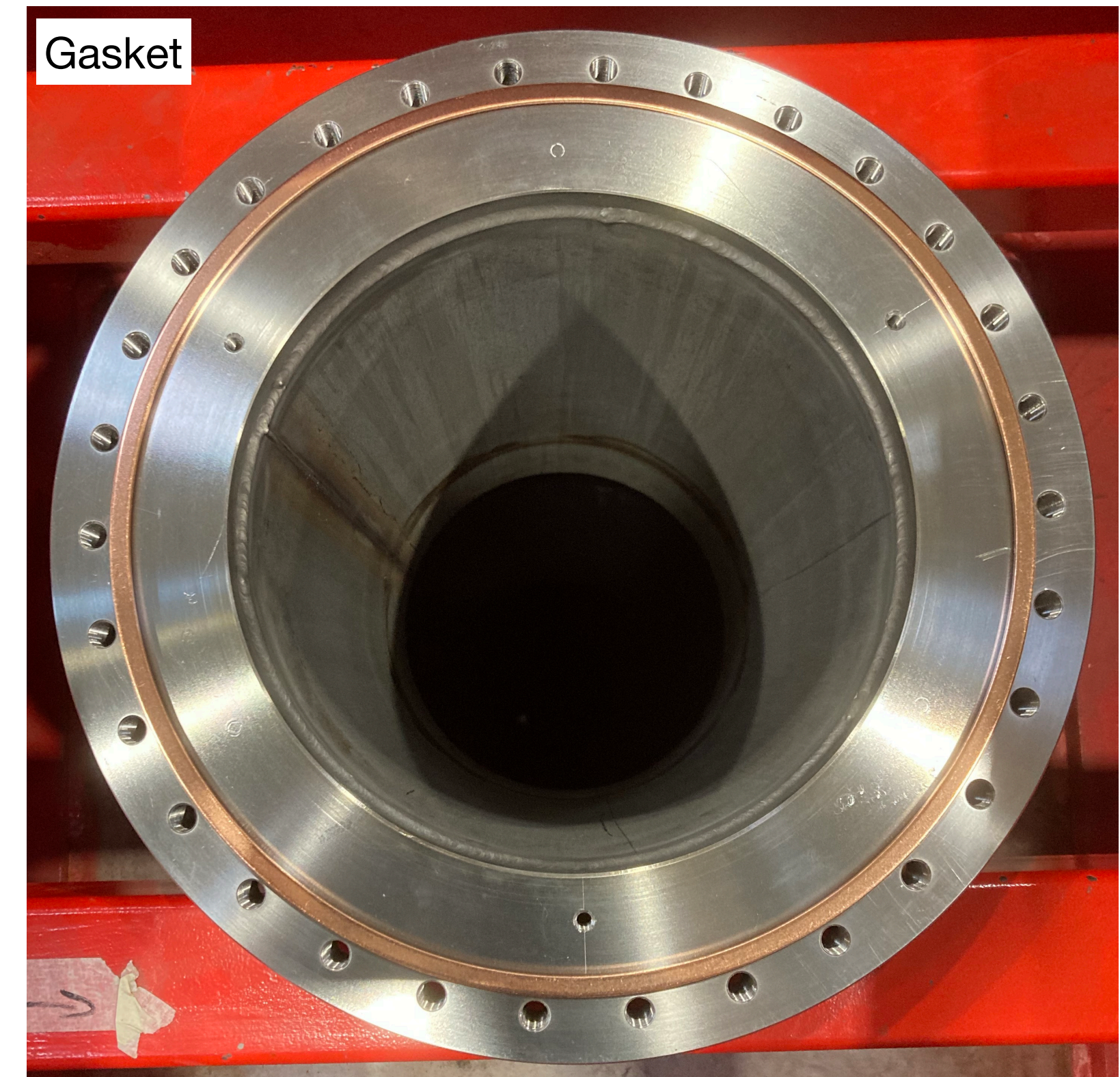
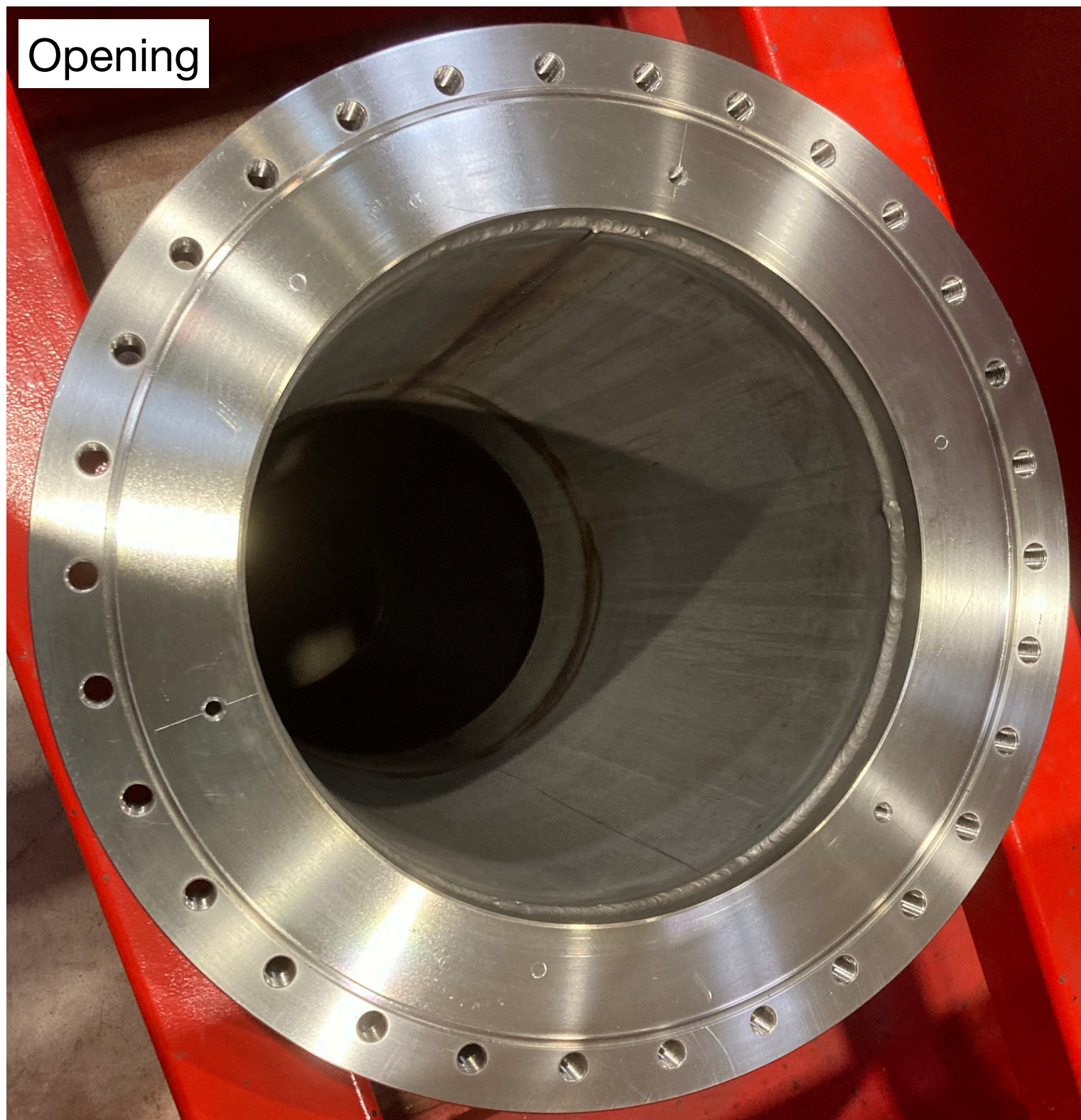


Preparation for crane operation

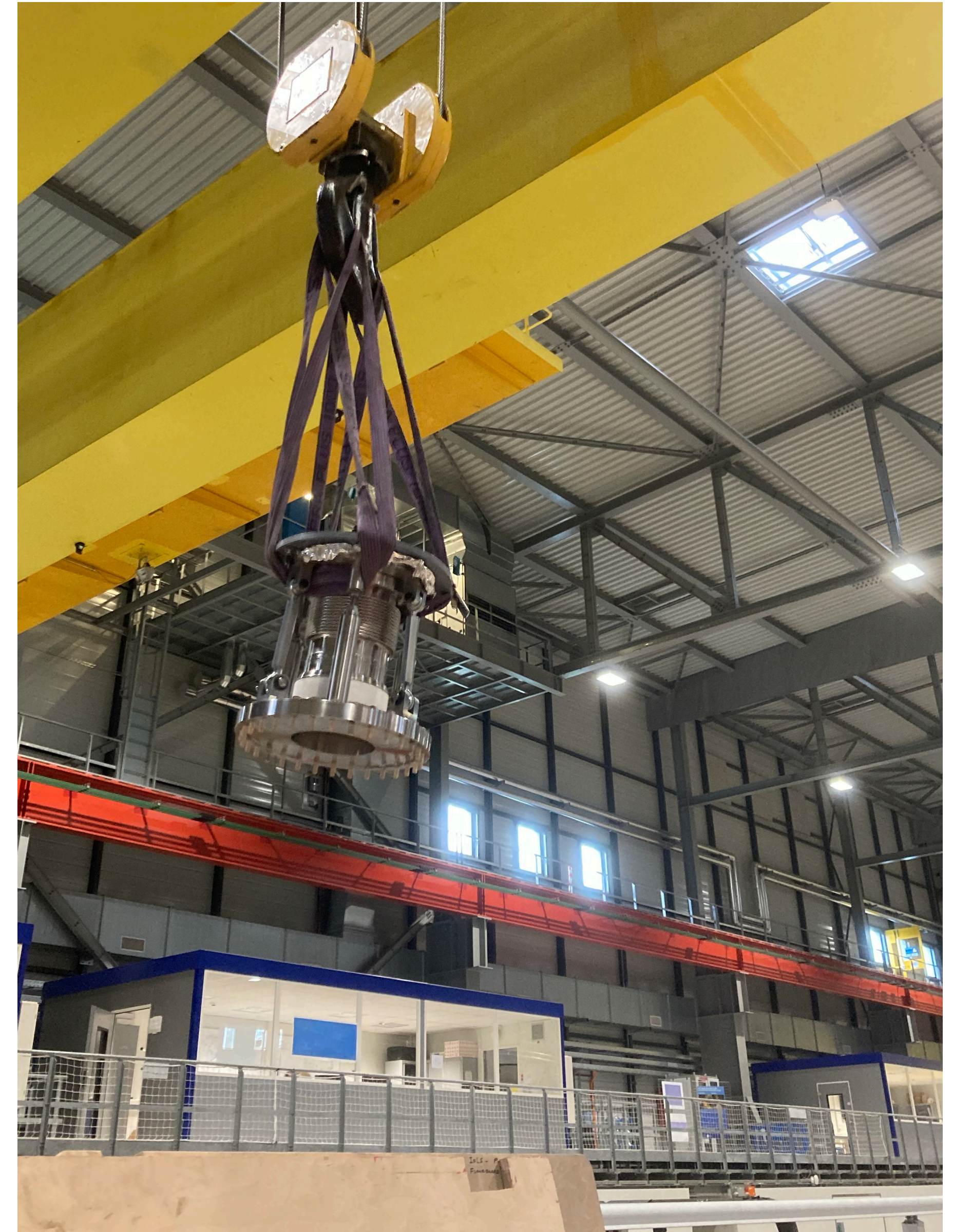
- Support table outside
- Bottom plate
- Soft interspace to protect the 'knife'
- Aluminum
- Bolts + washers in place



Flange preparation



Craning



Installation



- Same bolts as previous installation on the same flange
- Not tightened

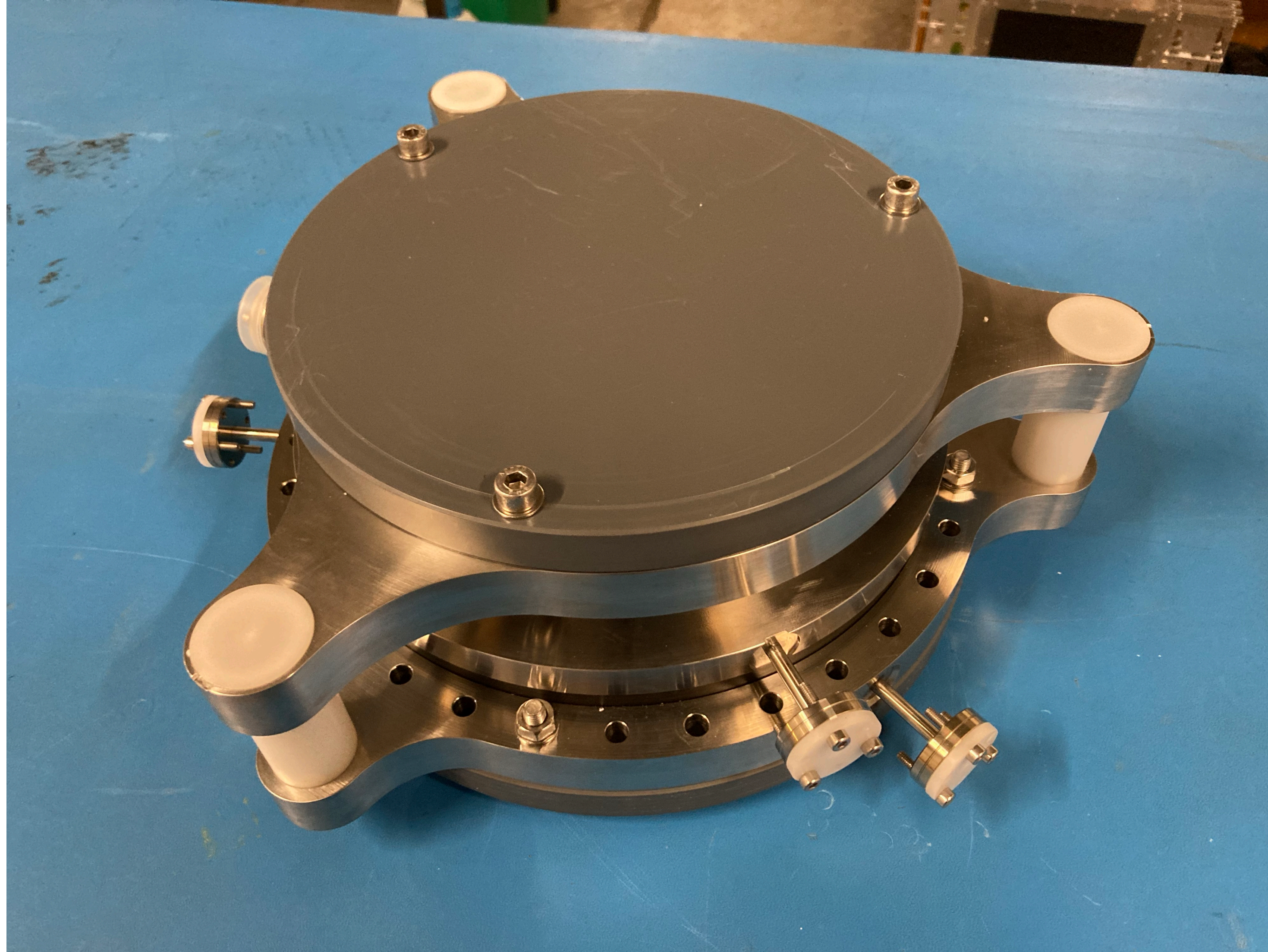
External cleaning + cover



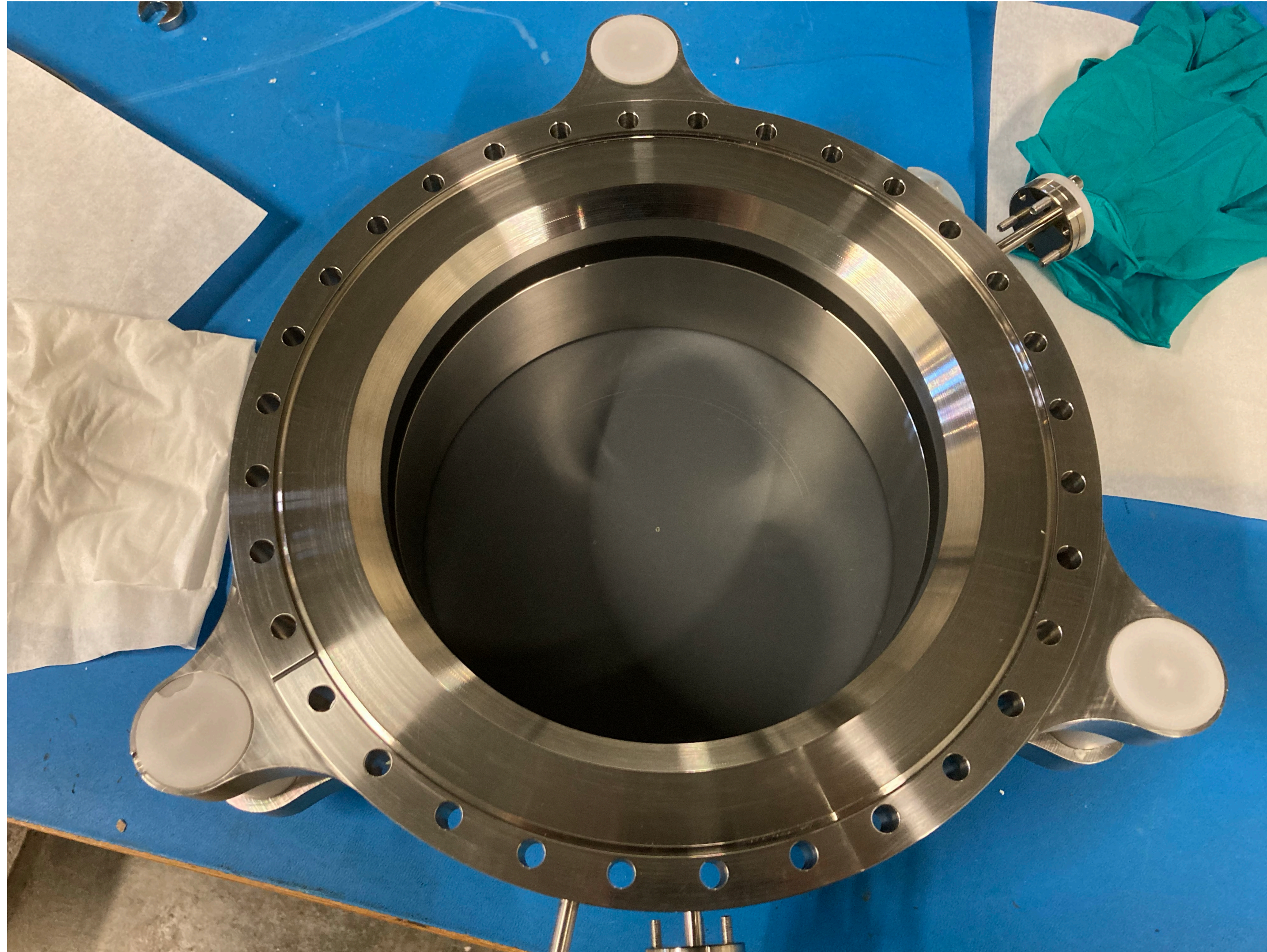
- Significant air flow was present at the flange opening
- No perceivable air leak with electrical break in place w/o plastic bag
- Plastic bag to prevent dust deposit, also closed on the bottom

P-2 Electrical Break Installation

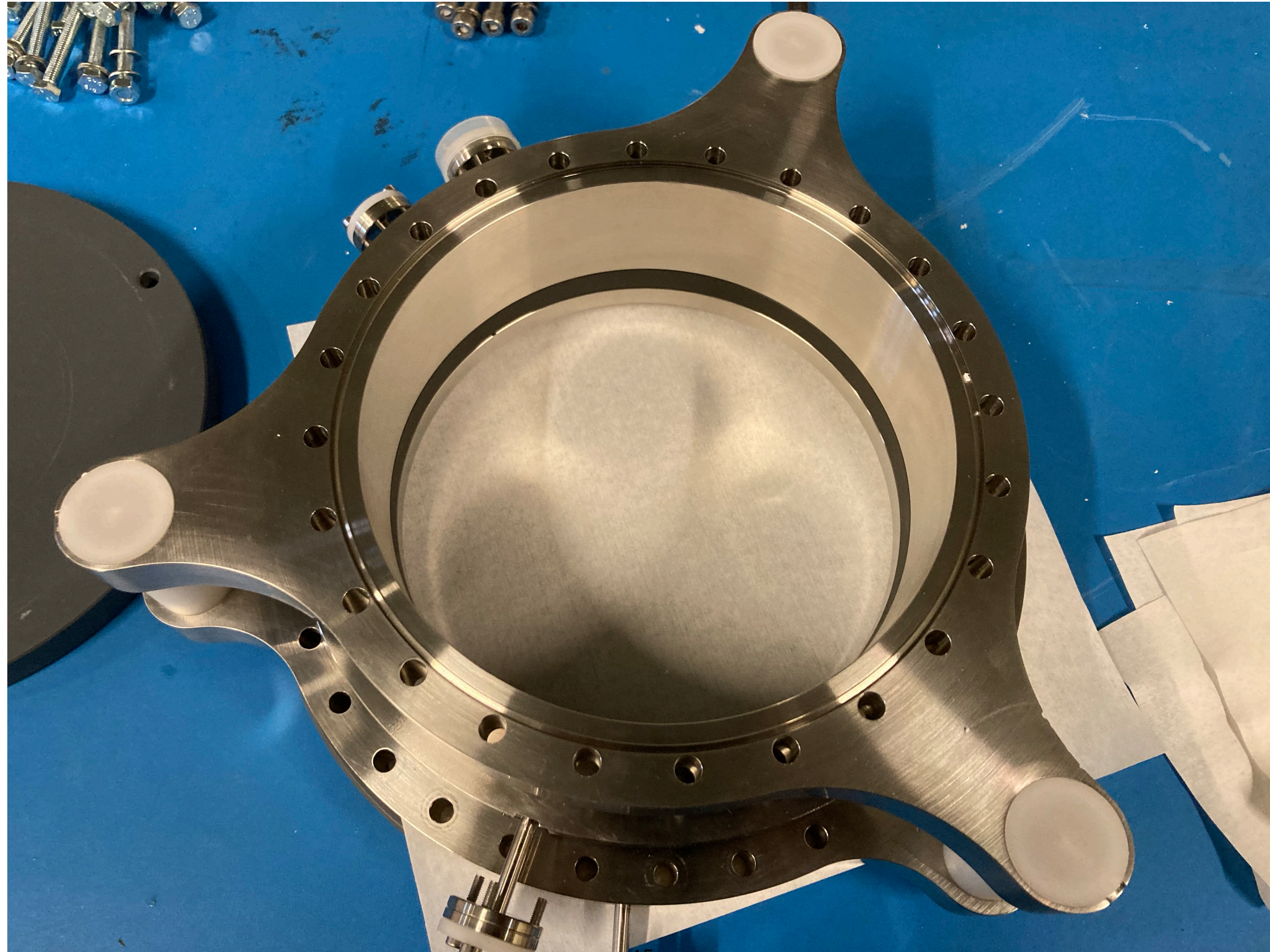
Opening



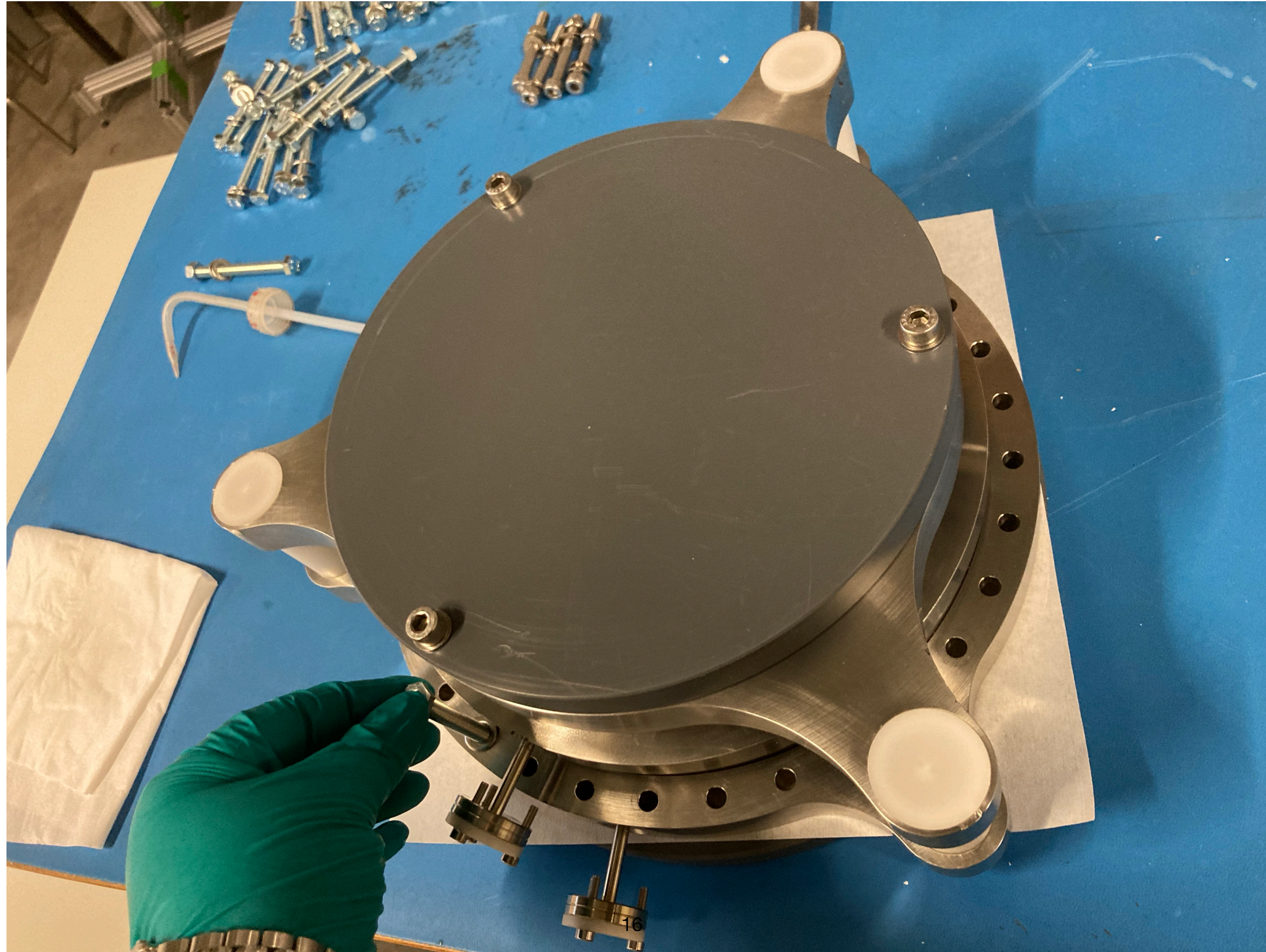
Inspection + cleaning (bottom)



Inspection + cleaning (top)

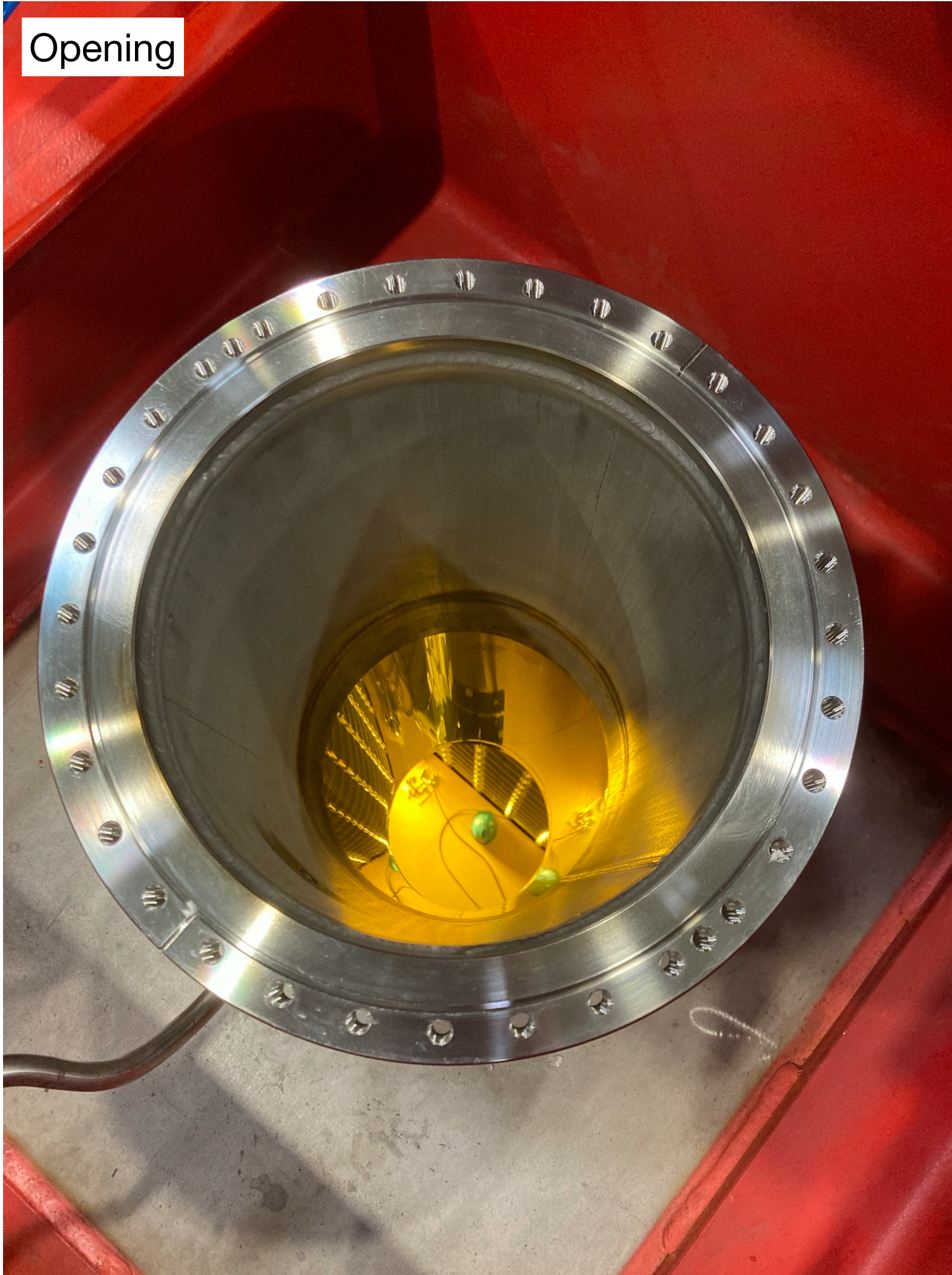


Preparation for installation

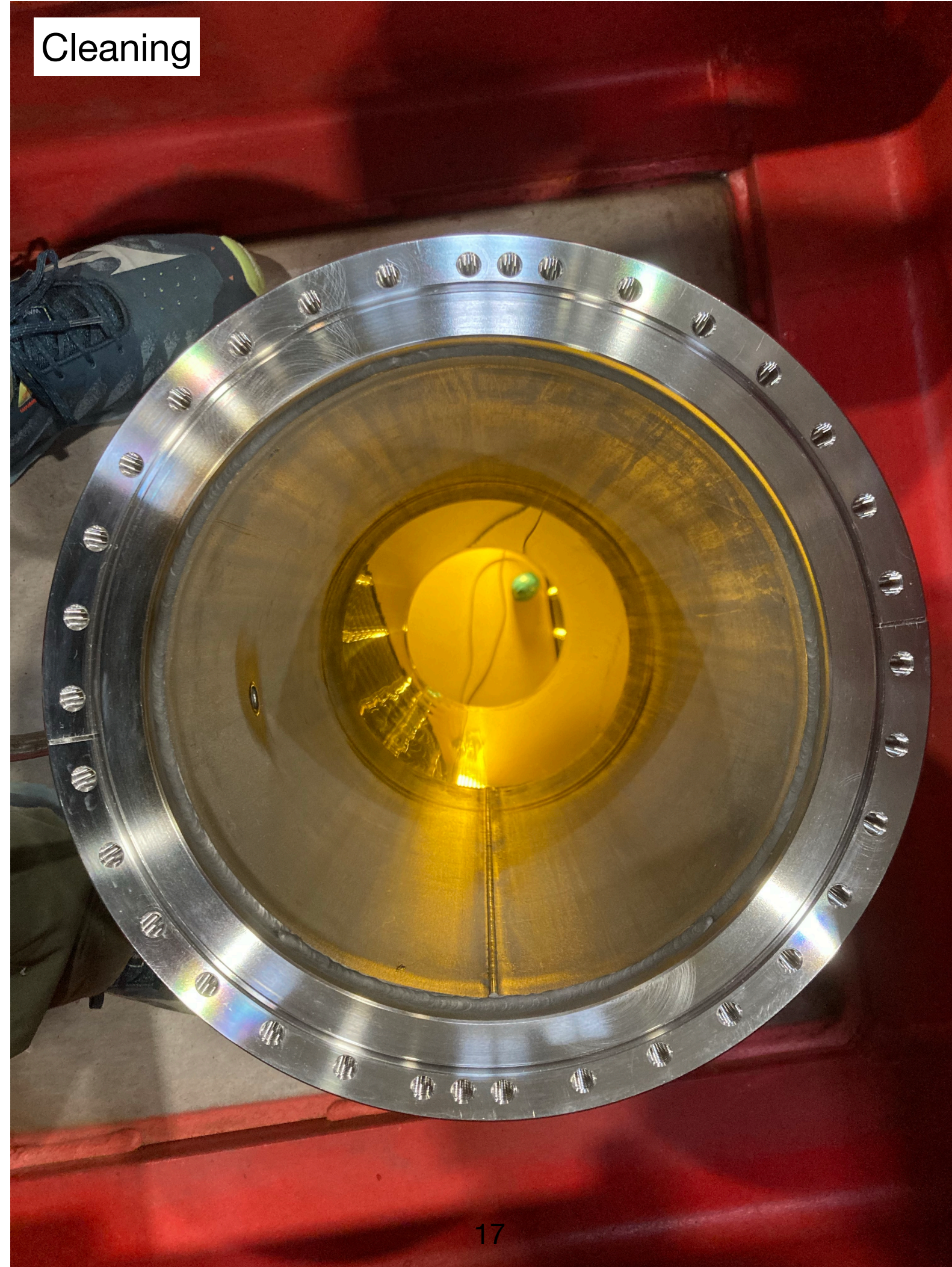


Flange preparation

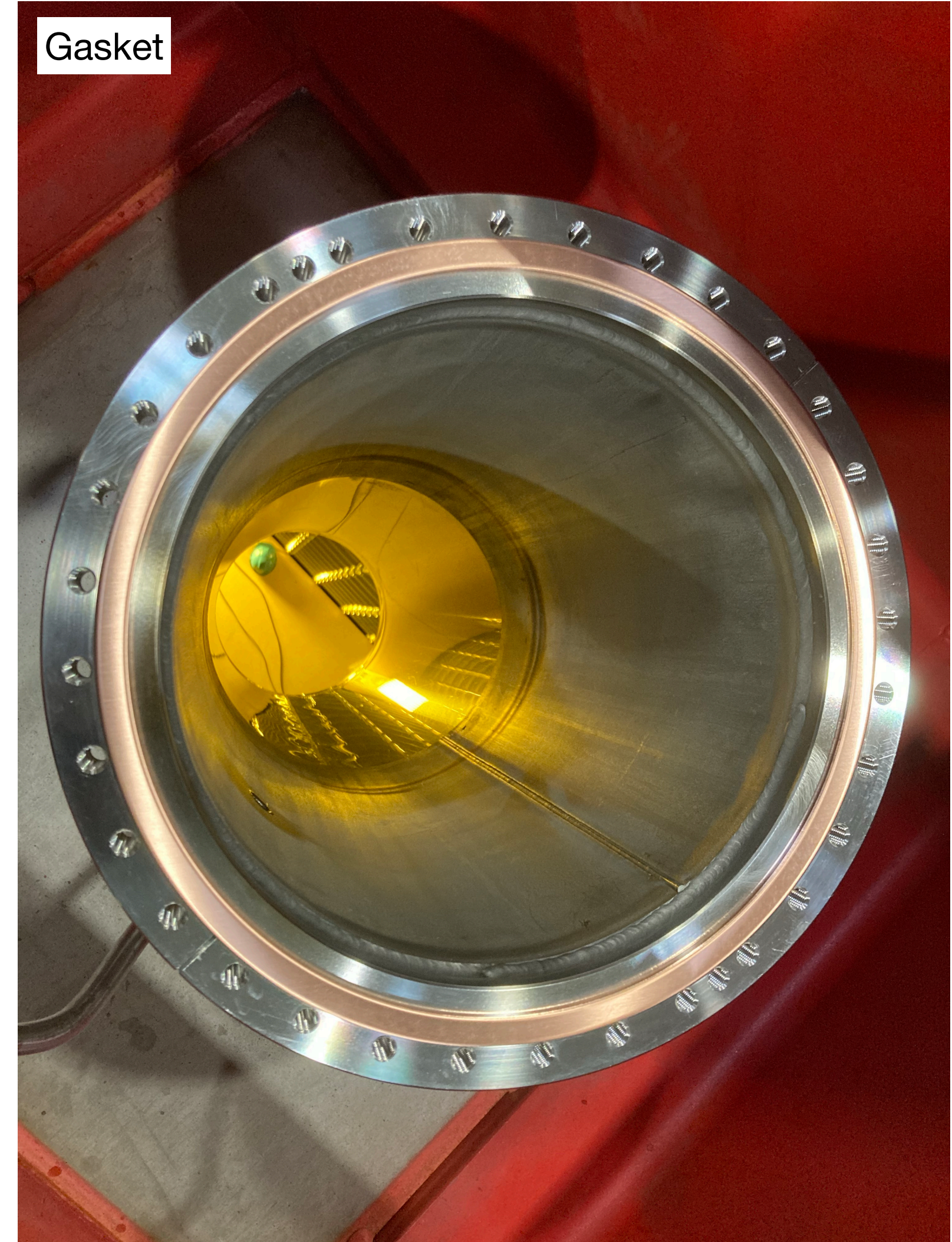
Opening



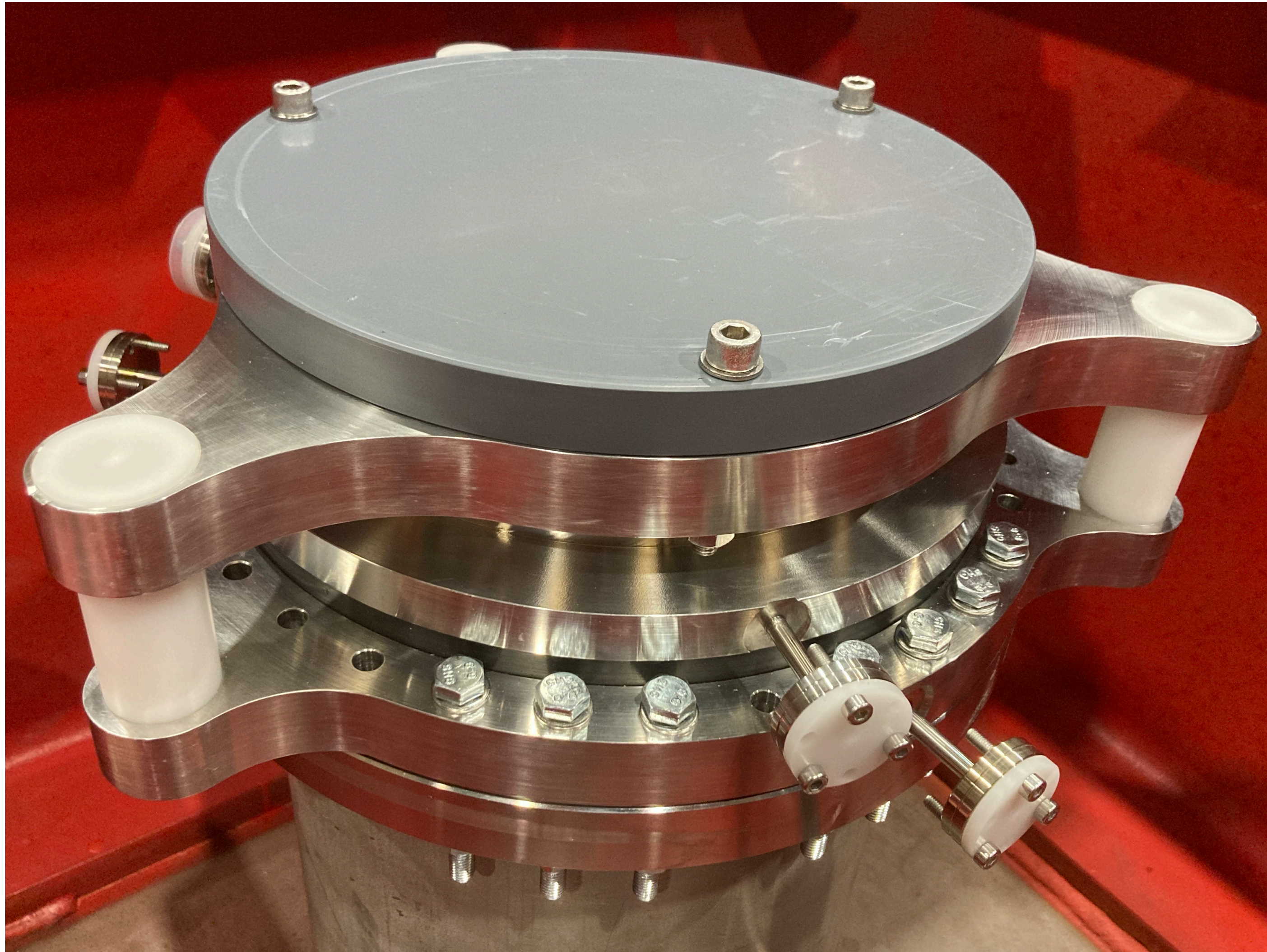
Cleaning



Gasket

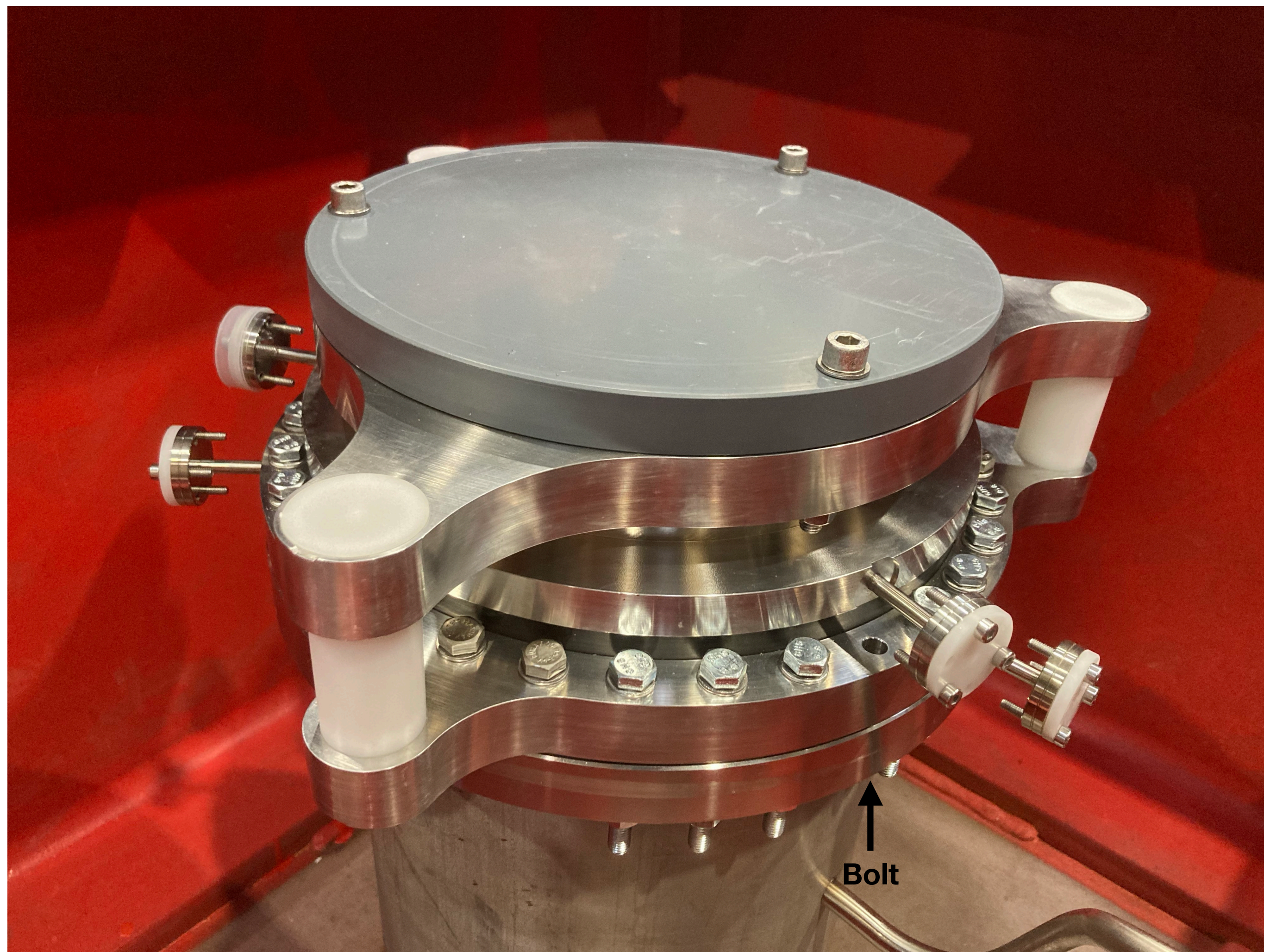


Installation



- Significant air flow was present at the flange opening
- No perceivable air leak with electrical break in place
- Bolts not tightened down
- Need 10 shorter bolts (ordered)

External cleaning + cover



Status of periscope locations



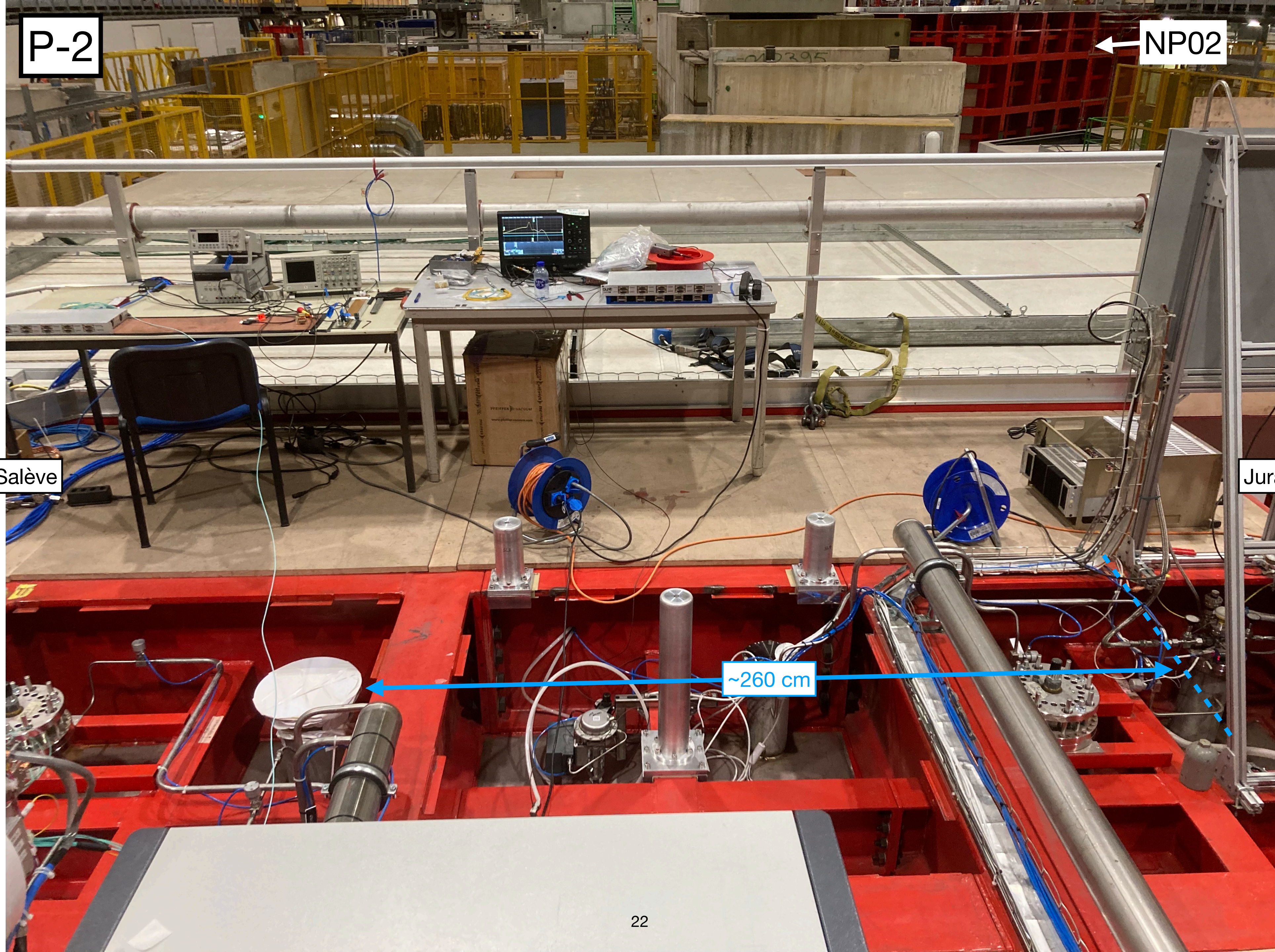
P-2

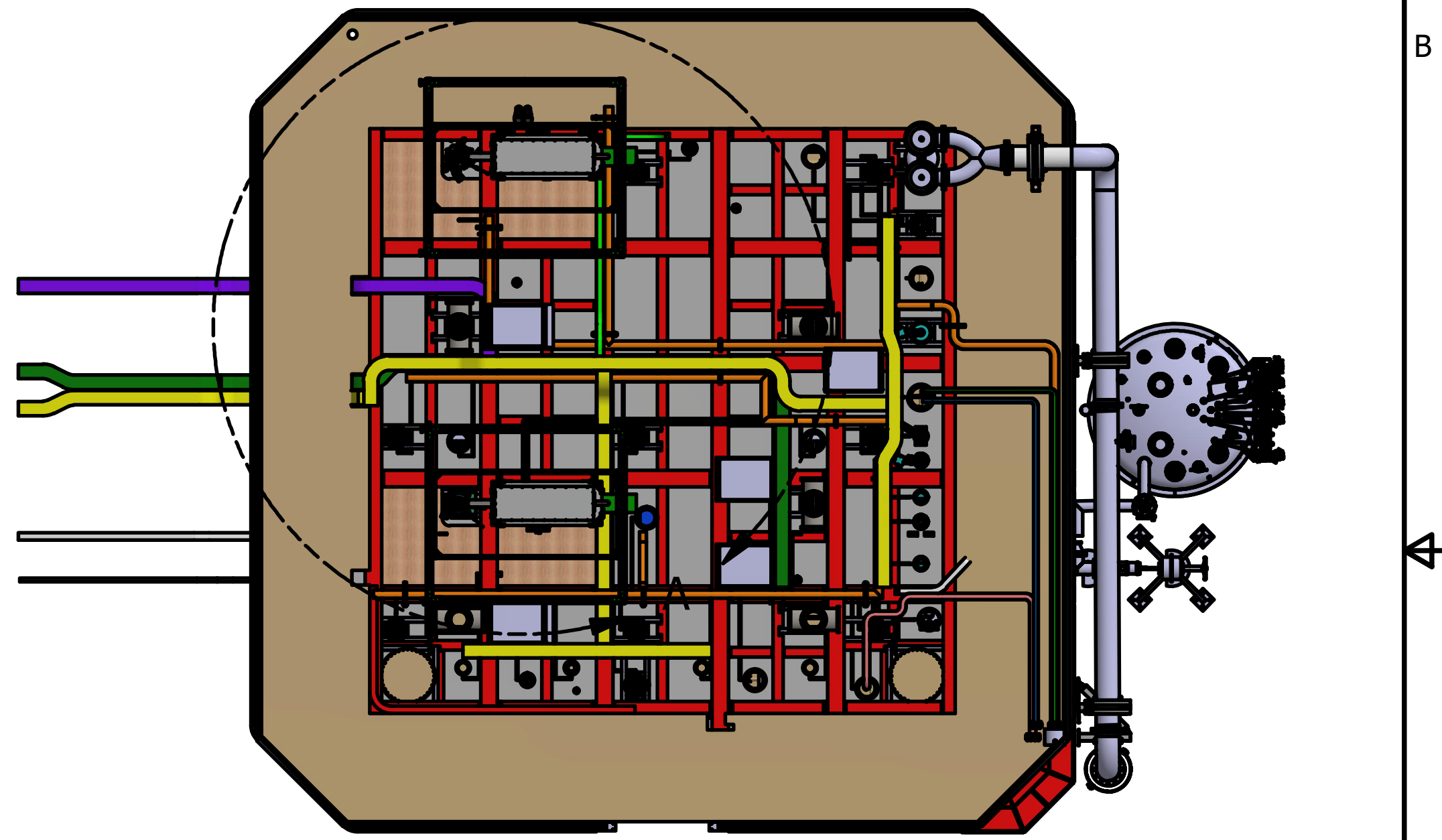
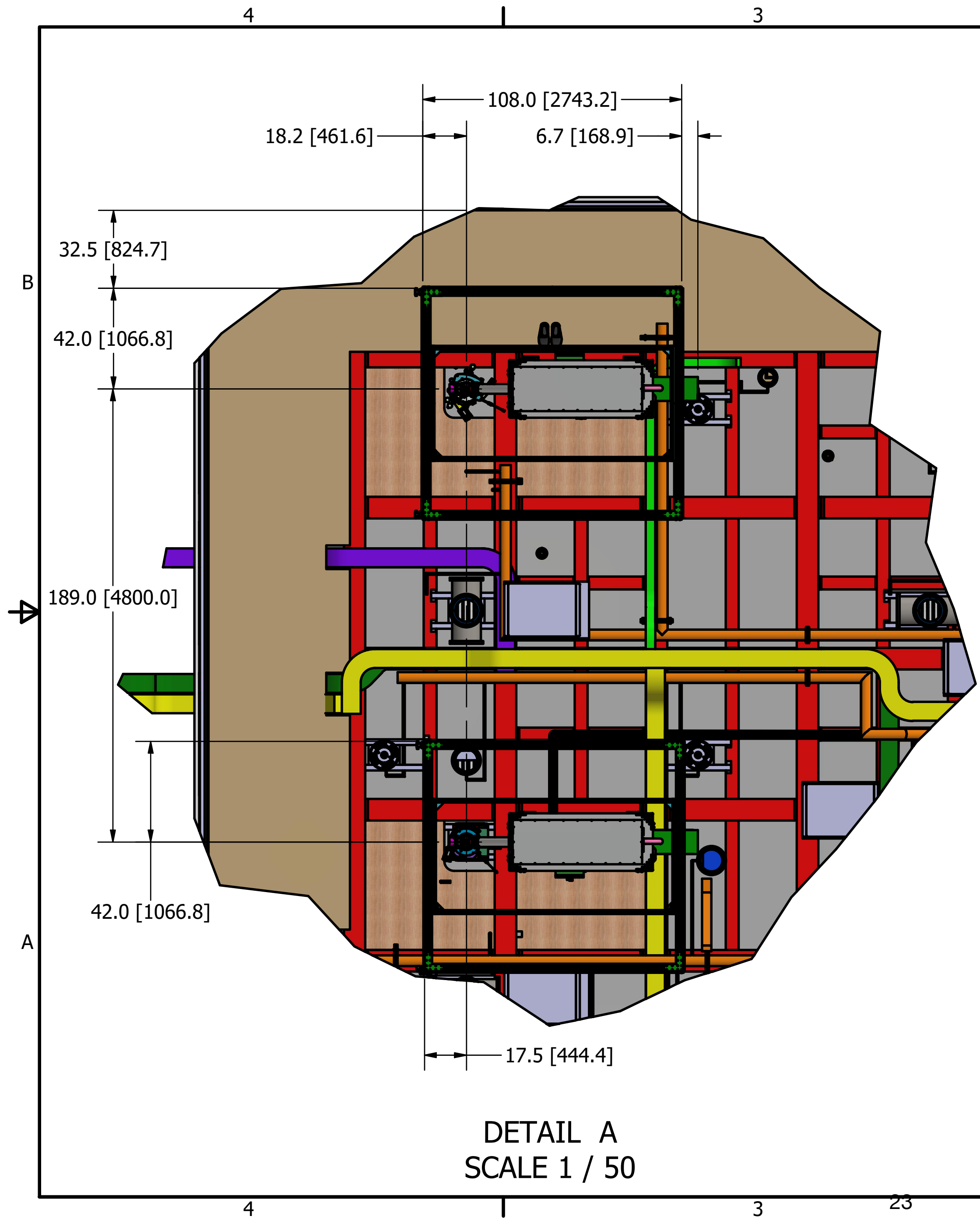
NP02


Salève

Jura

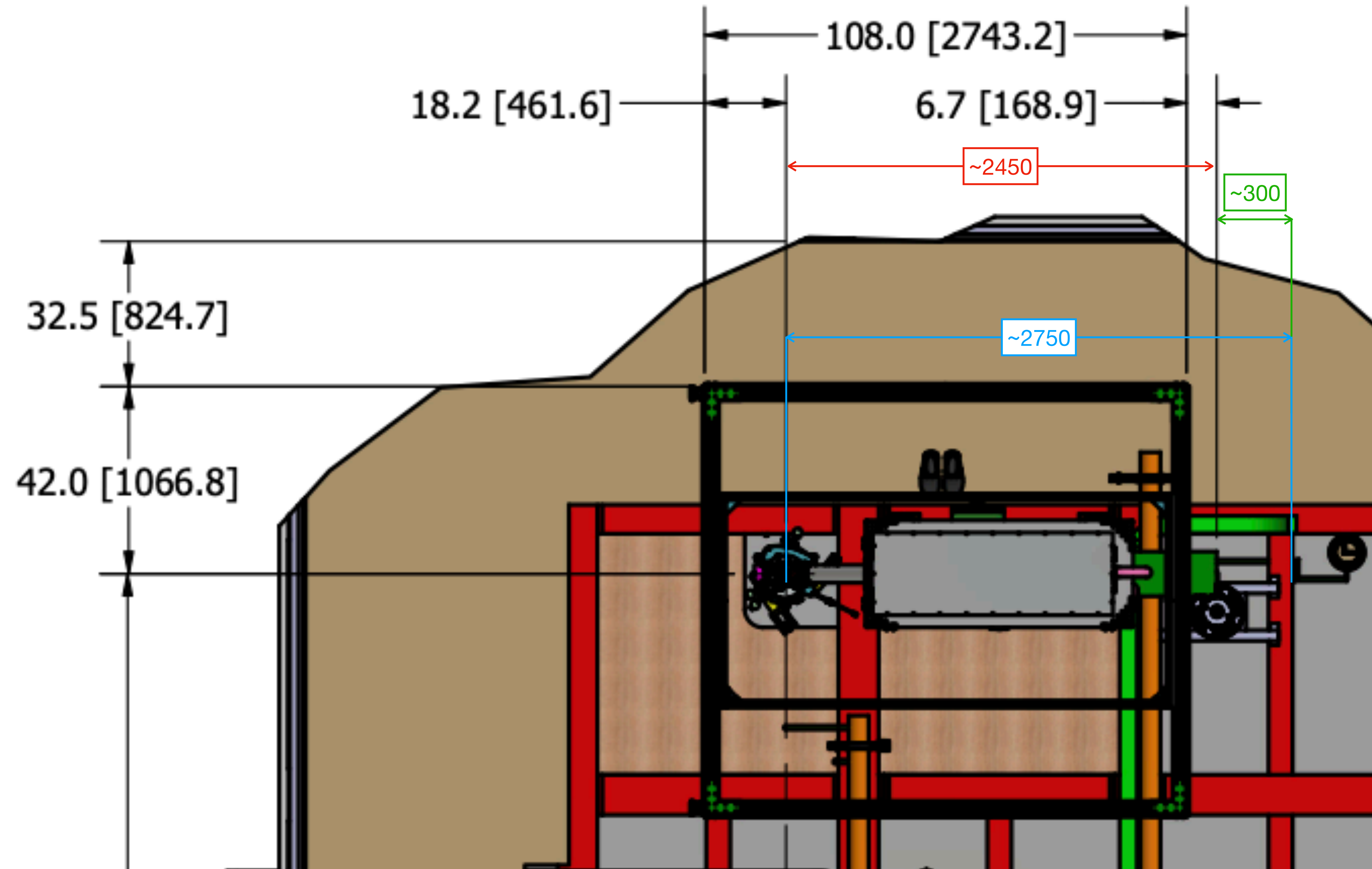
~260 cm





P-2 APPLIED & FUNDAMENTAL PHYSICS  LOS ALAMOS NATIONAL LABORATORY LOS ALAMOS, NM 87545	DIMENSIONS ARE IN INCHES TOLERANCES UNLESS SPECIFIED	NAME	DATE	LASER TENT LOCATIONS FOR PROTODUNE	
	FRACTIONAL ±	DRAWN	JAN 10-22		
	ANGULAR: MACH ± BEND ±	CHECKED			
	TWO PLACE DECIMAL ± 0.01	ENG APPR.			
	THREE PLACE DECIMAL ± 0.003	MFG APPR.			
MATERIAL	Q.A.				
FINISH	COMMENTS				
QUANTITY REQUIRED	NEXT ASSEMBLY				
	SCALE:	WEIGHT:			

SIZE	DWG. NO.	REV.
B	126Y-1767078	



Supports for Laser Stands

Additional components procured at CERN

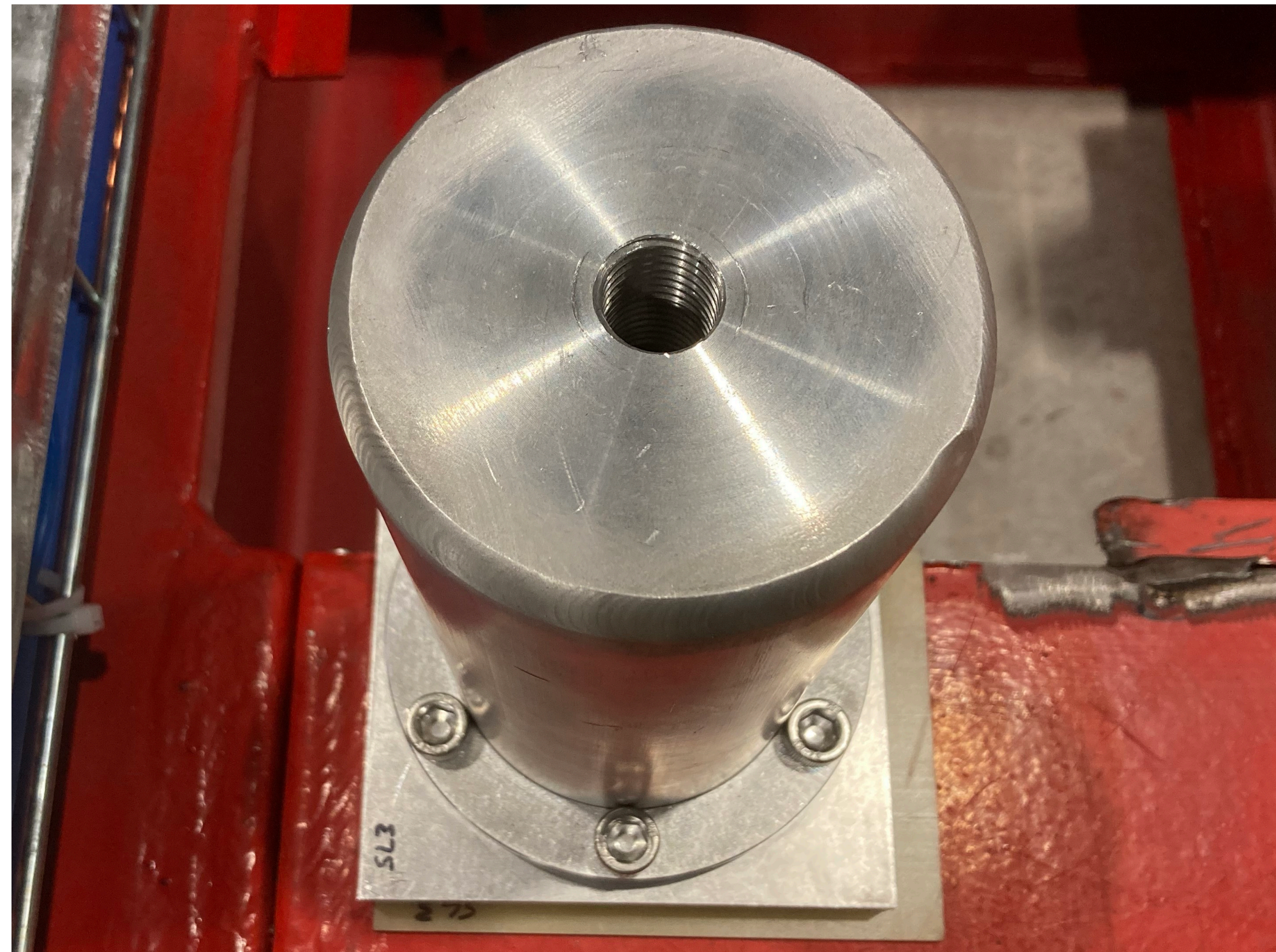
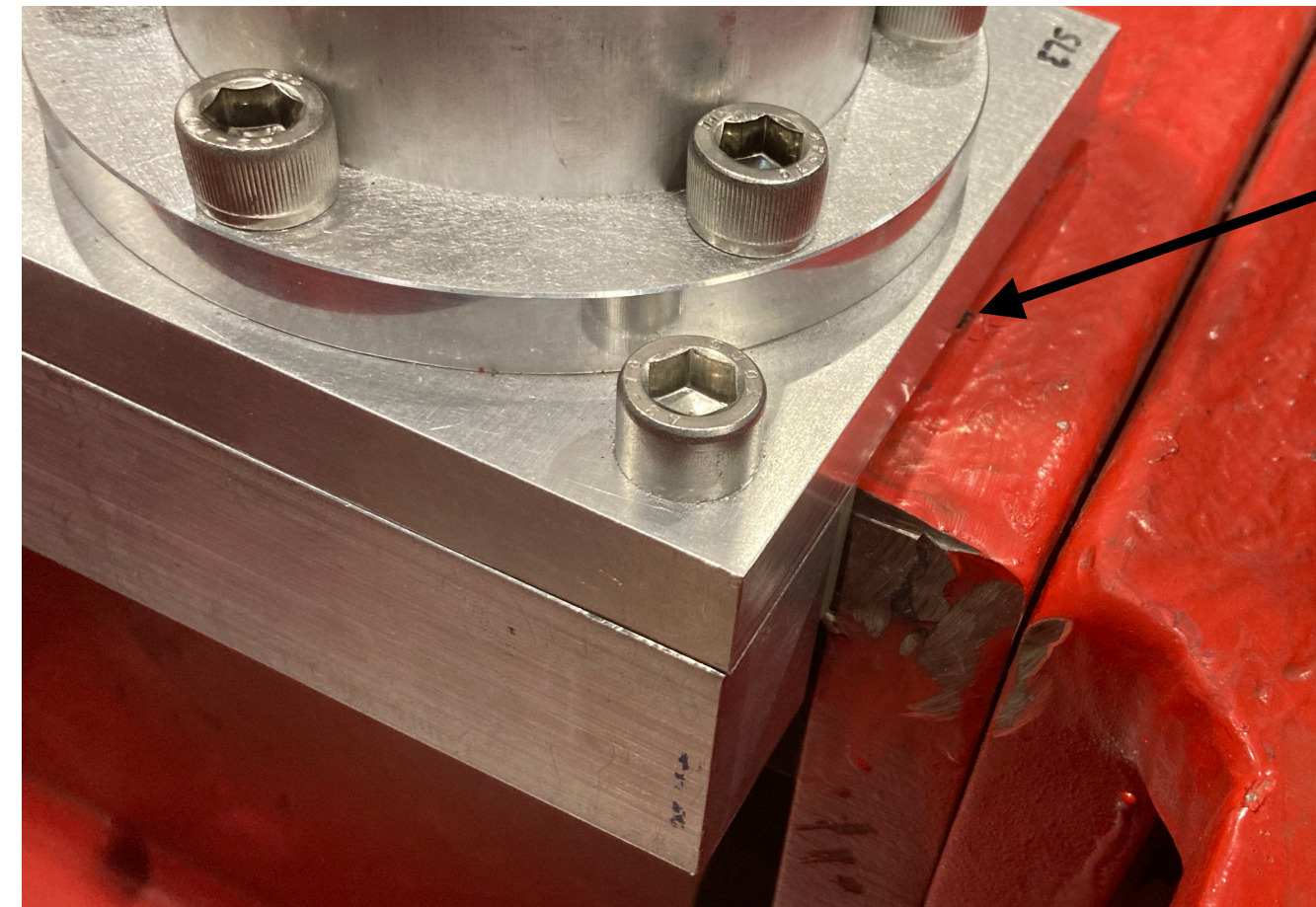
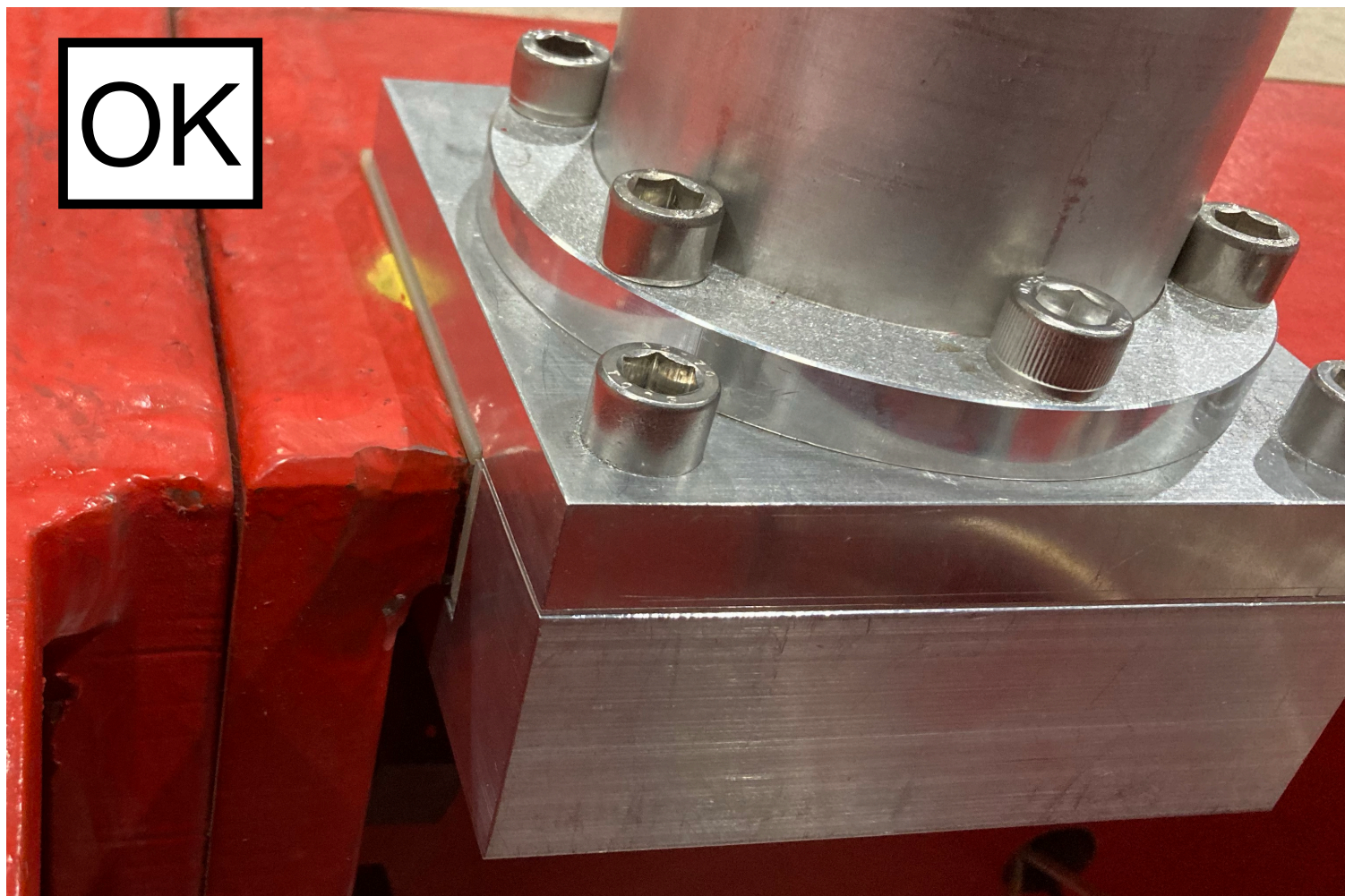
- P-1:
 - LL1: OK
 - SL1 - original: 2 mm additional Al plate (in place)
 - SL3 - **modified**: 2 mm additional Al plate (in place)
- P-2:
 - LL2 **modified**: needs additional Al plate (in place)
 - SL2 - **modified**: 3 mm additional Al plate (in place) + 2 mm GF10 (in place) + 2 mm Al plate (in place)
 - SL4 - **modified**: 3 mm additional Al plate (in place) + 2 mm GF10 (in place) + 2 mm Al plate (in place)

Issues:

- Cryostat beam welding points make surfaces uneven
- Beam thickness not uniform at mm precision

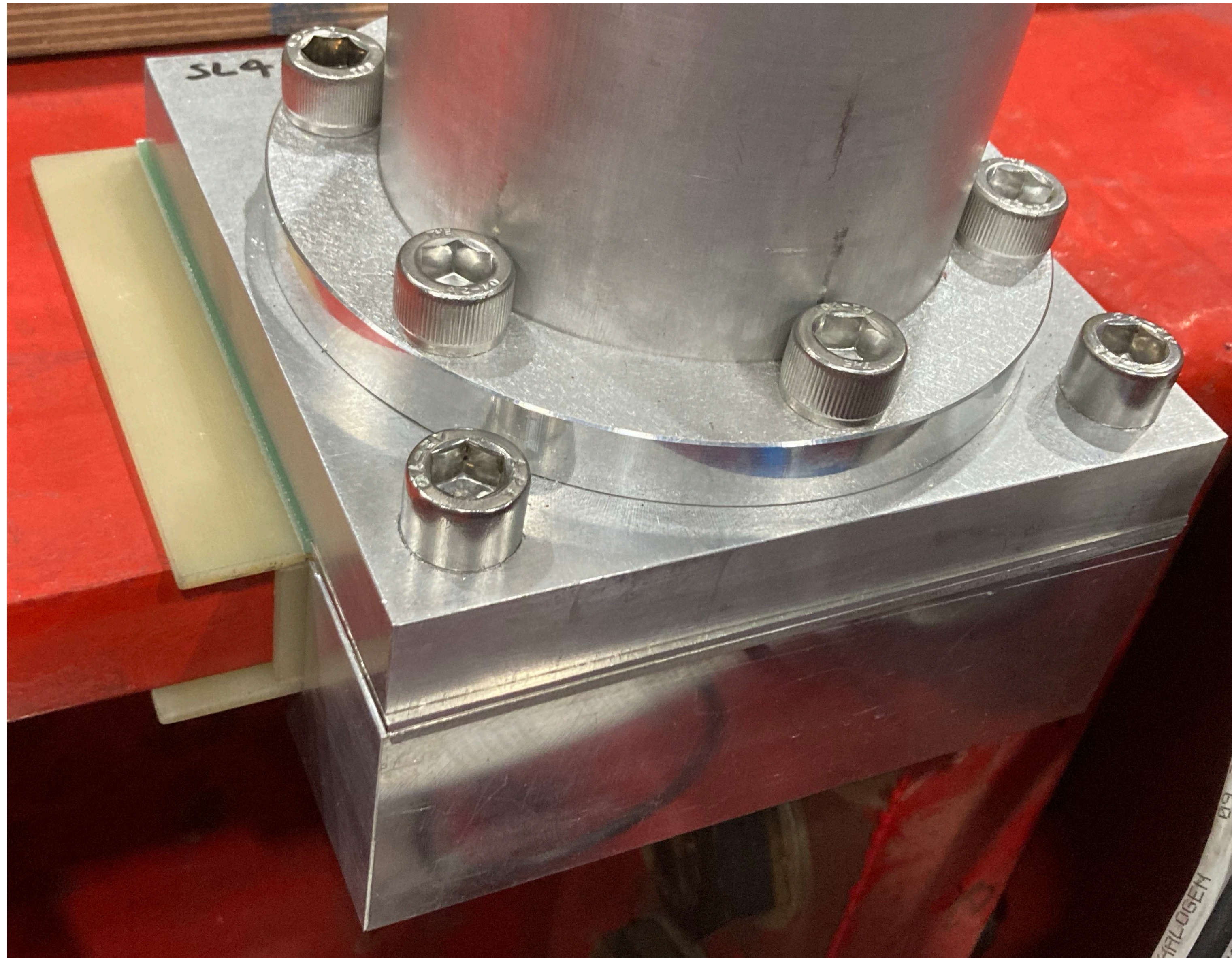
P-1

OK



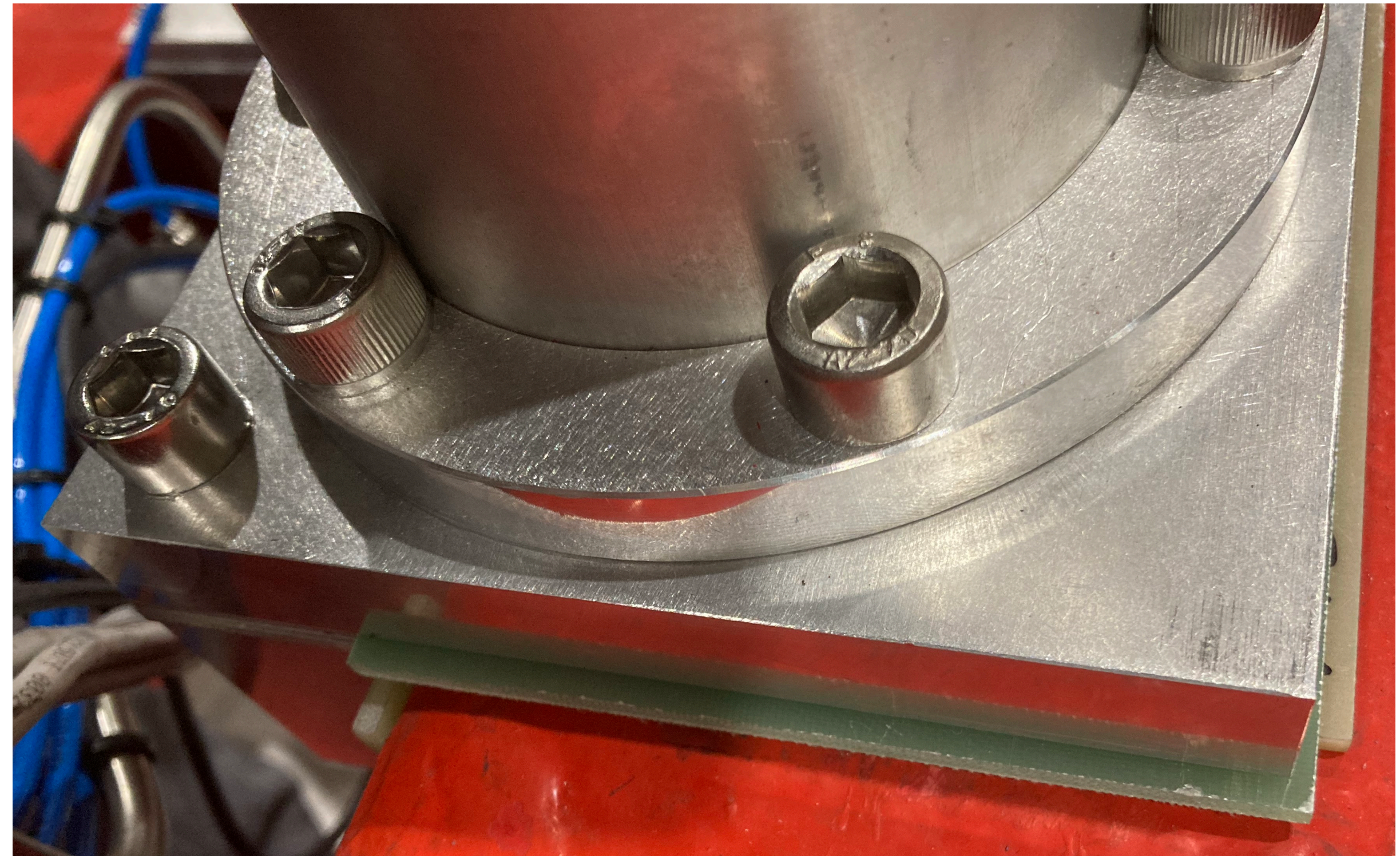
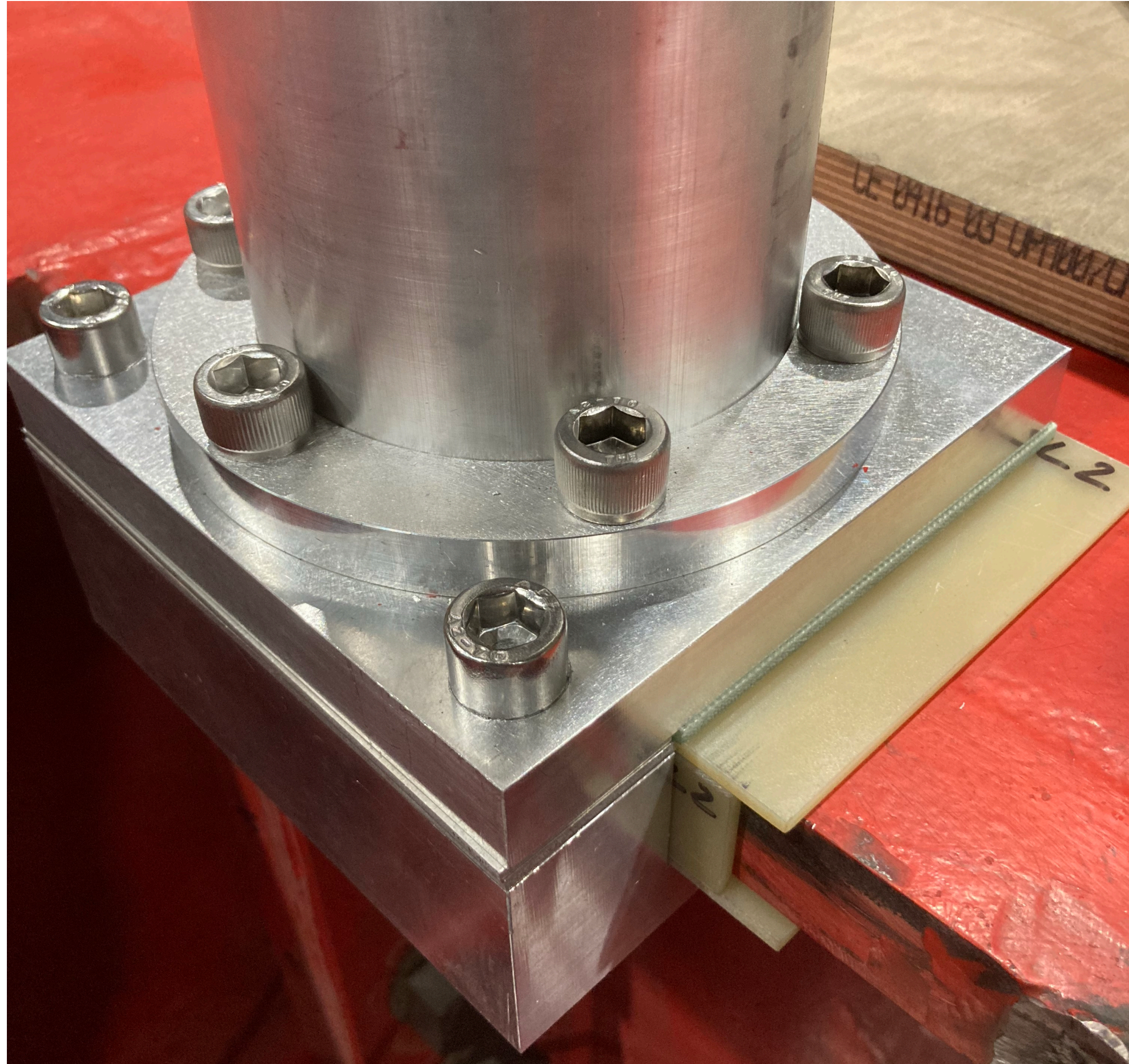
P-2 Short Leg (right side)

- 2x 2-mm Alu plates
- 1 additional GF10 plate
- Vertical GF10 does not fully shield Alu structure
 - Need to order a new one

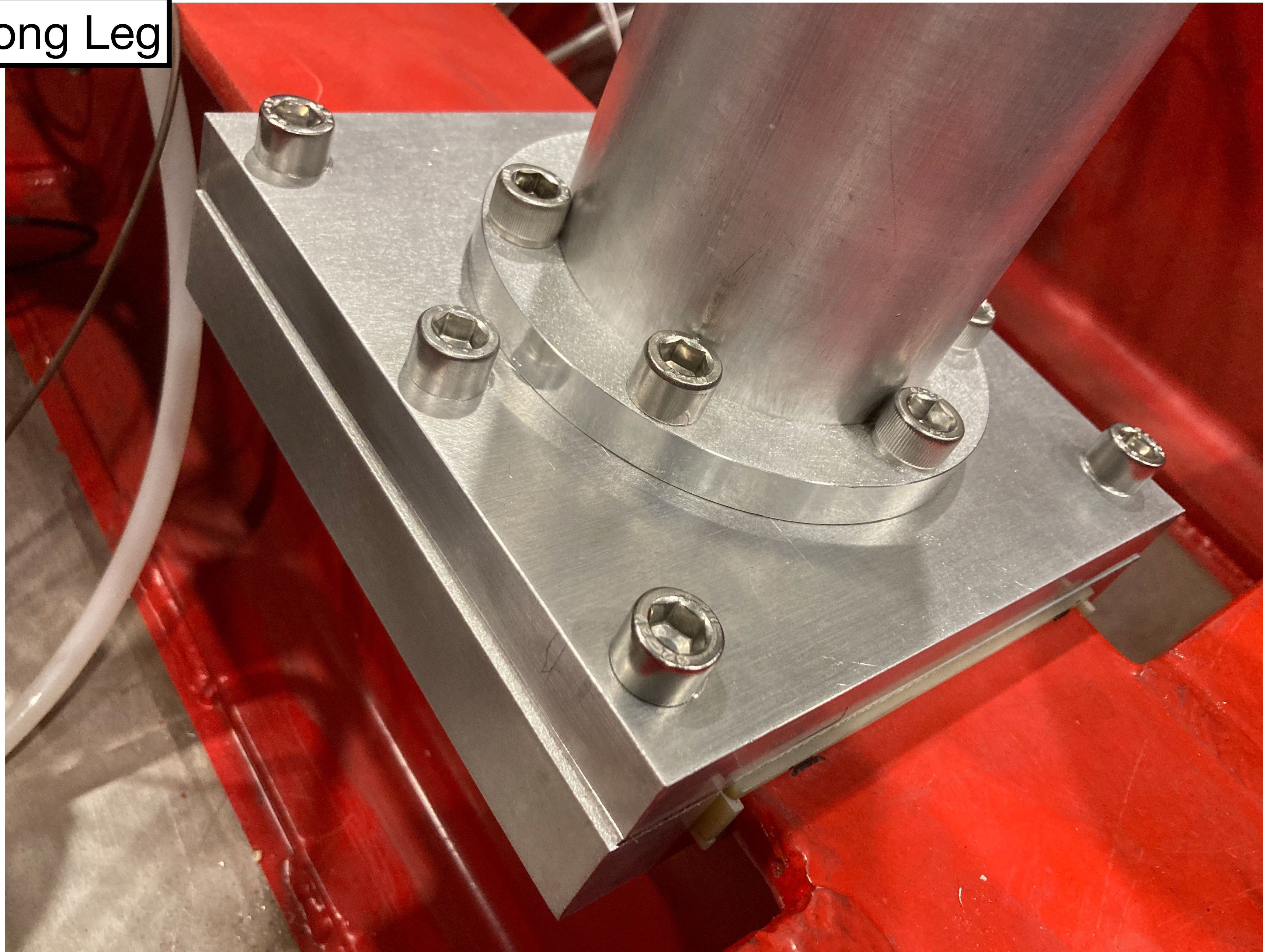


P-2 Short Leg (left side)

- 2x 2-mm Alu plates
- 1 additional GF10 plate
- Vertical GF10 does not fully shield Alu structure
 - Need to order a new one



P-2 Long Leg



- Insulation OK
- One additional Alu plate
 - SLs increased thickness

IoLS Assembly Room



