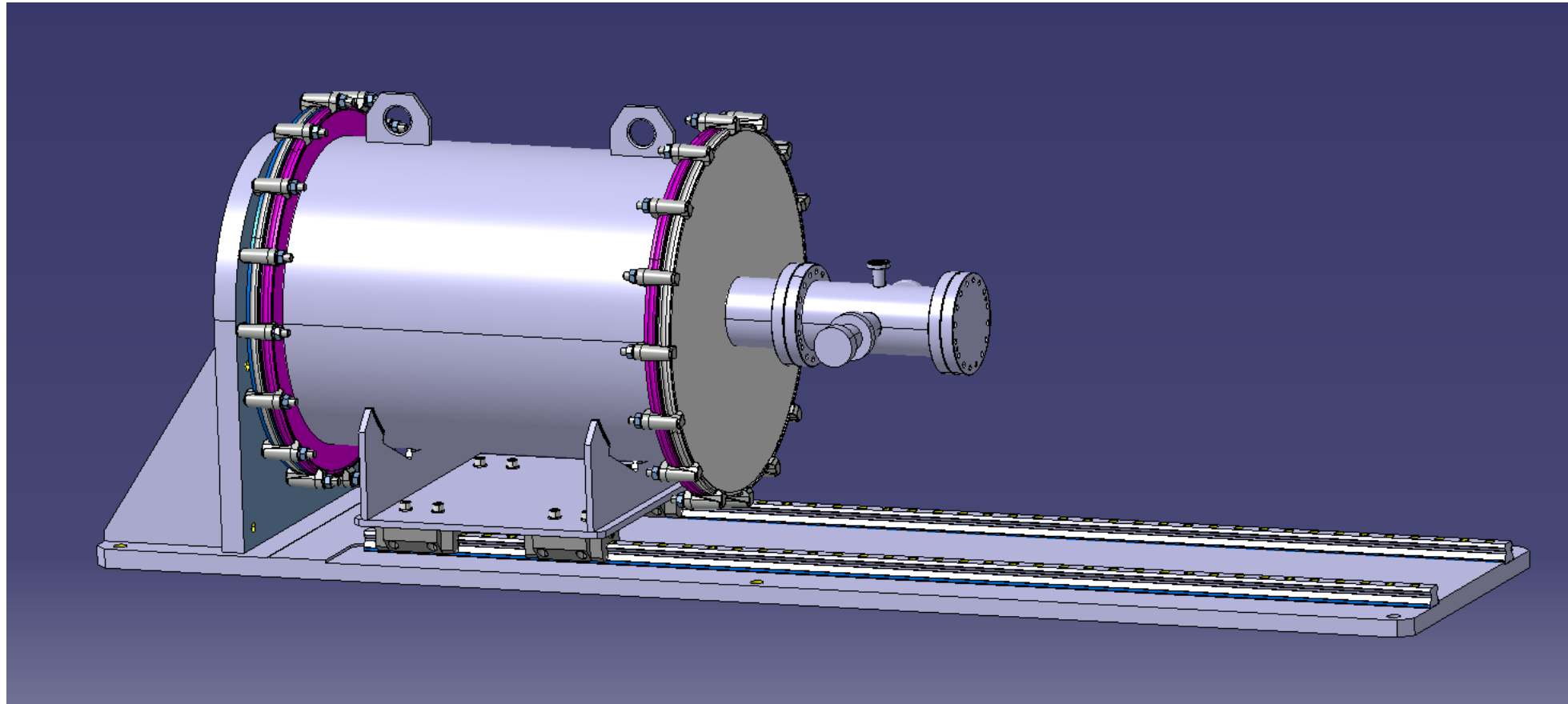


HL-LHC BPM Pressure and Leak test tool

LHCBPMQGTC0001 and ST1773142_02

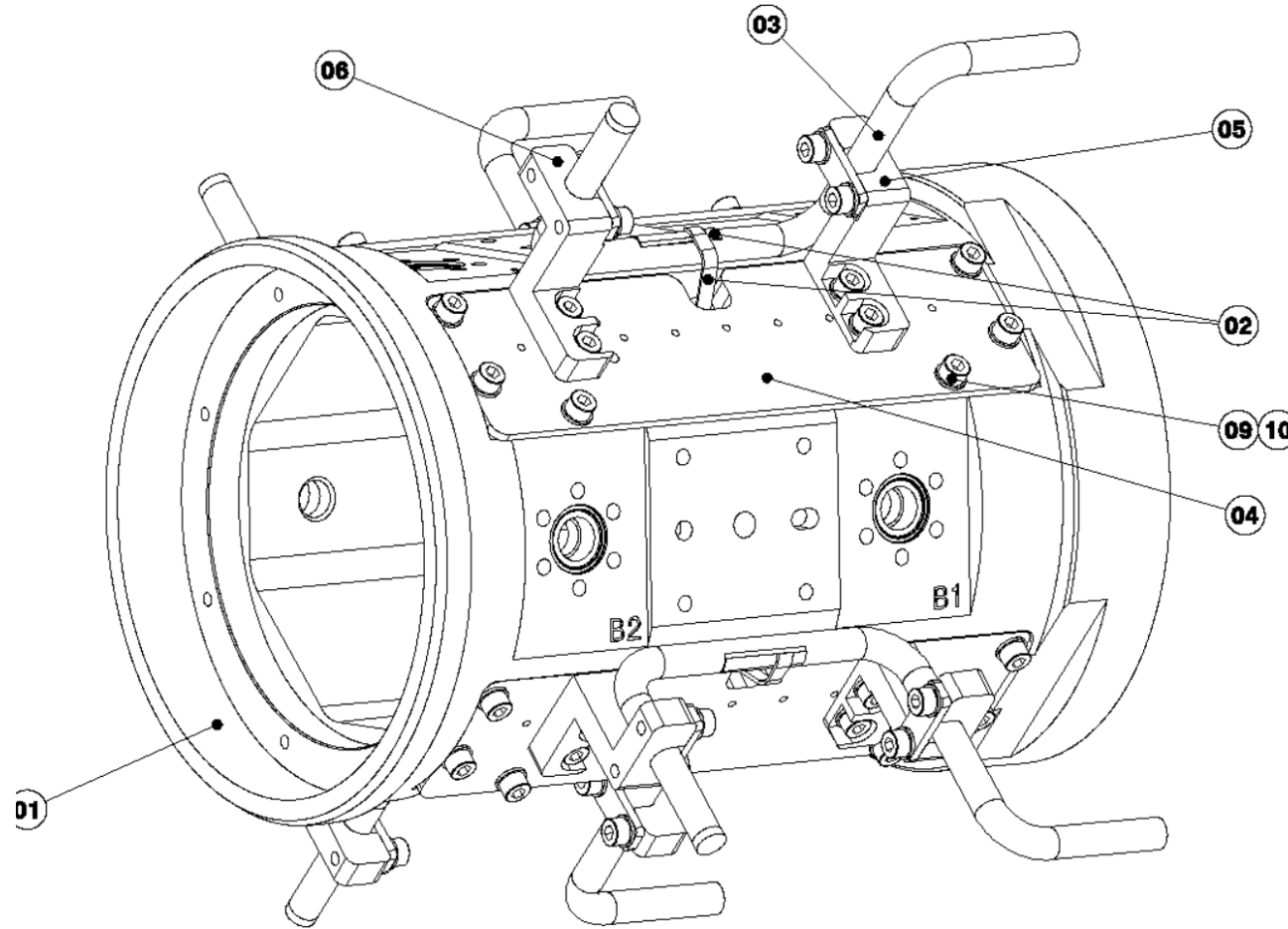


Objective of the meeting:

- Advance on up-date of EDMS 2105453
 - Agreement WP12/13 welds
- Assure all welds can be made technically – Weld heads o.k.?
- Assure that the cuts can be made.
- Agree on deliveries and responsibilities.
- Develop on Type A welding connections (and existing Type B)

Type B Made as per AP delivery

LHCBPMQST_B0033



Procedure welding process:
 - First weld pos.03 onto pos.01
 - Then pos.02 onto pos.01

UPPER ASSEMBLY : LHCBPMQST_B0002

BILL OF MATERIALS					
POS	QTY	DESCRIPTION	REFERENCE	MATERIAL	REV
01	1	OCTAGONAL MAIN BODY - COATING	LHCBPMQST_B0032 ST1855314	EN 1.4429 (N. Std. 918)	
02	4	ABSORBER WITH THERMAL BRIDGE ASSEMBLY	LHCBPMQST_B0025 ST1922461		
03	4	Cooling Tube with Plug	LHCBPMQST0006 ST1821479		
04	4	ABSORBER COVER	LHCBPMQST_B0030 ST1373363	EN 1.4404 (N. Std. 918)	
05	4	COOLING TUBE RETAINMENT BRACKET ASS	LHCBPMQST0006 ST1787911		
06	4	COOLING TUBE BRACKET ASSEMBLY (B)	LHCBPMQST0007 ST1802220		
07	8	ELECTRICAL CONTACT	FEUERHERDT : 9722 / 6K22 ST1981642	Du 90	
08	4	FLAT BAR FOR CONTACT STRIP	LHCBPMQST_B0081 ST1982129	EN 1.4404 (N. Std. 918)	
09	40	VENTED WASHER M6	ST1408992	EN 1.4404 (N. Std. 918)	
10	40	Degreasing CNC screw M5x10	ST1408991	EN 1.4404 (N. Std. 918)	
11	88	Slotted brass HD screw M5x5	ST1408989	EN 1.4404 (N. Std. 918)	
WGT 16.6 kg		MATERIAL Multiple		Liquor checked on 2024-06-20 14:17:11	
DESCRIPTION BPM BODY WITH COOLING PIPES AND ABSORBERS			DESIGNED CHECKED RELEASED APPROVED	LAUNCHED IN THE MARKET	POWER AD
REFERENCES Doc No: ST1822161_02 LHCBPMQST_B0033			AA	DESIGNED 2024-06-20	SCALE 1:1
NET VALUE FOR EXECUTION			-	1/1	

Type B connection - Baseline

EDMS no. 2105453 v.2.0

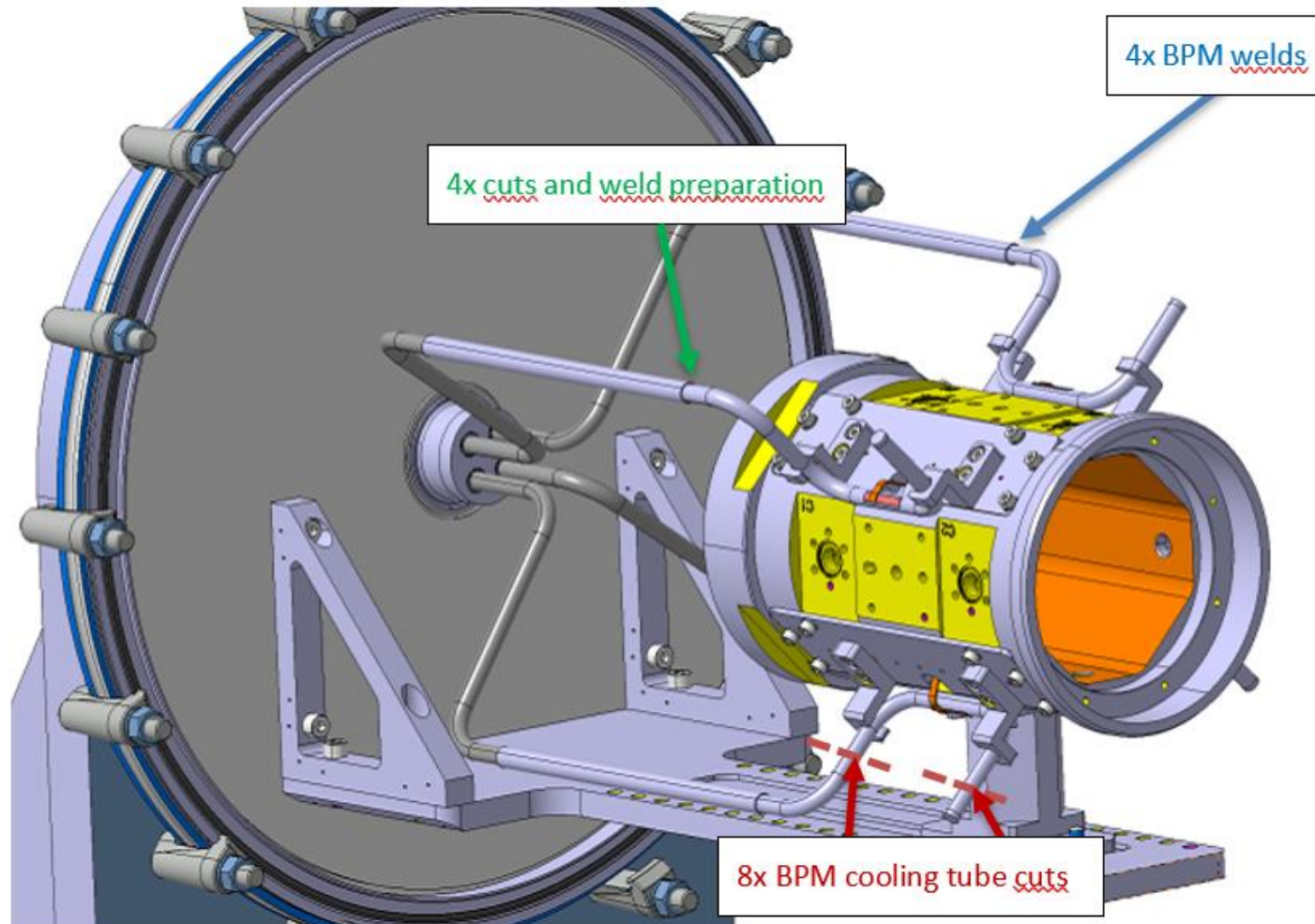
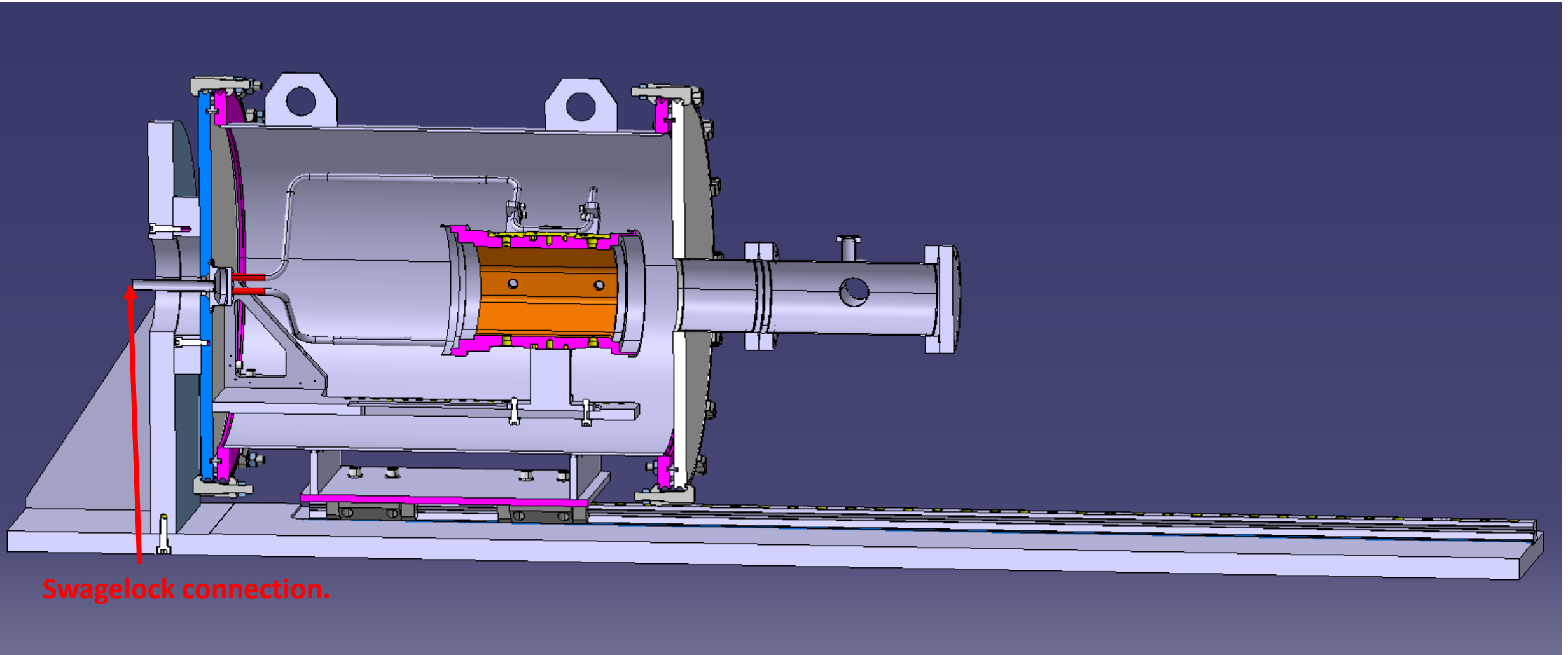


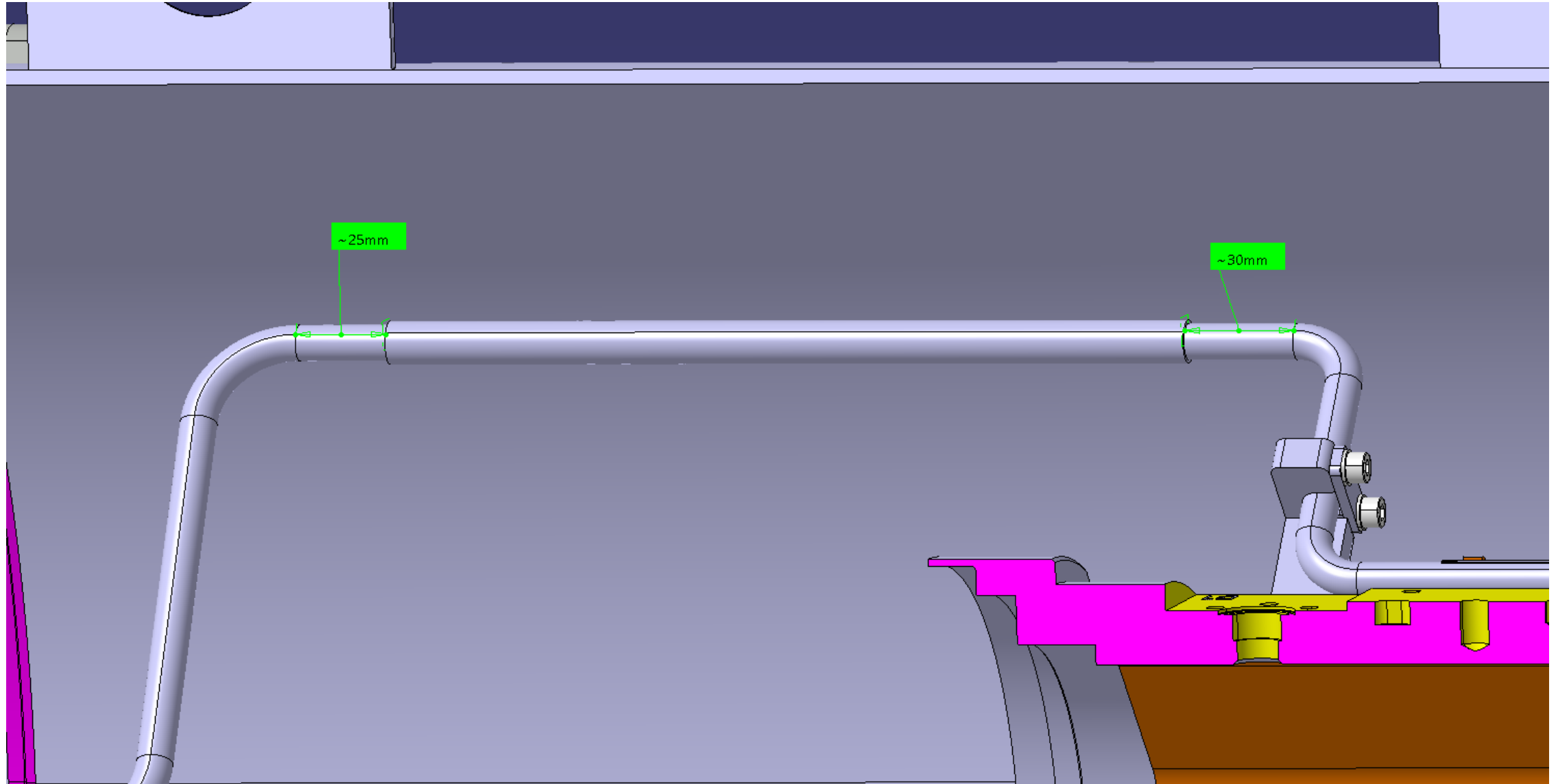
Figure 3: BPM cooling tube and connection cuts and welds to be made

Baseline

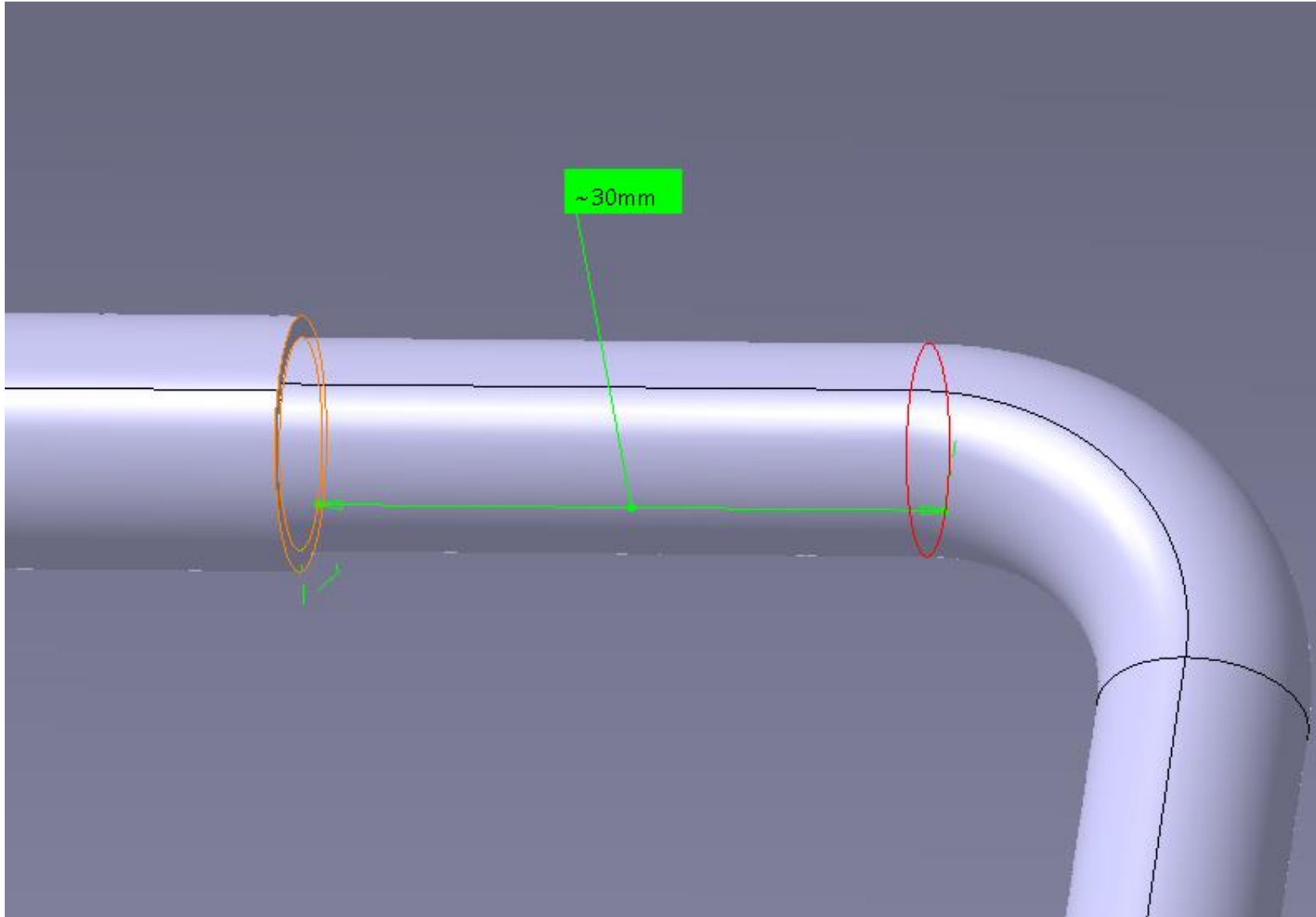
See LHC BPMQGTC0001 and ST1773142_02



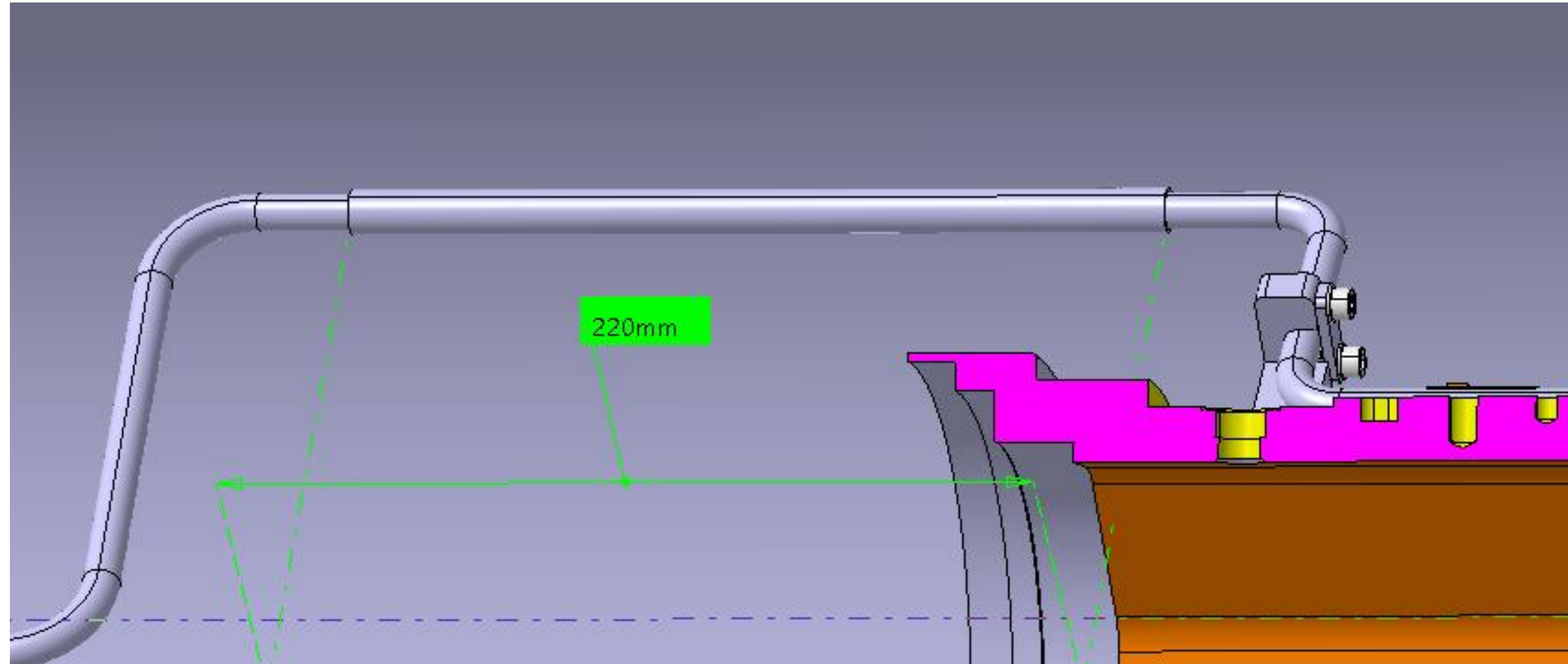
Type B connection - Baseline



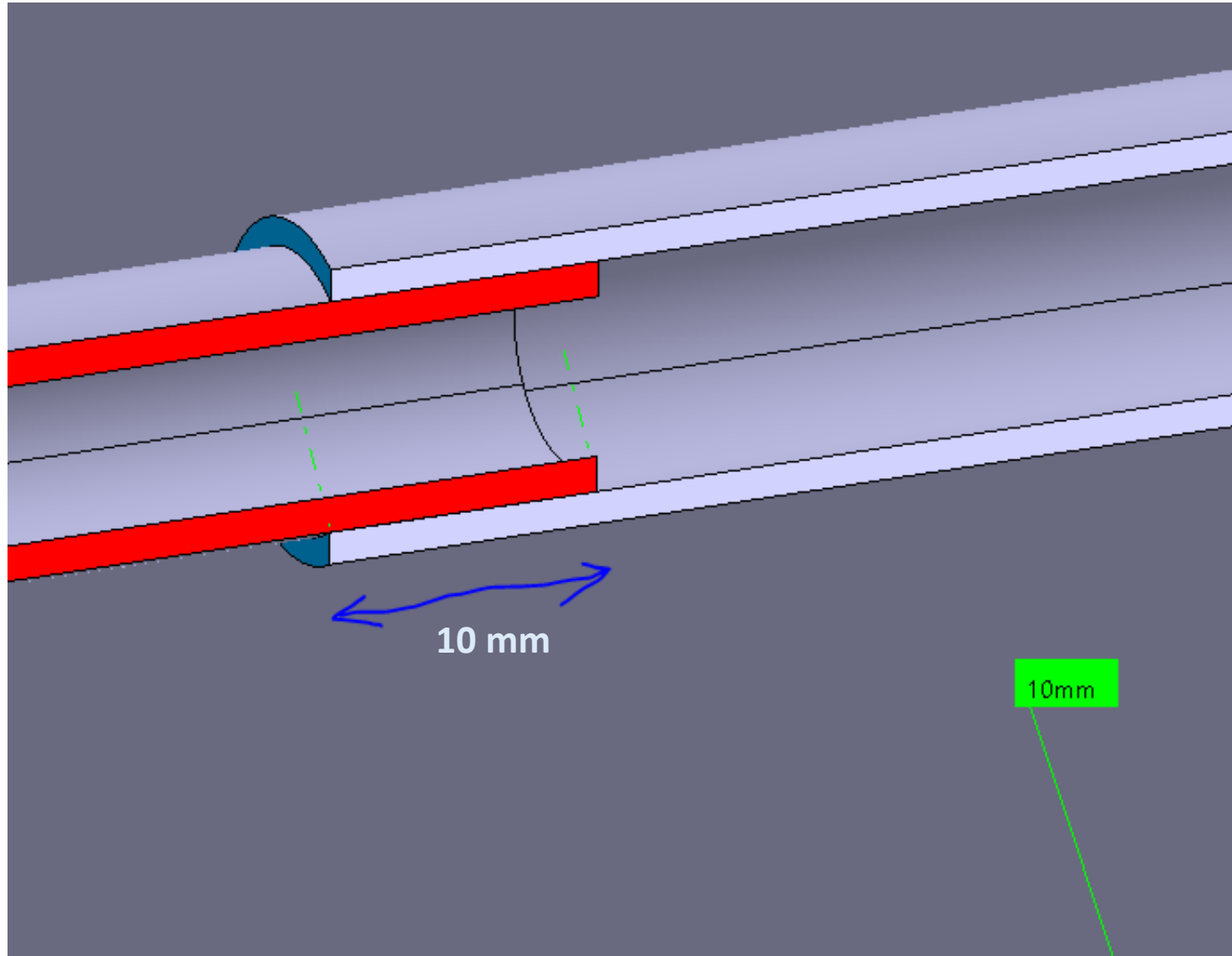
Type B connection - Baseline



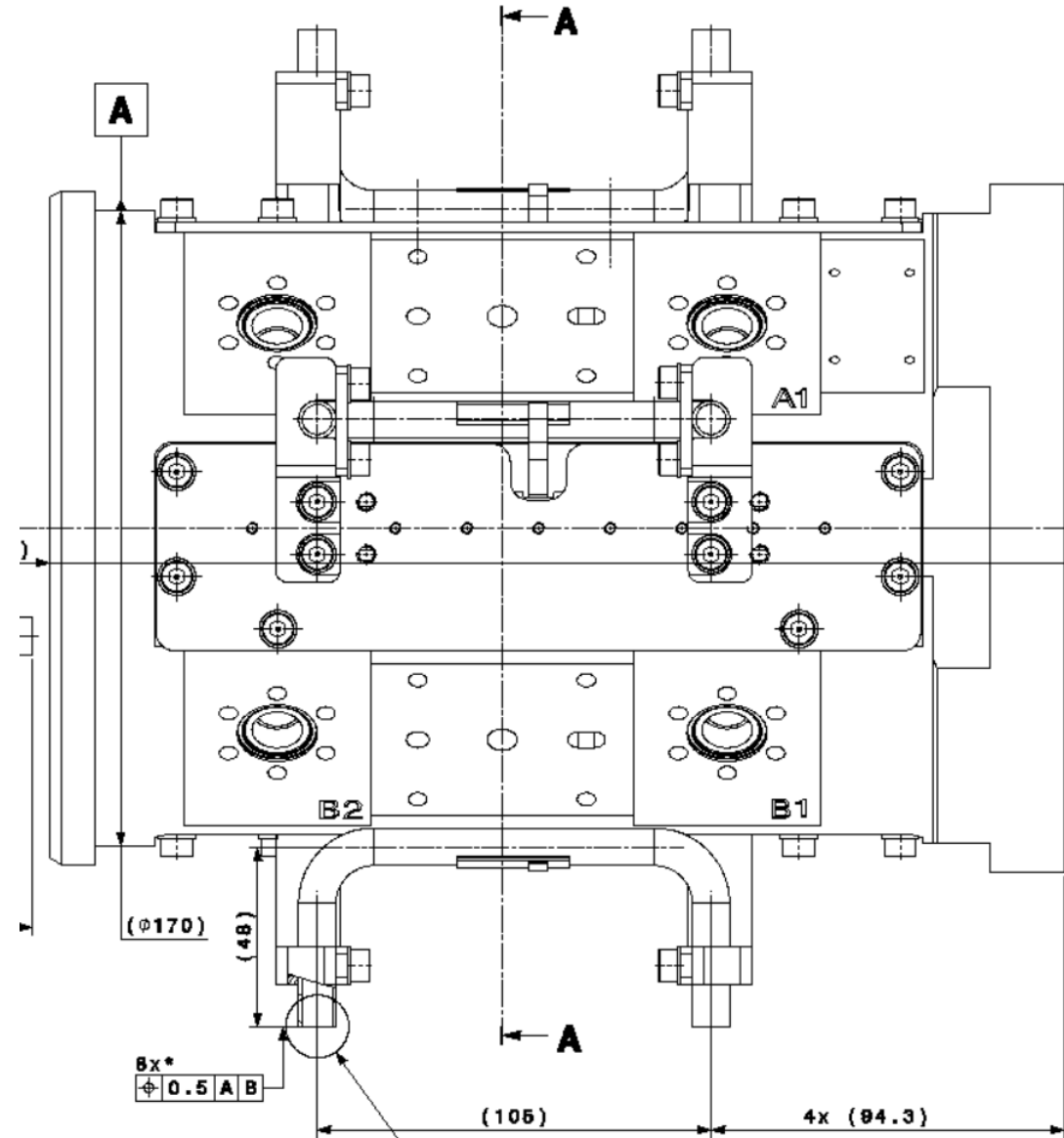
Type B connection - Baseline



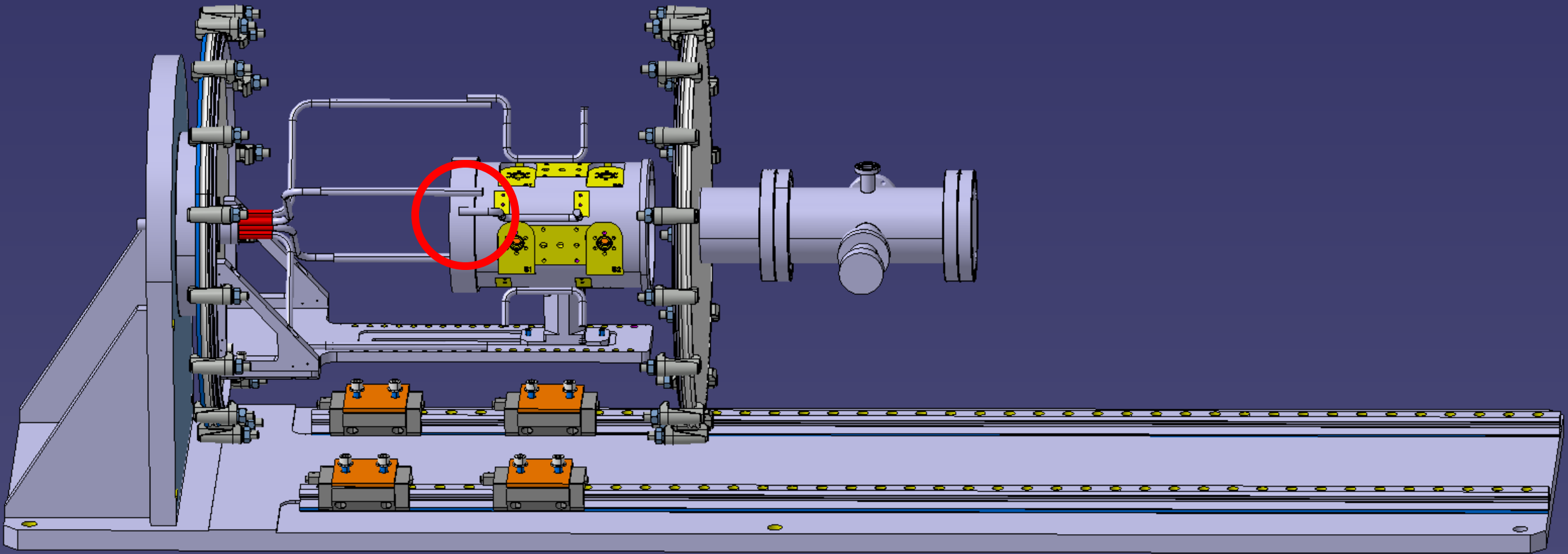
Type B connection - Baseline



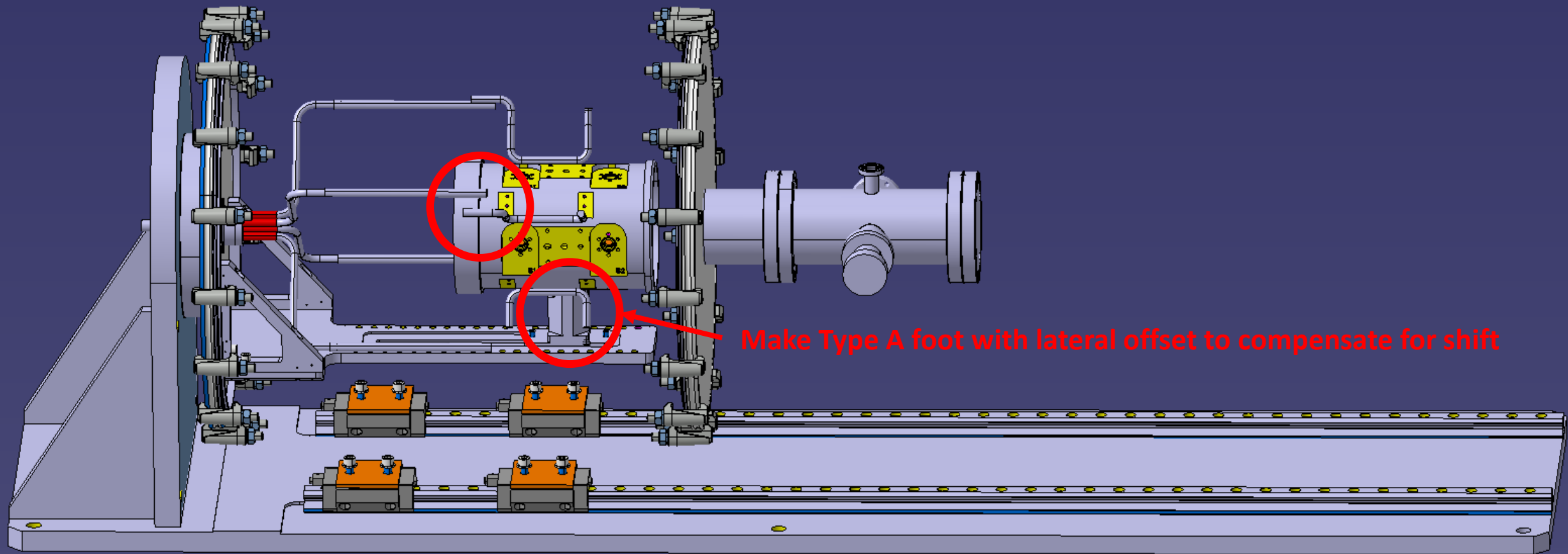
Result as per LHCBPMQST_B0002



Type A connection - Issue

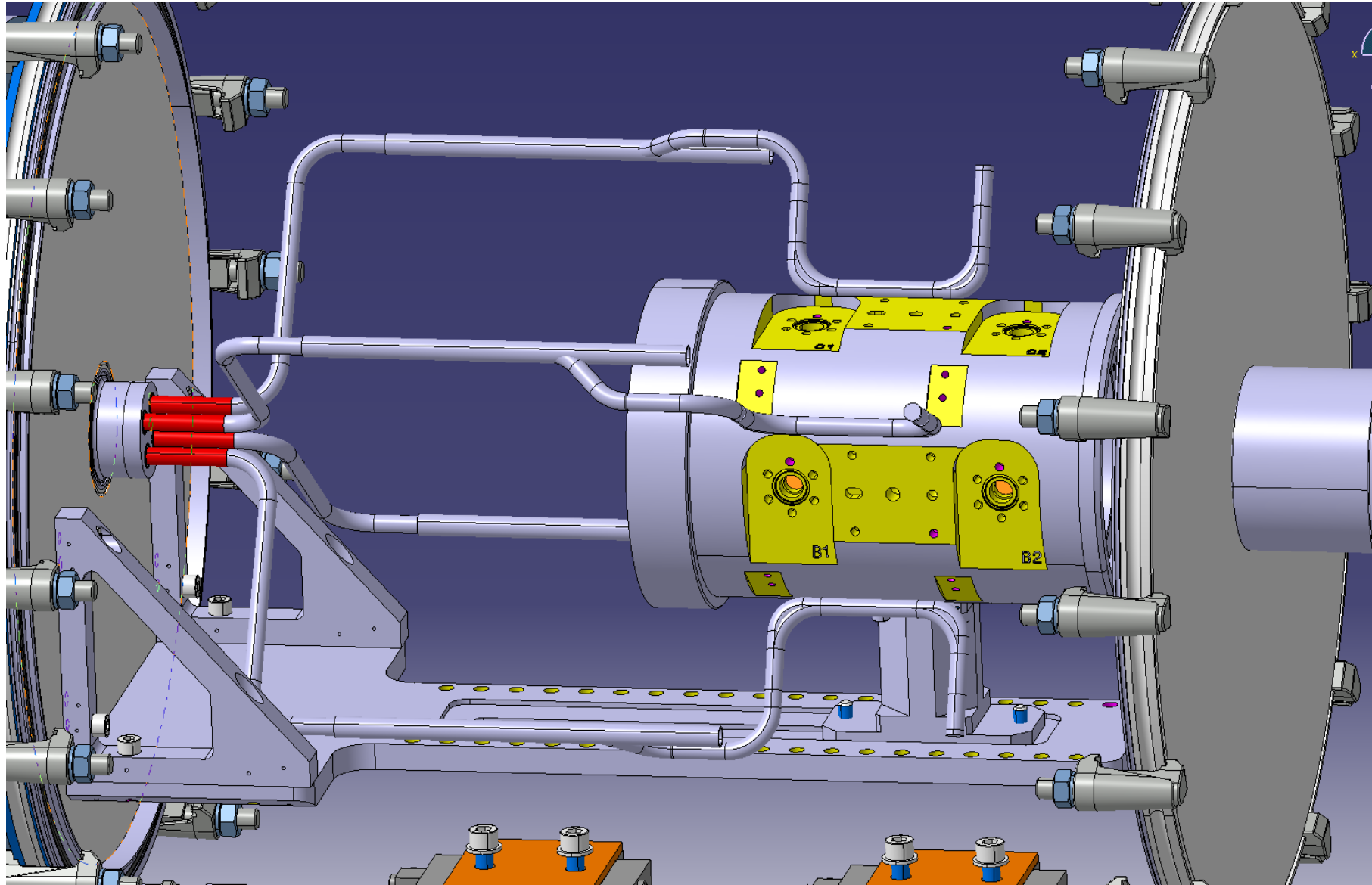


Type A Connection Option Foot



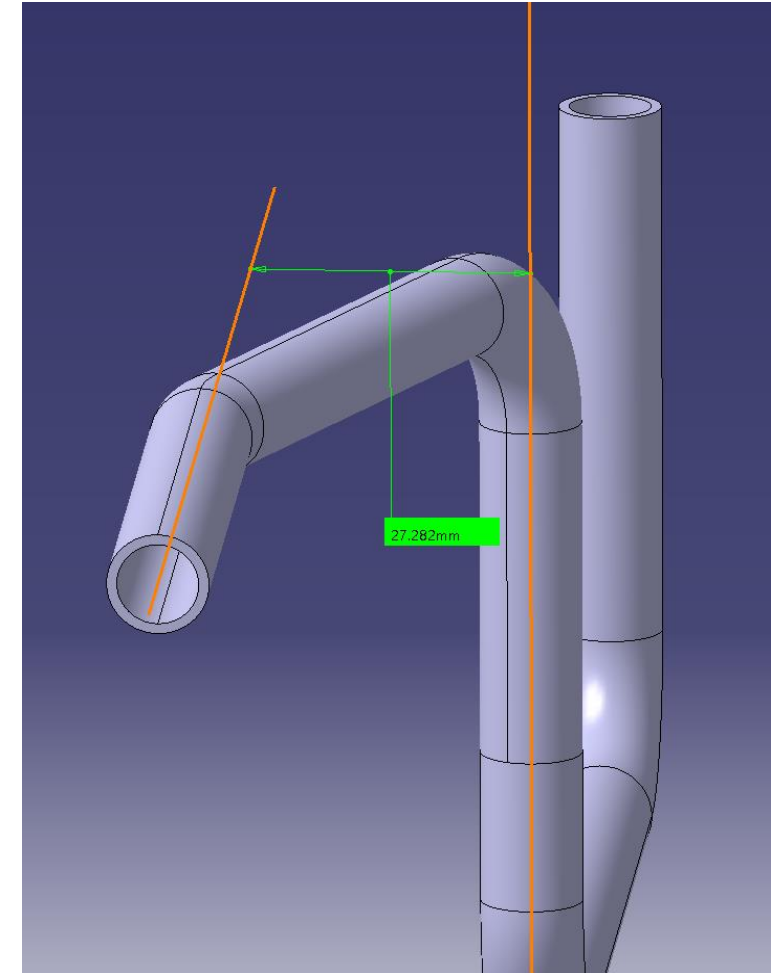
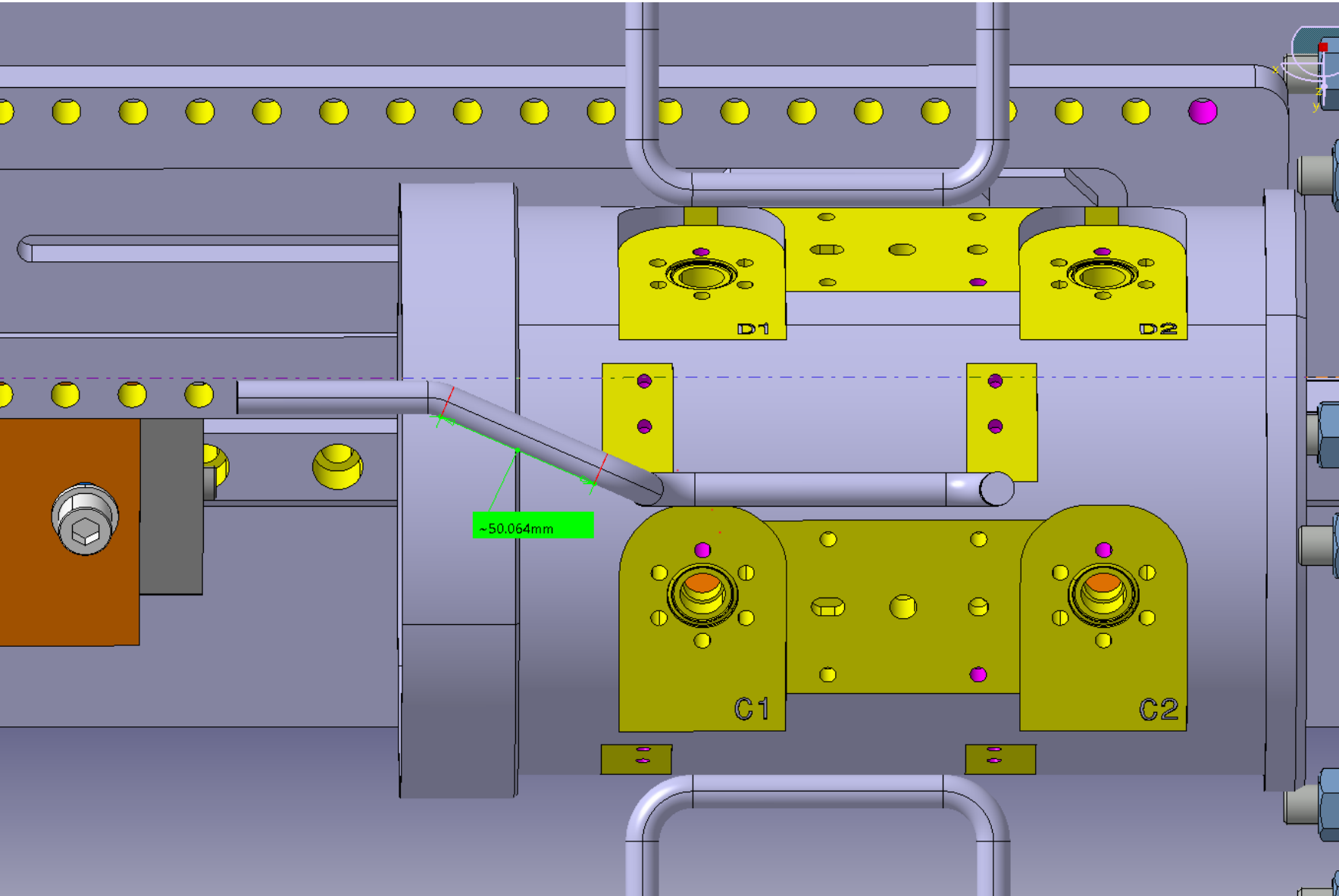
Type A connection – Option 1.1

Bend 8/10 tube – special for 6x4 Type A tubes



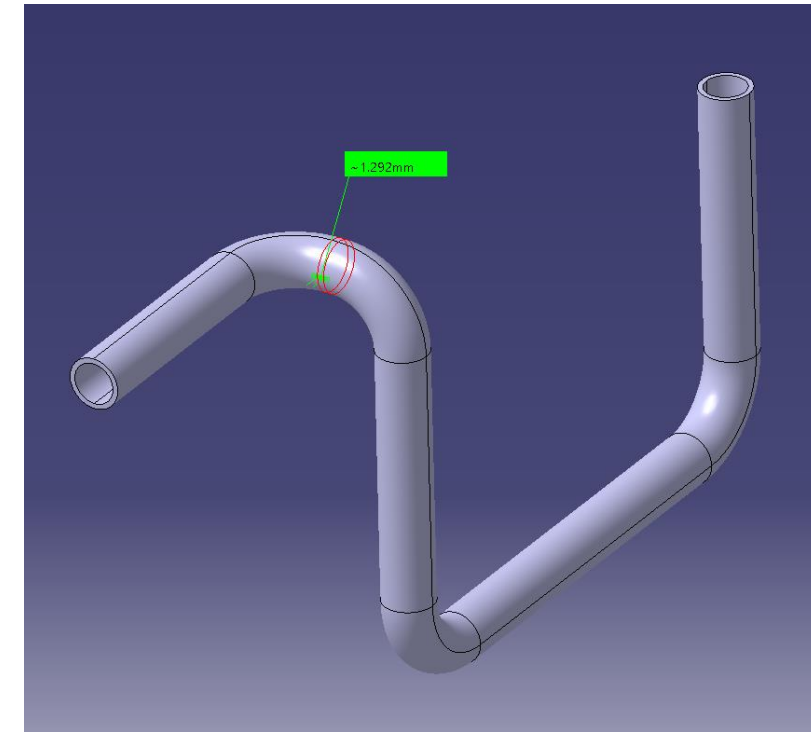
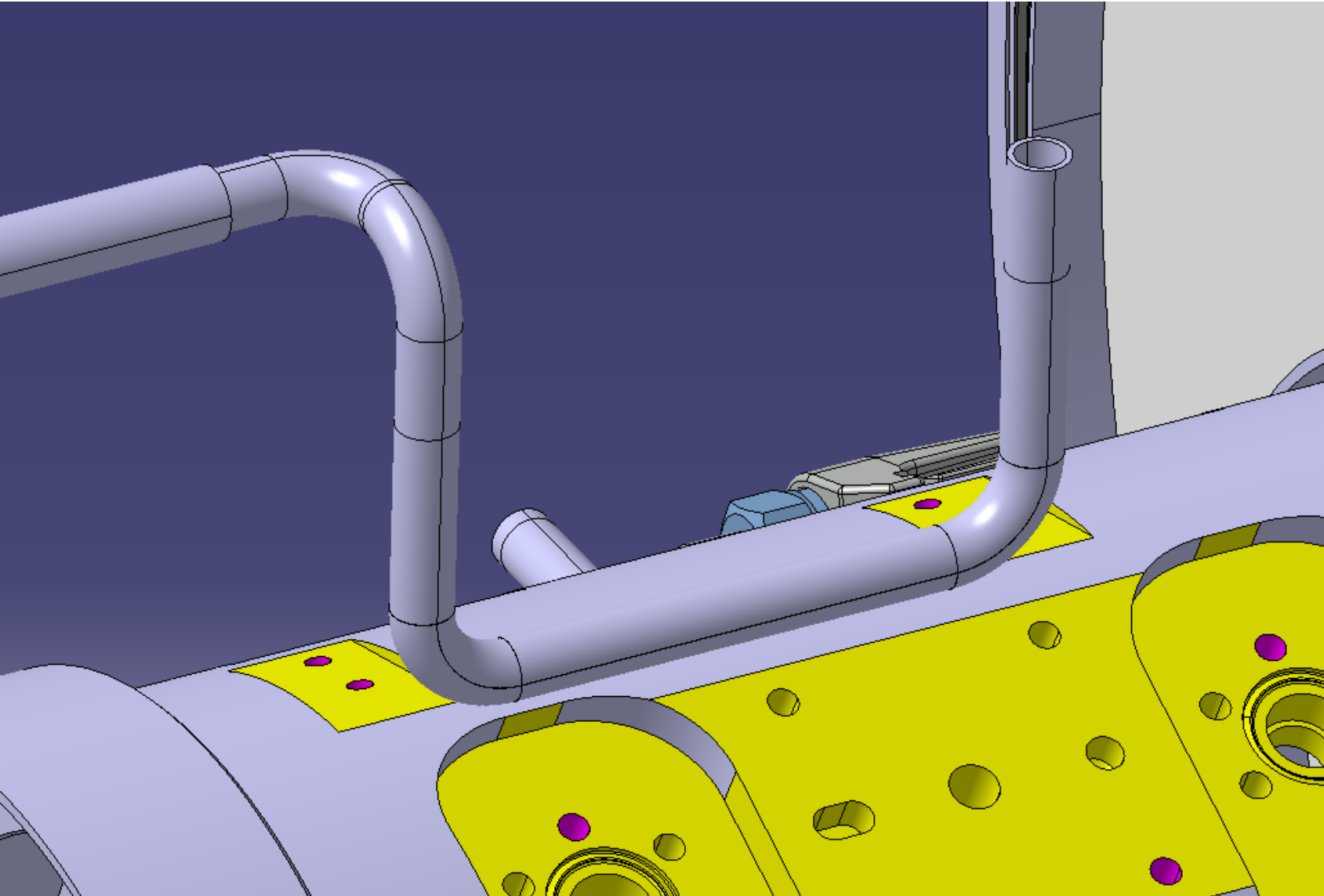
Type A connection – Option 1.2

Bend 8/10 tube – special for 6x4 Type A tubes



Type A connection – Option 1.3

Bend 8/10 tube – special for 6x4 Type A tubes

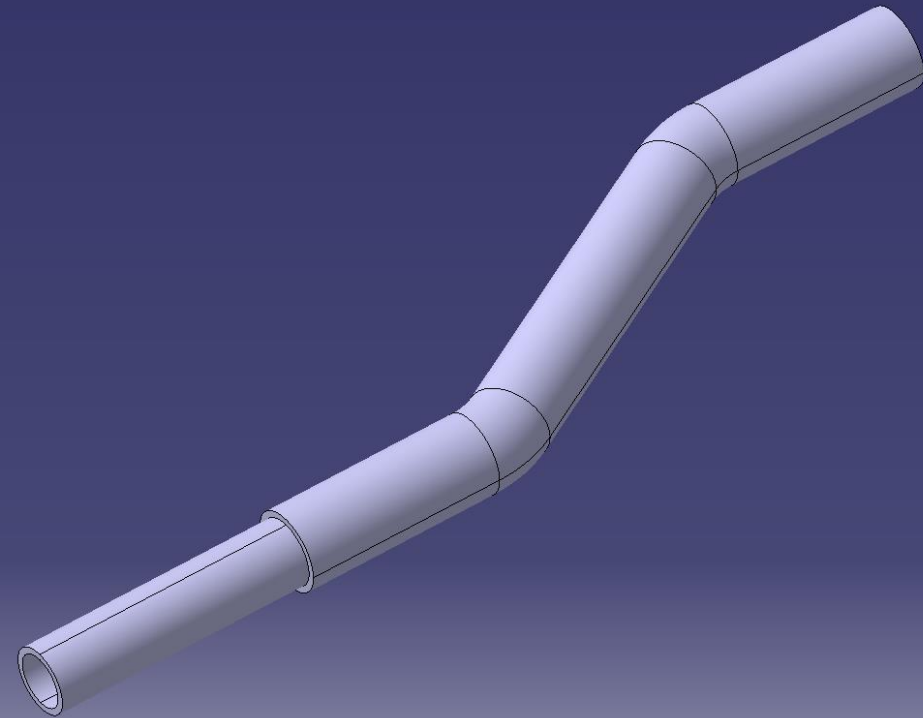
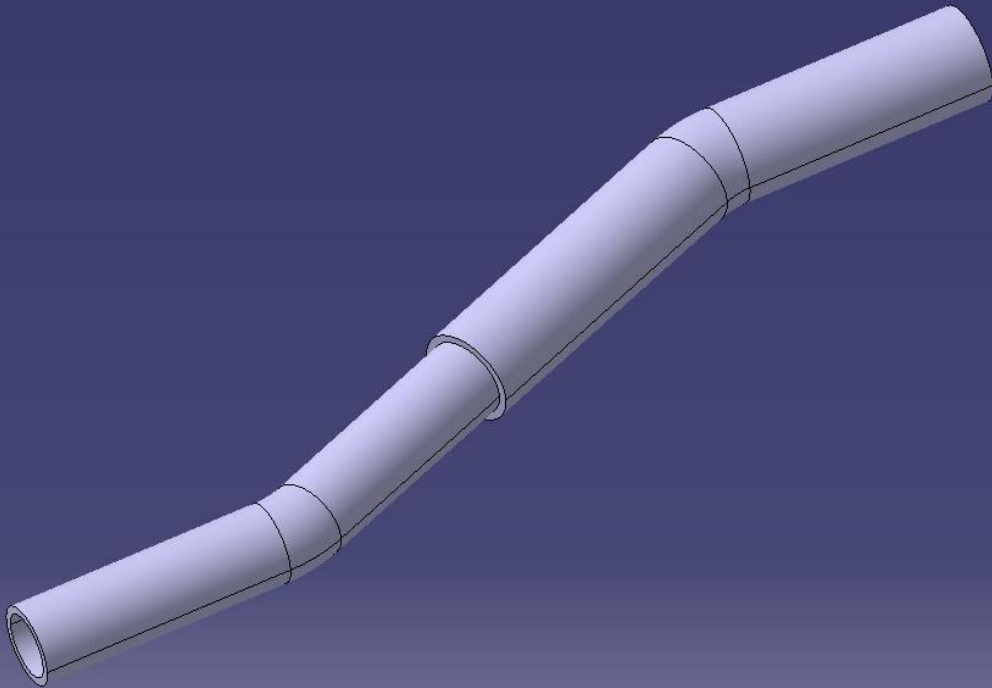


Type A connection – Option 2.1

Bend 8/10 tube as Type B – Use adapter to connect to spider

Option 2.1 a

Option 2.1 b



Certainly more options possible to minimise the length

Type B connection – Existing BPM

BPM Type B already welded with straight tubes in the workshop, now to connect?

Picture missing