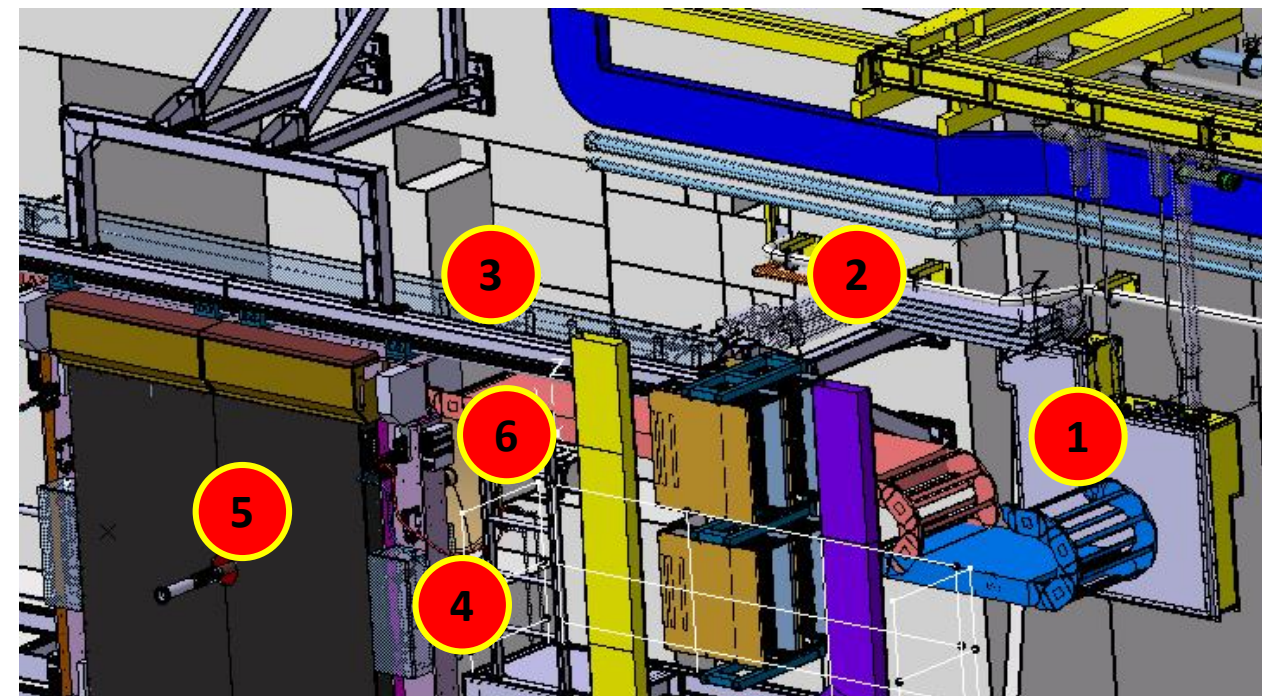


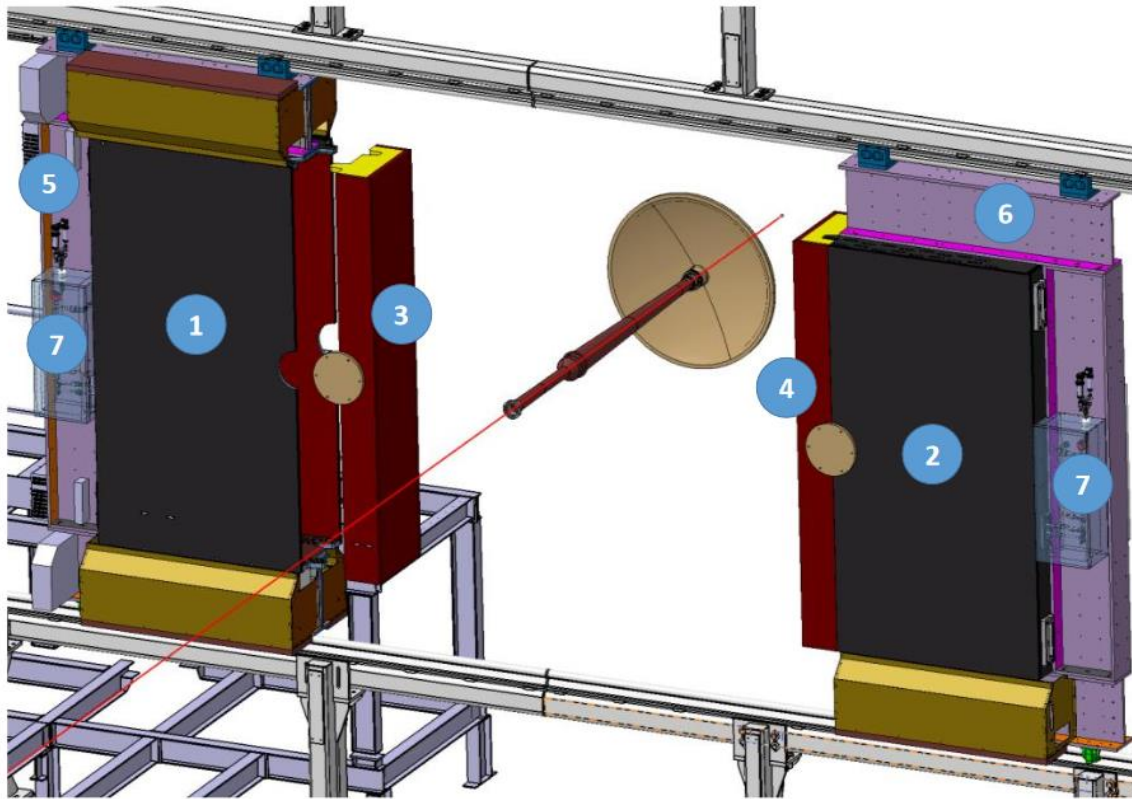
# UT CO2 schedule LHCb CO2 cooling meeting

<https://indico.cern.ch/event/848625/>



Part	Design	Procurement	Manufacturing	installation
1 - JB	done	done	done	done
2- piping	Insulation design			
3- "vacuum" piping	done	ongoing		
4- local box	Review design PID input from DT-FS	CERN DT-FS workshop?	November 2019?	Ideally when receive box (December 2019)
5- distribution in UT box	A-side in detailed design phase	Done C-Side	<ul style="list-style-type: none"> <li>Procurring Swagelok by CERN. November delivery</li> <li>Capillary pipes ongoing</li> </ul>	December when we receive UT box)
6 – piping 3 to 4	Flexible? Rigid?			

# Procurement – UT box & C-frame



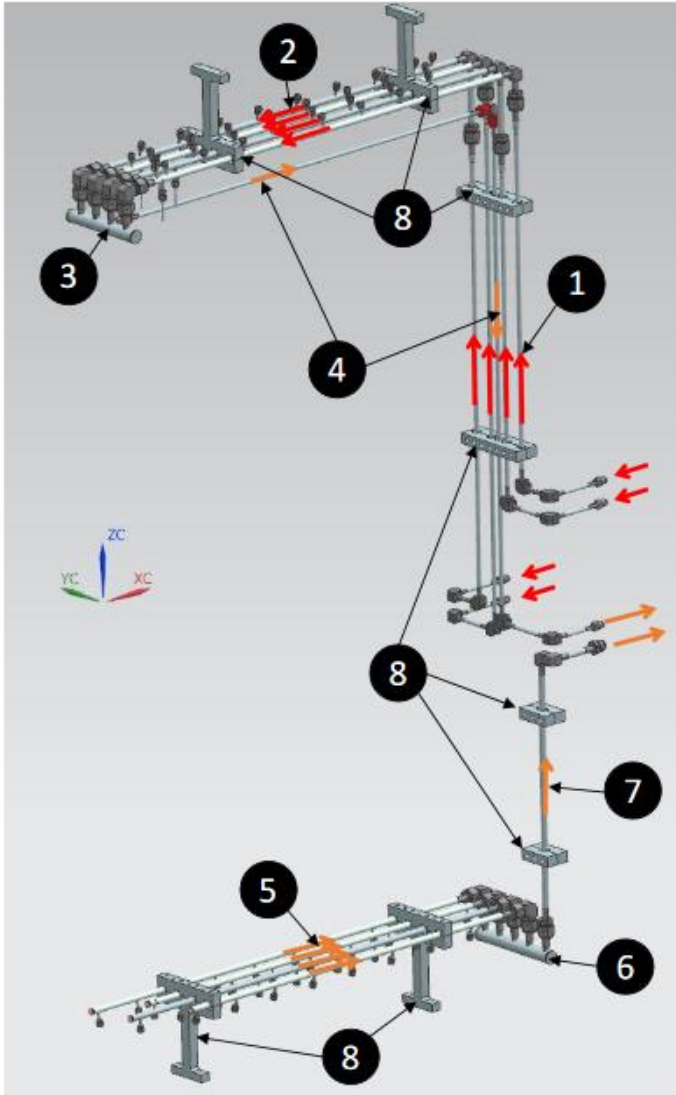
1. UT box C-side
2. UT box A-side
3. Protective cover C-side
4. Protective cover A-side
5. C-frame C-side
6. C-frame A-side
7. CO2 local box (4 items)

	Milestones	Weeks	Indicative Date
$T_0$	<ol style="list-style-type: none"> <li>1. Notification of Contract to the Contractor;</li> <li>2. CERN provides to the supplier a new set of conceptual drawings<sup>2</sup> and 3D models detailing solutions described in 3.4.</li> </ol>		October 2019
$T_1$	<p>The contractor shall submit for CERN's approval:</p> <ol style="list-style-type: none"> <li>1. the manufacturing processes that are used for the supply components and molds/jigs;</li> <li>2. the list of materials that are used in the supply and mold/jigs production.</li> </ol>	$T_0 + 1$ week	October 2019
$T_2$	<p>The contractor shall submit for CERN's approval:</p> <ol style="list-style-type: none"> <li>1. the manufacturing drawings;</li> <li>2. the manufacturing and testing schedules. The program shall include preliminary dates for inspections and tests;</li> <li>3. all other documentation mentioned in section 4.1.</li> </ol>	$T_0 + 3$ weeks	October 2019
$T_3$	The contractor shall deliver to CERN's the Supply, molds and jigs, and the documentation mentioned in section 4.2.	$T_0 + 8$ weeks	December 2019

Spec and drawings: <https://edms.cern.ch/document/2206154>

- Supplier notified;
- Input for CO2 local boxes required to design feedthroughs

# Procurement – CO2 manifolds



1. Inlet lines (4 items)
2. C-side top manifolds (4 items)
3. C-side top collector
4. Bypass line
5. C-side bottom manifolds (4 items)
6. C-side bottom collector
7. Outlet line
8. Mechanical supports (8 items)

	Milestones	Weeks	Indicative Date
$T_0$	<ol style="list-style-type: none"><li>1. Notification of Contract to the Contractor;</li><li>2. CERN provision of final manufacturing drawings to produce the C-side CO<sub>2</sub> distribution</li></ol>		September 15 <sup>th</sup> 2019
$T_1$	<ol style="list-style-type: none"><li>1. Delivery of Documentation as described in § 4.2</li></ol>	$T_0 + 2$ weeks	September 30 <sup>th</sup> 2019
$T_2$	<ol style="list-style-type: none"><li>1. Delivery of the CO<sub>2</sub> distribution for the C-side</li></ol>	$T_1 + 4$ weeks	October 30 <sup>th</sup> 2019

- Documentation already provided to supplier;
- CERN ordered raw materials (to avoid 14 week for procurement of parts)
- Expected delivery of C-side : 2week November

# Local boxes

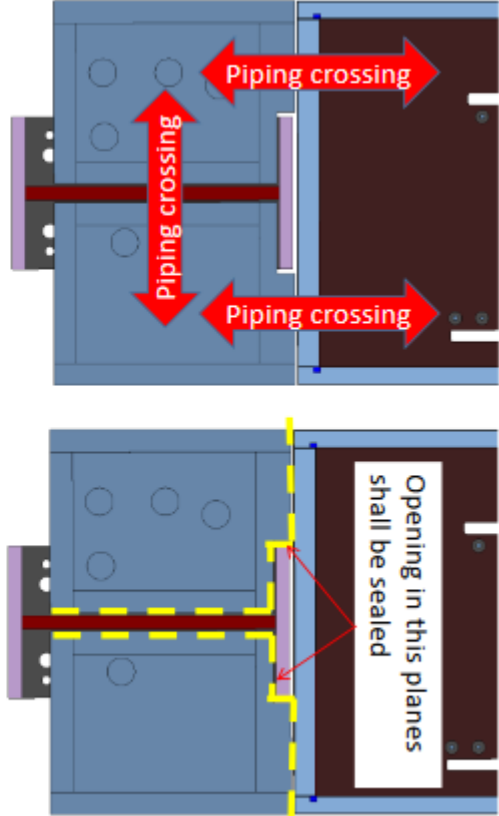
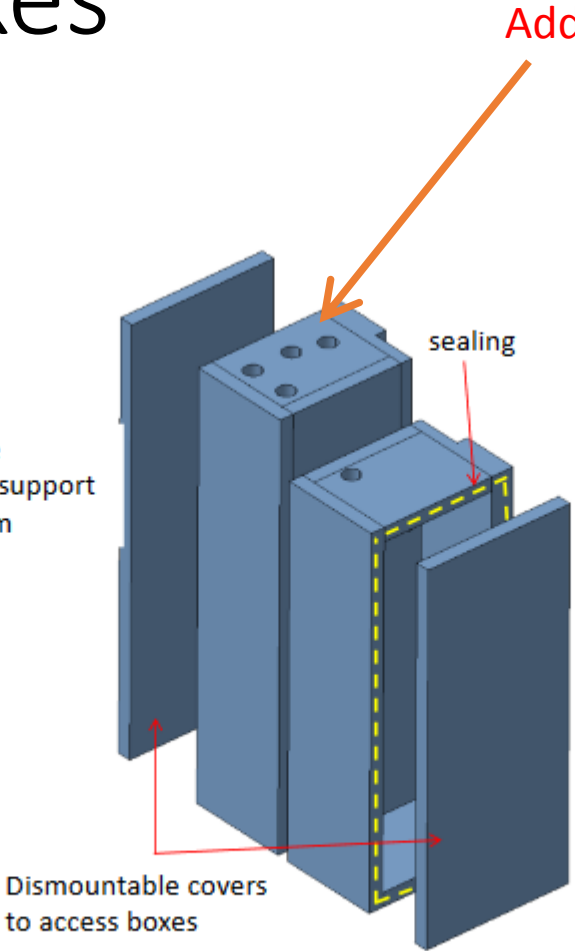
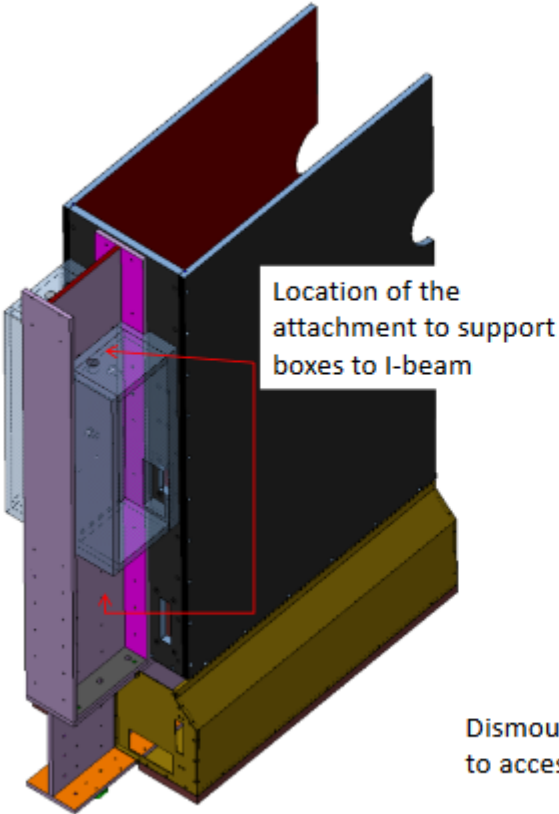


Figure 20: Local CO<sub>2</sub> boxes