

ECal Installation

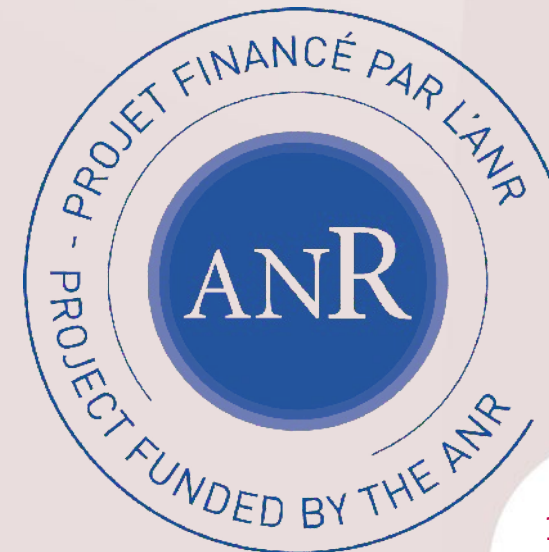
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Rail System

→ Fix rails and top frame

Check parallelism
before fixing

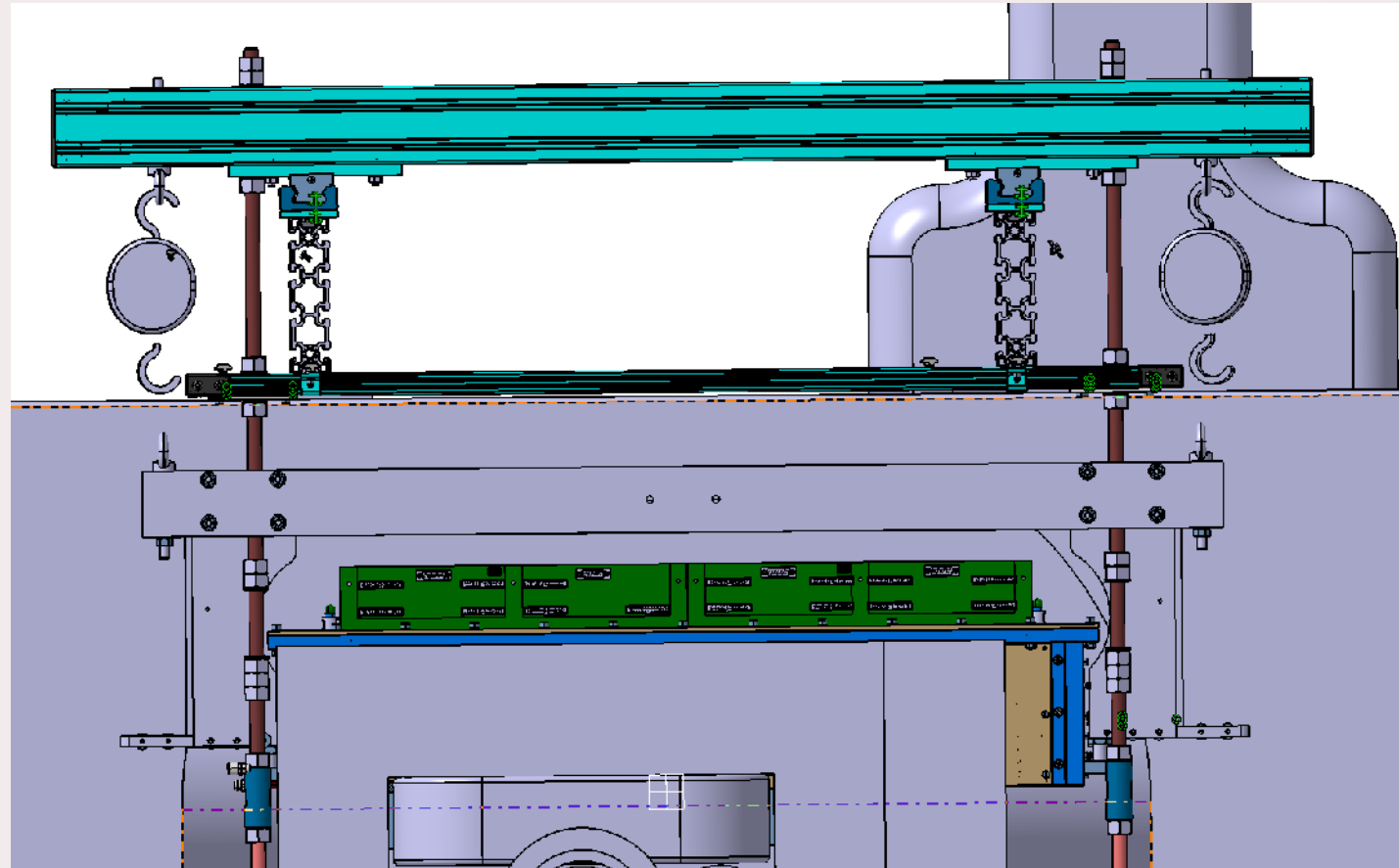
Check movement
without loading

Fix blockers at the
extremities

→ Fix frame below the rails and first threaded rods

Check the mobility of
the system along the
full length of the rails

Check that distances
for the rods match the
one on the ECal (i.e.
rods are parallel)



Install ECal

→ Install top ECal

Fix the position of the rail system

Place Ecal below the rods

Take the ECal up through the rods with side tackles

Fix the ECal in up position

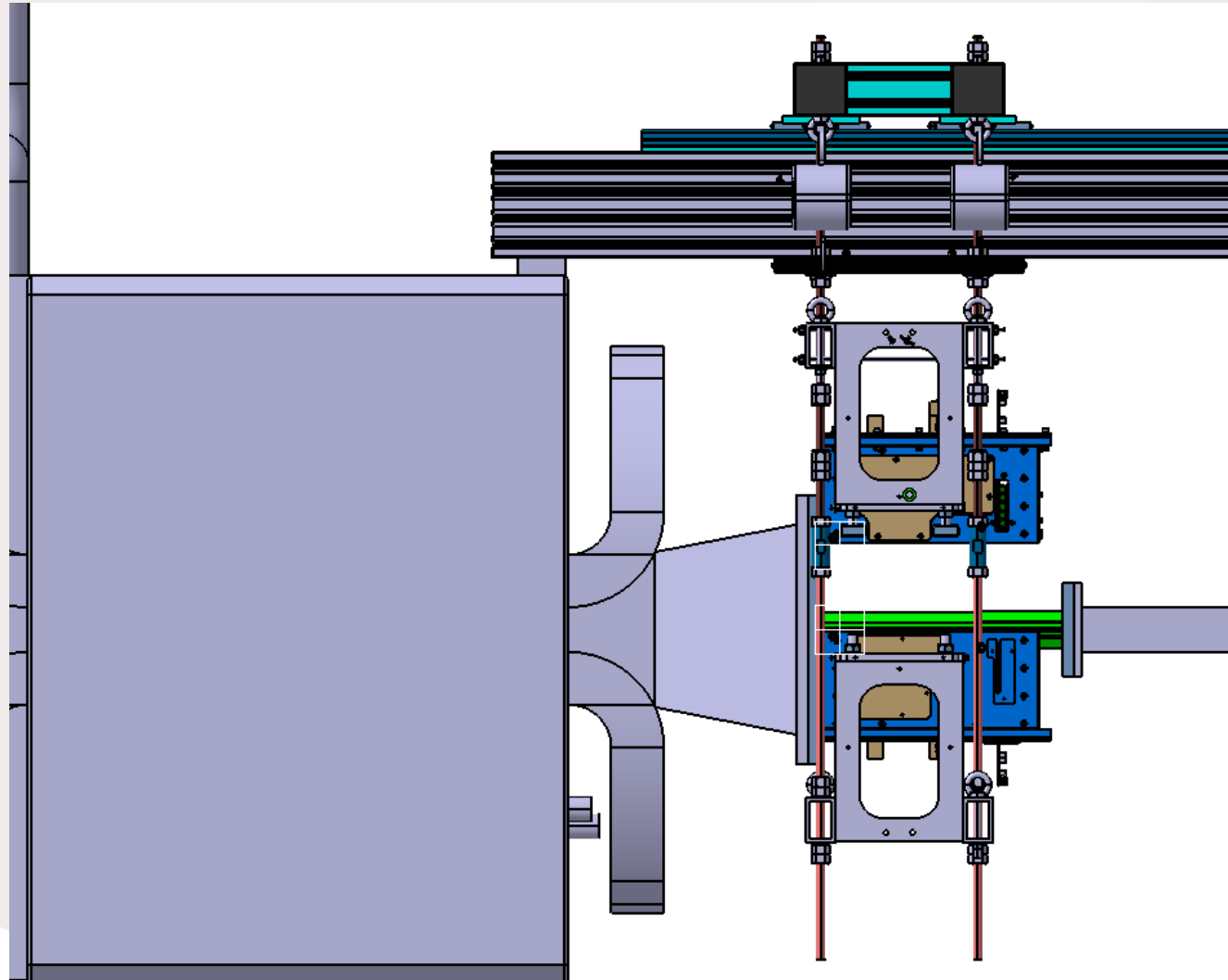
→ Attach second level of threaded rods

→ Install bottom ECal

Place the ECal below the rods

Take the Ecal up through the rods with side tackles

Fix the ECal in bottom position with two nuts per rod



Ecal Positioning

→ Precise positioning of top ECal

Release rail blocker to place the ECal close to the vacuum flange (~mm)

Lower the top ECal slowly (directly with the nuts)

Stop when reaching the marks established on the vacuum chamber

→ Precise positioning of bottom ECal

Put the bottom ECal slowly in place (directly with the nuts)

Stop when reaching the marks

→ Install all extra structure intended for rigidity of the system

→ Survey

