

Seismic platform issues

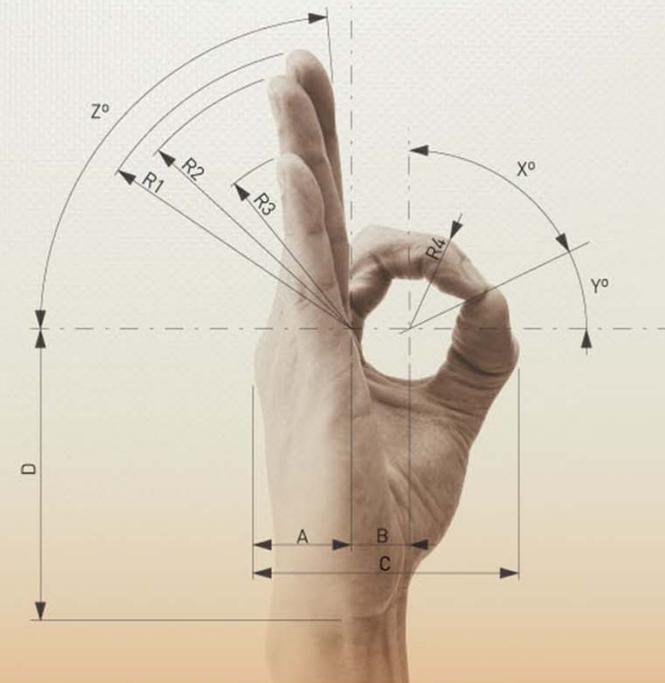
Authors:

Jordi Torrent*, Lluís Ripoll*, José L. Perez Aparicio** and Roberto Palma**

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** Polytechnic University of Valencia (Spain)

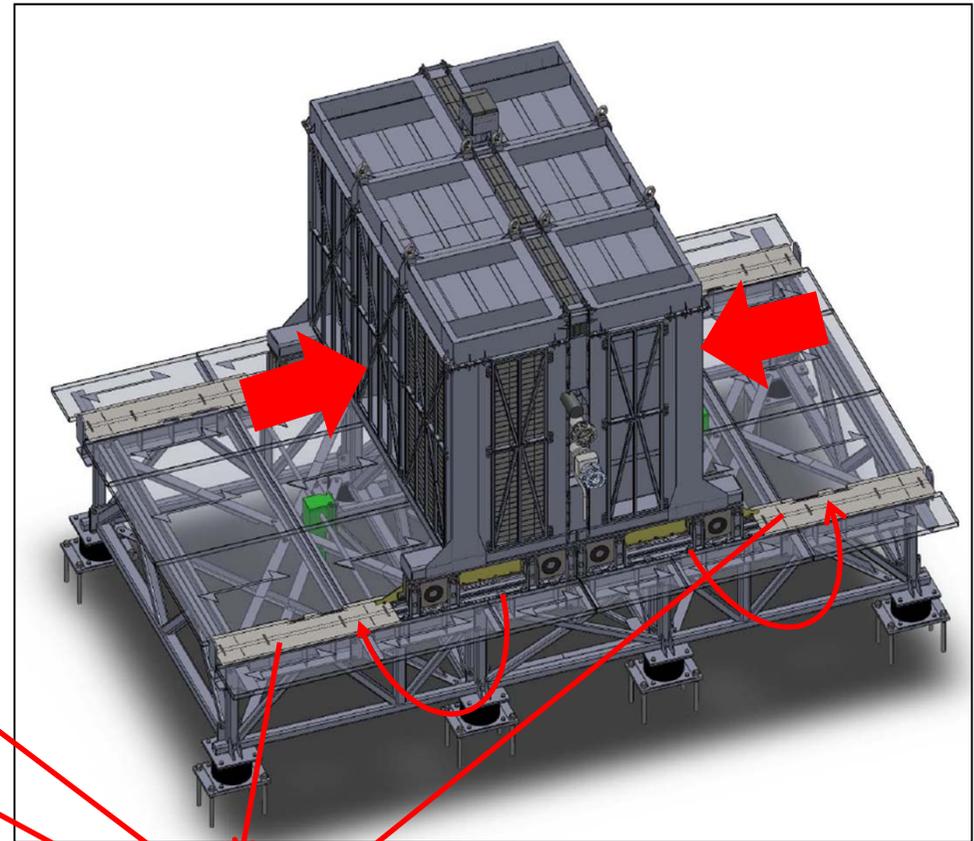
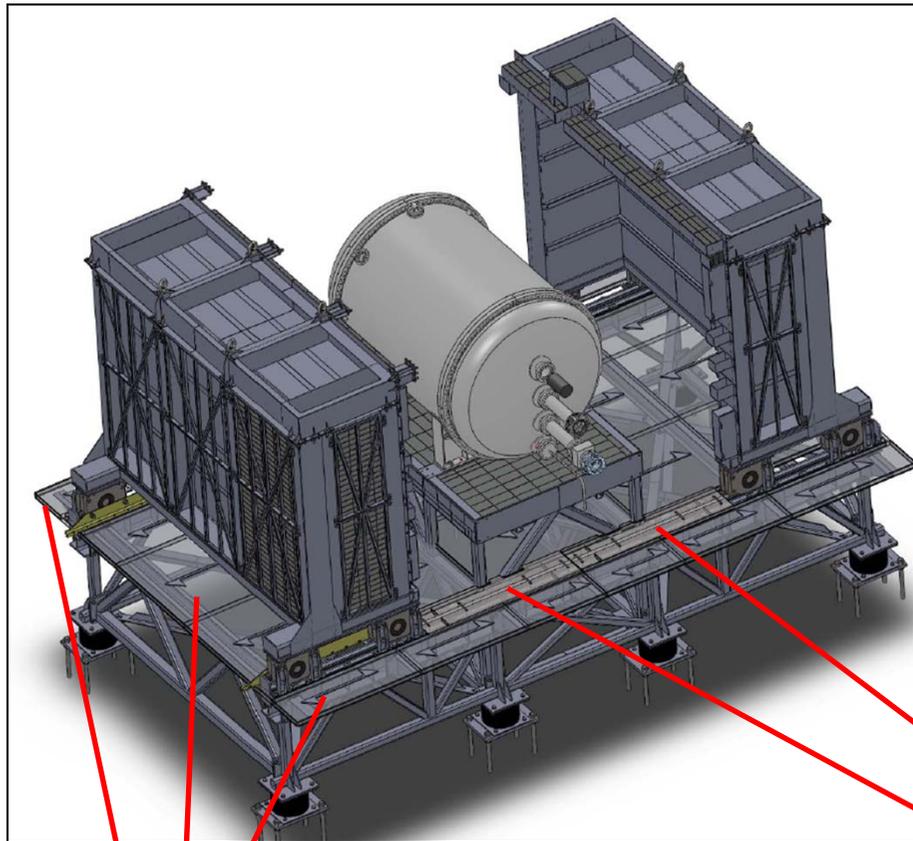
September / 18 / 2012



Platform of the seismic structure (pedestal).

View, castles are opened

View, castles are closed



Fixed platforms
TRAMEX

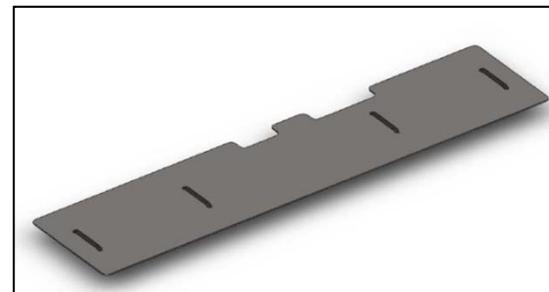


Work structure (Canfranc)

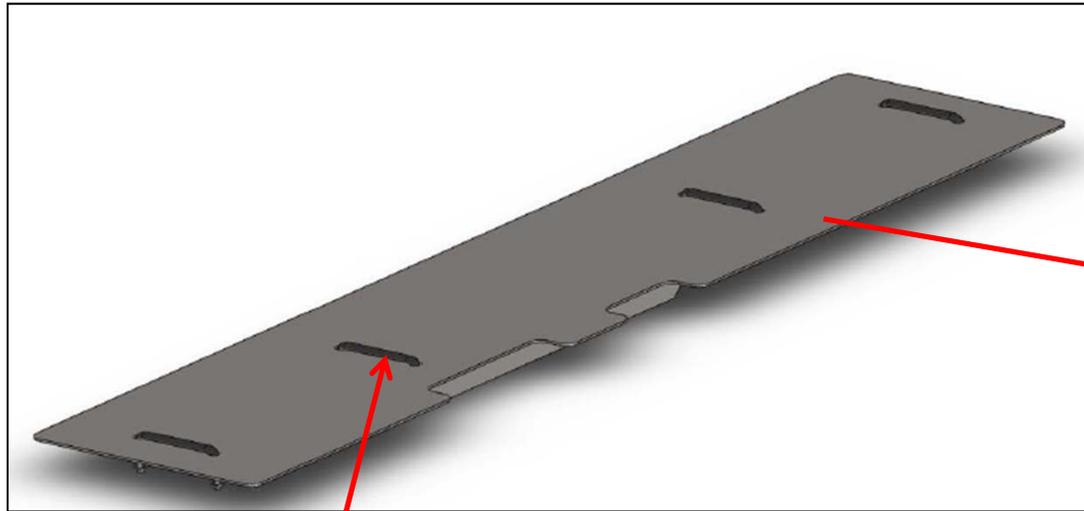


Same type

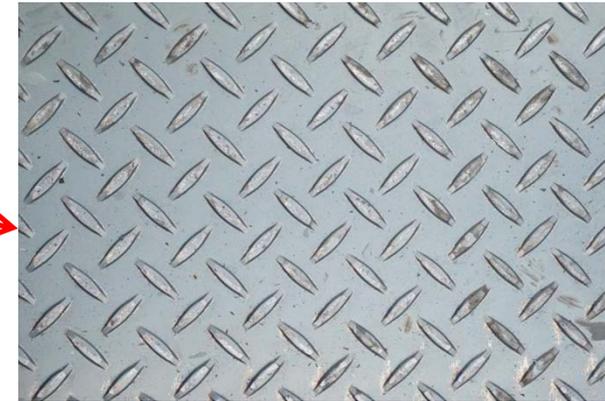
Removable covers



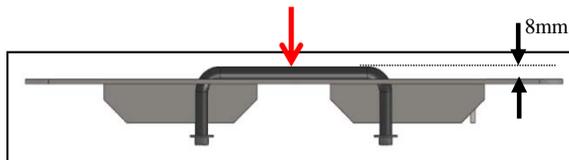
Removable covers.



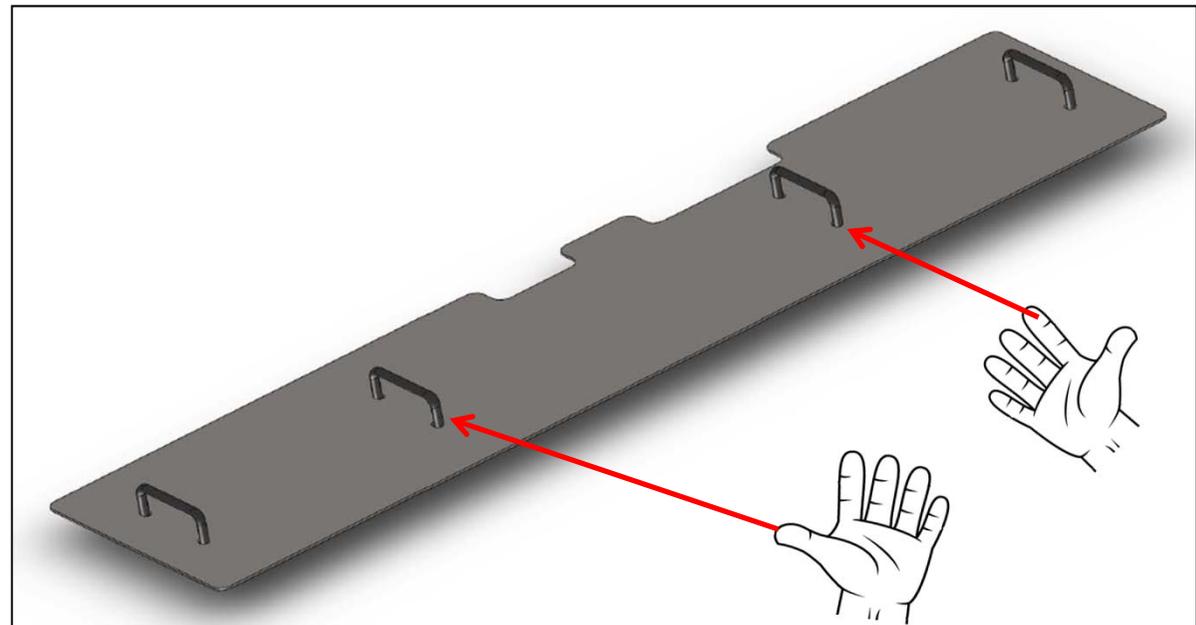
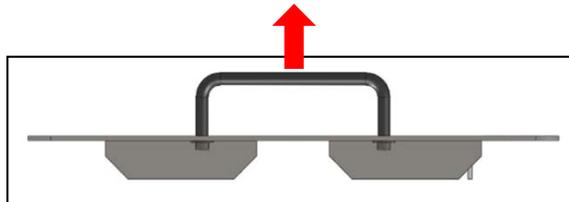
Galvanized sheet



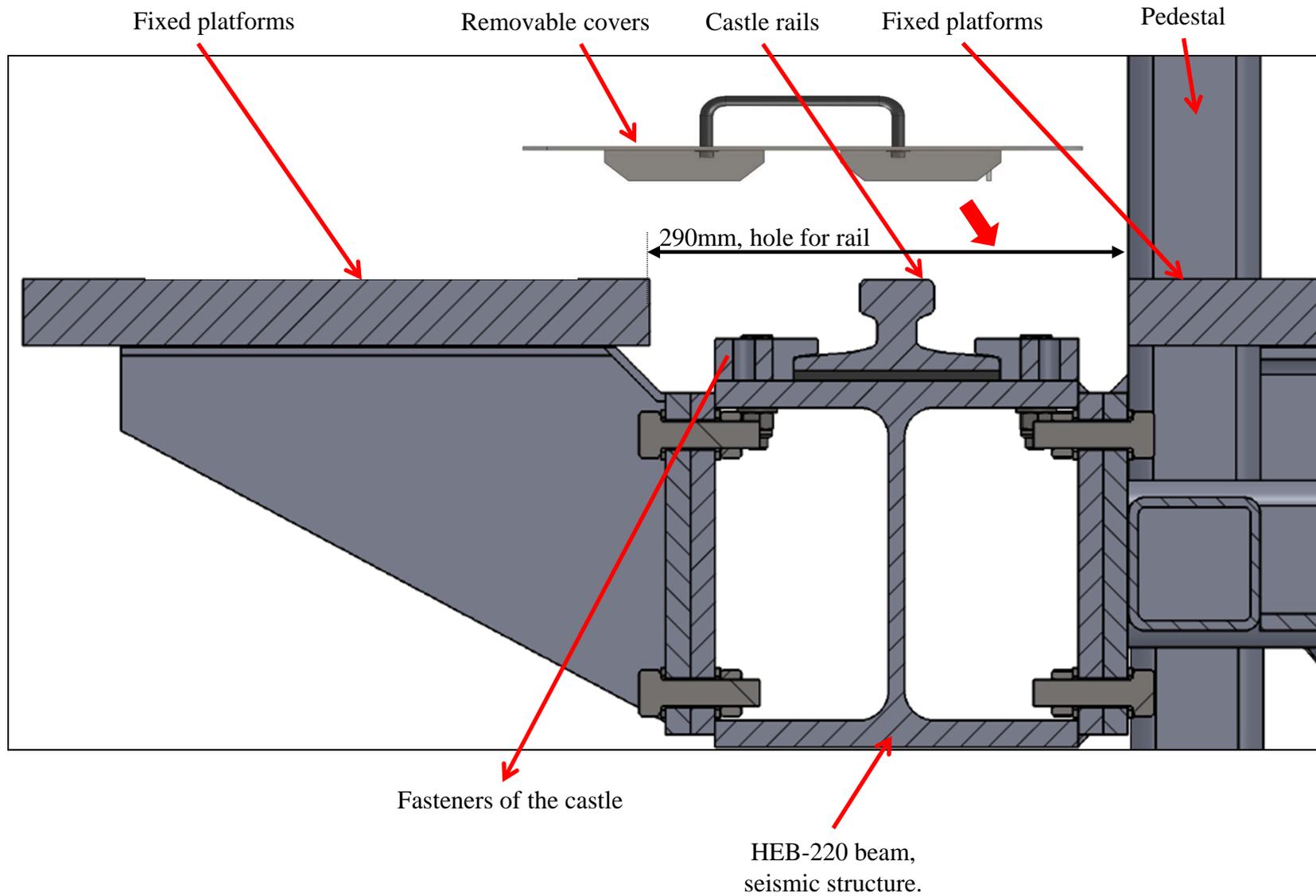
Hidden handle



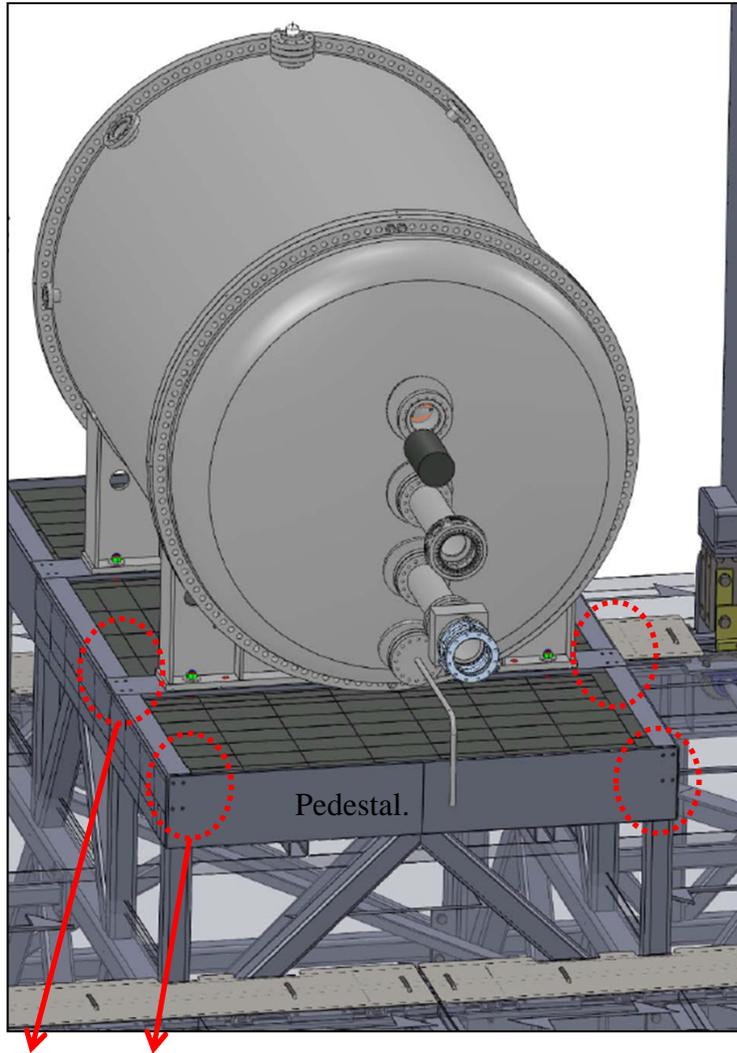
Visible handle



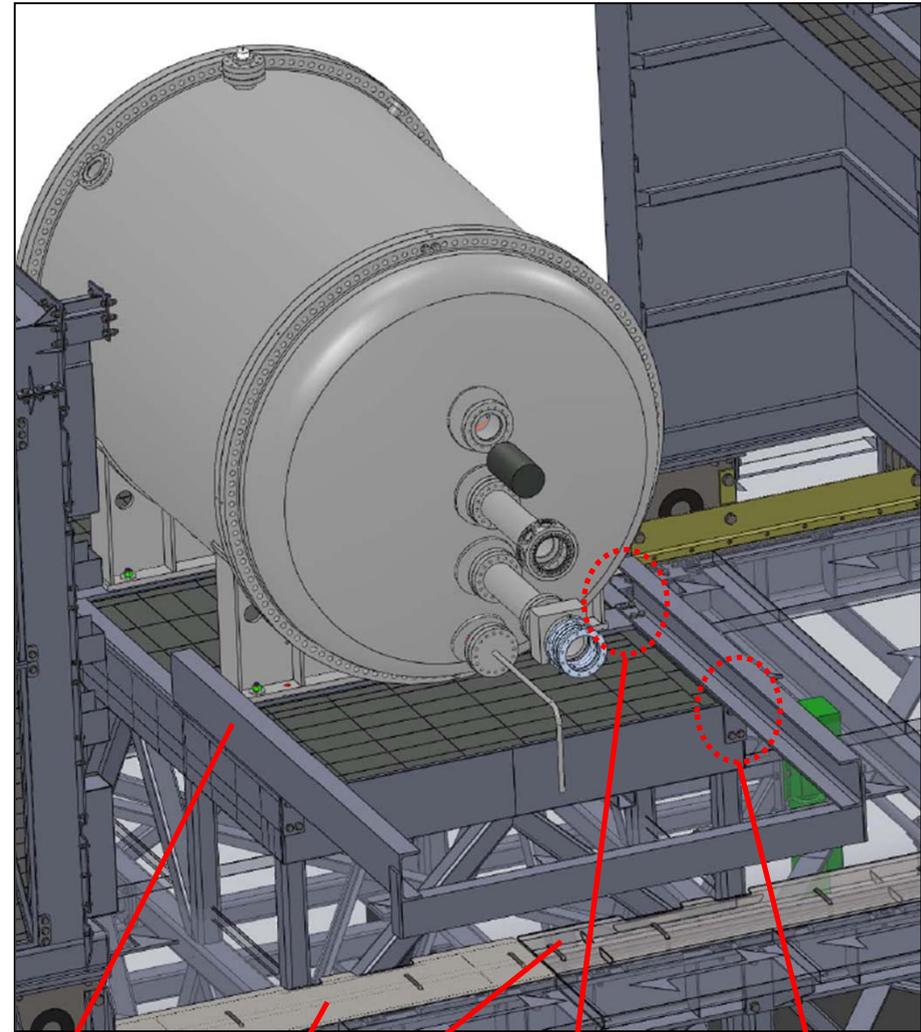
Removable covers.



Threaded holes for the CAP rail system.



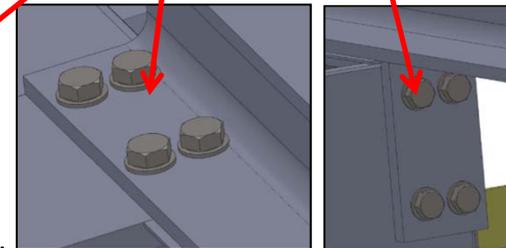
Threaded holes for the CAP rail system.



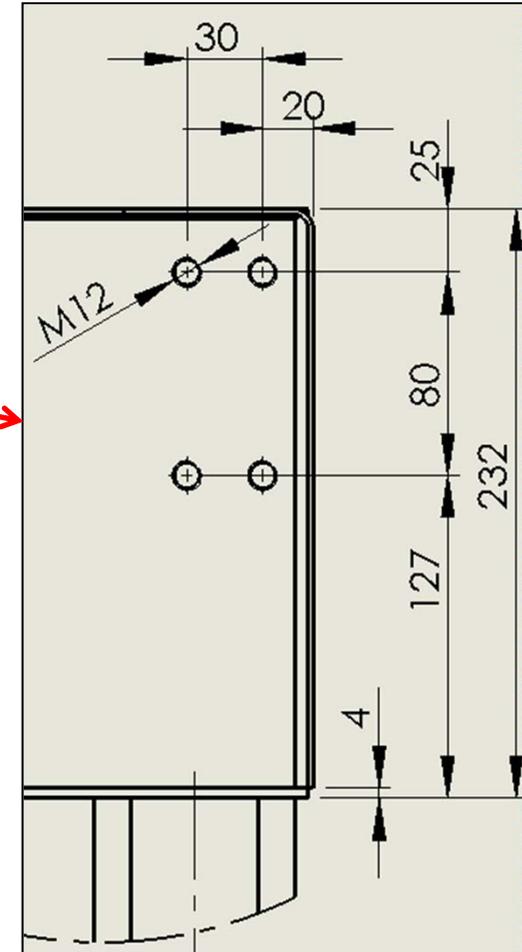
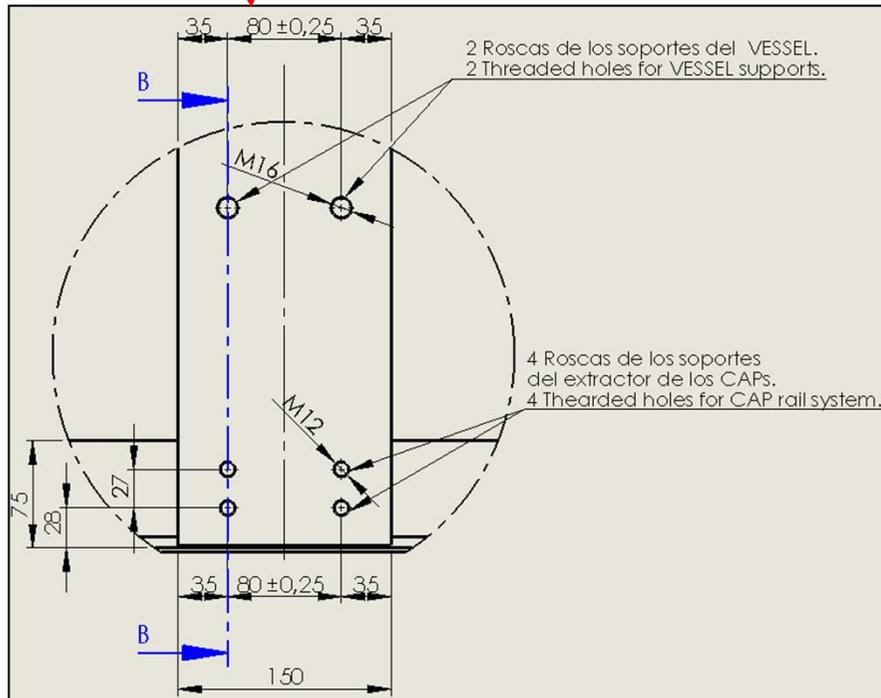
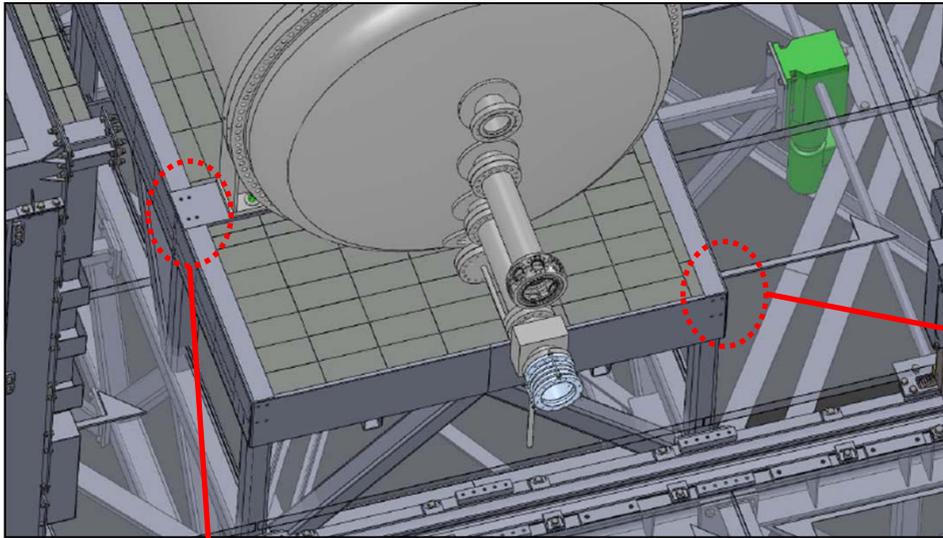
Support of the CAP rail system.
UPE-160 Beam

The removable covers are in their place and cover all the hole surface.

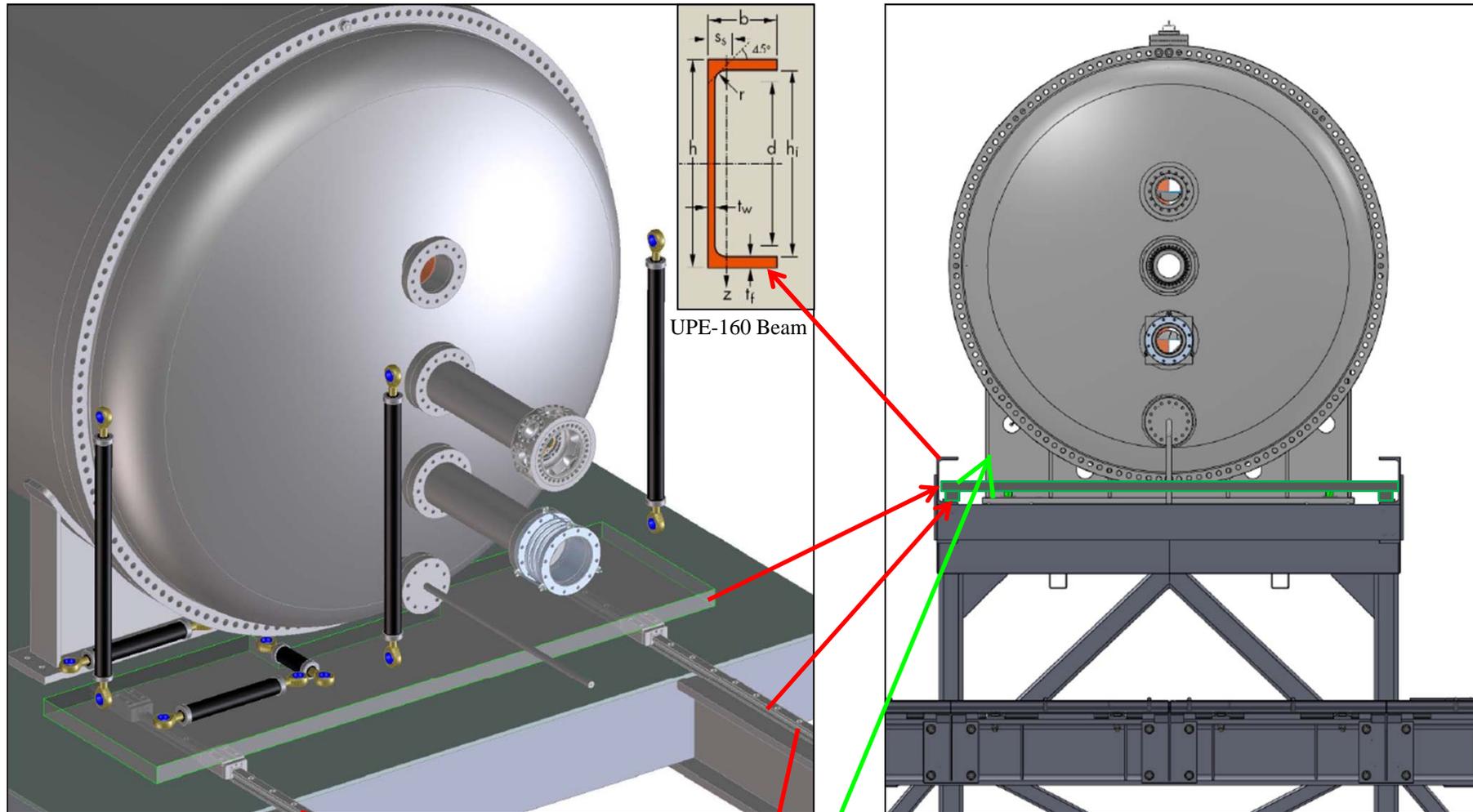
Fastening of the CAP rail system.



Threaded holes for the CAP rail system.



Head installation fixture.



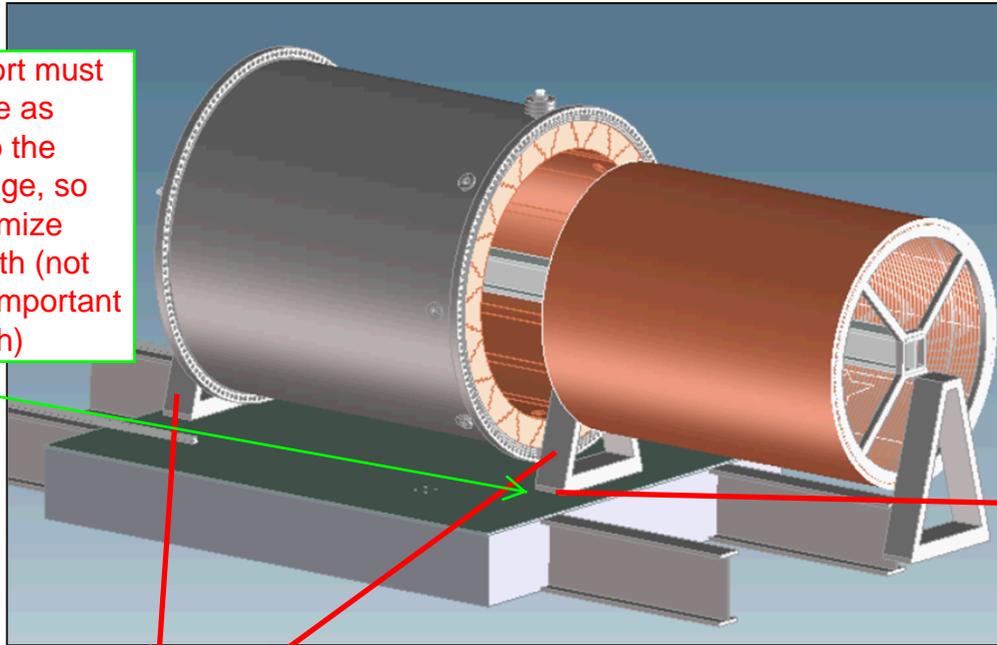
UPE-160 Beam

The CAP rail system.

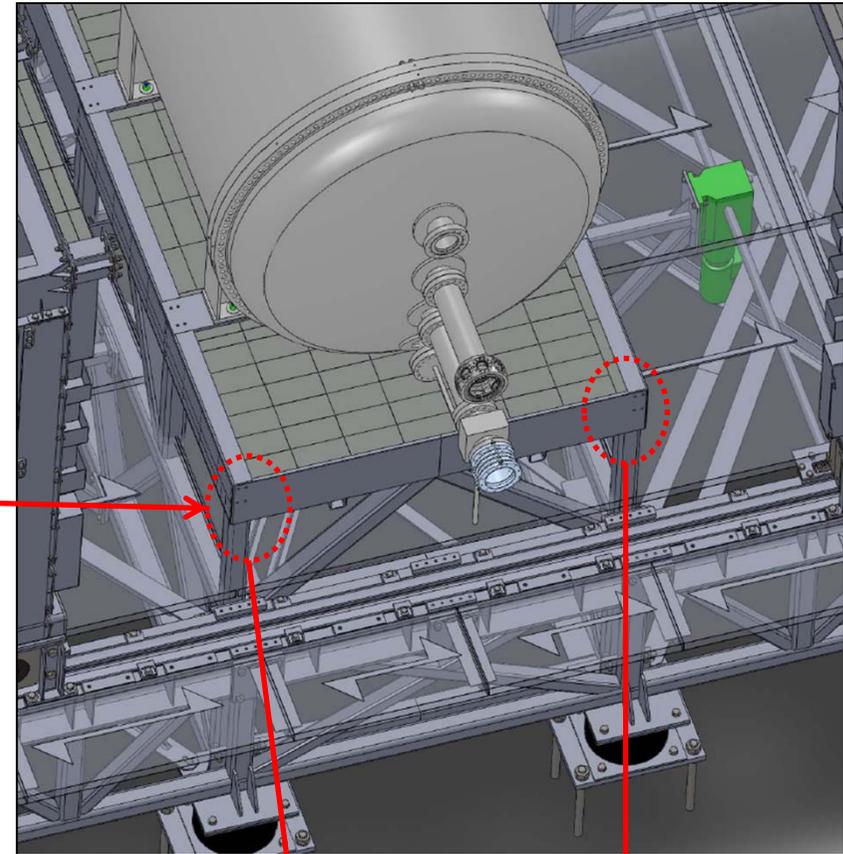
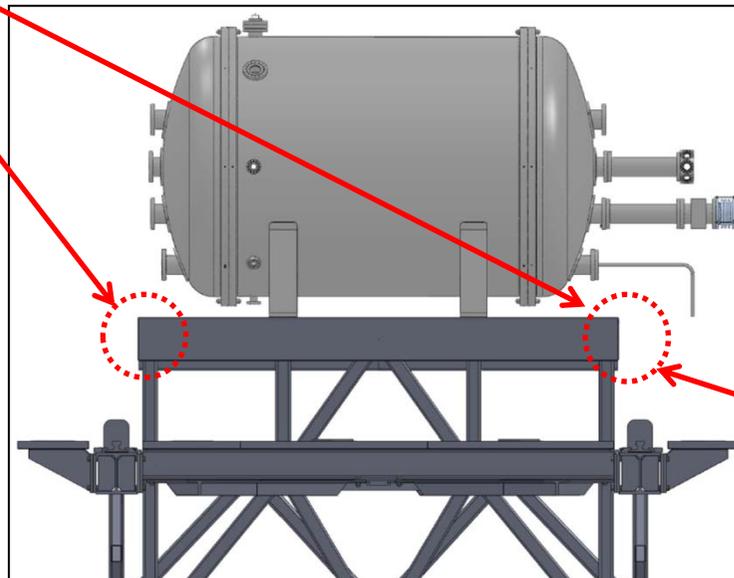
this looks good, we may

Option A: The temporary support for installation of the field cage.

This support must be as close as possible to the vessel flange, so as to minimize beam length (not sure how important it is, though)



Temporary supports.



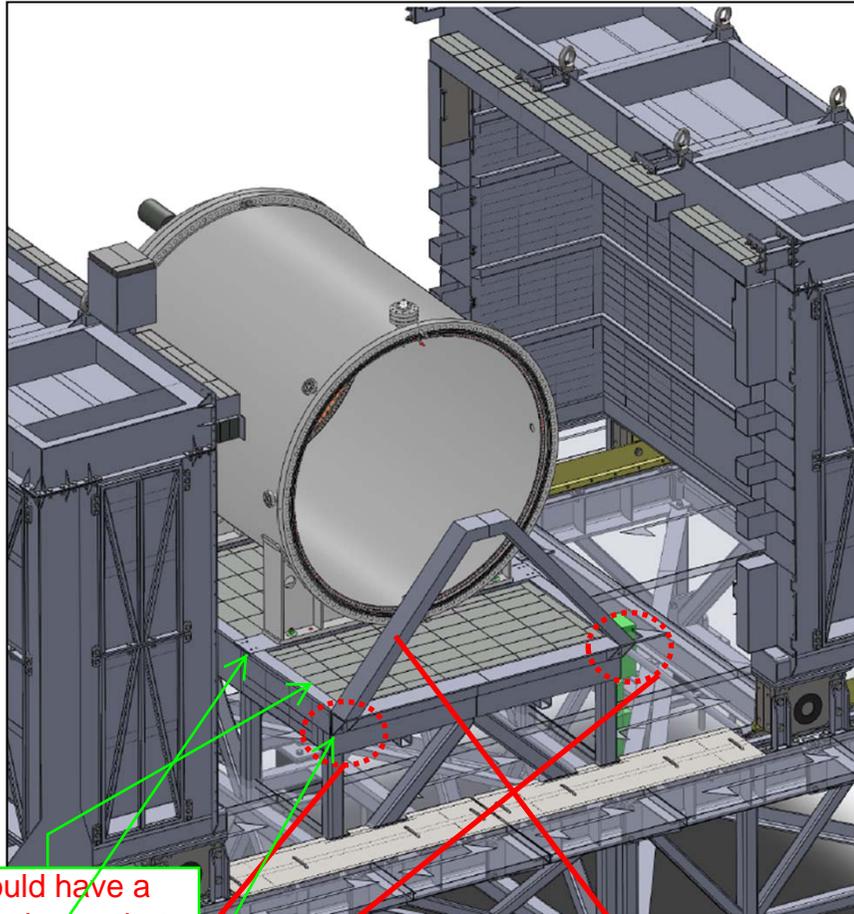
Threaded holes for temporary supports.

In both sides of the Vessel.

Option A: The temporary support for installation of the field cage.

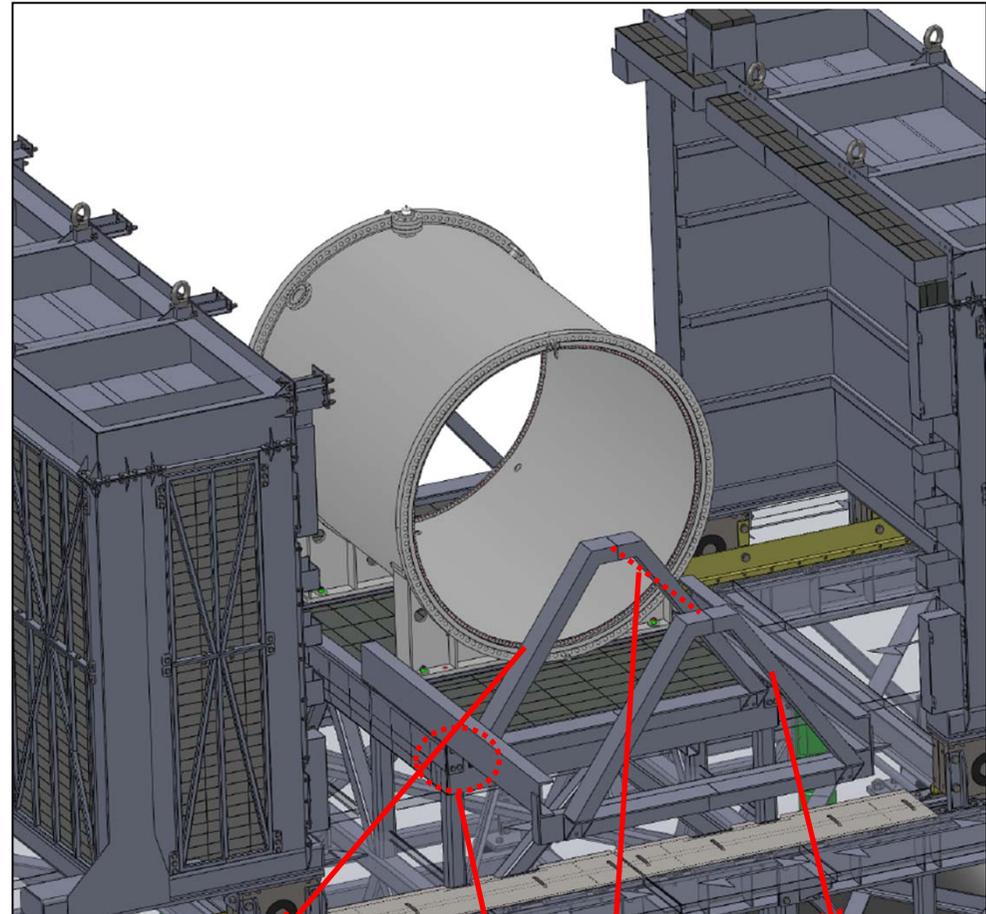
View of back temporary support.

Preliminary idea.



View of front temporary supports.

Preliminary idea.



you could have a support here , that uses both these holes, and these holes (long footprint)

places for the temporary supports.

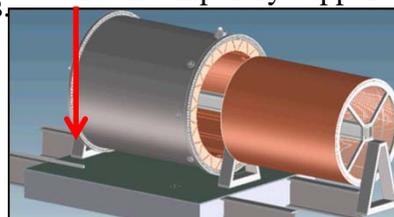
Back temporary support.

Central temporary support.

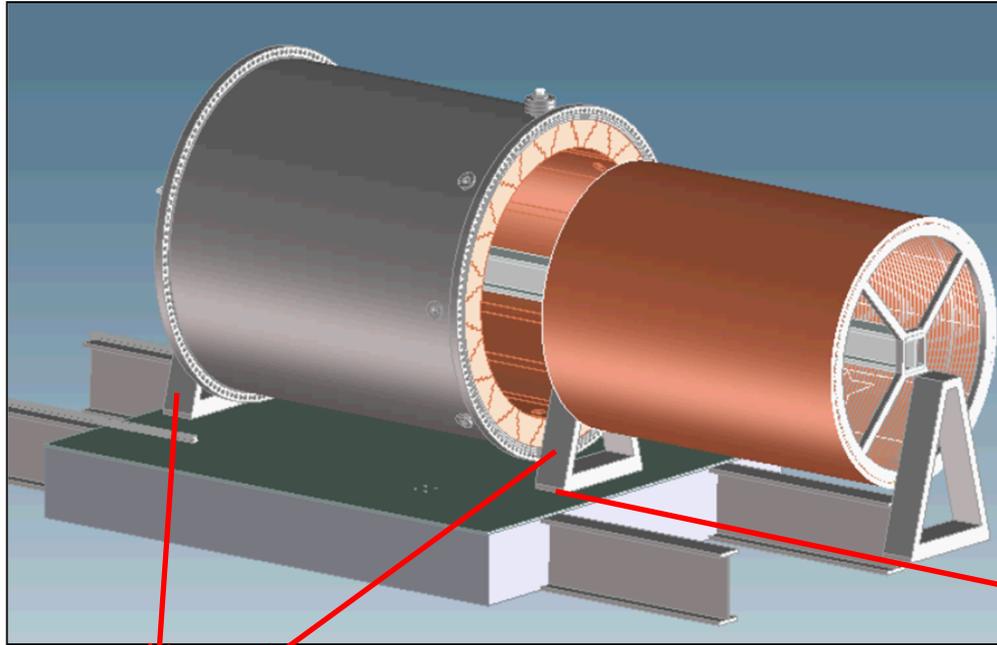
Frontal temporary support.

Place of the field cage.

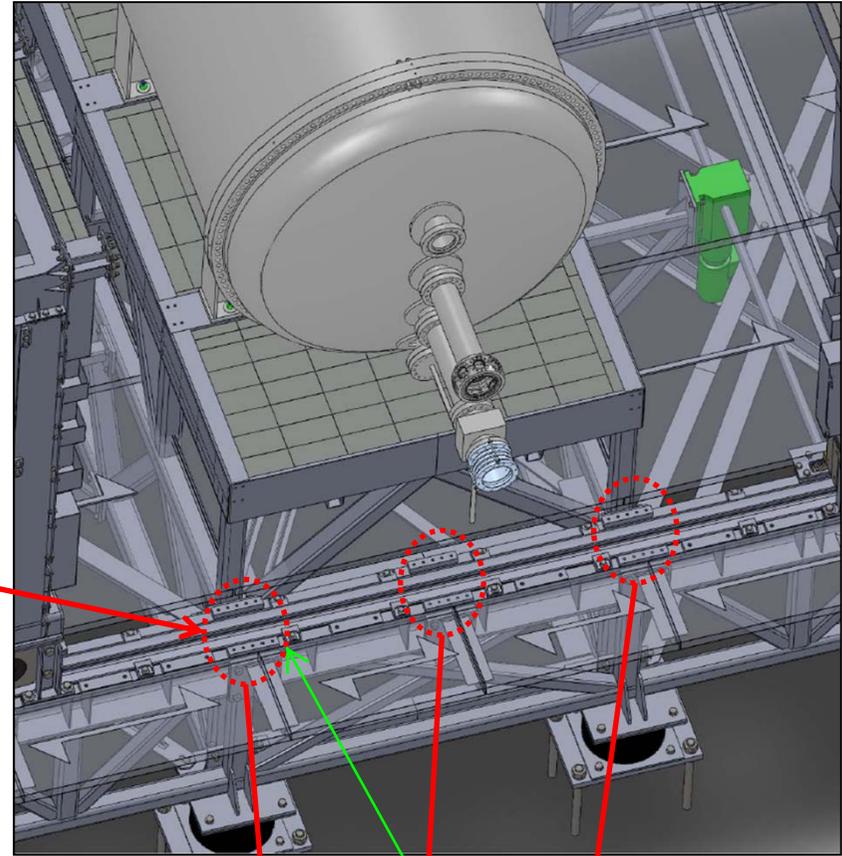
Threaded holes for the temporary supports.



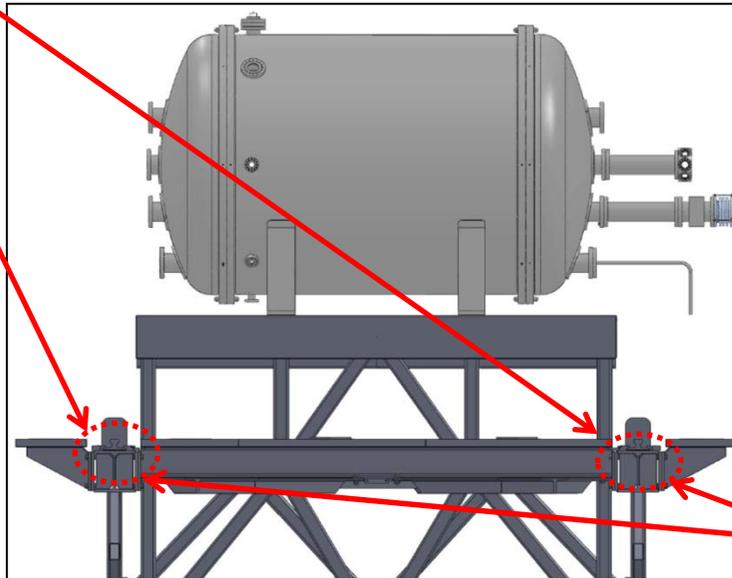
Option B: The temporary support for installation of the field cage.



Temporary supports.



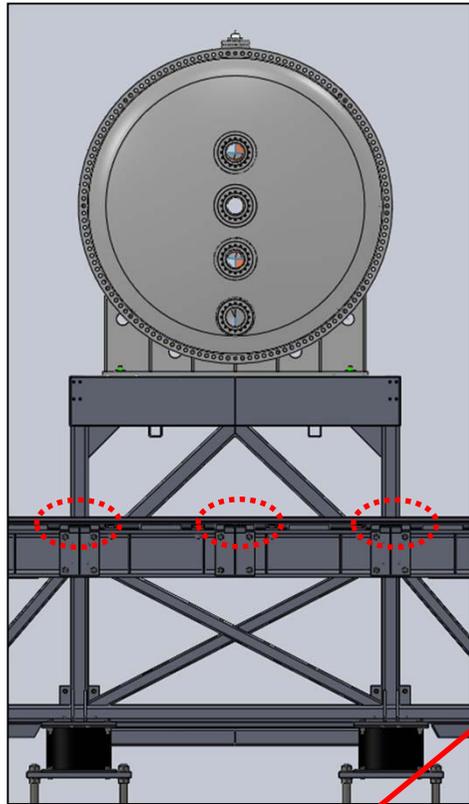
Threaded holes for temporary supports.



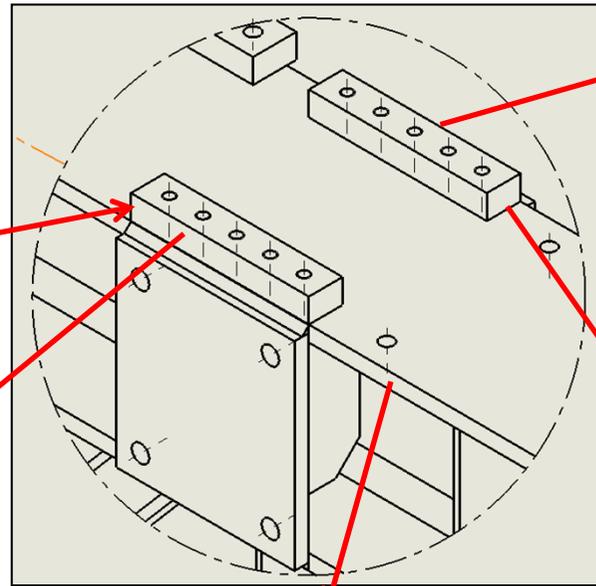
In both sides of the Vessel

I like these as they may support more weight, perhaps

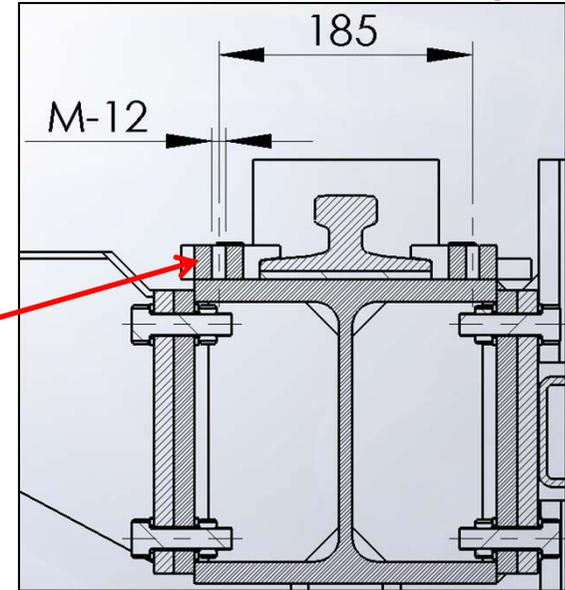
Option B: The temporary support for installation of the field cage.



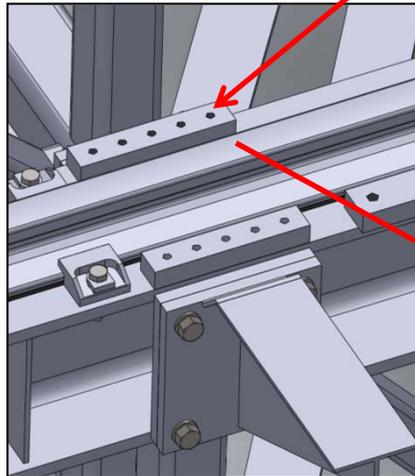
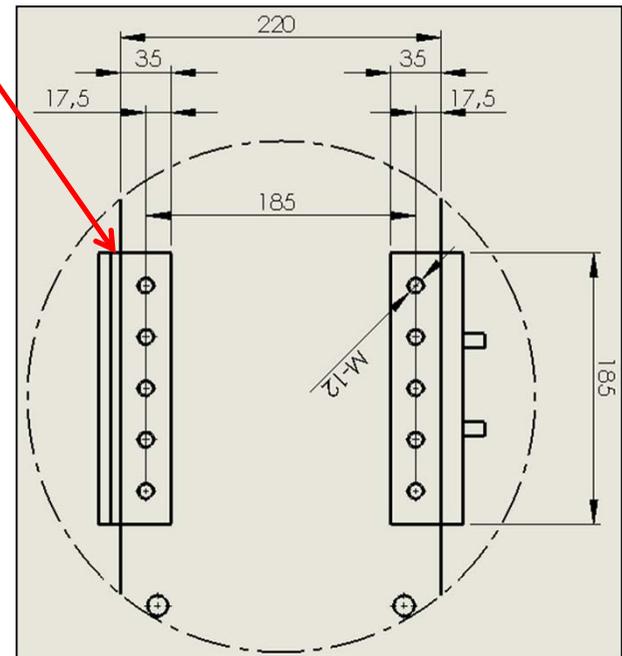
Threaded holes for temporary supports.



HEB-220 beam, seismic structure.

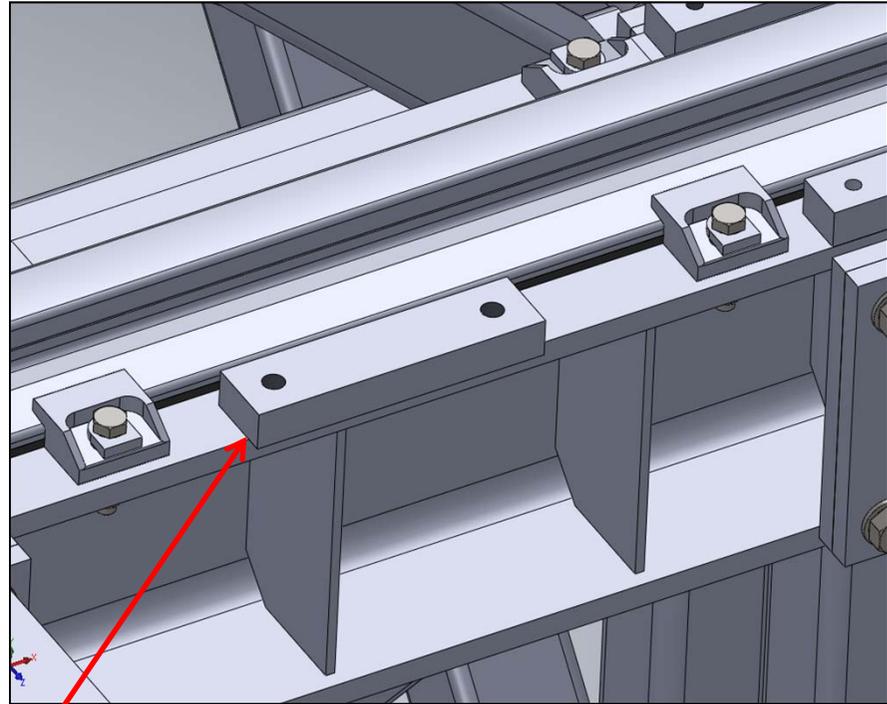
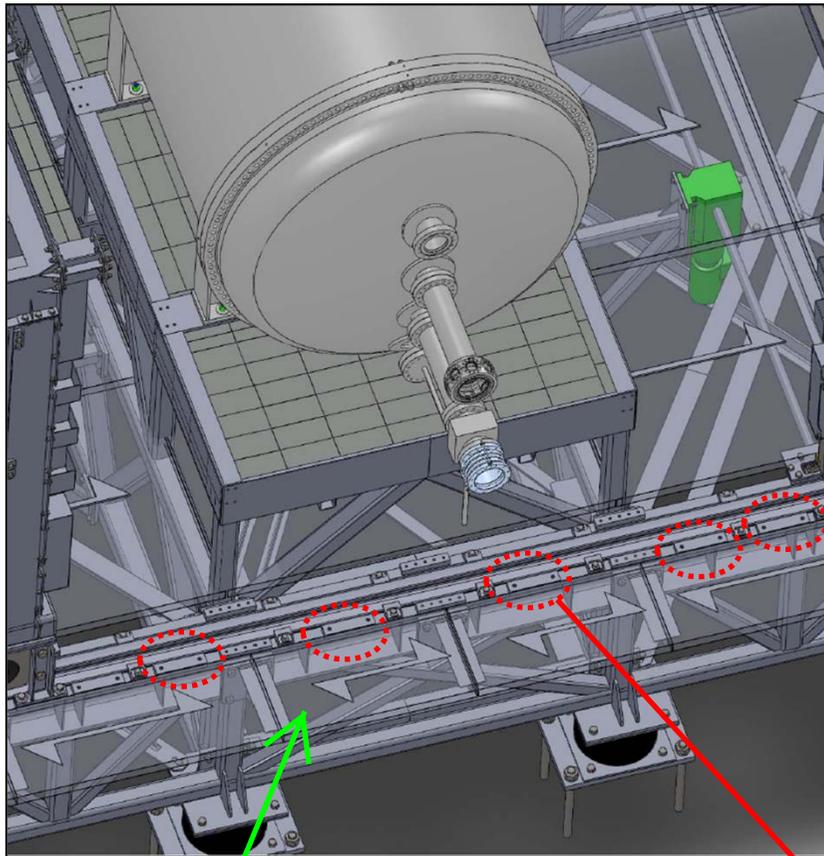


HEB-220 beam, seismic structure.



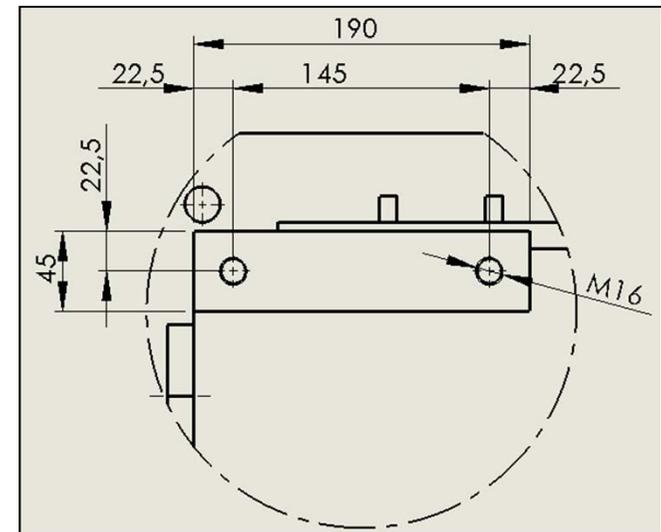
Rail

Others threaded holes for optional fasteners.

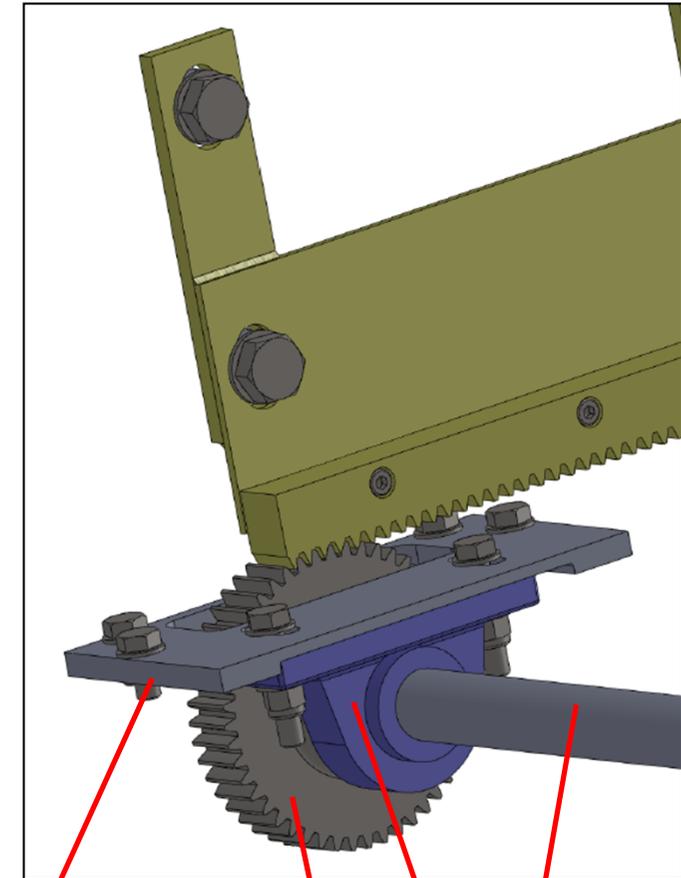
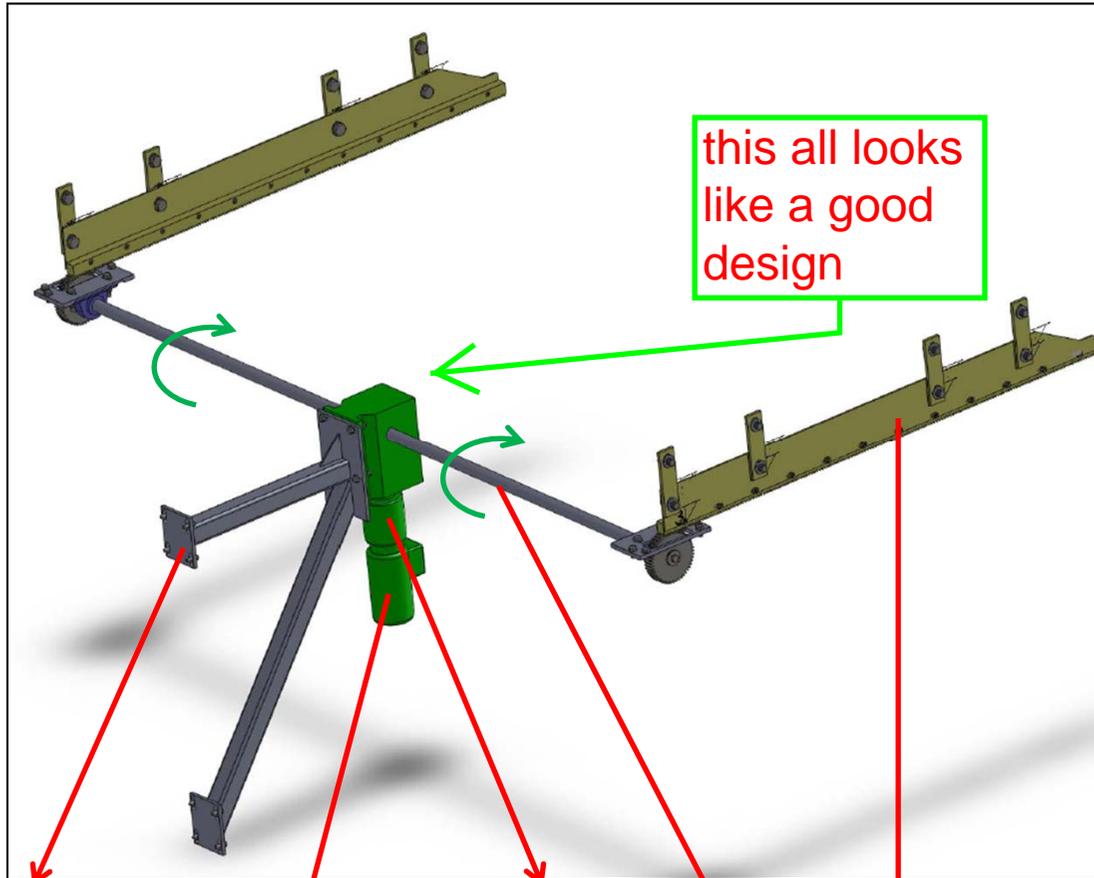


Others threaded holes for optional fasteners. The castles have to be open.
These threaded holes are for the closed castles.

also a good option, but may need support closer to vessel. These supports would be good for an outboard end support for the rail system



The motion system.



this all looks like a good design

Motor support
(In progress).

Electrical motor

Housed torque limiter.

Gear rack screwed to
castle

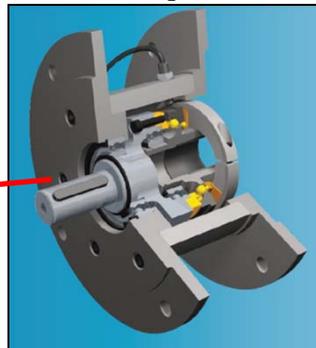
Support screwed to
seismic structure

Gear

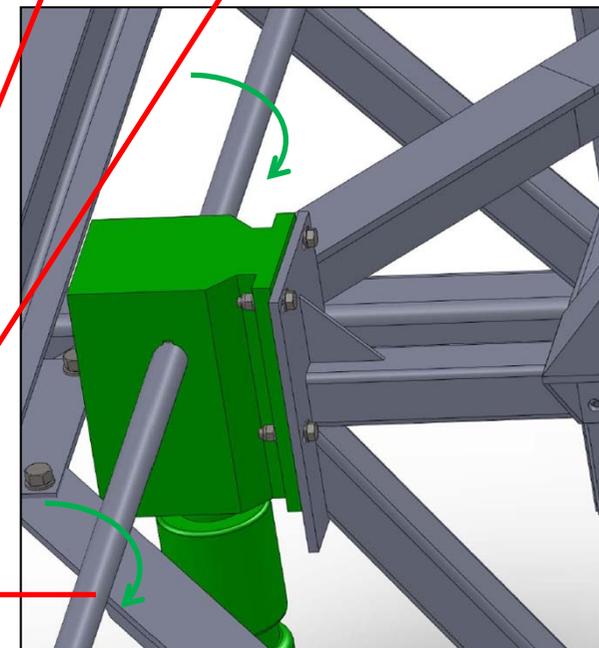
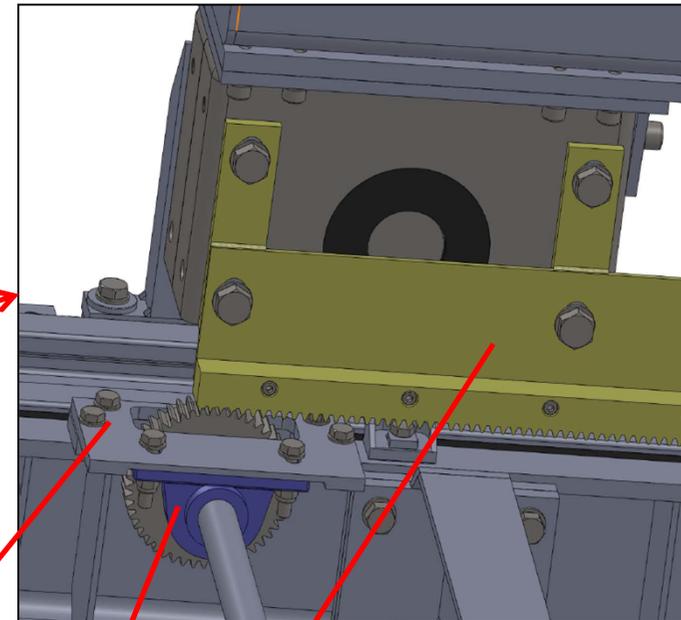
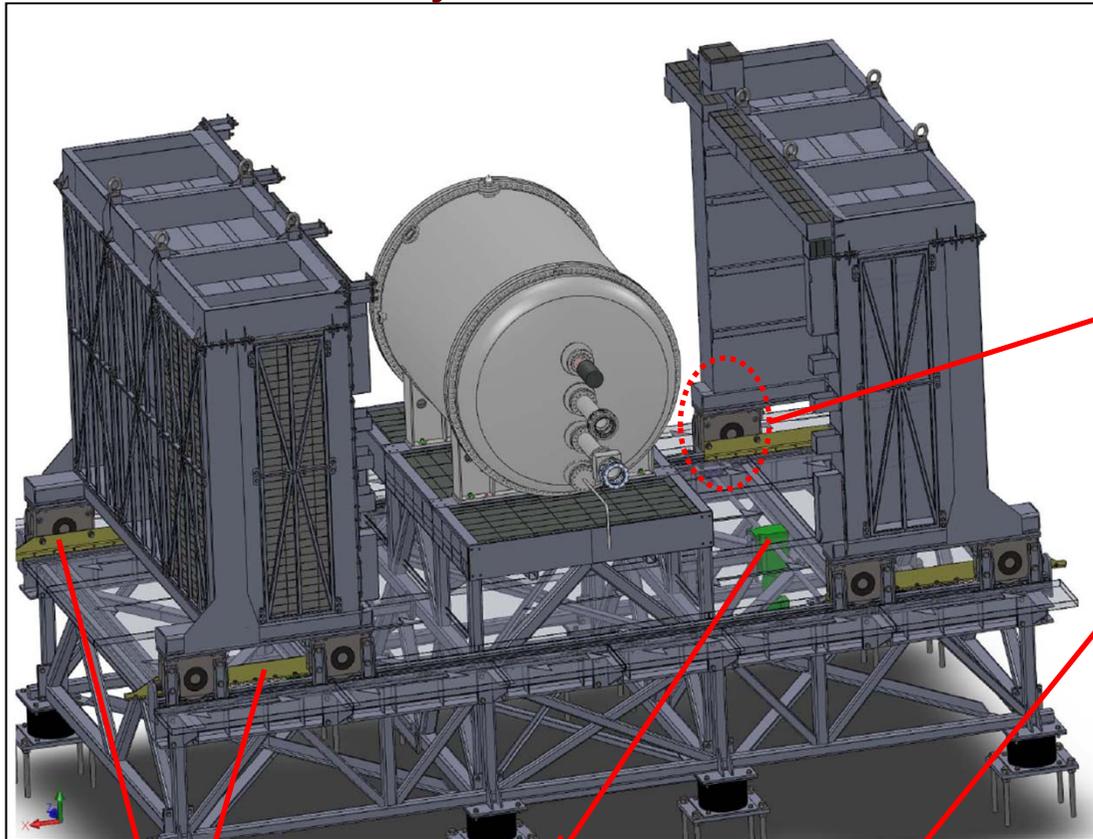
Rigid shaft

Rigid shaft

Bearing block



The motion system on castle.



Gear rack screwed to castle

Electrical motor is under the platform.

Support screwed to seismic structure

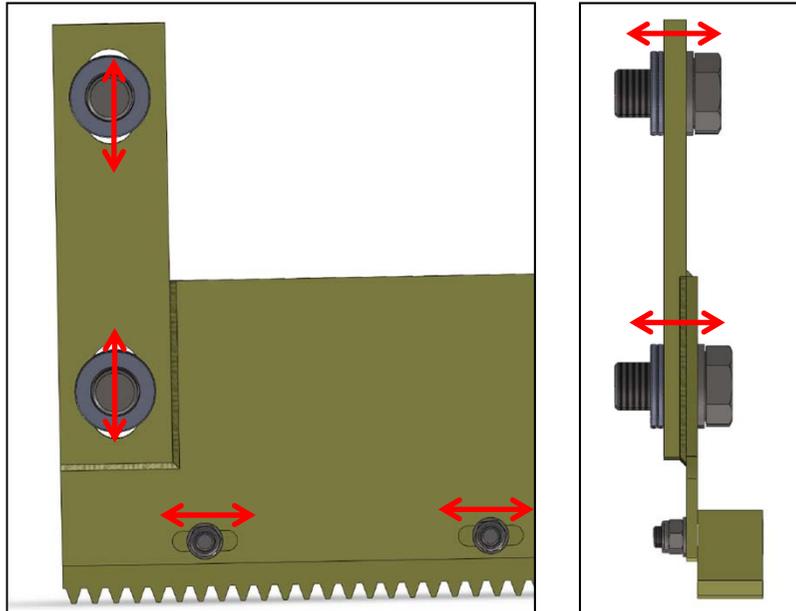
Bearing block

Gear rack screwed to castle

Shaft is under the platform.

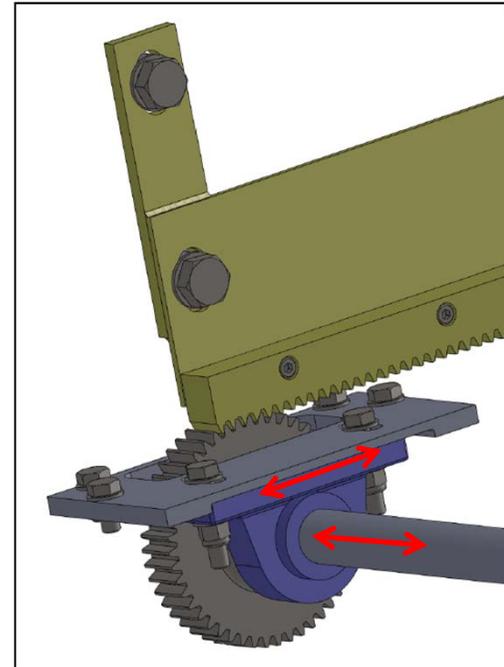
Adjusting of the motion system.

View of the gear rack adjustments.

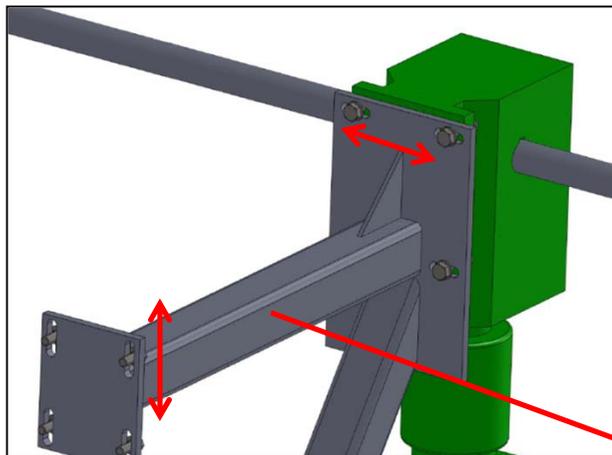


Adjusting washers

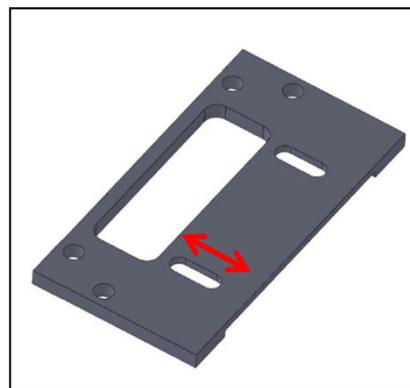
View of the gear adjustment.



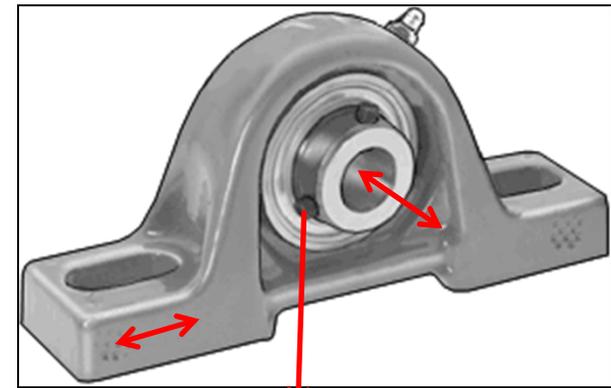
View of the motor adjustments



Bearing block support



Bearing block



In progress the support, no definitive

Adjustment threads