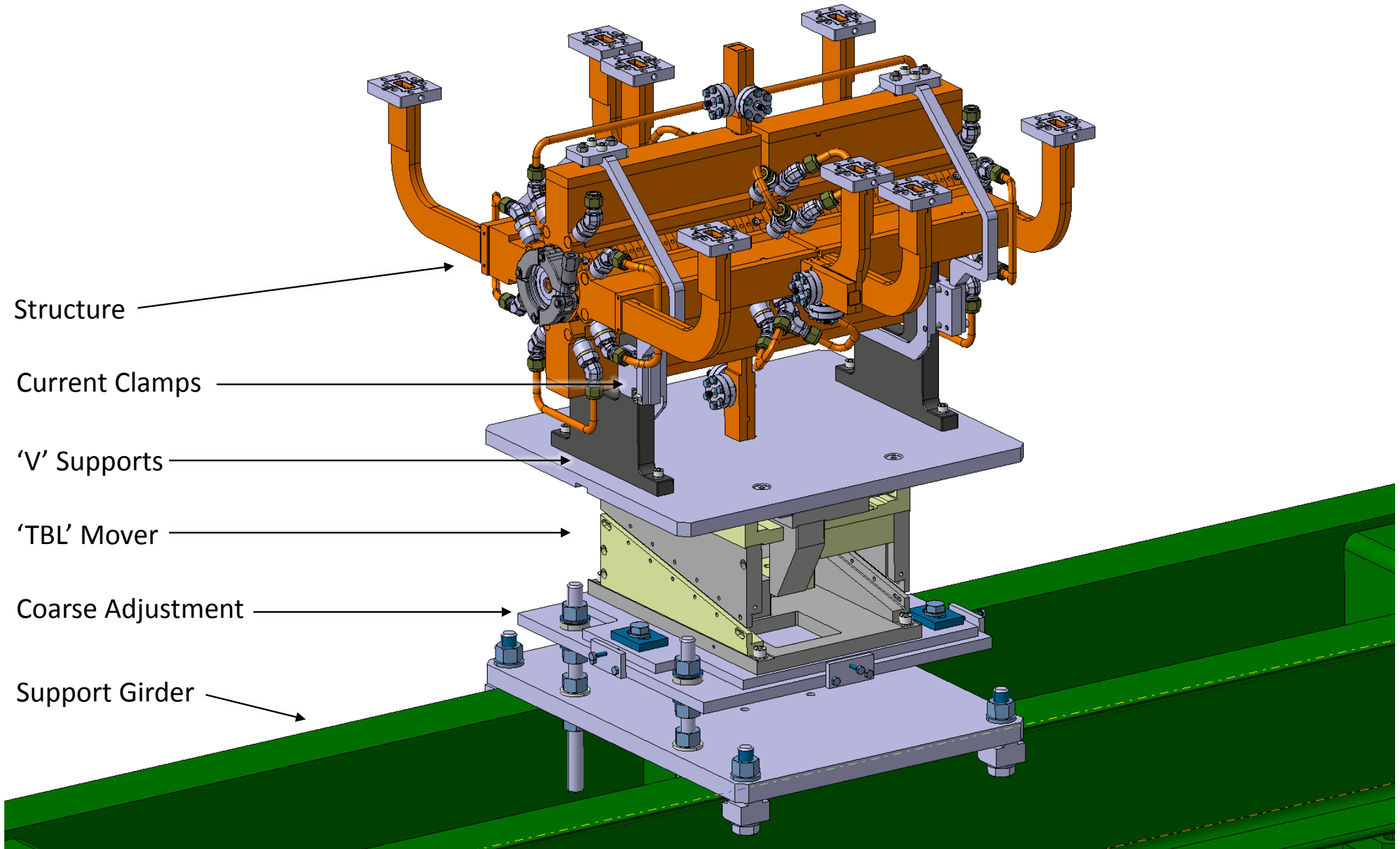


CLEAR SAS Mover Support

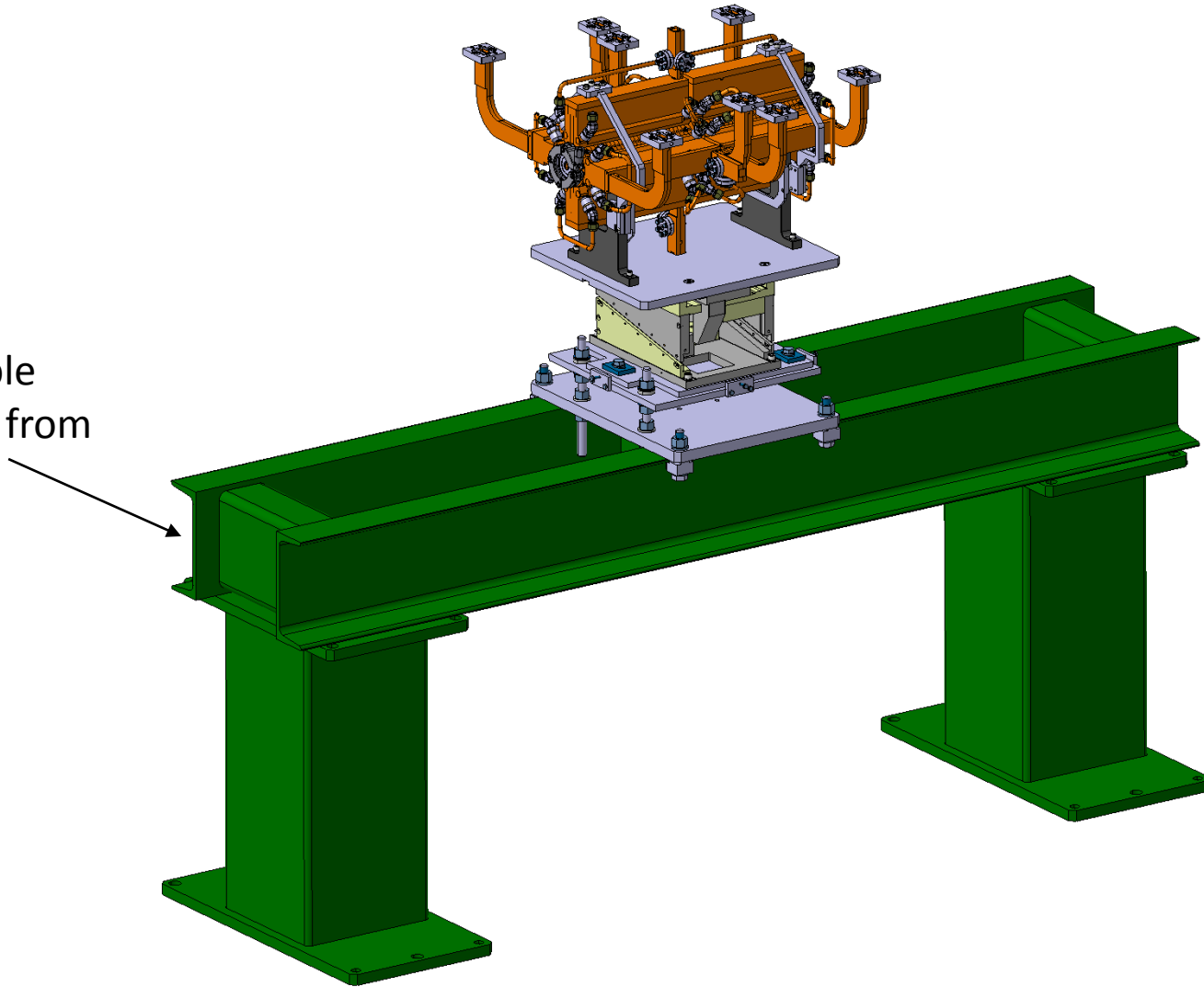
Matthew Capstick

14-02-2020

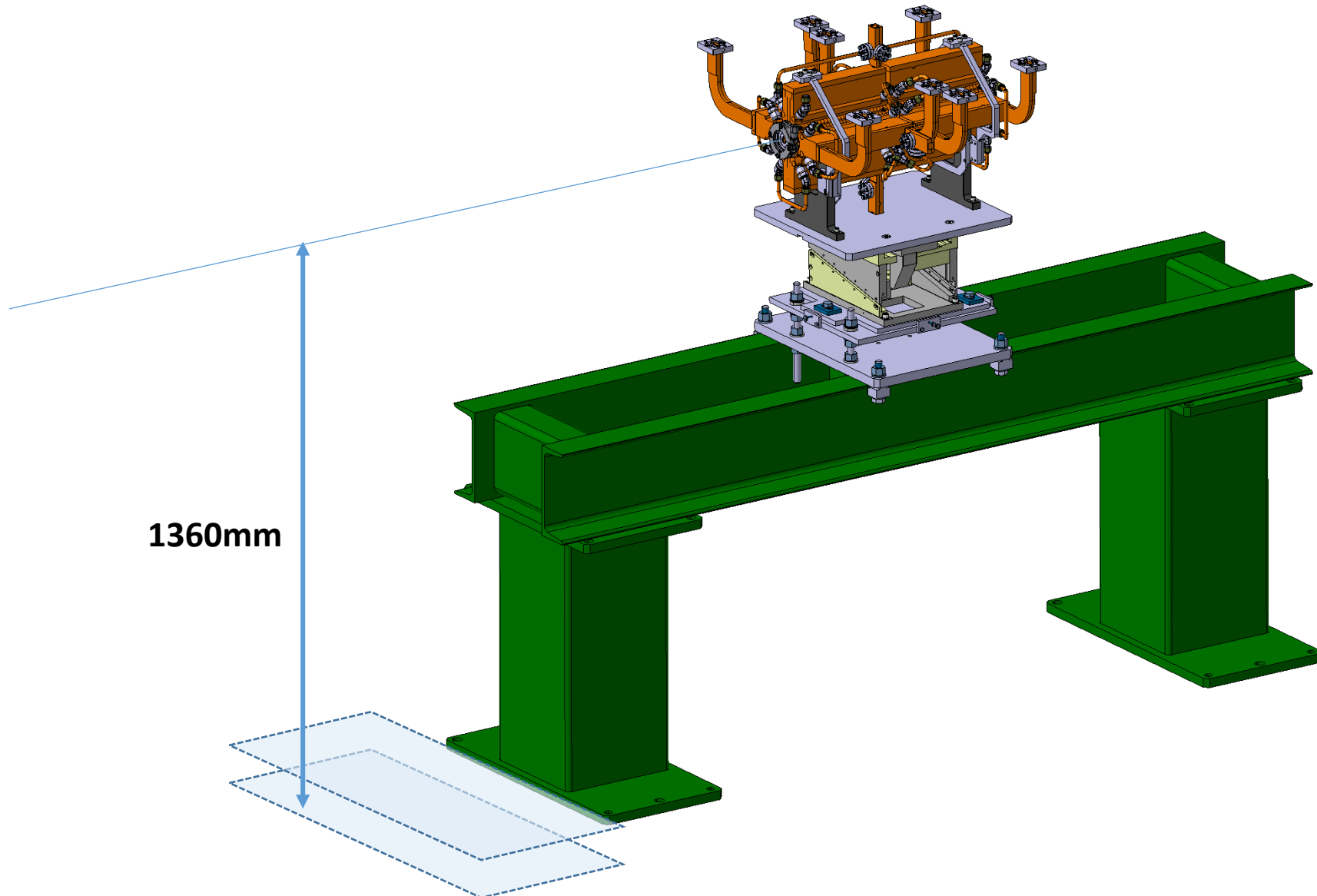


CLEAR Support Girders

Do we have an available
girder to fill the space from
the TBM?

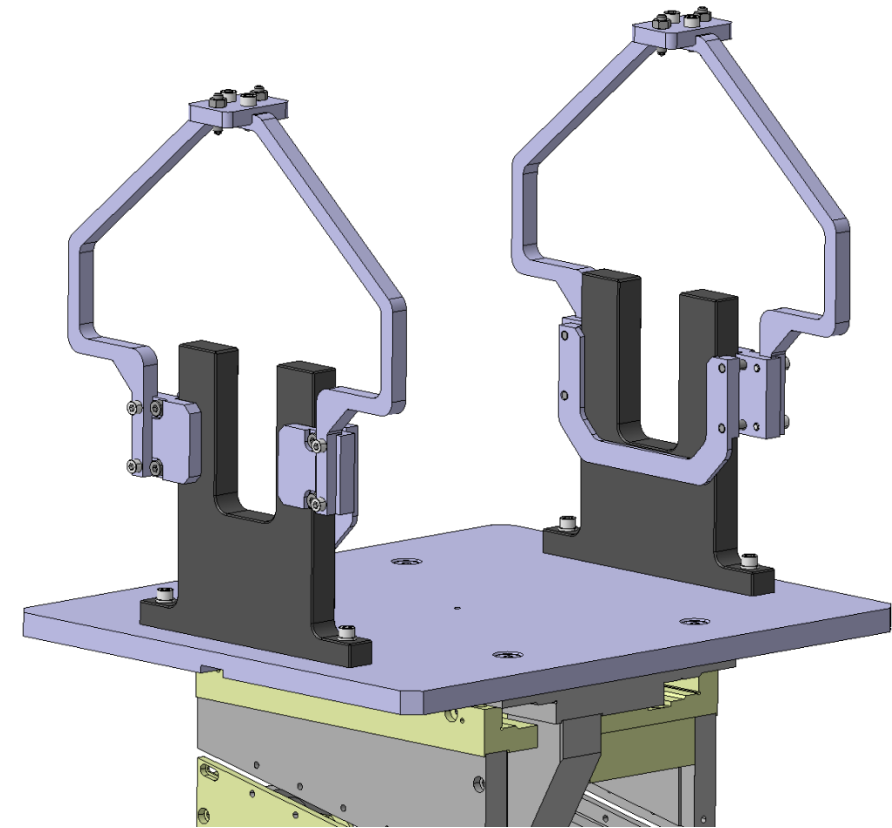
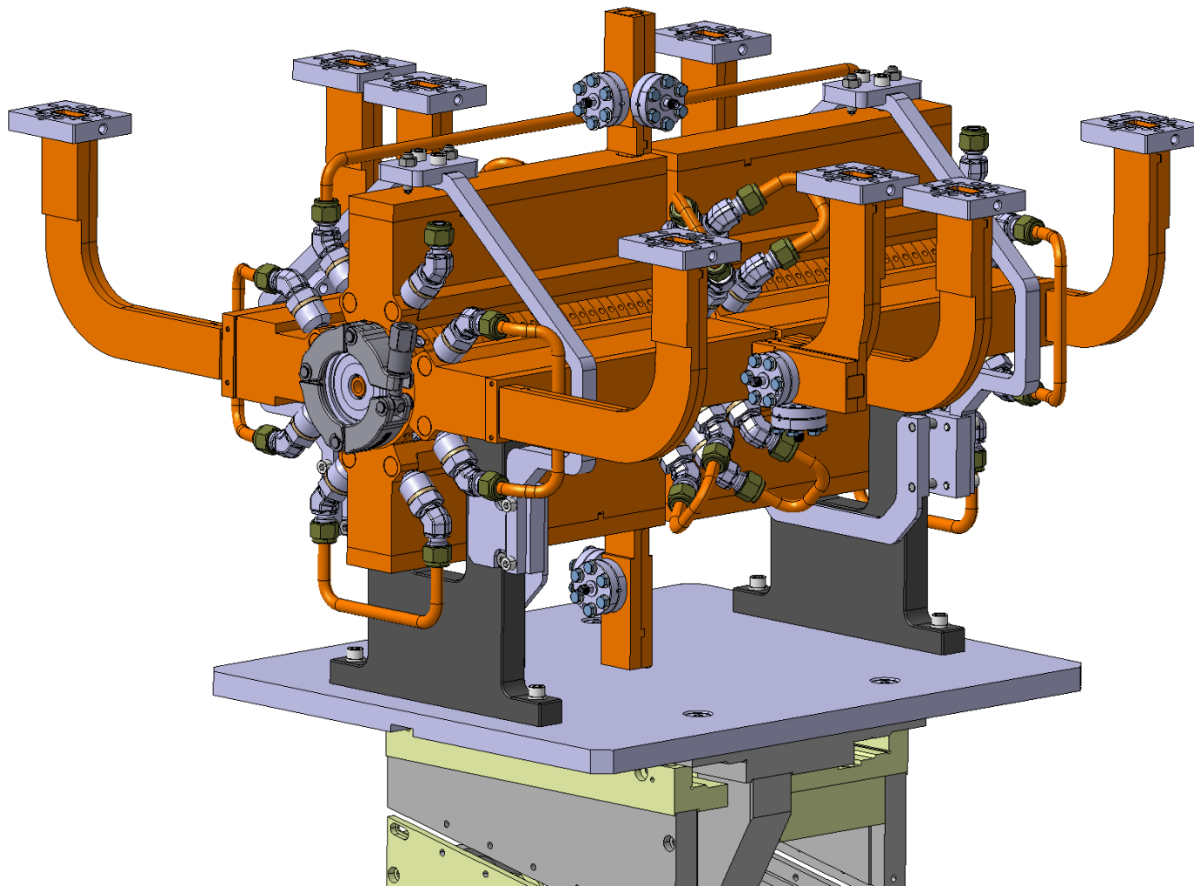


CLEAR Beam Height



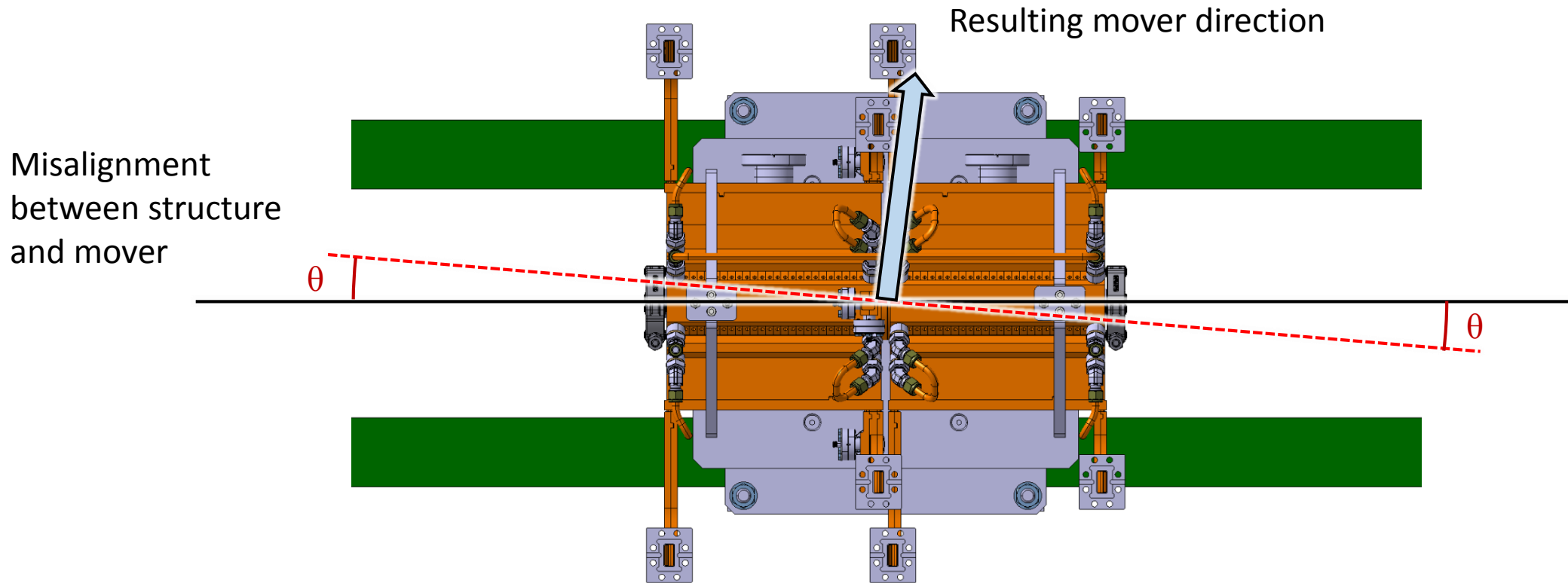
Fixing

Utilising the same V mounts and clamps as the current TBM girder?

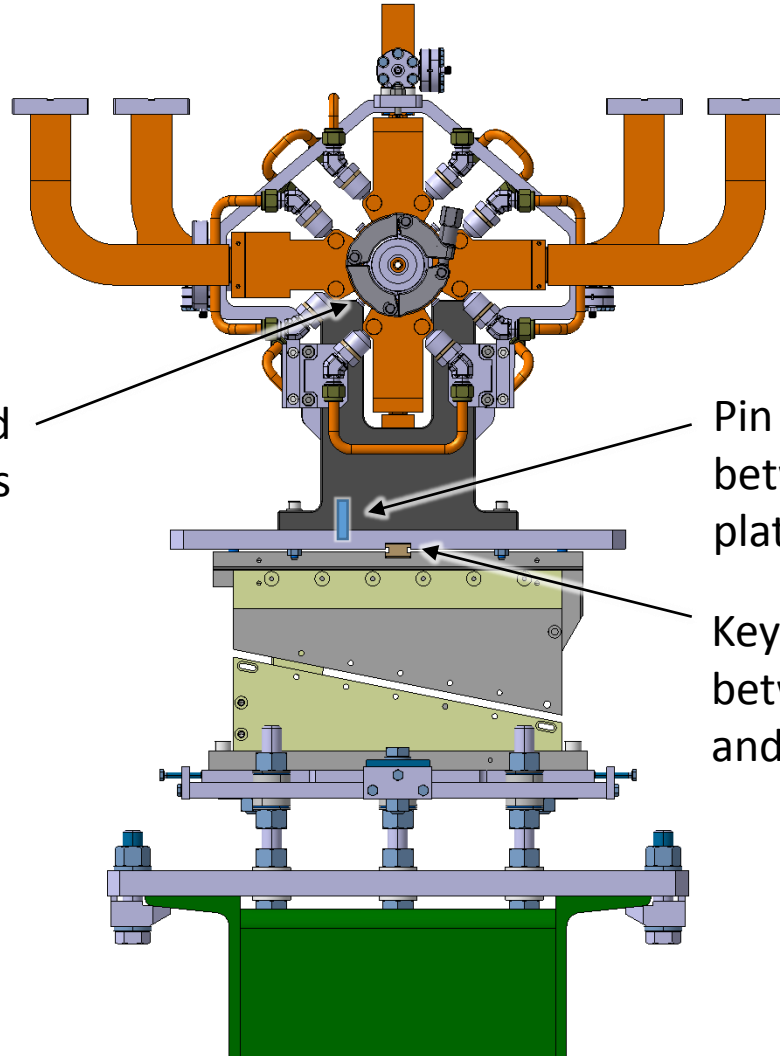


Alignment Error

What is an allowable alignment error between the structure and the mover?



Alignment Features

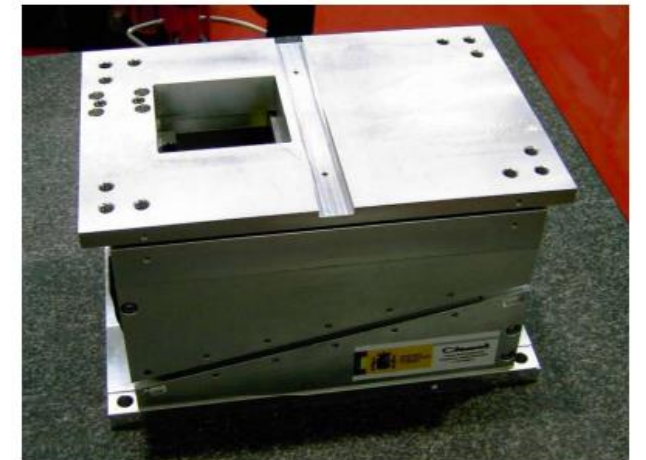
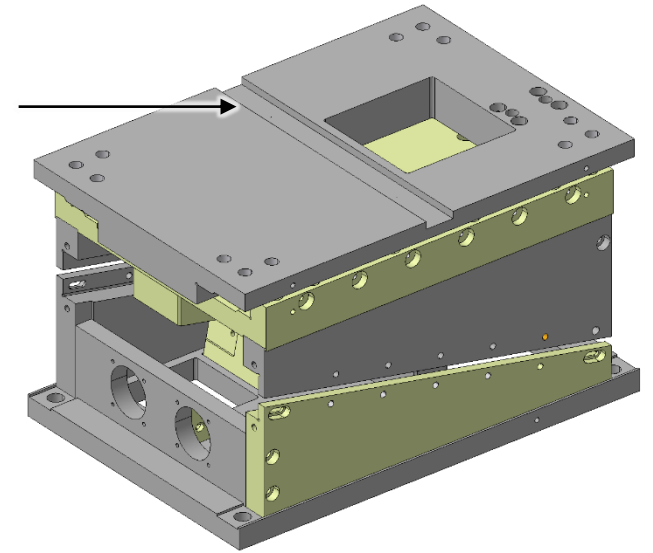


Precision Machined
'v' mounts

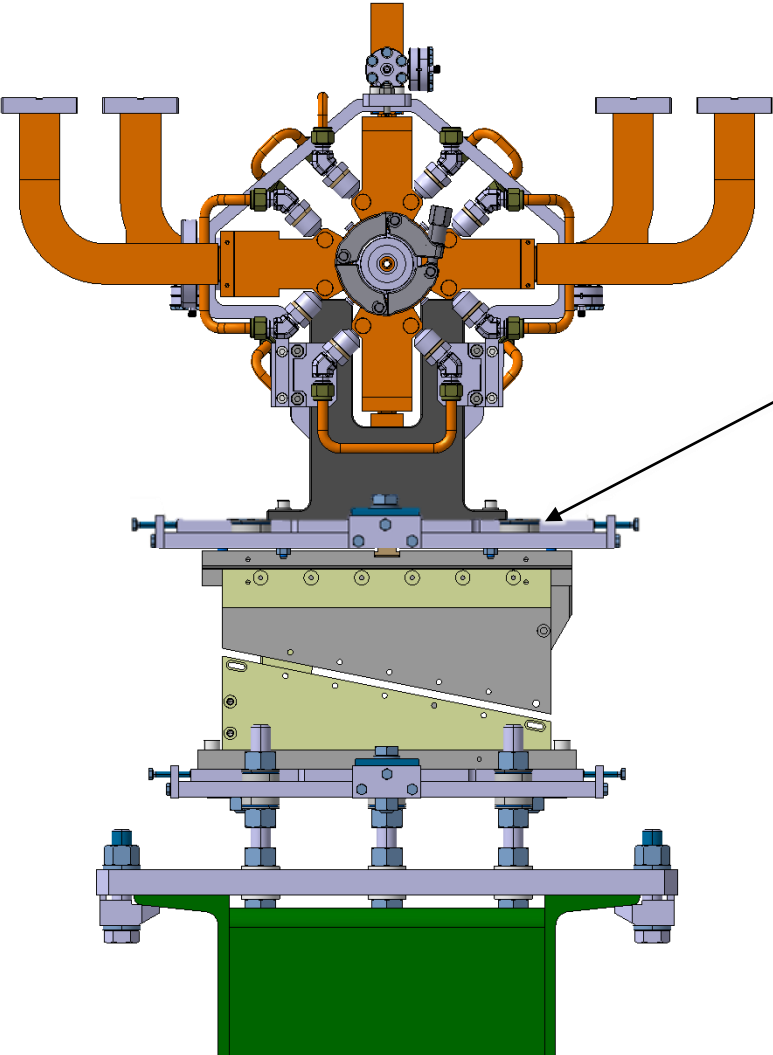
Pin to fix alignment
between the top
plate and the 'v's

Key to fix alignment
between the mover
and the top plate

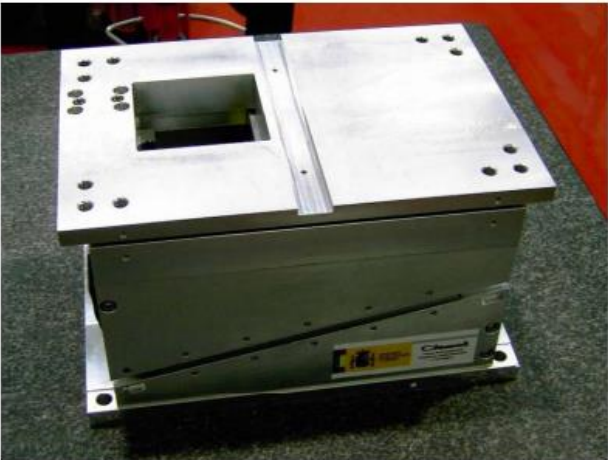
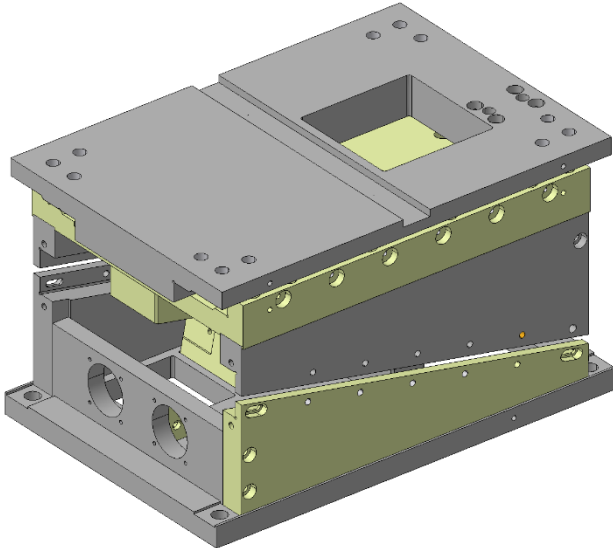
Does the mover
have this alignment
slot



Alignment Adjustment



Alternative adjustment plate could provide the alignment requirements

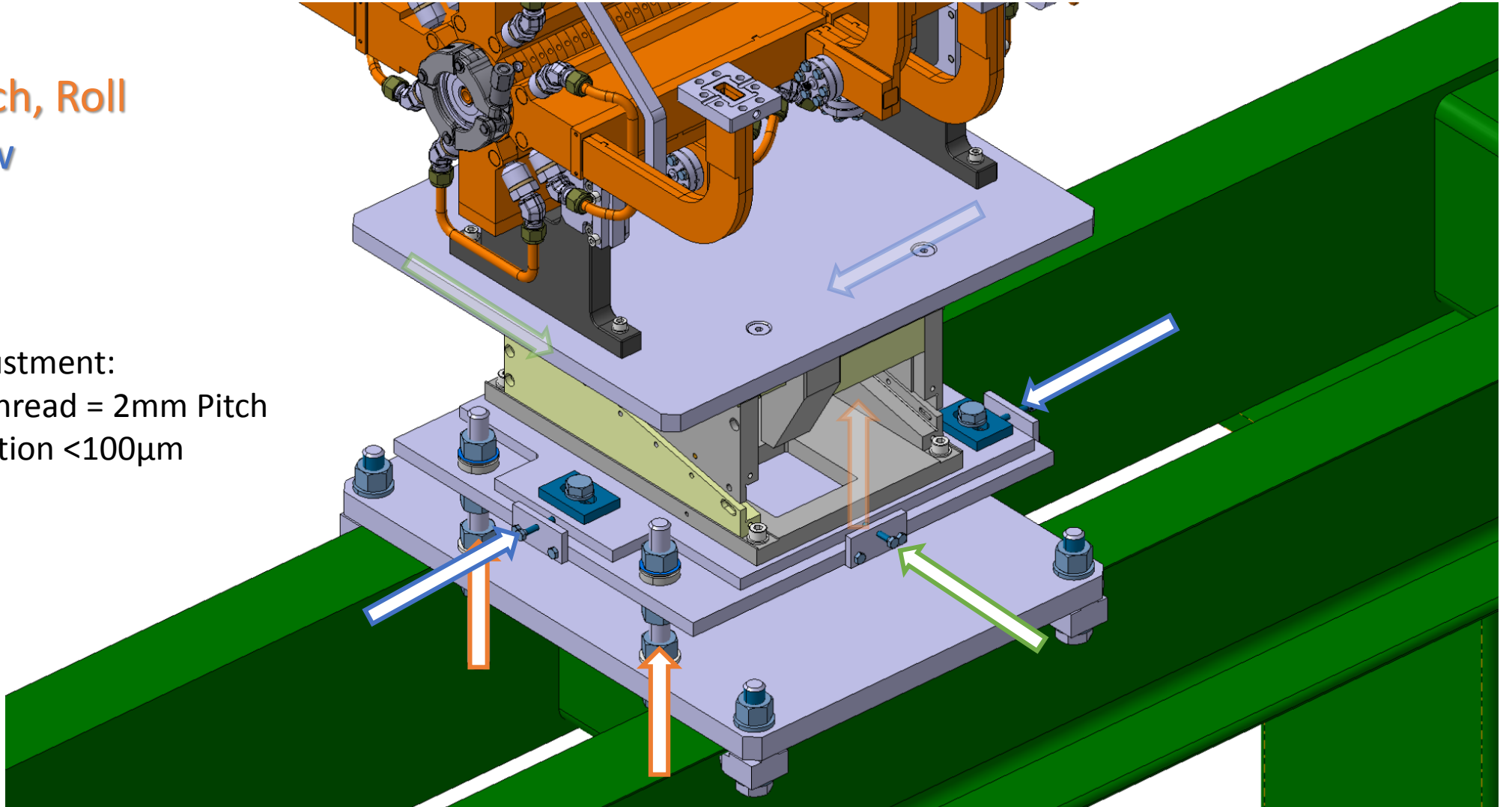


Coarse Adjustment

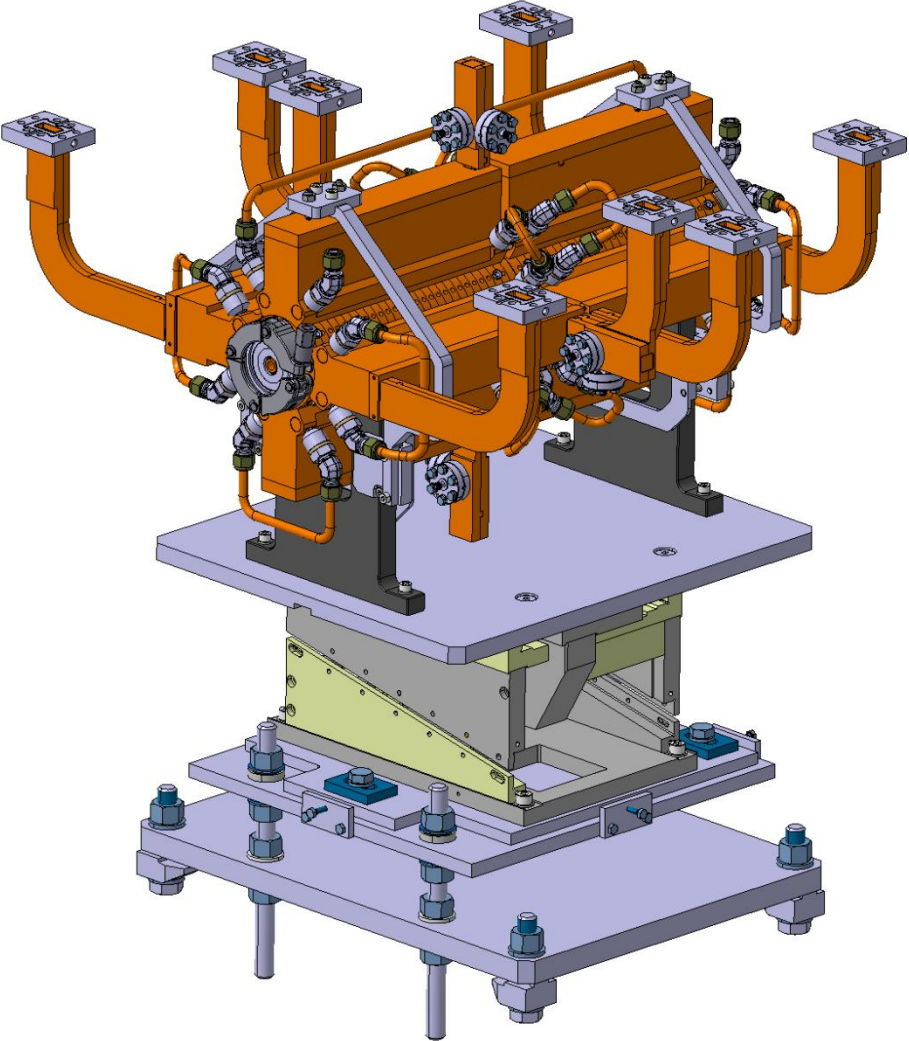
- Z, Pitch, Roll
- X, Yaw
- Y

Vertical Adjustment:

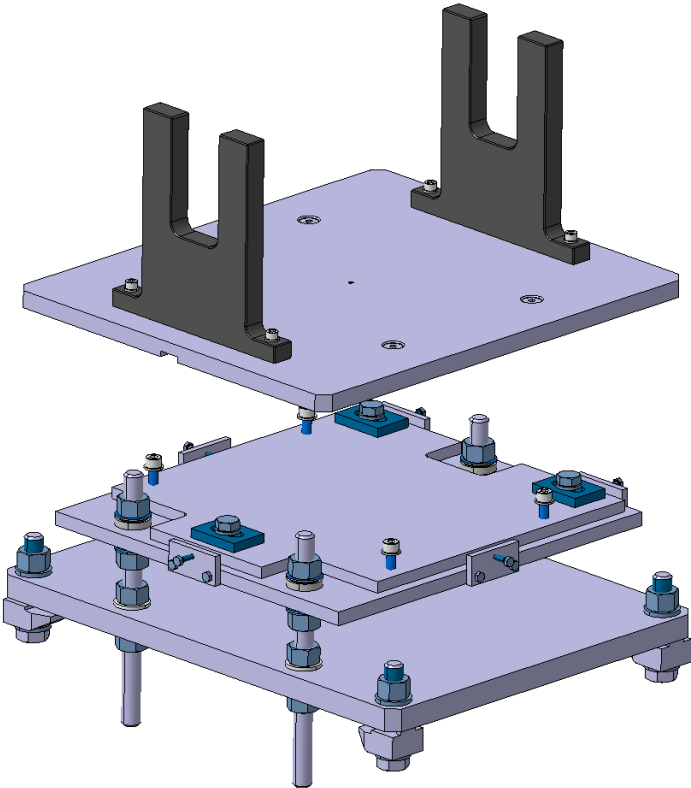
- M16 Thread = 2mm Pitch
- Resolution $<100\mu\text{m}$



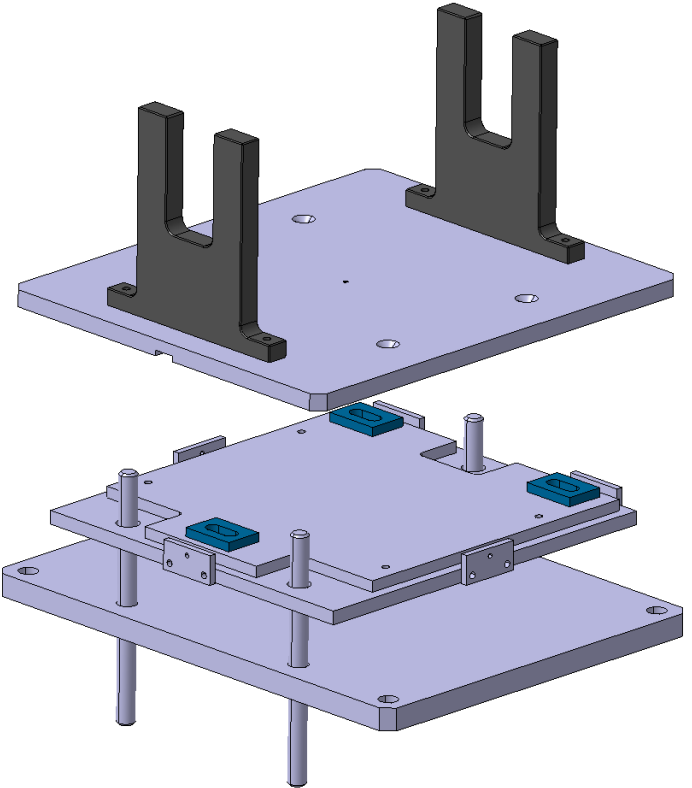
Components



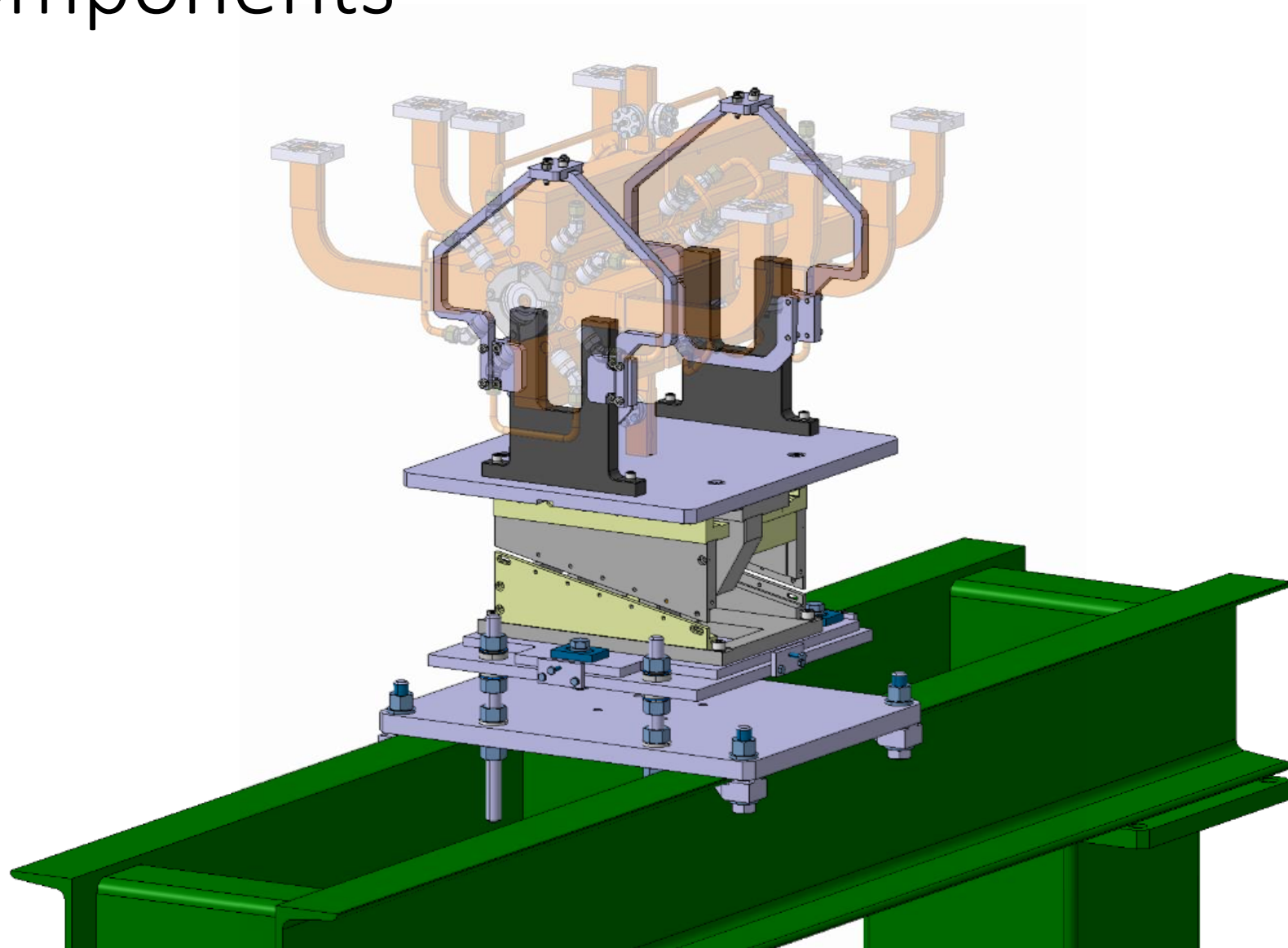
New



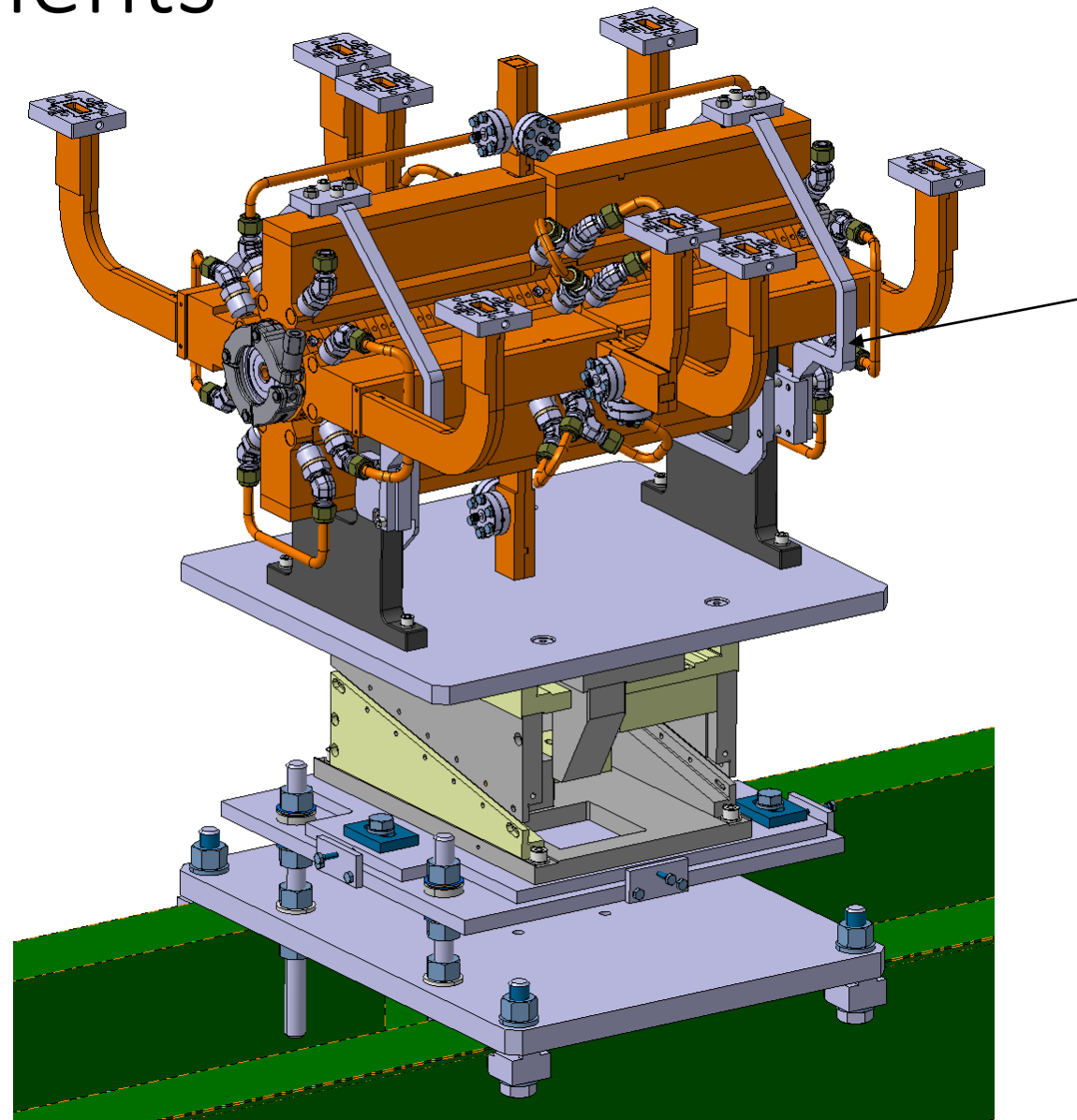
Manufactured



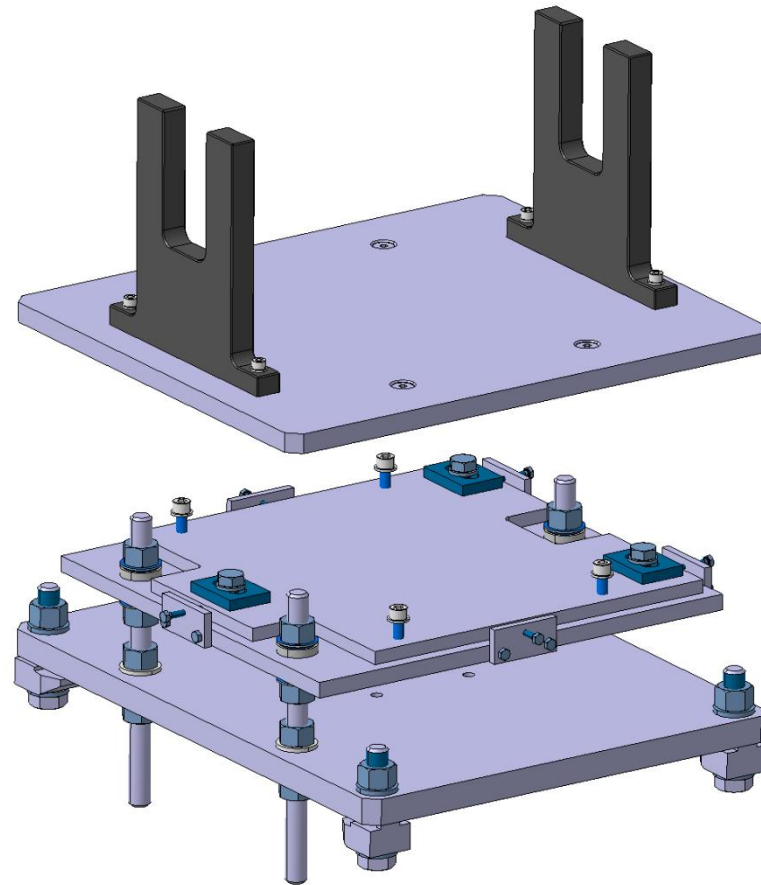
All Components



All Components



New Components



Manufactured Components

