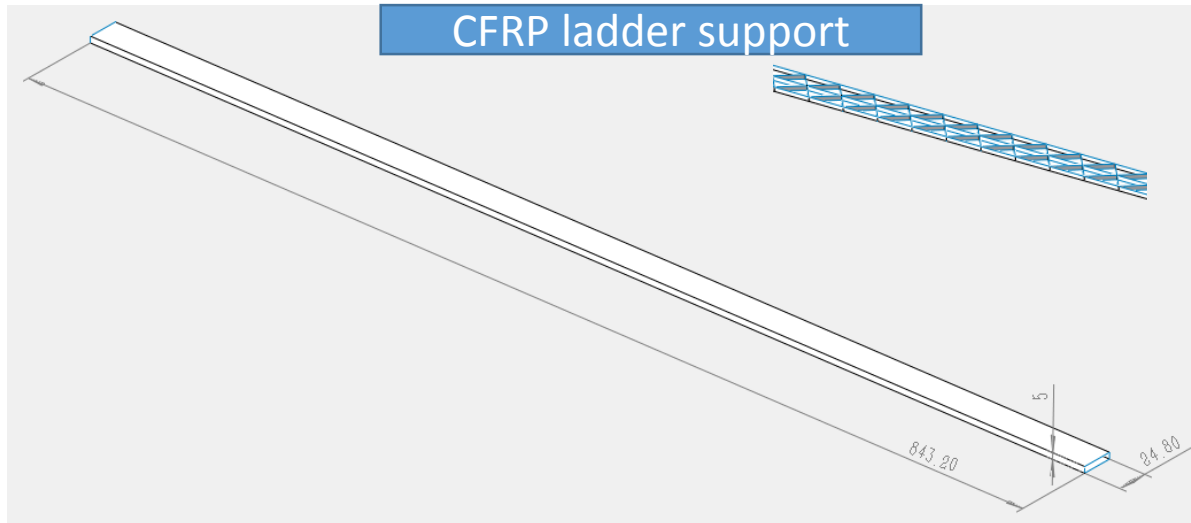


The long CFRP ladder support

The equivalent thickness of the CFRP support for one sensitive layer: **0.235mm**



Other materials (mm)

Si 0.05

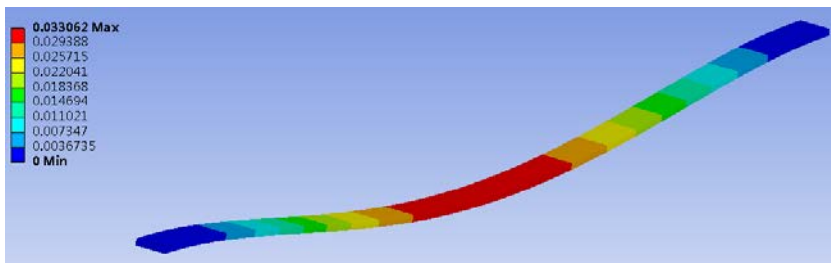
Pi 0.1

Al 0.036

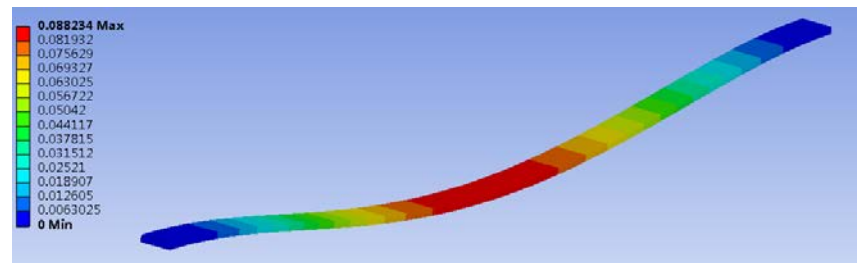
adhesive 0.56+0.56

Section: 24.8x5 mm

Def - self weight: 0.033mm

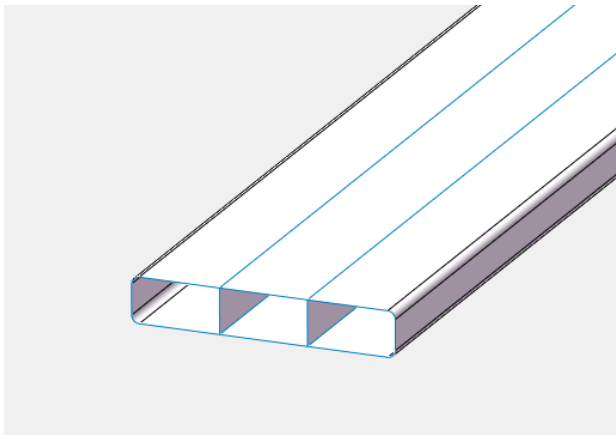


Def - fully loaded: 0.09mm



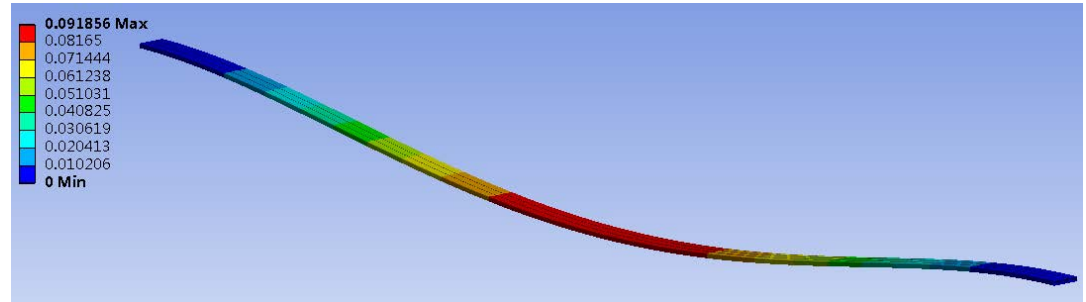
The long CFRP ladder support - updated

Section: **17.4x3 (L=840)** mm
Wall thickness 0.15mm

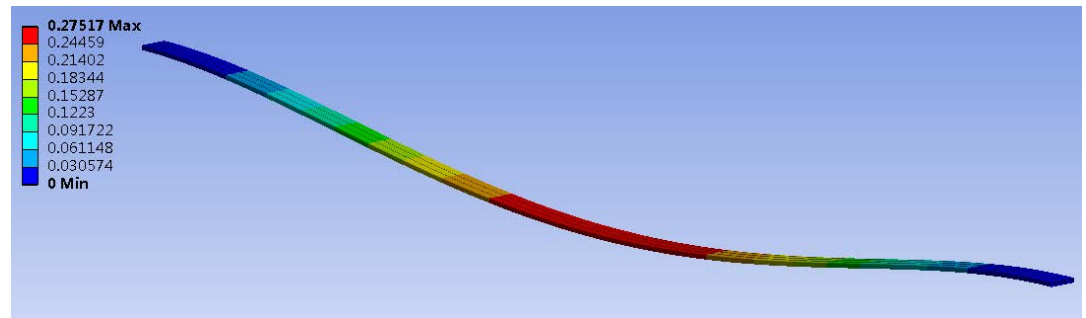


The equivalent thickness of the CFRP support for one sensitive layer: **0.2mm**

Def - self weight: 0.09mm

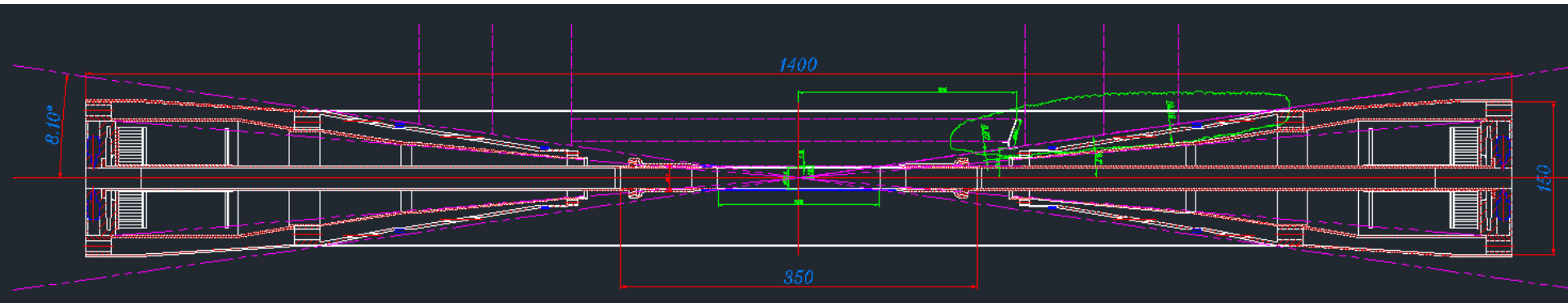


Def - fully loaded: 0.28mm (**acceptable?**)



New CFRP support relatively easier for fabrication is being designed

Layout discussion

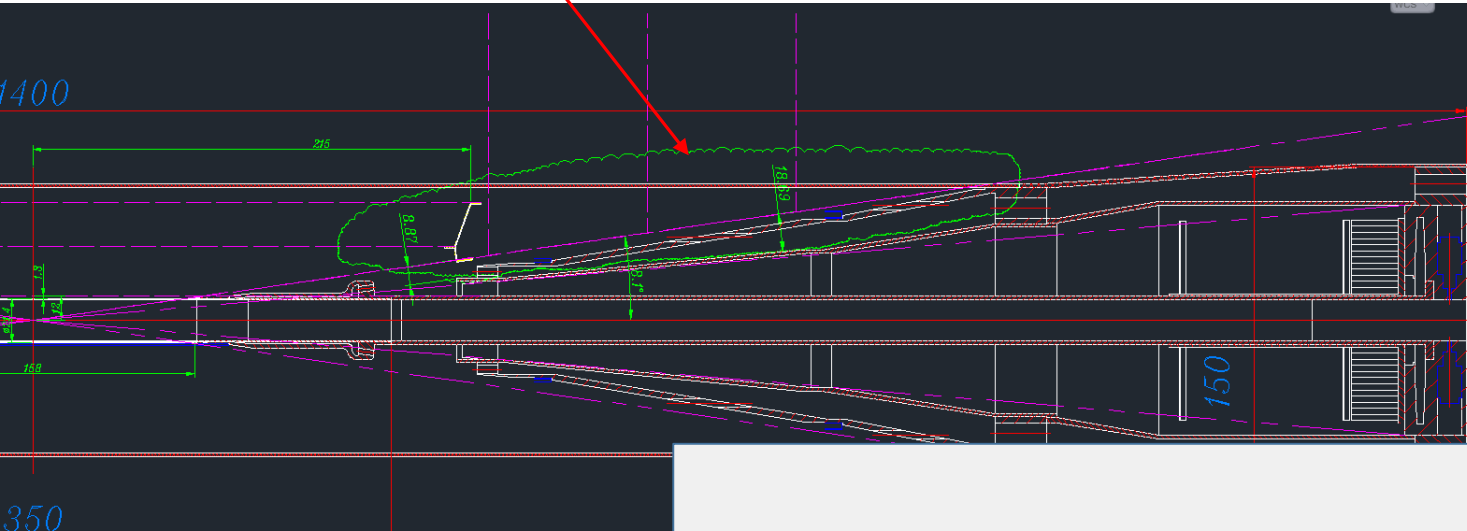


Air cooling...

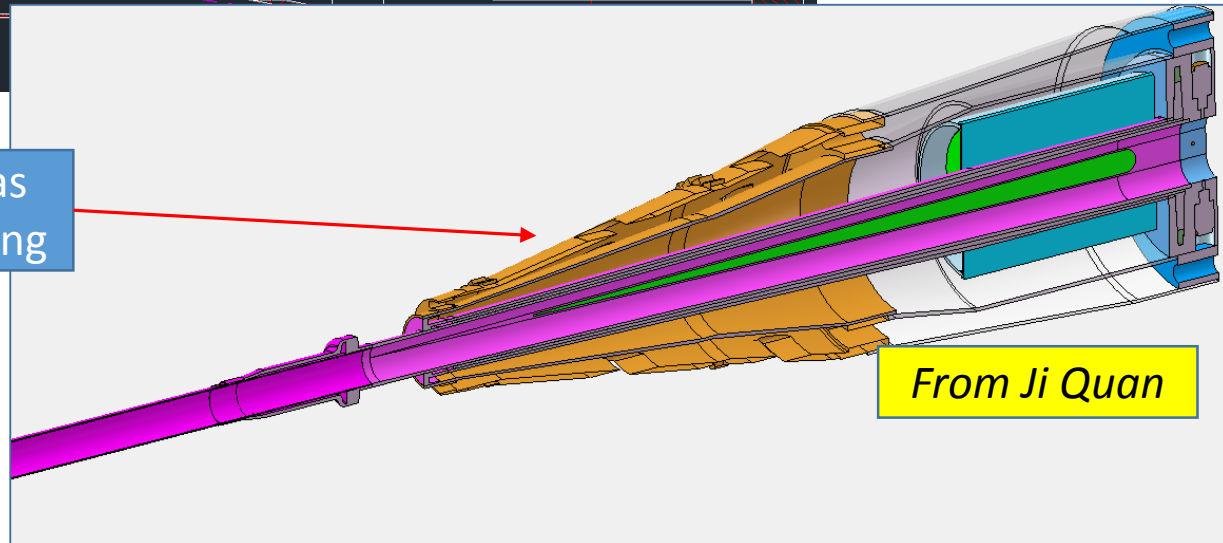
Cable routing....

Layout discussion

Available space for VTX

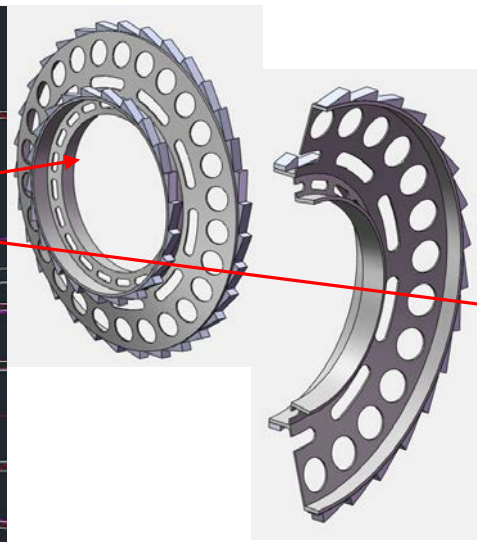
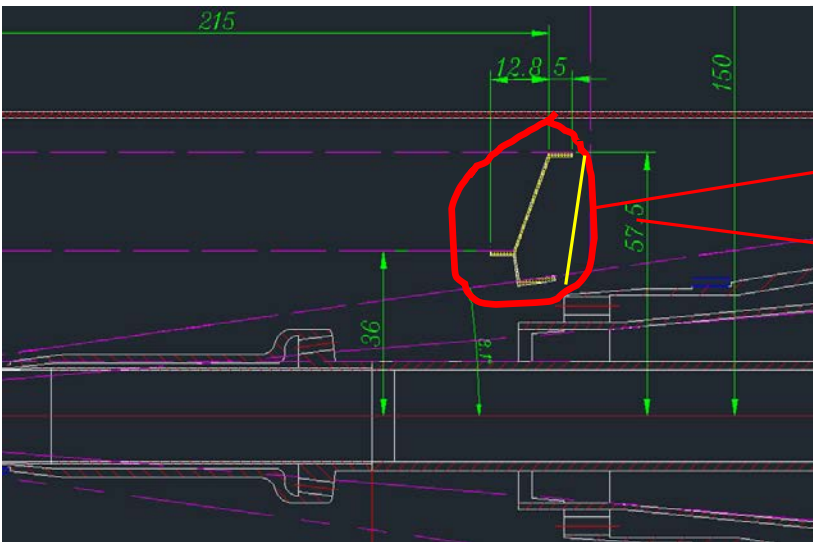
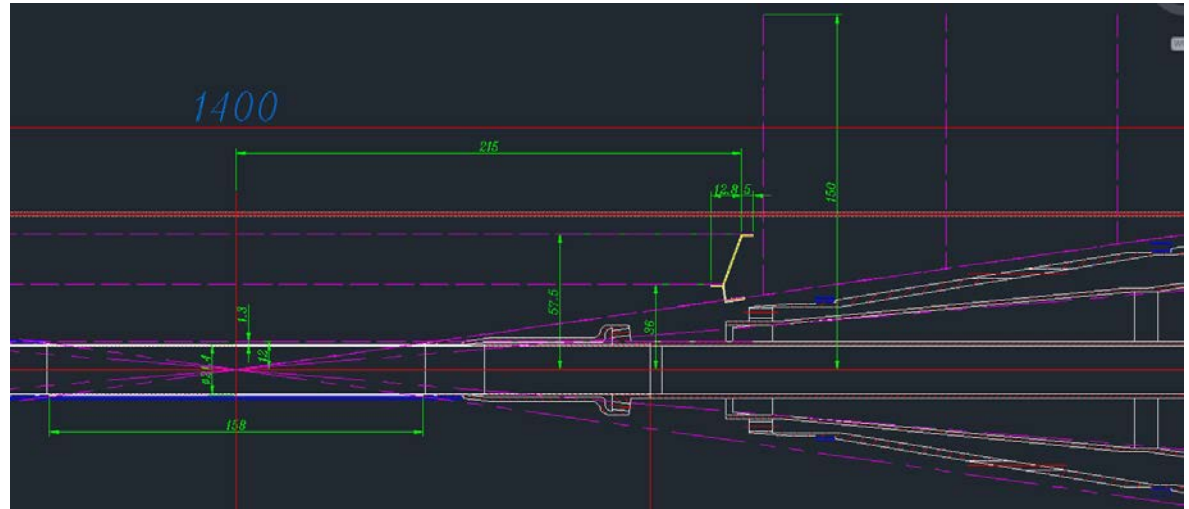


This part can be customized as VTX need air cooling and routing



Barrel support and materials estimate

Length of inner layer



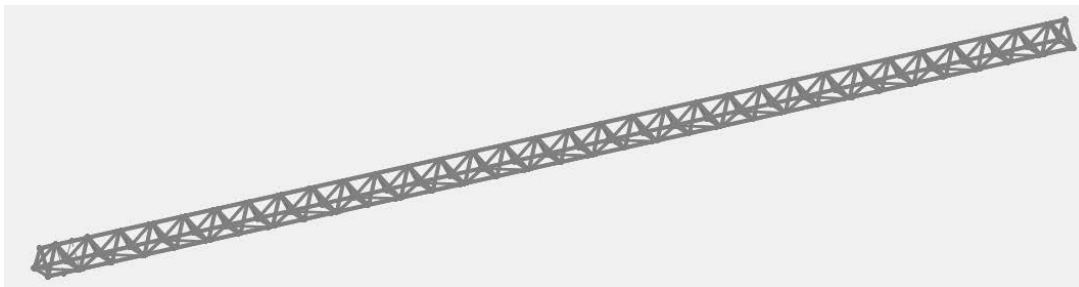
Mass: 15g (Peek + CFRP)

Equivalent thickness of CFRP on the ring (r: 17.3-36.3 mm) is 1.17mm.

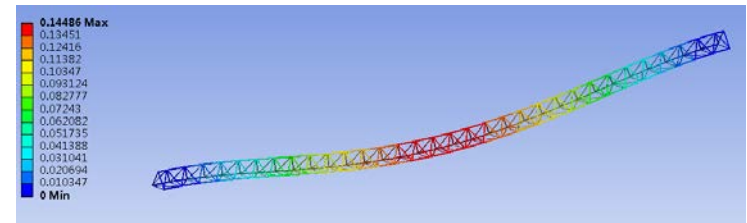
Static analysis will be done.

An optional support design for tracker

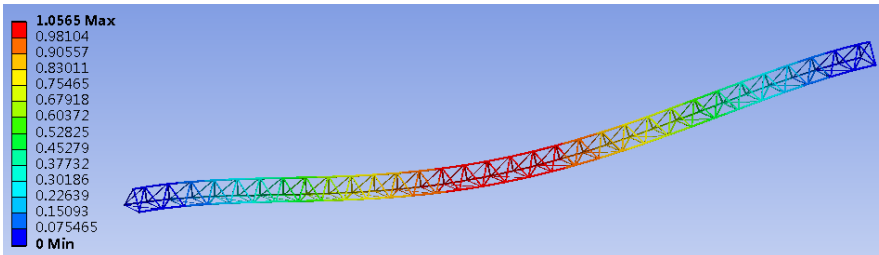
Edge of the triangle: 86.6 mm, truss length: 3200 mm, thickness 0.8 mm
Material CFRP, total mass 402 g



Self weight, def: 0.145mm



Self weight + 2.5kg (apply to the bottom of the truss),
def: 1.1mm



Failure IRF: max 0.25, FS=4

