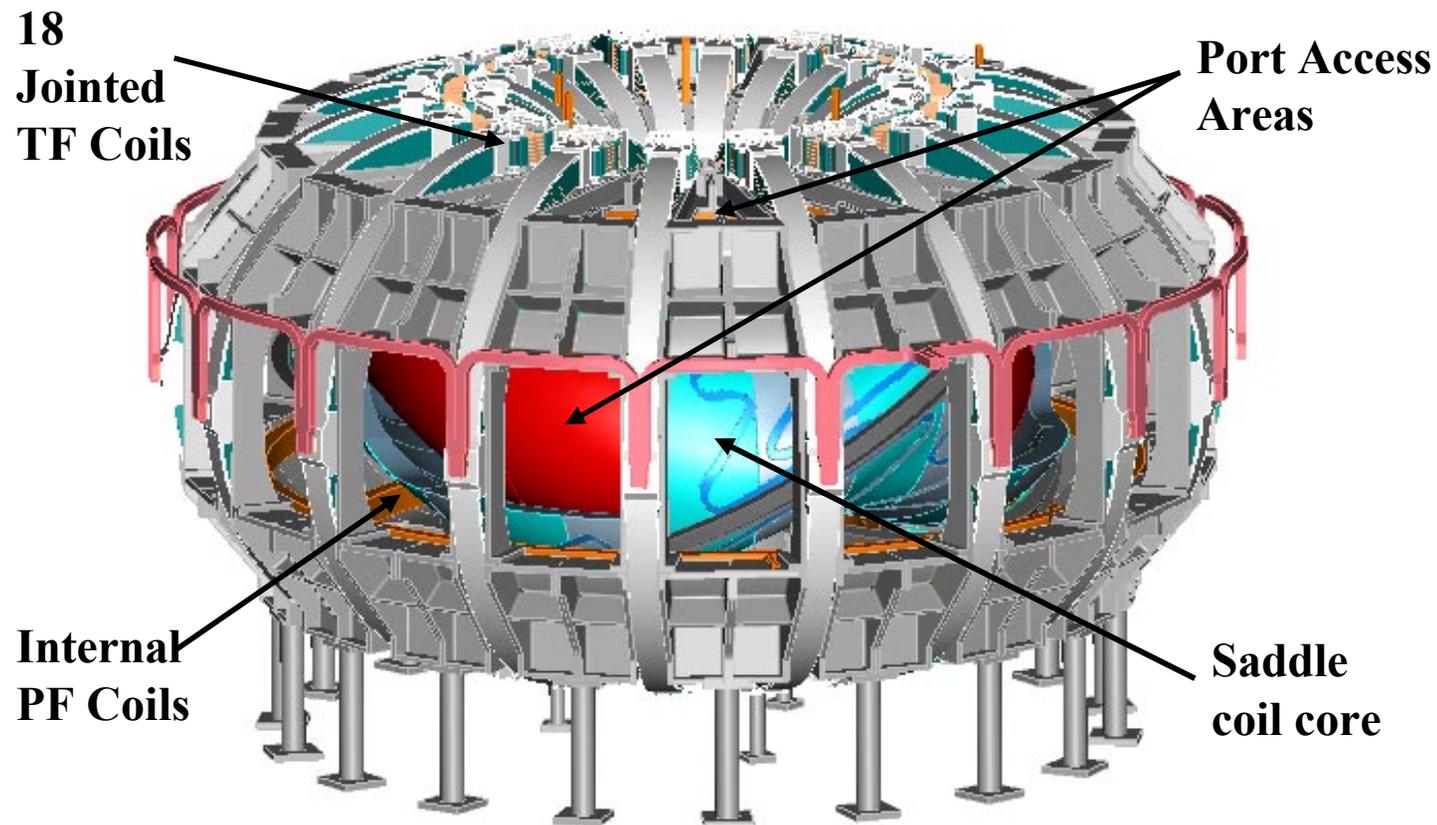


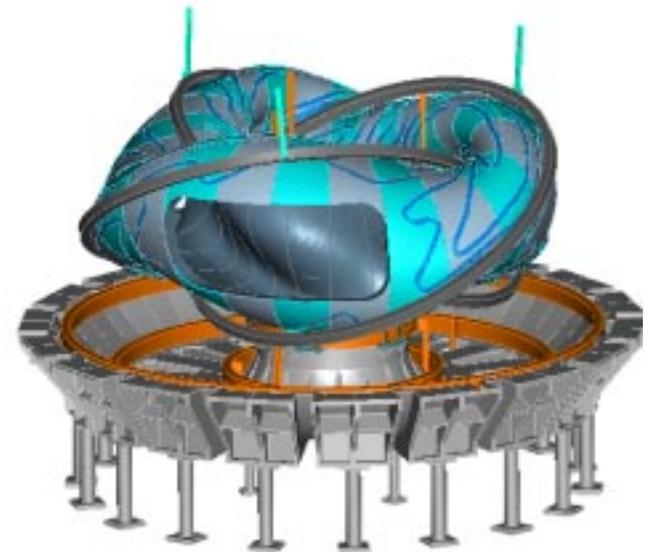
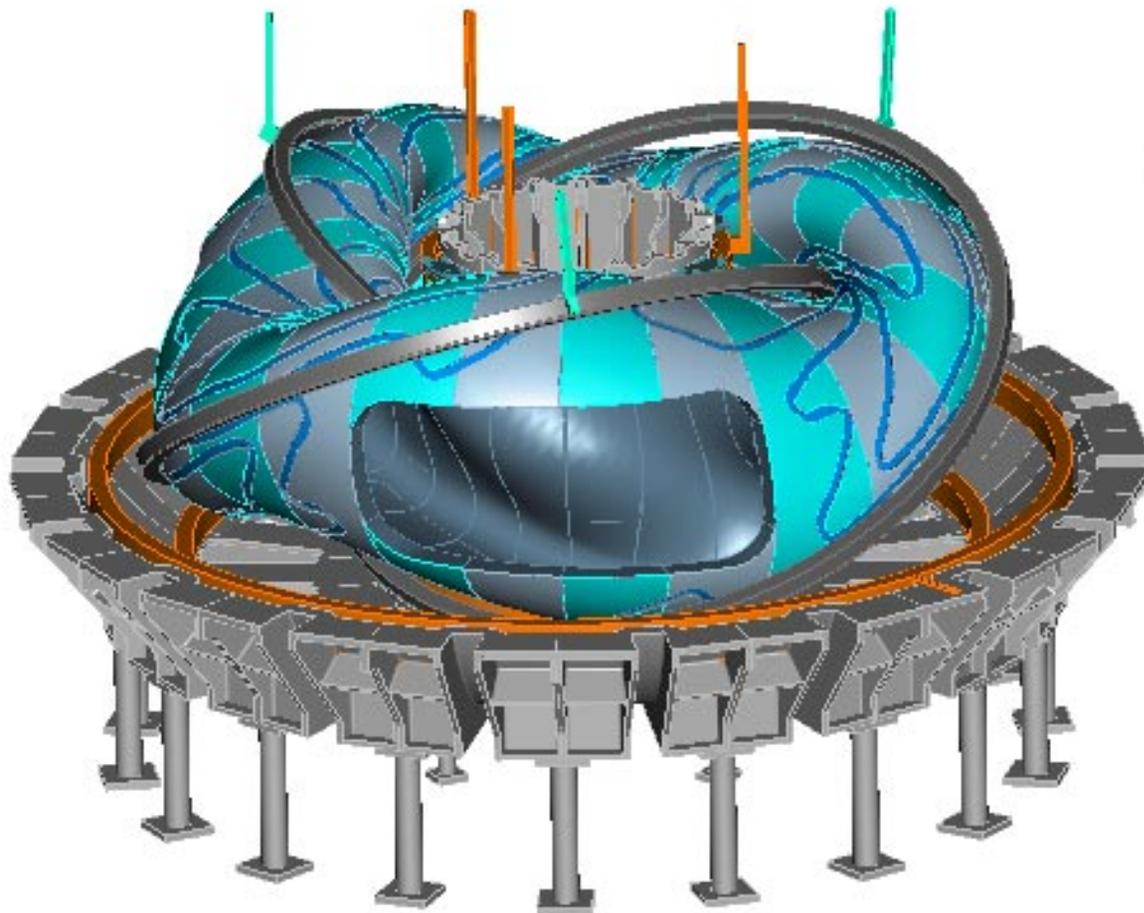
SADDLE COIL CONFIGURATION DEVELOPMENT

Tom Brown (PPPL)
November 13-14, 2000

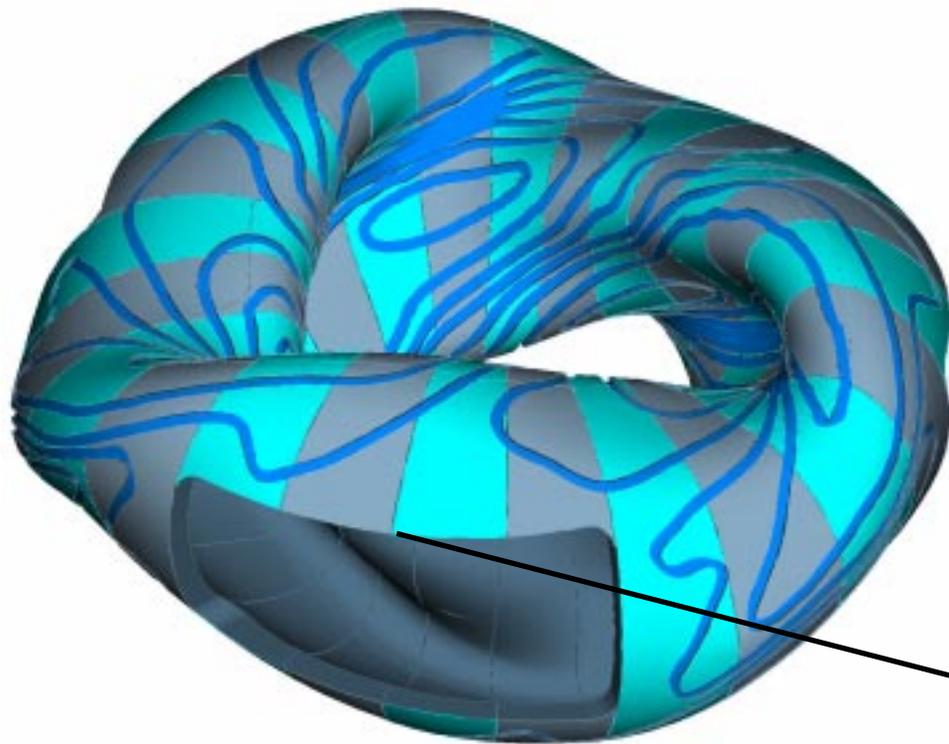
NCSX Saddle Coil Option Core Configuration



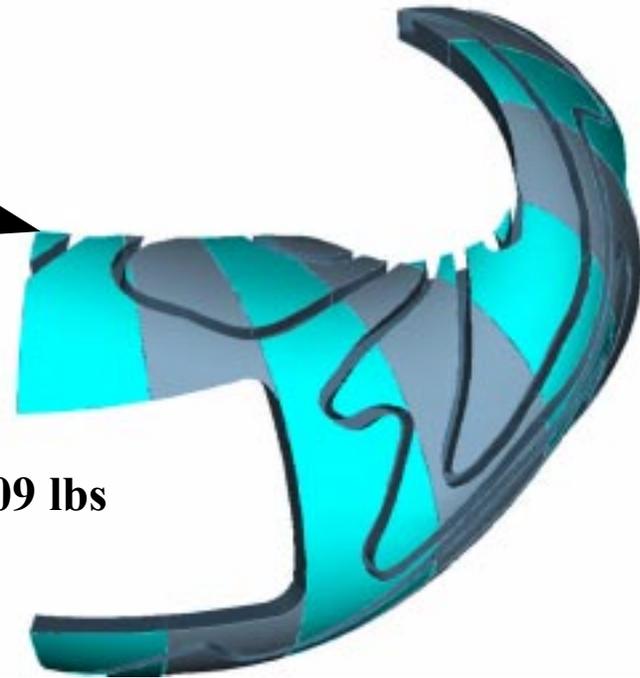
Saddle coil core assembly



**The stellarator
core is expected
to weigh less than
50 tons**

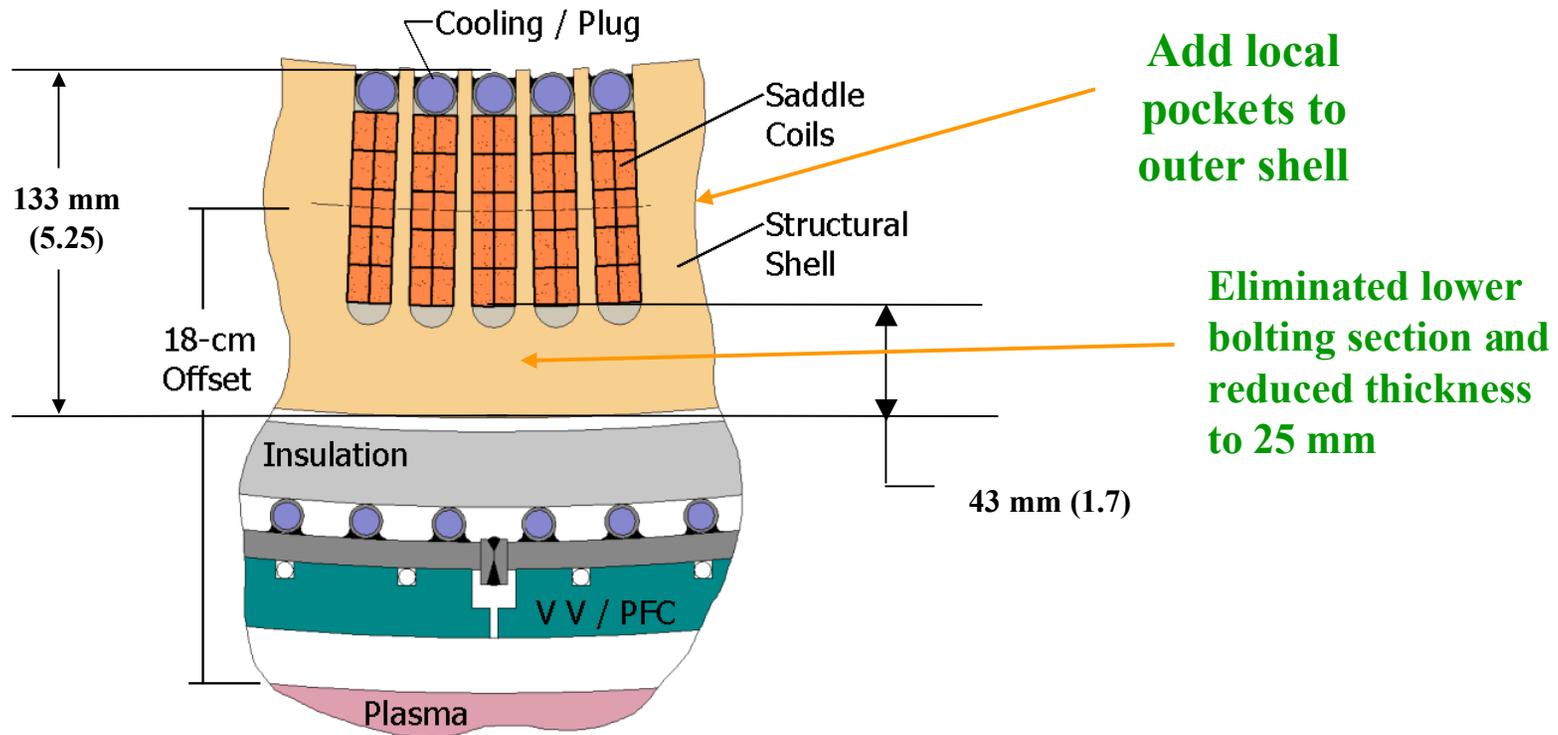


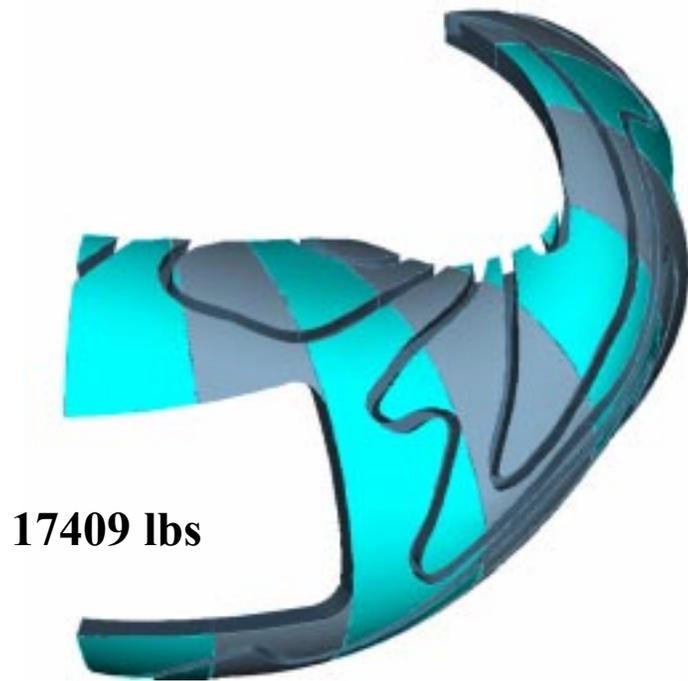
**Cast Nickel-Al-Bronze
structure, 48 segments
(shell weight 87691 lbs)**



17409 lbs

Baseline coil/VV build





17409 lbs

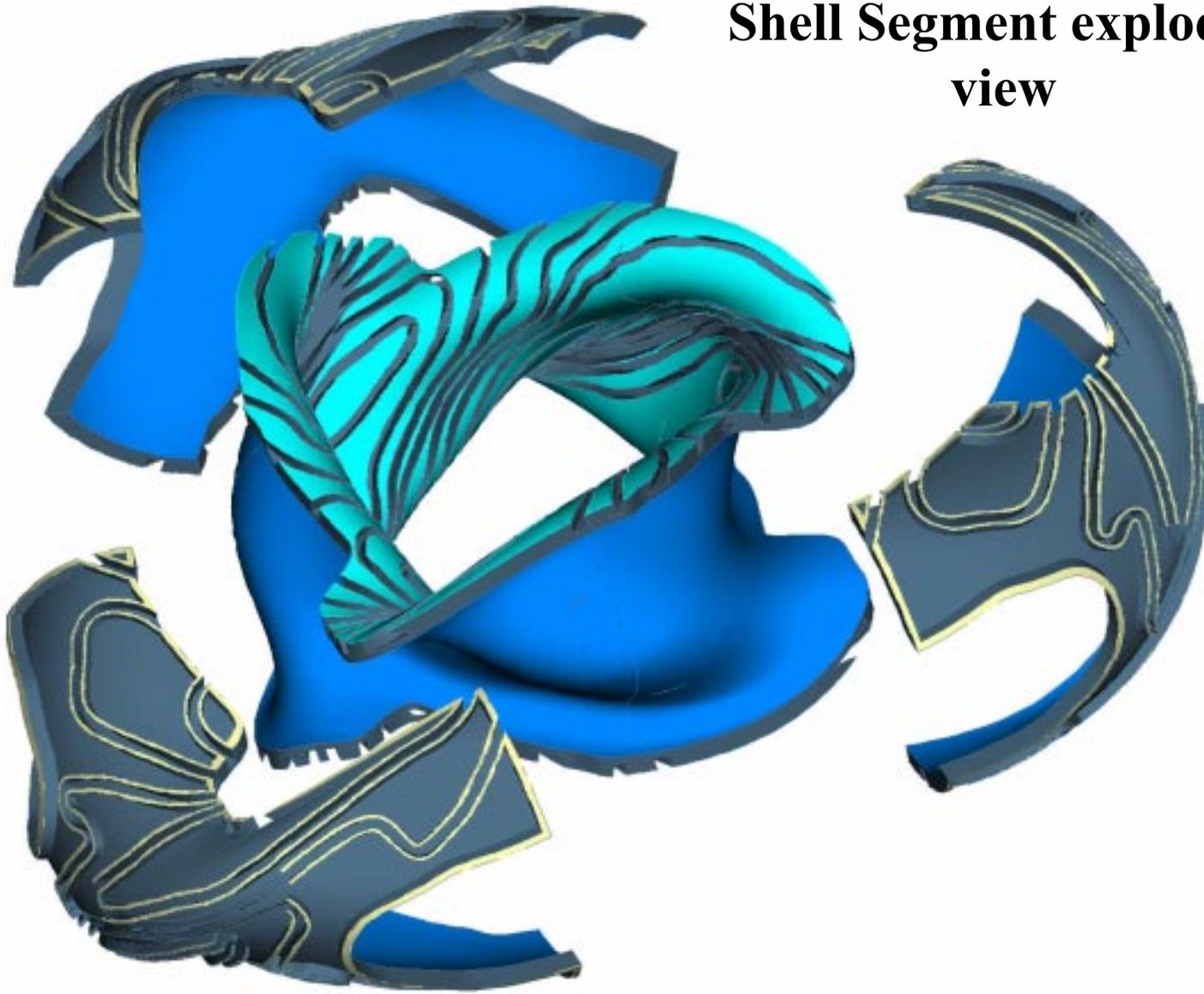
**A potential weight
reduction of 40% – 50%
can be achieved in the
outer shell segments**

Cast SS segment

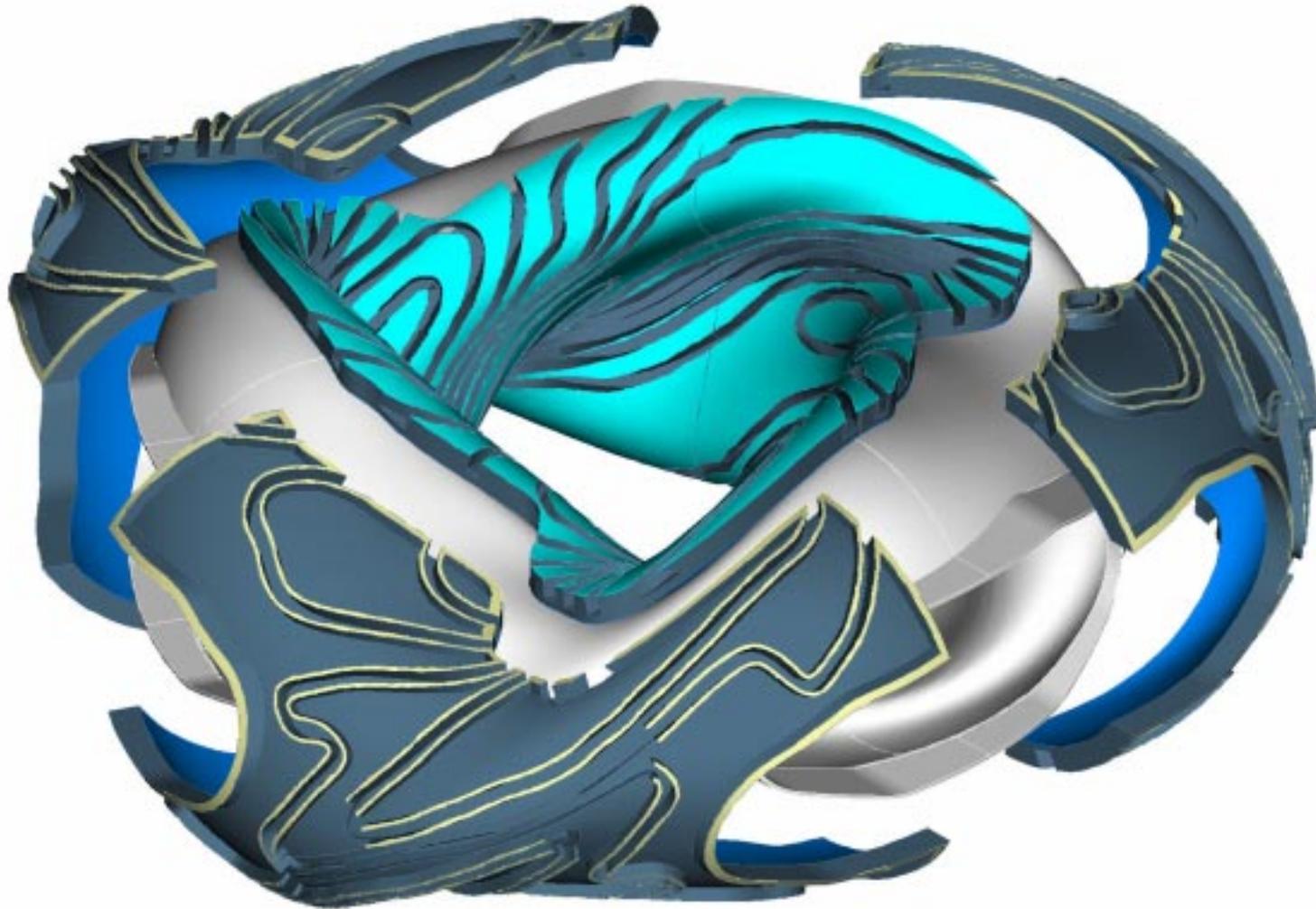


9800 lbs

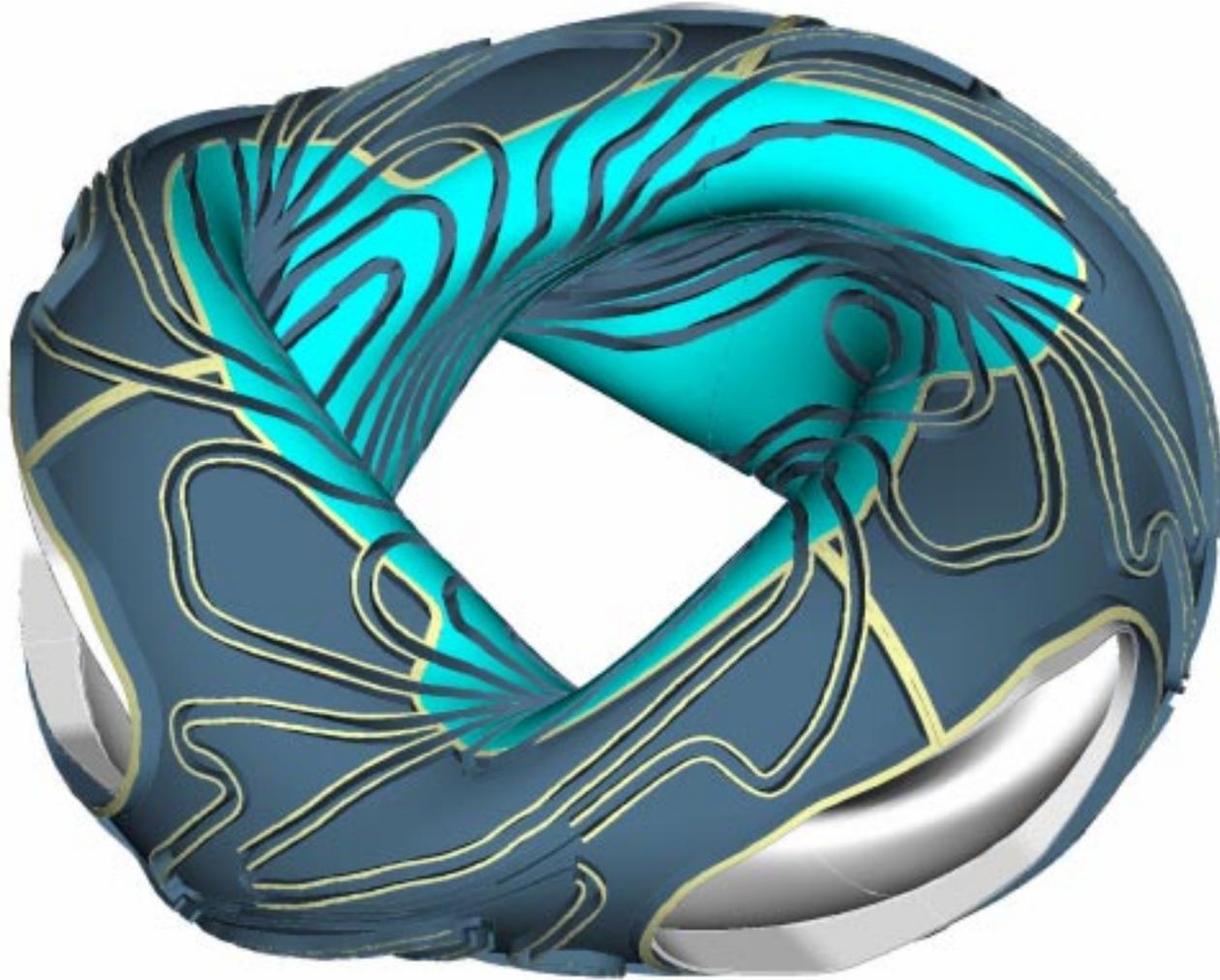
**Shell Segment exploded
view**



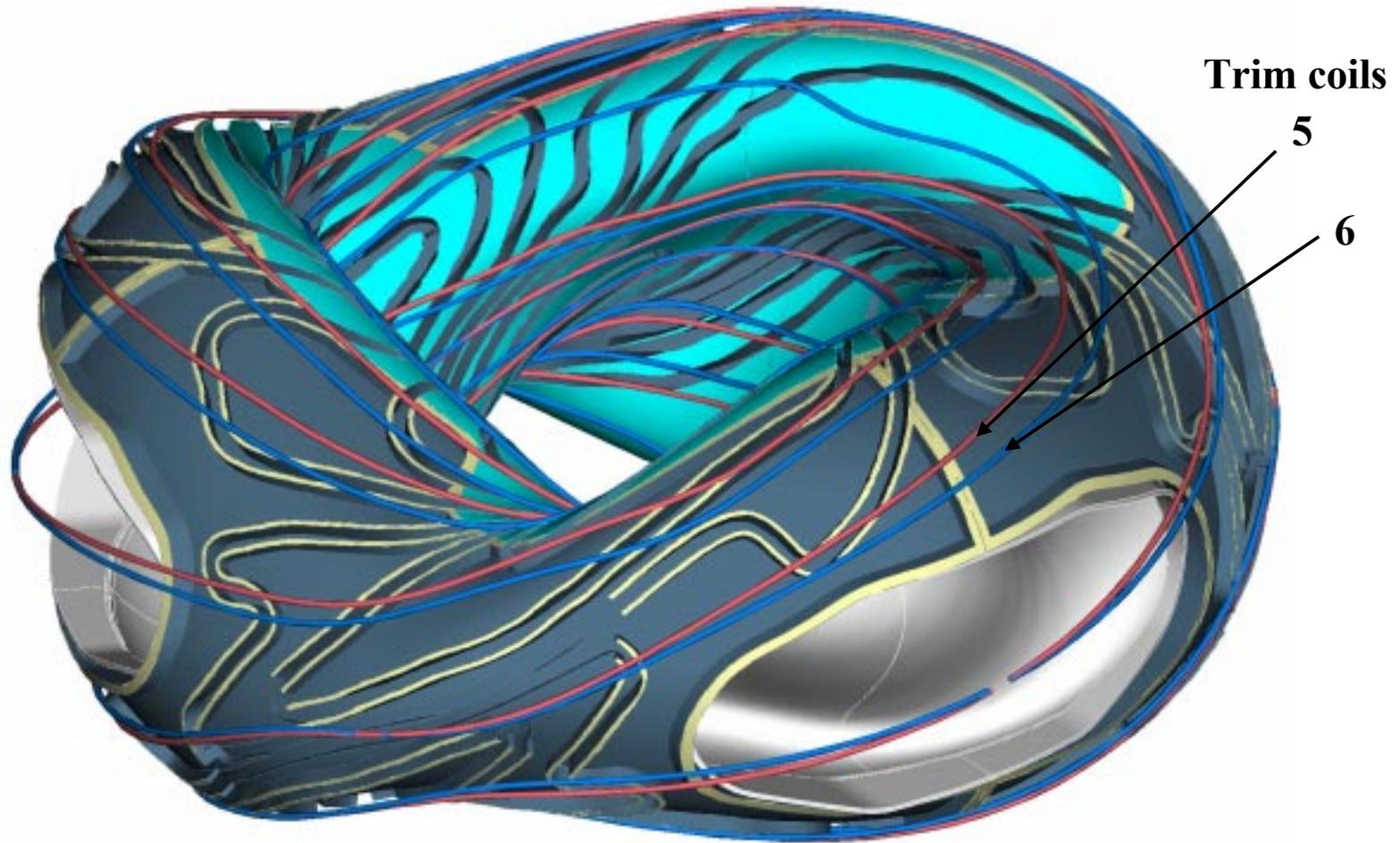
Final coil shell assembly around the vacuum vessel



Saddle coil shell and VV assembly



Two trim coils added to saddle coil assembly



Trim coils 4 thru 8 added to core assembly

