

Evaluation of loads not considered in the full strength assessment

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ENGINEERING
DEPARTMENT

Pre-tuner in Nb - EP

ANSYS
R14.1
MECHANICAL

B: Tuning Interface EP

Figure

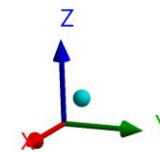
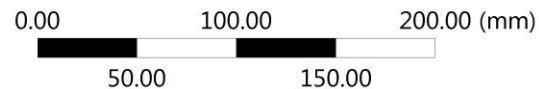
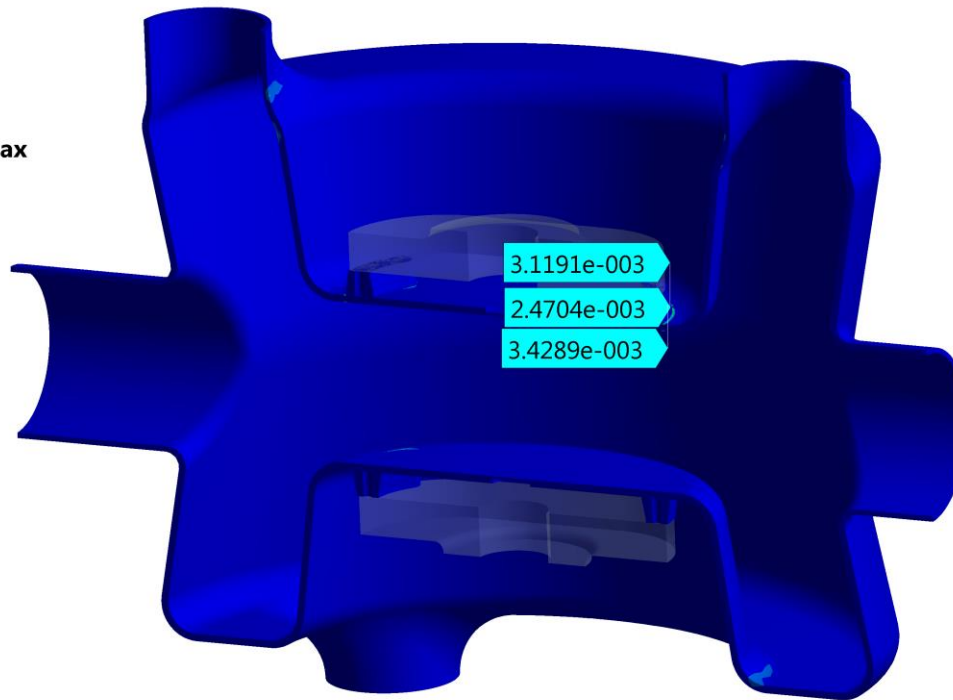
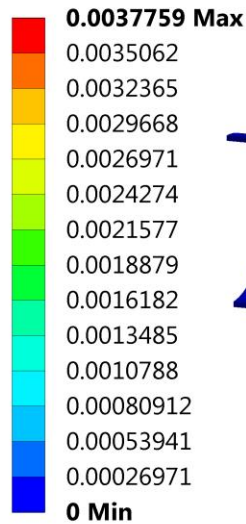
Type: Equivalent Plastic Strain

Unit: mm/mm

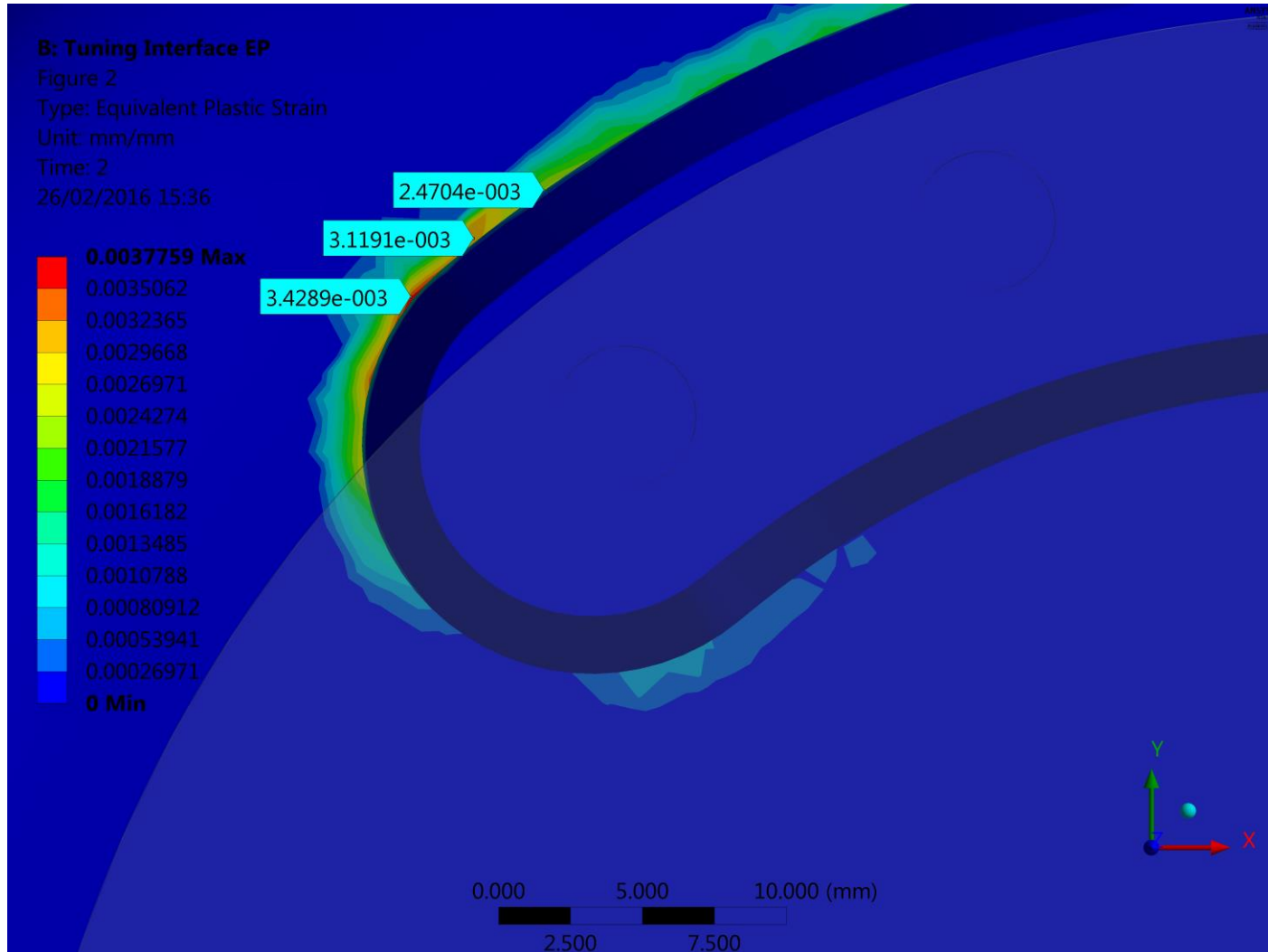
Time: 2

26/02/2016 15:36

The peak value is
mesh-sensitive



Pre-tuner in Nb - EP



Pre-tuner - deformation



B: Tuning Interface EP

Figure

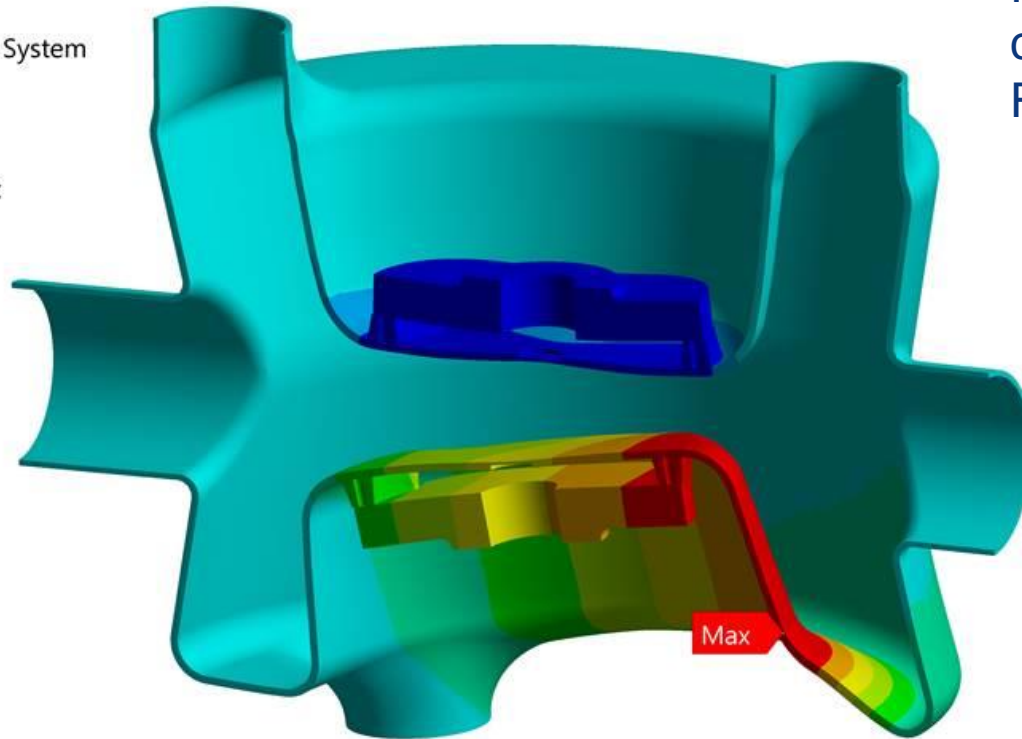
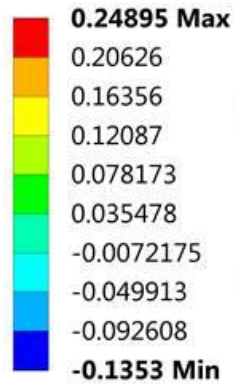
Type: Directional Deformation(Z Axis)

Unit: mm

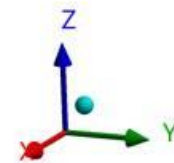
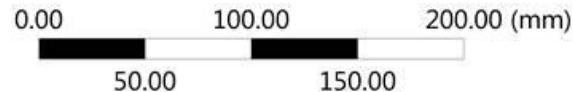
Global Coordinate System

Time: 1

25/02/2016 15:08



It's a non parallel capacitor.
Re-evaluate?

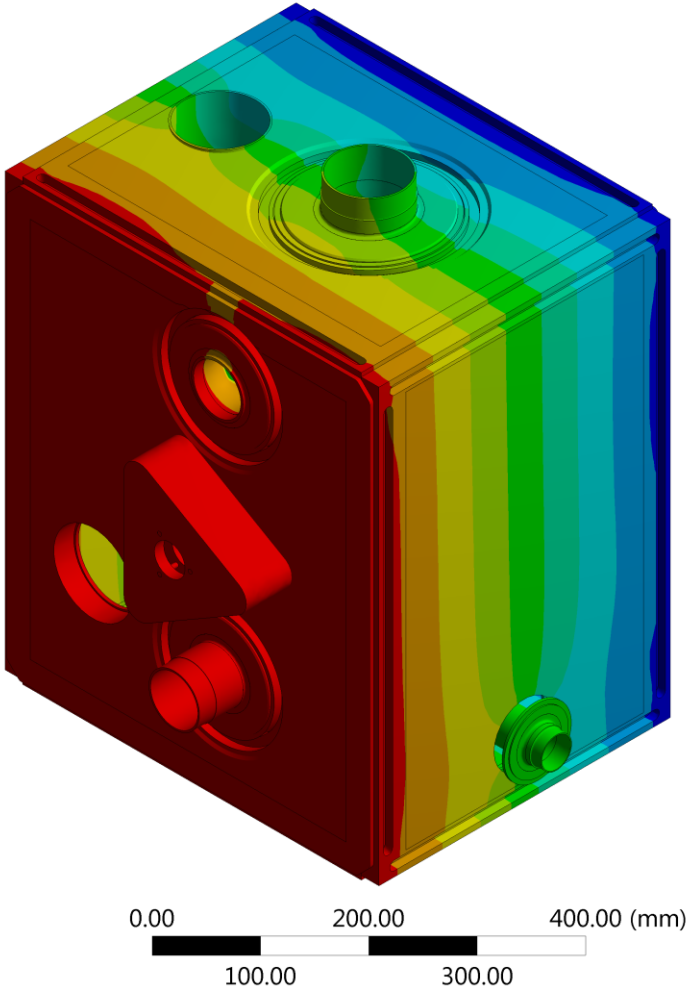
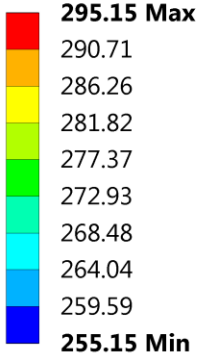


ΔT during cool down

ANSYS
ES13
APR 2013

A: Steady-State Thermal

Figure 2
Type: Temperature
Unit: K
Time: 1
26/02/2016 11:46



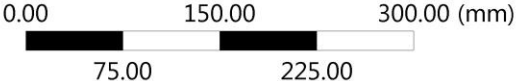
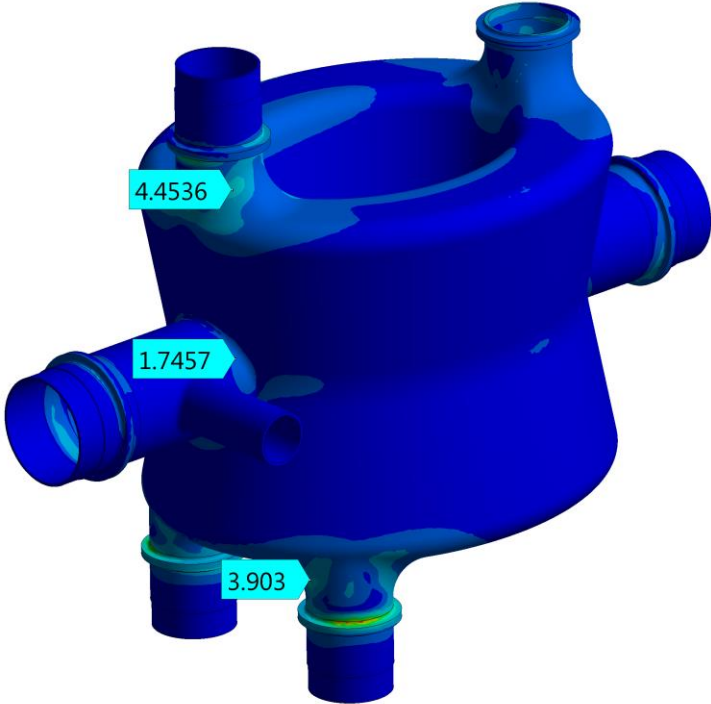
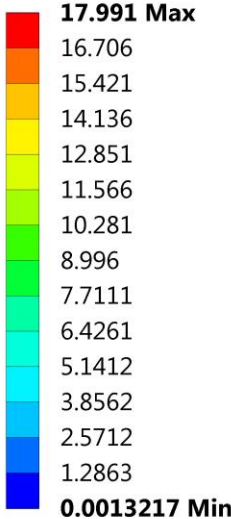
ΔT during cool down

ANSYS
BIL2
11/2015

B: Static Structural

Figure
Type: Equivalent (von-Mises) Stress
Unit: MPa
Time: 1
26/02/2016 11:46

Localized peak is higher, but still not terrible





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