



# ***SS PLATES***

***6, 8, 10 OR 12MM***

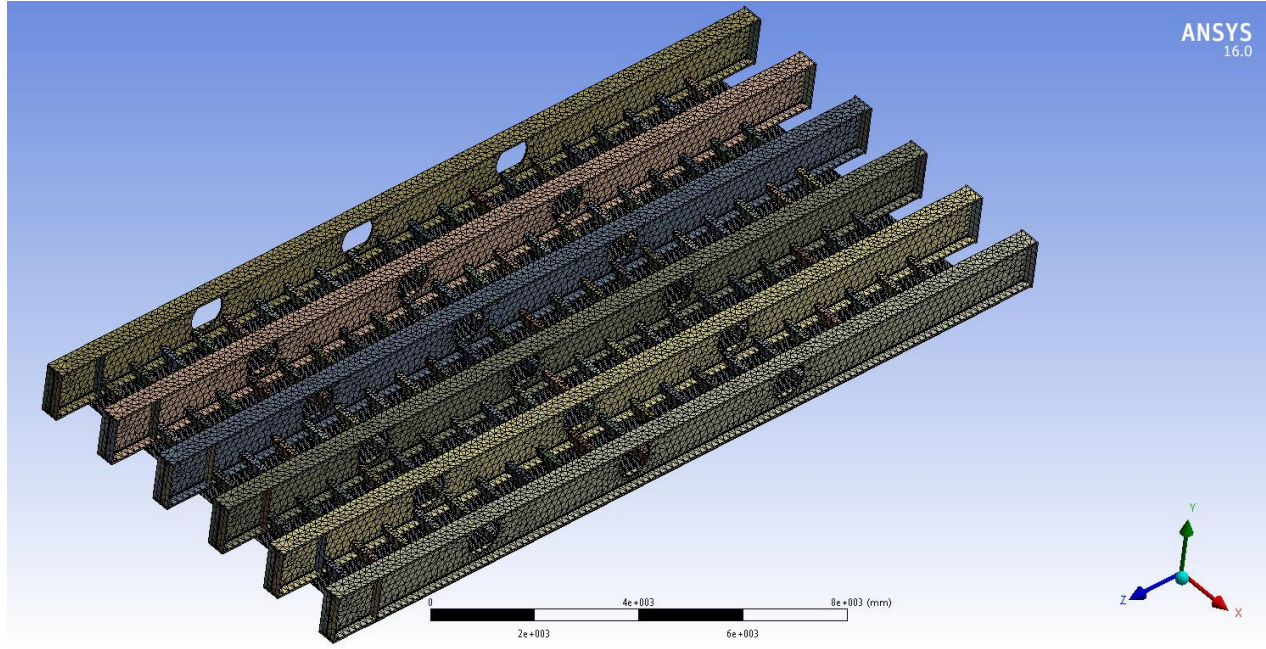
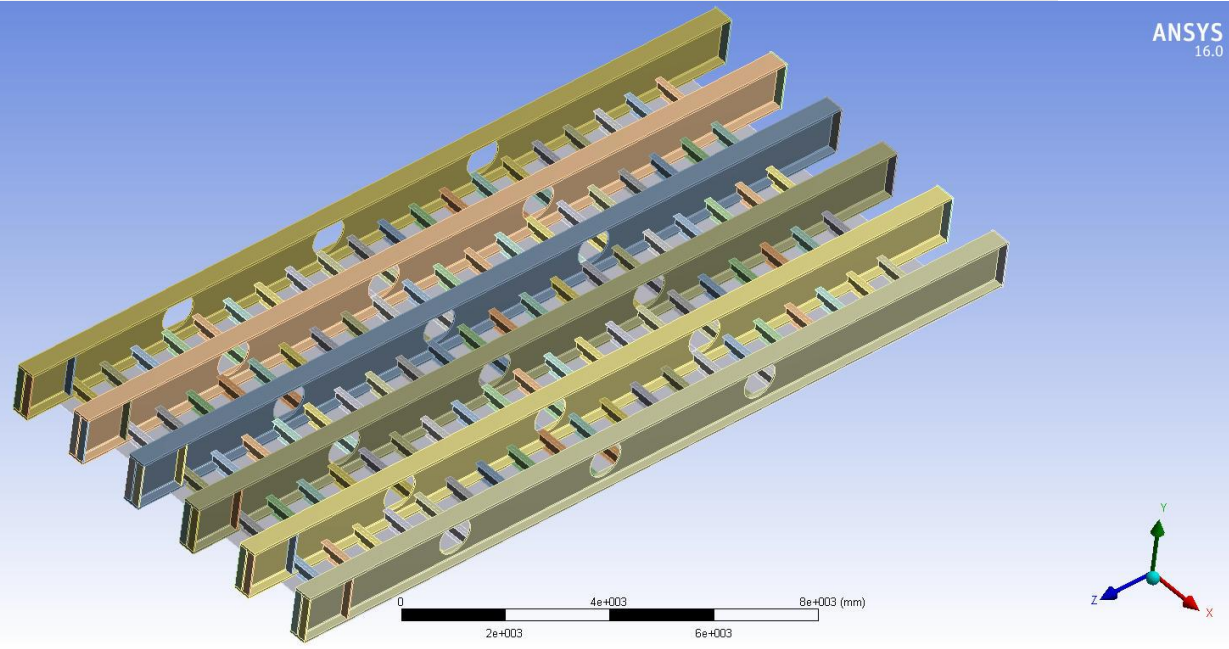
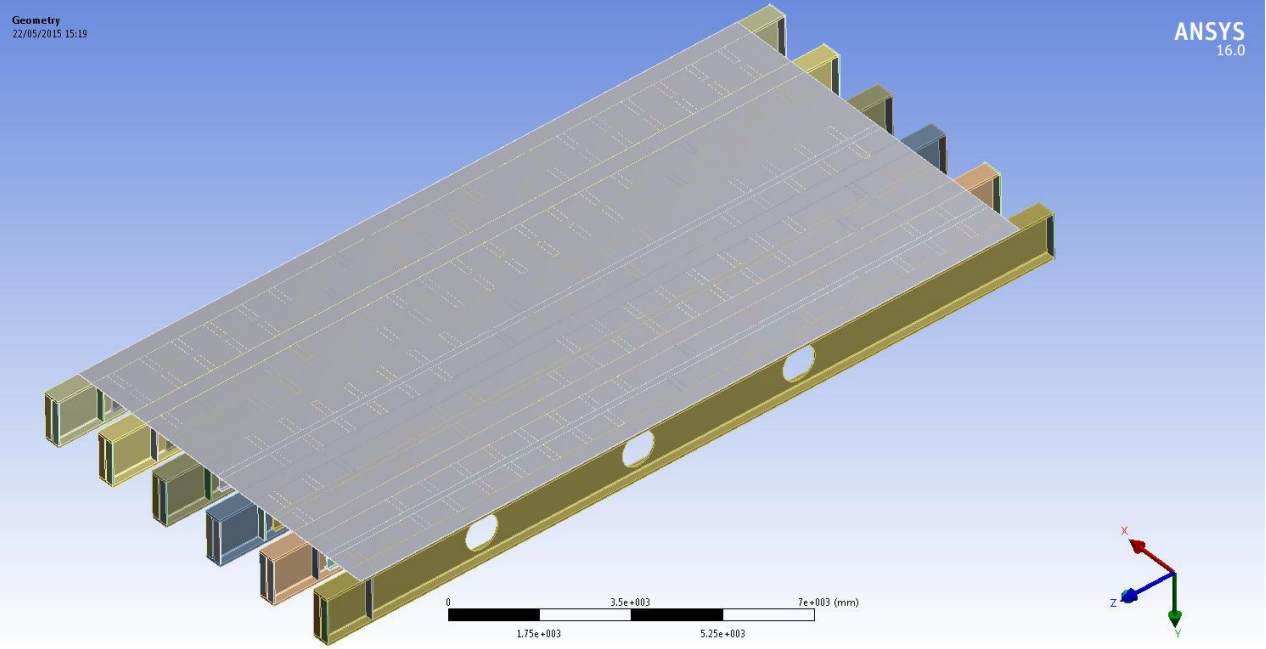
The behaviour of the stainless steel plates forming the tertiary containment barrier.

Analyses has been performed studying the effect of the thickness.

Four different possibilities studied and presented below for the following thicknesses:

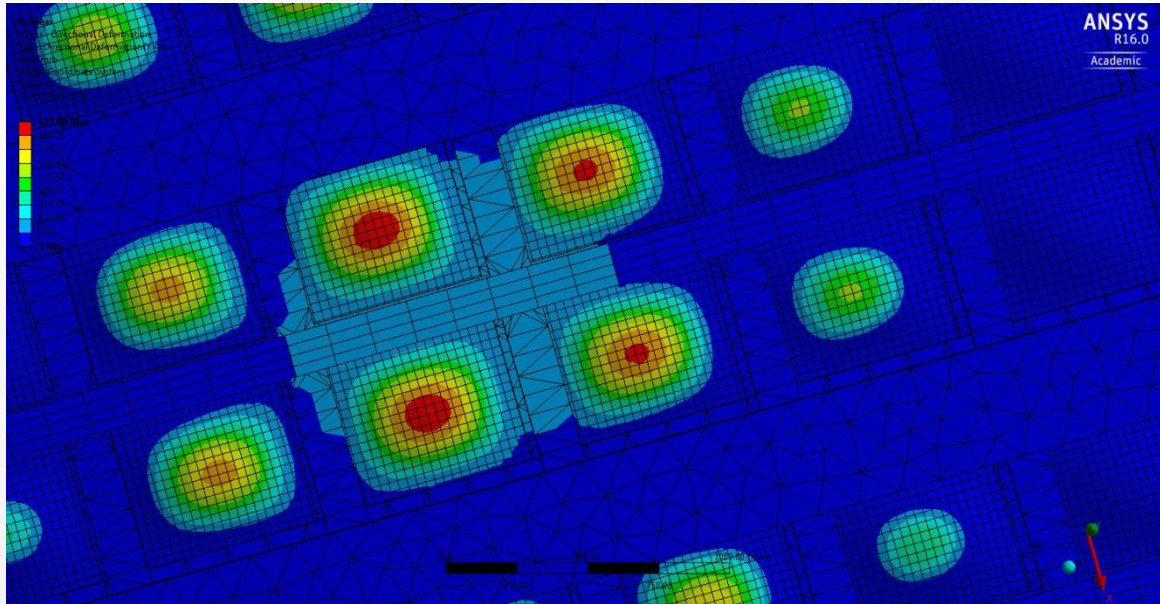
- 6mm
- 8mm
- 10mm
- 12mm

$\sim 5'000\text{ m}^2$

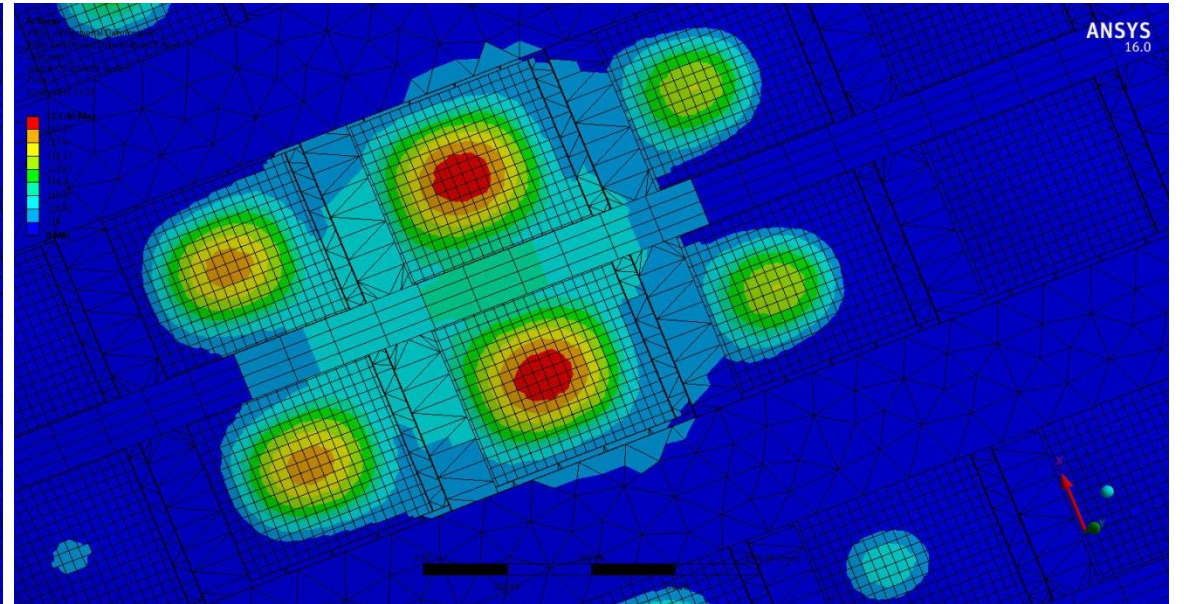




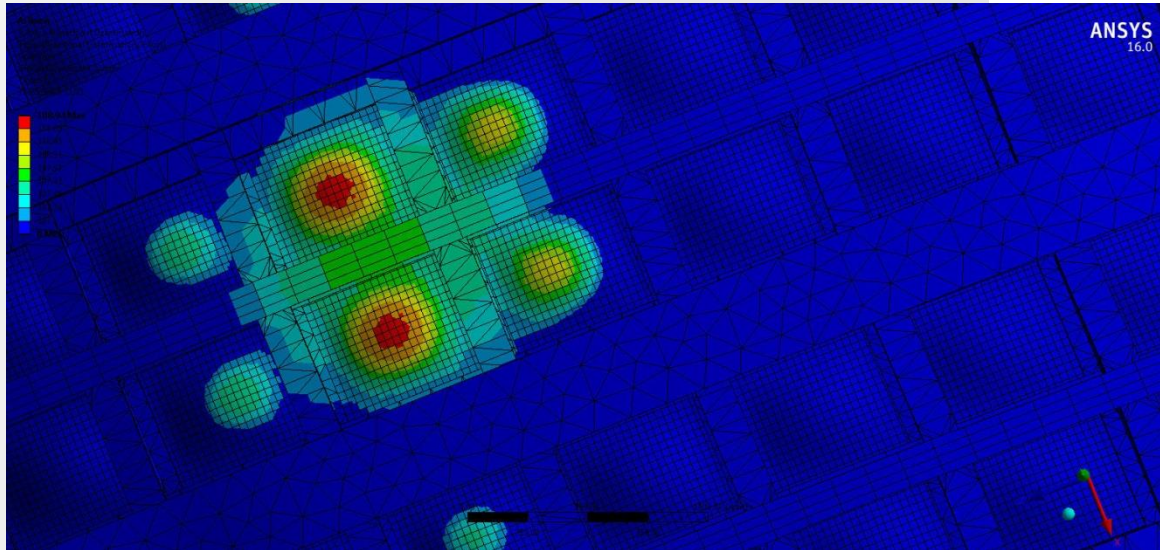
# Deformations [mm]



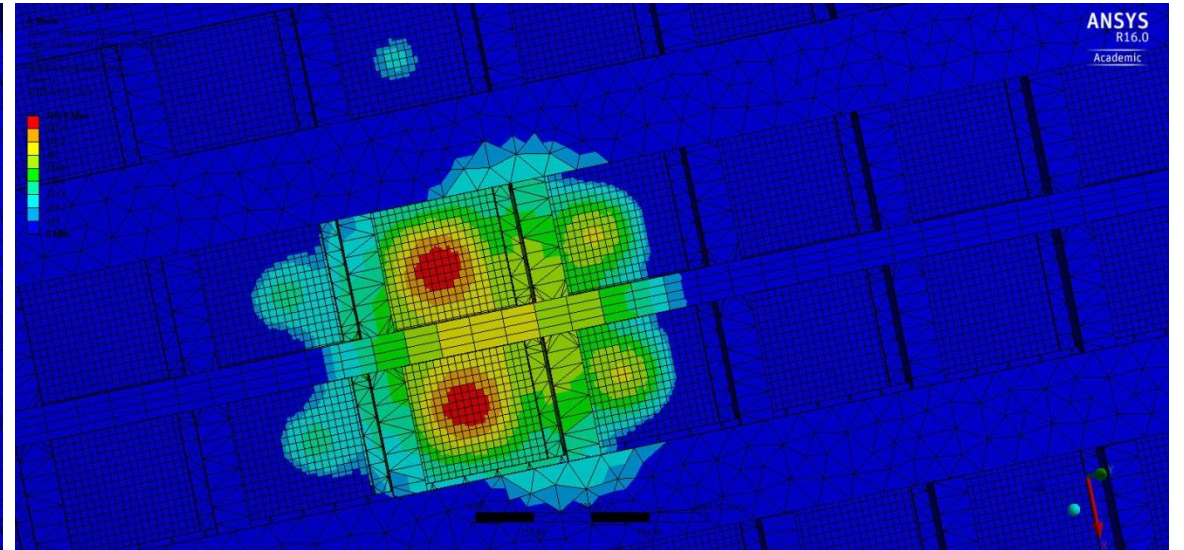
6mm (114-121mm = ~7mm)



8mm (110-113.5mm = ~3.5mm)



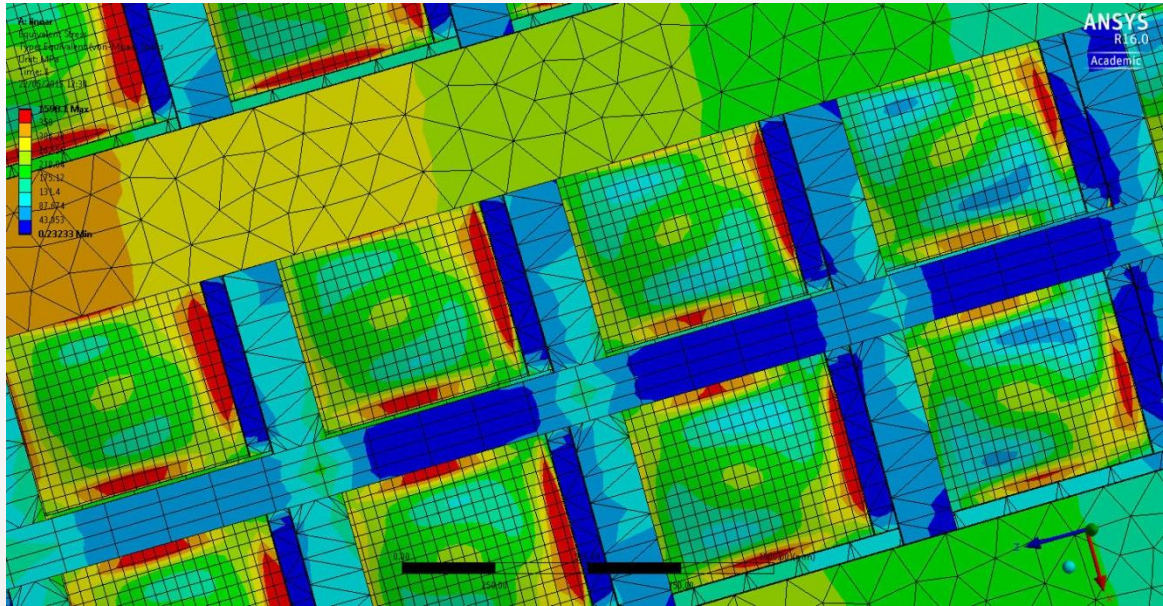
10mm (107-109mm = ~2mm)



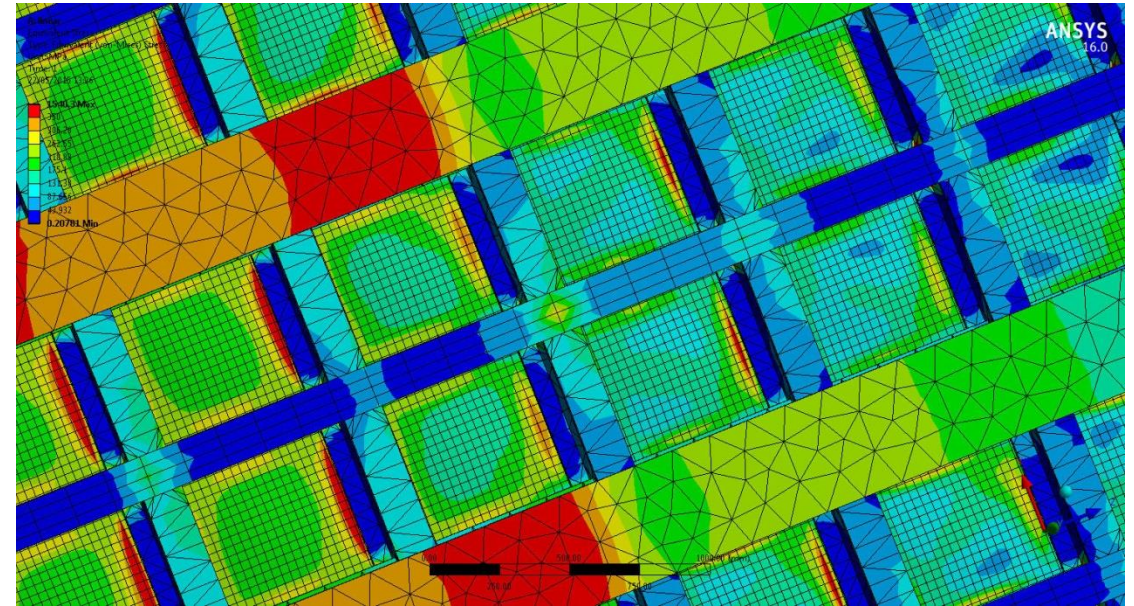
12mm (104-105.6mm = ~ 1.6mm)



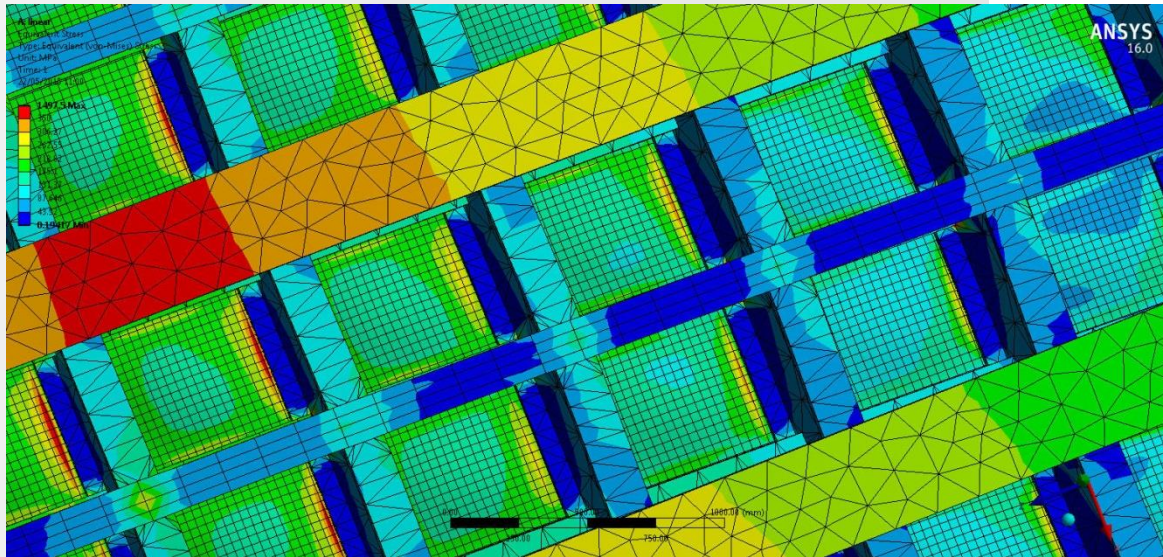
# Stresses [MPa]



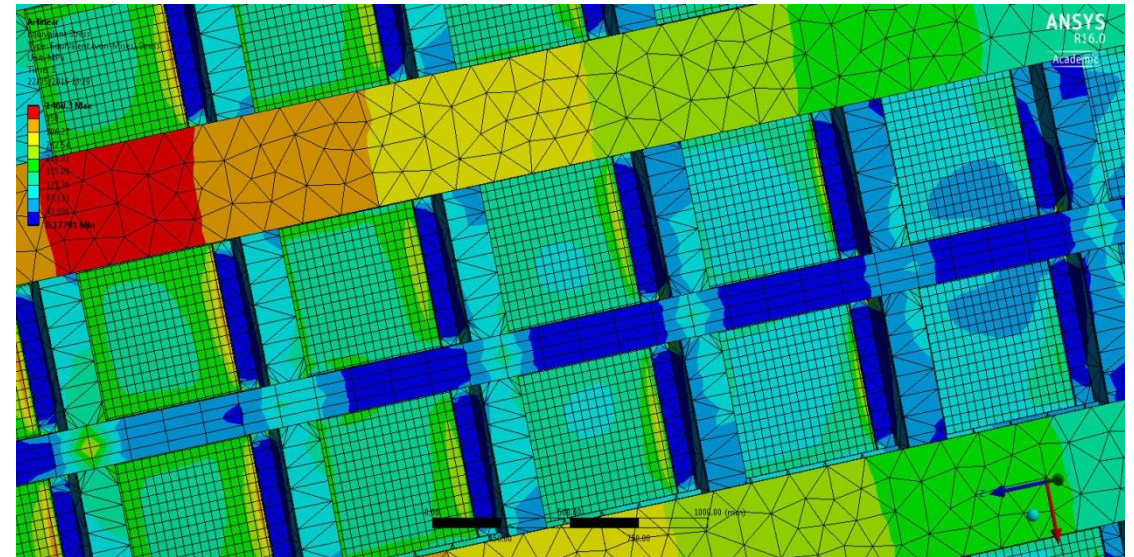
6mm (470-230)



8mm (320-170)



10mm (290-160)

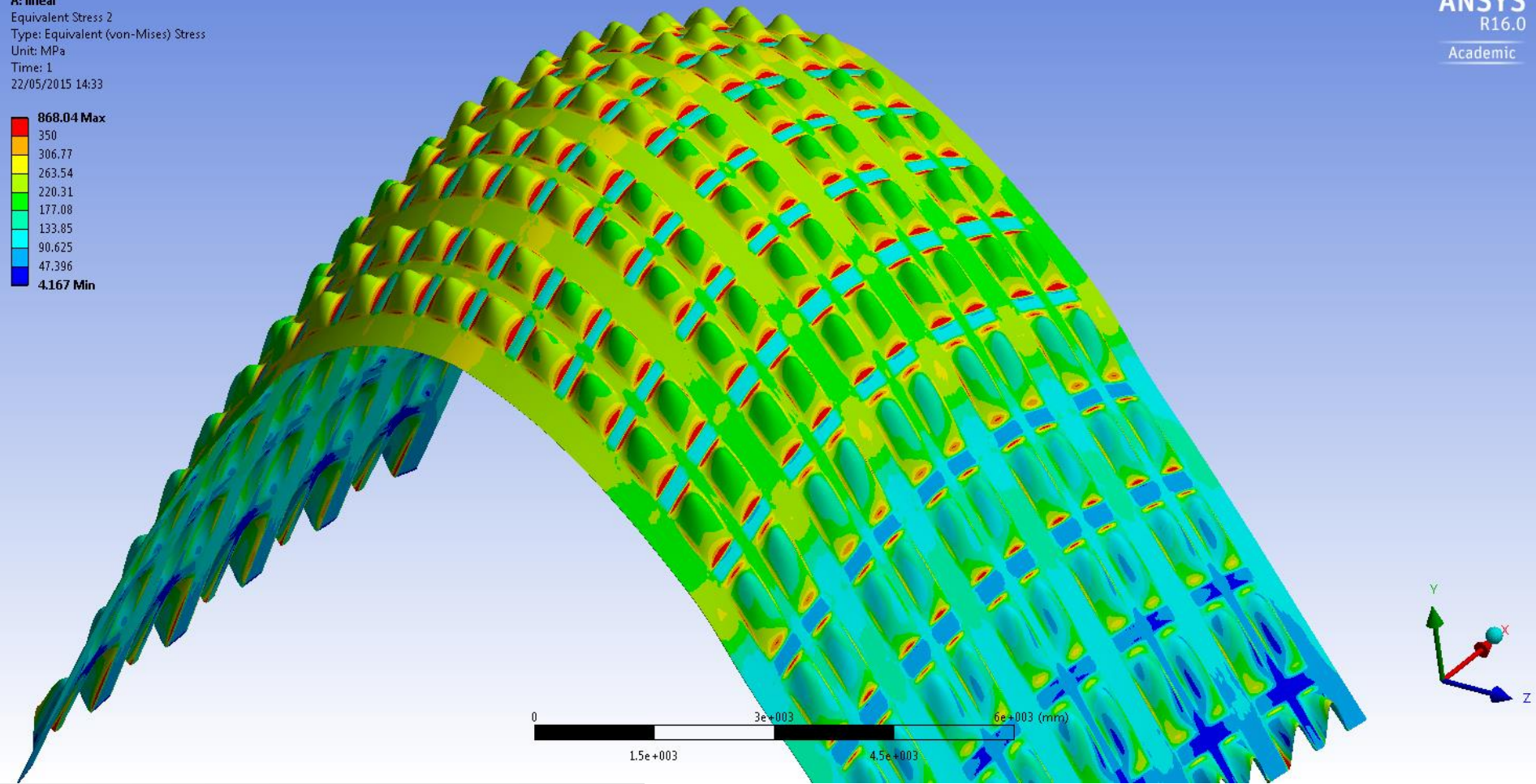
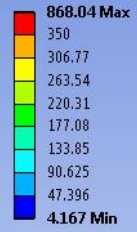


12mm (280-130)



A: linear  
 Equivalent Stress 2  
 Type: Equivalent (von-Mises) Stress  
 Unit: MPa  
 Time: 1  
 22/05/2015 14:33

ANSYS  
 R16.0  
 Academic



Thickness (mm)	Defromation (mm)			Stresses (MPa)	
	Minimum Value	Maximum Value	Total	Welded Edge	Center
6	114	121.08	7.08	470	230
8	110	113.46	3.46	320	170
10	107	108.94	1.94	290	160
12	104	105.6	1.6	280	130