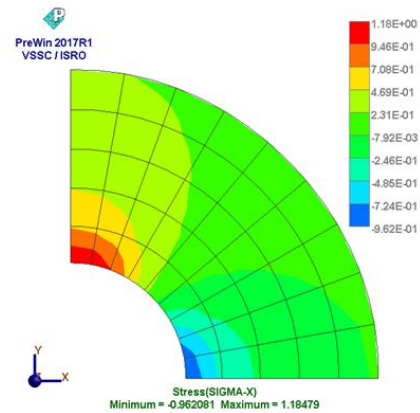
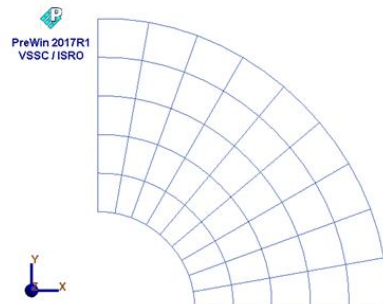
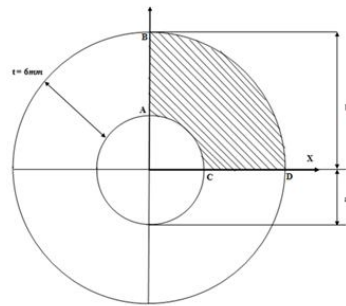


Static analysis of infinite thick pipe (treated as 2d)



Load :	Uniform internal pressure of 1 MPa		
Boundary condition :	$U_x = 0$ along edge AB, $U_y = 0$ along edge CD		
Material property :	$E = 200 \text{ GPa}$, $\nu = 0.3$		
Geometric property :	Inner radius, $a = 3 \text{ mm}$; outer radius, $b = 9 \text{ mm}$; length = 1 mm		
Element type:	8-node plane stress element		
Finite element statistics :	Number of elements	Number of nodes	Degrees of freedom
	45	164	306

At point C	NAFEMS	FEAST ^{SMT}	NASTRAN [®]
Radial stress (MPa)	-1.00	- 0.96	- 0.95
Hoop stress (MPa)	1.25	1.23	1.20
Axial stress (MPa)	0.00	0.00	0.00