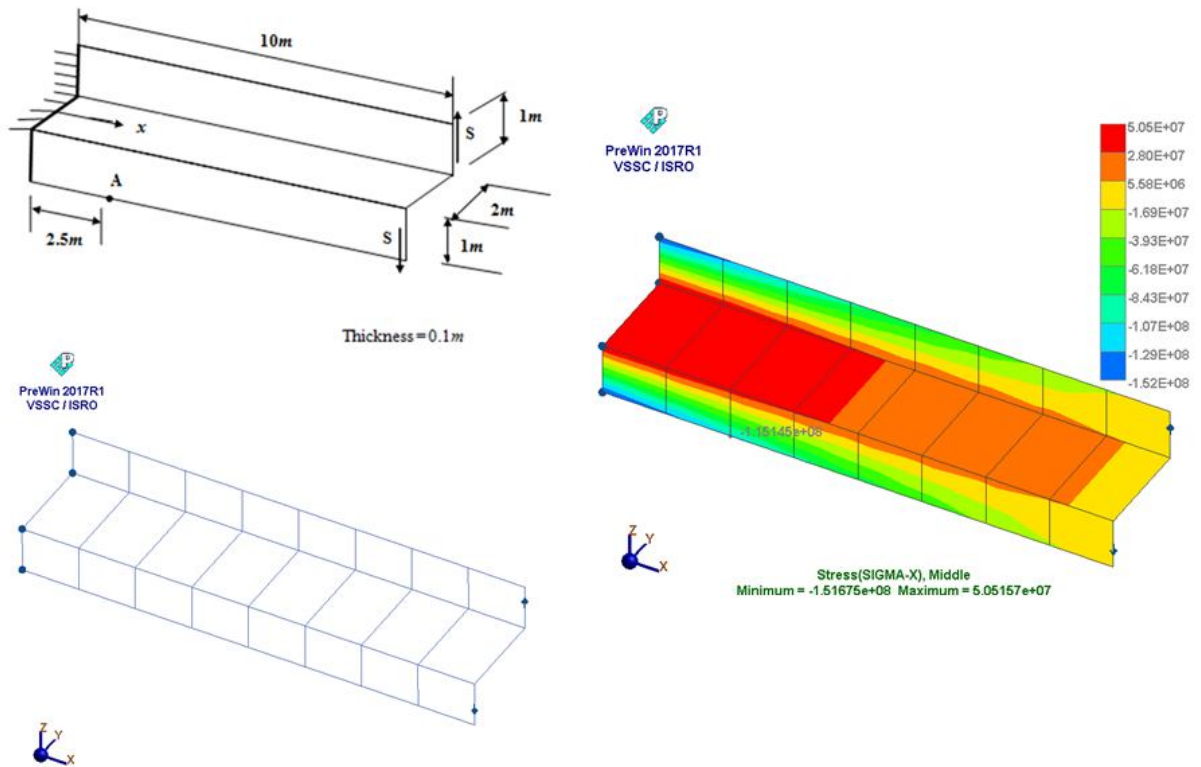


## Static analysis of z-section cantilever



<b>Loading</b>	:	Torque of 1.2 MNm applied at end $x = 10m$ by two uniformly distributed edge shears, $S = 0.6 MN$ at each flange	
<b>Boundary condition</b>	:	At edge $x = 0$ : $U_x=U_y=U_z=R_x=R_y=R_z=0$	
<b>Material property</b>	:	$E = 210 GPa, \nu = 0.3$	
<b>Element types</b>	:	Quadrilateral element	
<b>Finite element statistics</b>	:	Number of elements	Number of nodes
		24	36
			Degrees of freedom
			192

Mid surface axial stress, $\sigma_x (MPa)$ at point A	
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