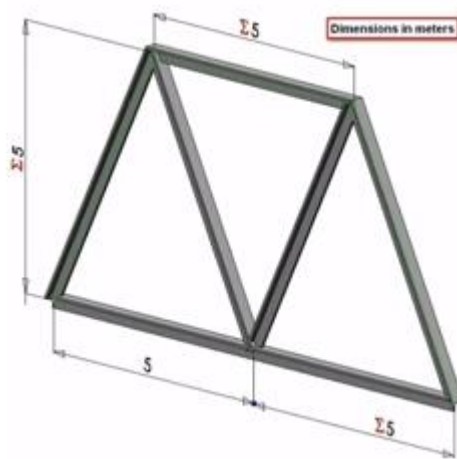


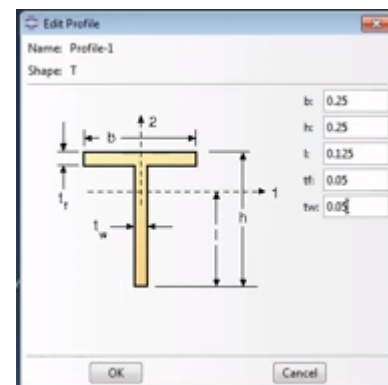
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EX03: ANALYSIS OF S BEAM “T”

In this tutorial we will analyze the 2D Bridge shown in Figure 4. The cross T-section of the beam is shown in Figure 5. Pinned support at left end and roller support at right end, uniform load of 1000 N/m at lower horizontal members. The material is steel membrane with elastic modulus of 210GPa and Poisson ratio 0.25



(a)



(b)

Figure.4. (a) Simple 2D-beam, dimensions are in m, (b) Beam cross T-section, dimensions are in m.

EX04: FINIT ELEMENT ANALYSIS OF BICYCLE FRAME

In this tutorial we will analyze the bicycle frame shown in Figure 5, with 3D POINT. The material used is Aluminum with elastic modulus of 69 GPa and Poisson ratio 0.33.

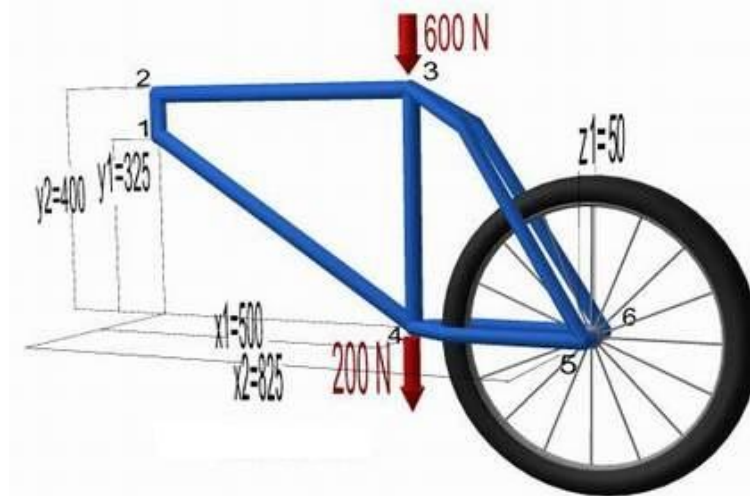


Figure.3. Bicycle frame, dimensions are in mm.