

According to maximum shear stress theory, resultant shear stress

$$\tau_{max} = \frac{1}{2} \sqrt{\sigma^2 + 4\tau^2} = \frac{1}{2} \sqrt{\left(\frac{969.14}{h}\right)^2 + 4 \times \left(\frac{101}{h}\right)^2}$$

VS $\sqrt{\sigma^2 + \tau^2}$