

$$M_{inner} := (3.492 \cdot 10^8) \text{ N} \cdot \text{m}$$

$$\sigma_{max} := 690 \text{ MPa}$$

$$I = \frac{M \cdot c}{\sigma_{max}}$$

filling in the equation gives me the correct number but I would prefer unit  $\text{mm}^4$

$$I_{inner.ideal} := \frac{M_{inner} \cdot 195}{690} = (9.869 \cdot 10^7) \text{ J}$$

For the preferred unit result in  $\text{mm}^4$  Mathcad lets me rearrange things but then the equation looks weird

$$I_{inner.ideal} := \frac{M_{inner} \cdot \frac{\text{mm}}{1000} \cdot 195}{\sigma_{max}} = (9.869 \cdot 10^7) \text{ mm}^4$$