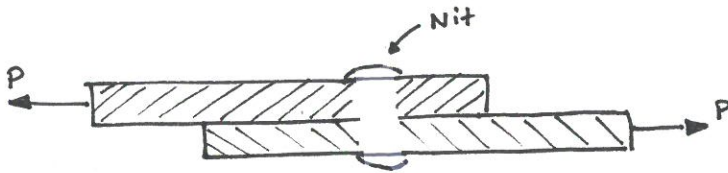


2.3.4 Givet Nitförband

x Nitdiameter 25 mm

x P = 10000 N

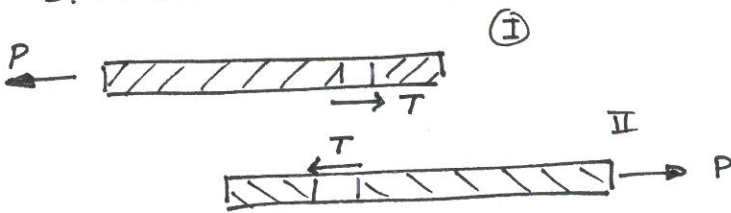


Sökt Genomsnittlig skjuvspänning τ_m

Lösning

(1. Frilägg) (2. Jmv)

3. Snitta



4. Jmv

$$\sum F_x: -P + T = 0$$

$$\sum F_x: -T + P = 0$$

$$\Leftrightarrow \underline{T = P}$$

5. Medelshjuvspänning

$$\left[\tau = \frac{P}{A} \right]$$

$$x A = \frac{\pi d^2}{4}$$

$$\Rightarrow \tau = \frac{P}{\frac{\pi d^2}{4}} = \frac{4 \cdot T}{\pi d^2} = \frac{4 \cdot 10000}{\pi \cdot 25^2} \approx \underline{\underline{20.4 \text{ MPa}}}$$

$$\frac{N}{\text{mm}^2} = \text{MPa ok}$$