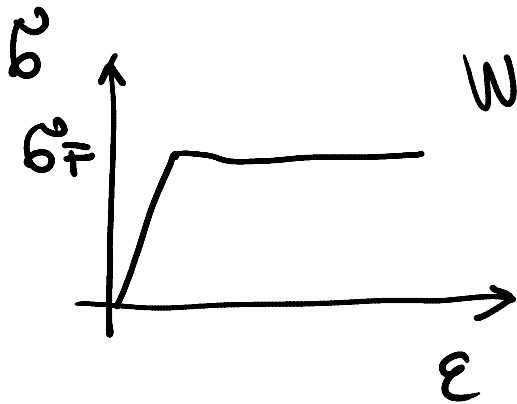
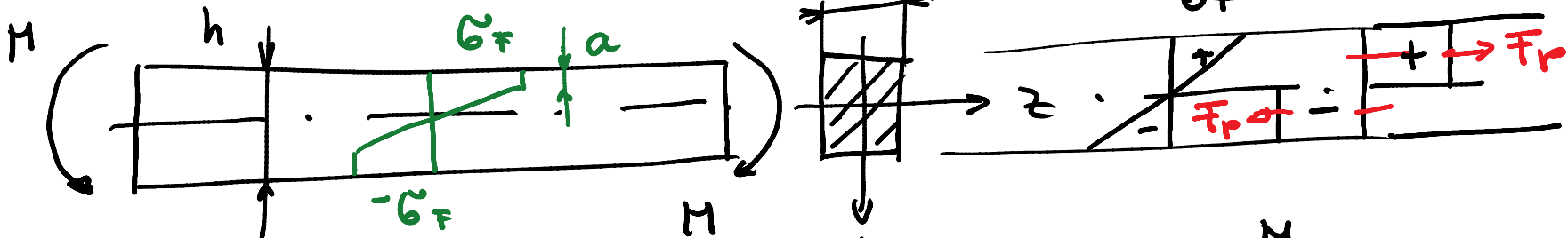


MEJNO ŠTEVILO K_p

$$K_p = \frac{L_p}{L_F}$$

← SILA PRI KATERI JE PLASTIFICIRAN CELOTEN PREREZ (OBREHIVITEN)

UPOGIBNO OBREHIVITEN NOSILEC

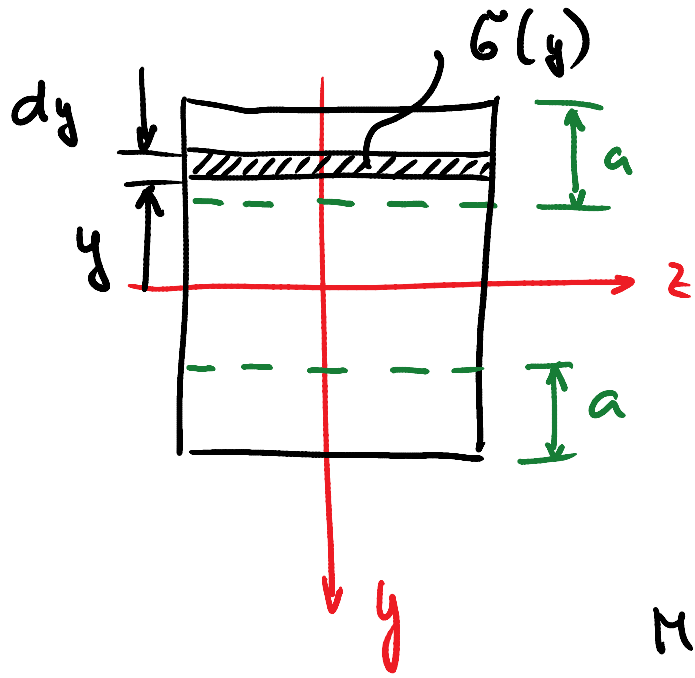


$$W_z = \frac{bh^2}{6}$$

$$K_p = \frac{M_p}{M_F}$$

$$\sigma_F = \frac{M_F \cdot 6}{bh^2}$$

$$F_p = \sigma_F \cdot b \cdot \frac{h}{2}$$



$$dA = b dy$$

$$\int_0^{\frac{h}{2} - a} dM = y \sigma(y) dA = 2 \int_0^{\frac{h}{2} - a} y \sigma(y) b dy$$

$$M = 2b \int_0^{\frac{h}{2} - a} y \sigma(y) dy + 2b \int_{\frac{h}{2} - a}^{\frac{h}{2}} y \sigma_F dy$$

$$\sigma(y) = c y$$

$$M = 2bc \int_0^{\frac{h}{2} - a} y^2 dy + 2b \sigma_F \int_{\frac{h}{2} - a}^{\frac{h}{2}} y dy = 2bc \frac{1}{3} \left(\frac{h}{2} - a\right)^3 + b \sigma_F \left(\frac{h^2}{4} - \left(\frac{h}{2} - a\right)^2\right)$$

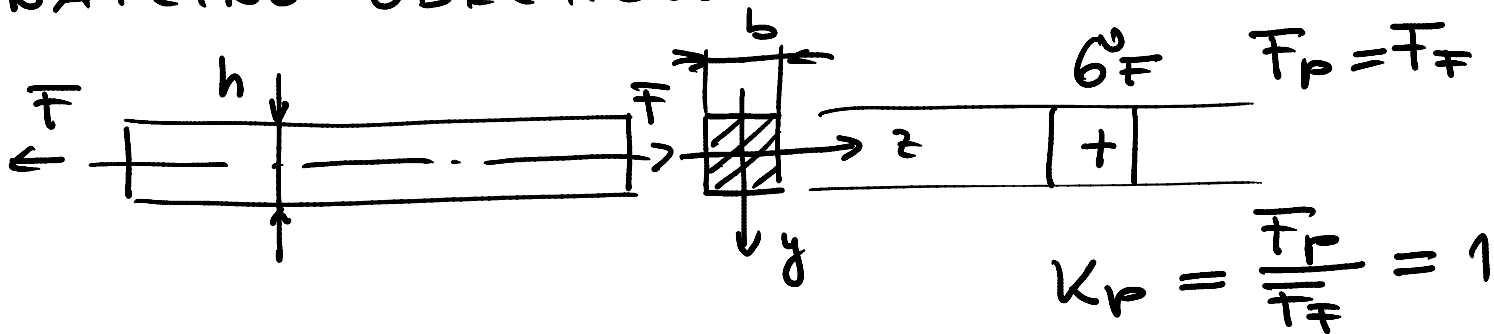
$$a = \frac{h}{2} \rightarrow M_p = \frac{\sigma_F b h^2}{4}$$

$$K_r = \frac{M_p}{M_F} = \frac{\cancel{\sigma_F} b h^2 6}{4 \cancel{\sigma_F} b h^2} = \frac{3}{2} = 1,5$$

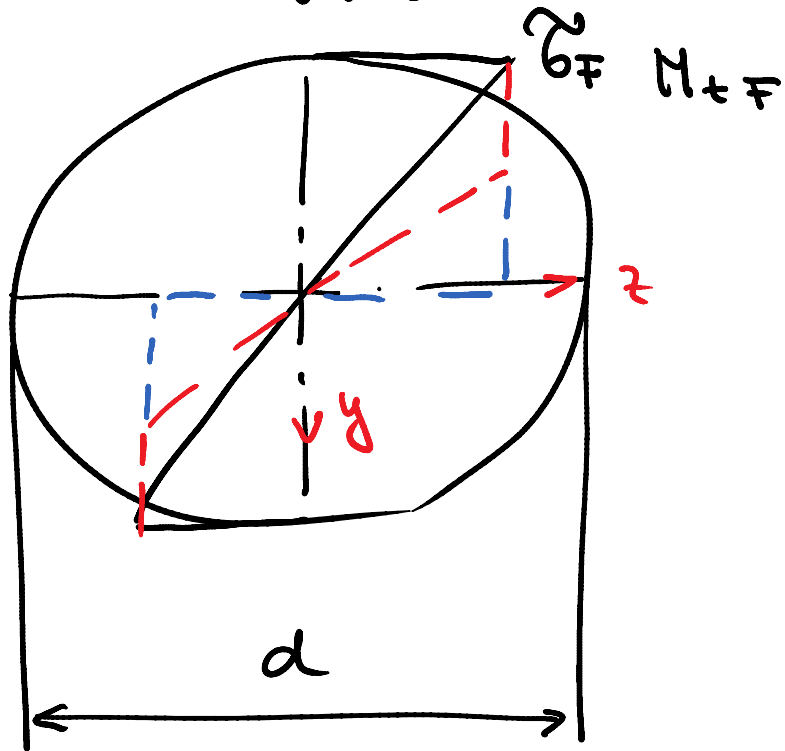
$$M_p = F_p \cdot \frac{h}{2} = \sigma_F \cdot b \frac{h^2}{4}$$

$$K_p = \frac{M_p}{M_F} = \frac{\cancel{\sigma_F} b h^2 \sigma}{4 \cancel{\sigma_F} b h^2} = \frac{3}{2} = 1,5$$

NATEŽNO OBREHEDJEN NOSILEC

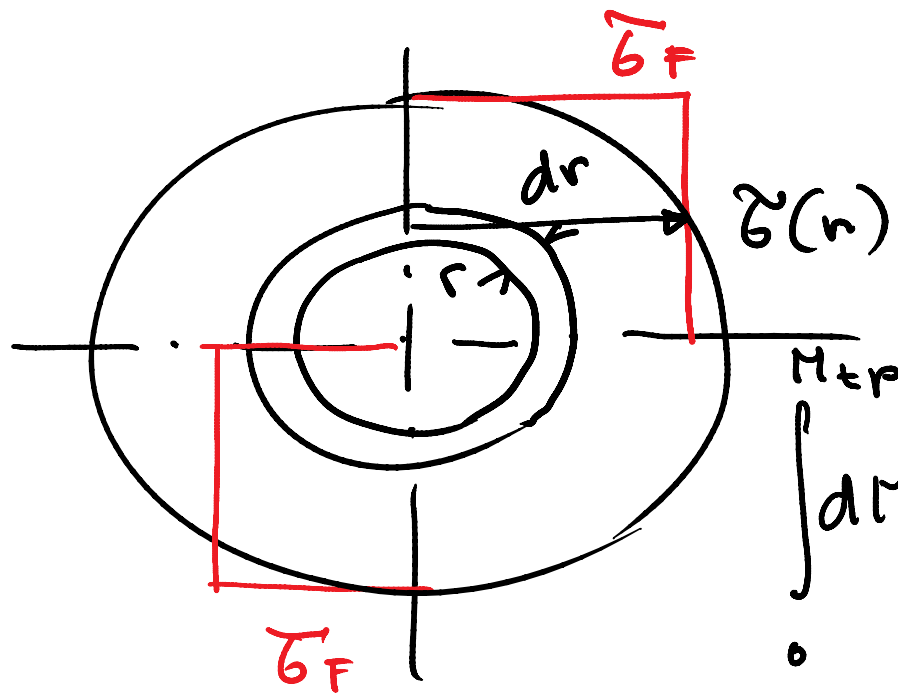


UZVOJNO OBREHENTEN NOSILEC



$$\sigma_F = \frac{M_{tF}}{W_p} = \frac{M_{tF} 16}{\pi d^3}$$

$$M_{tF} = \frac{\sigma_F \cdot \pi d^3}{16}$$



$$dM = r \sigma(r) \underbrace{\bar{m}}_{dA} r dr$$

$$\int_0^{\frac{d}{2}} dM = \bar{m} \sigma_F \int_0^{\frac{d}{2}} r^2 dr$$

$$M_{tp} = \bar{m} \sigma_F \frac{1}{3} \frac{d^3}{8} = \frac{\sigma_F \bar{m} d^3}{12}$$

$$K_p = \frac{M_{tr}}{M_{tF}} = \frac{\cancel{\sigma_F \bar{m} d^3} 16}{12 \cancel{\sigma_F \bar{m} d^3}} = \frac{4}{3}$$