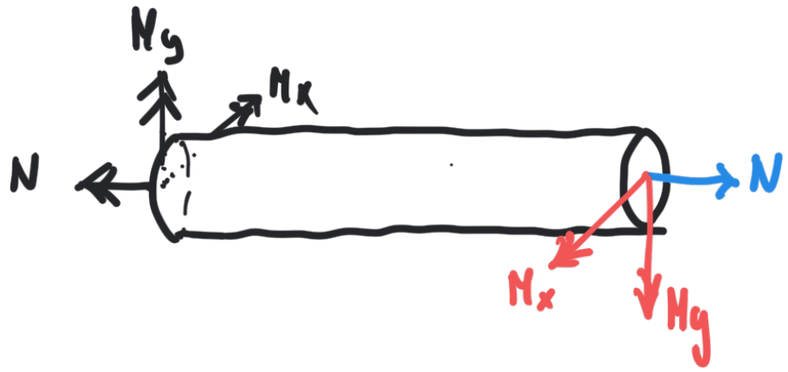
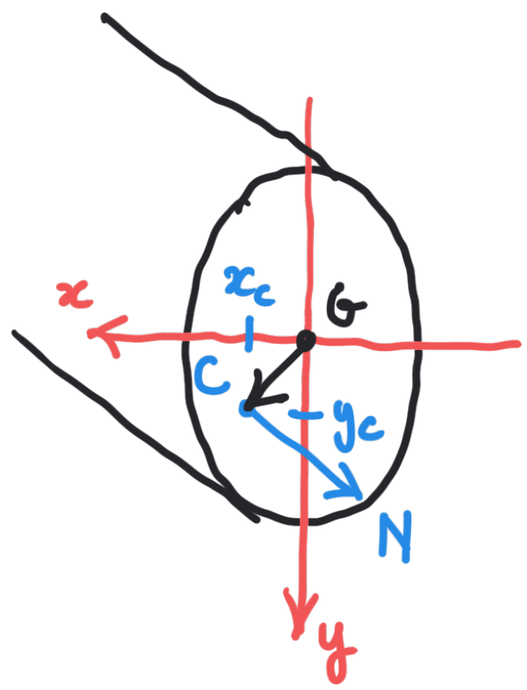
PRESSO/TENSO FLESSIONE DEVIATA
FORZA NORMALE ECCENTRICA





$$\sigma_z = \frac{N}{A} + \frac{M_x}{I_x} y - \frac{M_y}{I_y} x$$

$$x_c = -\frac{M_y}{N} \quad y_c = \frac{M_x}{N} \qquad (*)$$

$$\underline{M} = \underline{GC} \times N\,\underline{k} = \left(x_c \underline{i} + y_c \underline{j}\right) \times N\,\underline{k}$$

$$= -x_c N \underline{j} + y_c N \underline{i}$$

$$M_x = y_c N \quad M_y = -x_c N \Rightarrow (*)$$

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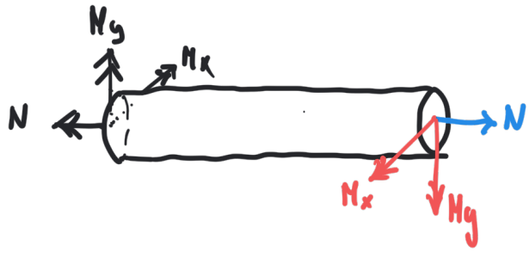

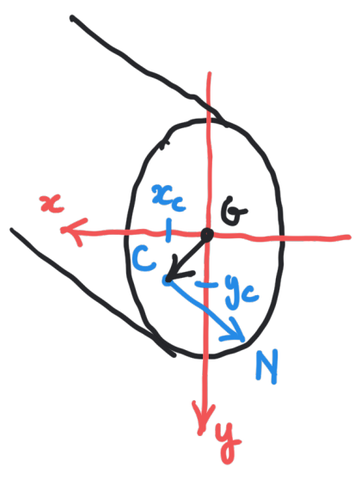

$$\sigma_z = \frac{N}{A} + \frac{M_x}{I_x} y - \frac{M_y}{I_y} x$$

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$$\underline{M} = \underline{GC} \times N\underline{k} = (x_c \underline{i} + y_c \underline{j}) \times N\underline{k}$$

$$= -x_c N \underline{j} + y_c N \underline{i}$$

$$M_x = y_c N \quad M_y = -x_c N \Rightarrow (*)$$

$$\rho_x = \sqrt{\frac{I_x}{A}}$$

$$\rho_y = \sqrt{\frac{I_y}{A}}$$

$$\sigma_z = \frac{N}{A}\left(1 + \frac{A}{I_x}\frac{M_x}{N} y - \frac{A}{I_y}\frac{M_y}{N} x\right) = \frac{N}{A}\left(1 + \frac{y_c}{\rho_x^2} y + \frac{x_c}{\rho_y^2} x\right)$$

$$1 + \frac{y_c}{\rho_x^2} y + \frac{x_c}{\rho_y^2} x = 0$$ eq. asse neutro
rappresentazione canonica

$$x_n = -\rho_y^2 / x_c \quad y_n = -\frac{\rho_x^2}{y_c}$$

$$\frac{x}{x_n} + \frac{y}{y_n} = 1$$ (forma segmentaria)