$\gamma_{M0} = \gamma_{M1} = 1.05 \qquad \gamma_{M2} = 1.25$

Titolo nota 10/12/2019

TRAZIONE

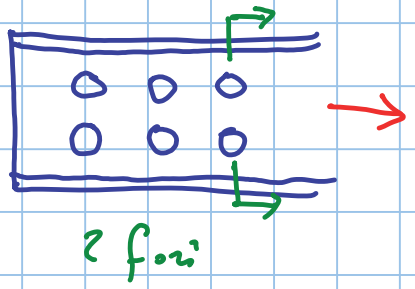
VERIFICA

$$N_{Rd,pl} = A \frac{f_y}{\gamma_{M0}}$$

PROGETTO

$$A \geq \frac{N_{Ed}\,\gamma_{M0}}{f_y}$$

in presenza di fori $\qquad A_{net} = A - \sum d_0 t$



$$N_{Rd,u} = 0.9\, A_{net} \frac{f_u}{\gamma_{M2}}$$

duttile $\qquad N_{Rd,u} > N_{Rd,pl}$

$$\frac{A_{net}}{A} > \frac{f_y/\gamma_{M0}}{0.9\, f_u/\gamma_{M2}}$$

COMPRESSIONE

classe 1, 2, 3

ASTA

VERIFICA

$$N_{b,Rd} = \chi \, A \, \frac{f_y}{\gamma_{M1}}$$

$$\lambda = \frac{l_0}{i} \qquad \bar{\lambda} = \frac{\lambda}{\lambda_1}$$ vedere λ_{max}

scegliere curva $\rightarrow$ coeff. imperfez.

$\Downarrow$

χ

PROGETTO

$$A \geq \frac{N_{Ed} \, \gamma_{M1}}{f_y \, \chi}$$

ma χ dipende dalle sezioni

CLASSIFICAZIONE SEZIONI

- N
- M

dipende da distribuzione di tensioni

i limiti sono differenziati:

- per elementi vincolati — ad entrambi gli estremi
  — a un solo estremo
- diagramma delle Tensioni — costante
  — variabile

FLESSIONE SEMPLICE RETTA

VERIFICA

$$M_{Rd} = W_{pl} \frac{f_y}{\gamma_{M0}} \qquad \text{classe } 1,2$$

$$W_{el} \frac{f_y}{\gamma_{M0}} \qquad \text{classe } 3$$

asse neutro baricentrico

PROGETTO

$$W_{pl} \geq \frac{M_{Ed}\ \gamma_{M0}}{f_y}$$

l'asse neutro divide in due parti di area uguali

$W_{pl} = 2\, S_{y2ns}$ rispetto a asse baricentr.

contemporaneamente

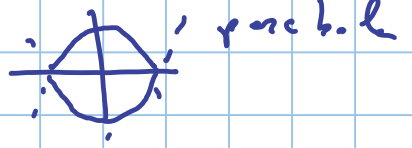
SLE limiti freccia

$$I \geq I_{nec}$$

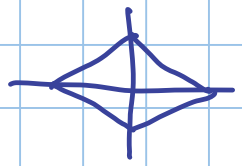
FLESSIONE SEMPLICE DEVIATA

$$\left(\frac{M_{Ed,y}}{M_{Rd,y}}\right)^2 + \left|\frac{M_{Ed,z}}{M_{Rd,z}}\right| \leq 1$$

per profili I



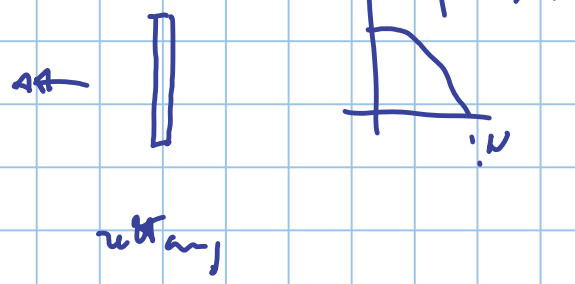
$$\left|\frac{M_{Ed,y}}{M_{Rd,y}}\right| + \left|\frac{M_{Ed,z}}{M_{Rd,z}}\right| \leq 1$$

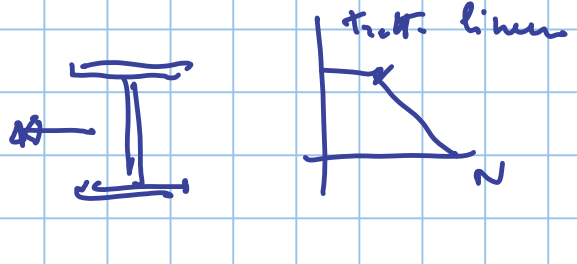


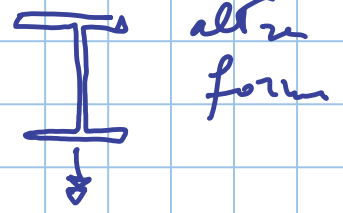
tanto

FLESSIONE COMPOSTA RETTA

classe 1, 2

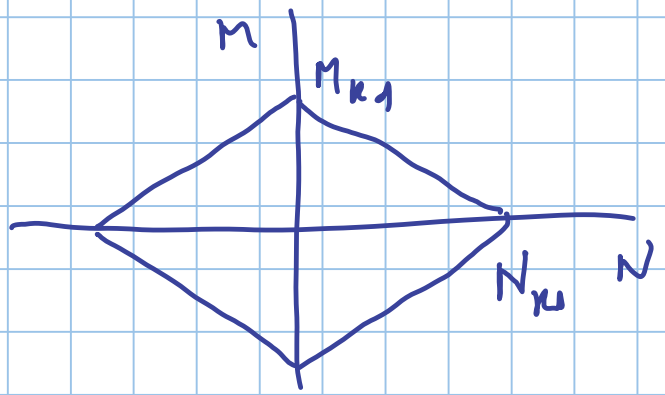






DIPENDE DALLA FORMA DELLA SEZIONE

classe 3



$$\left|\frac{M_{Ed}}{M_{Rd}}\right| + \left|\frac{N_{Ed}}{N_{Rd}}\right| \leq 1$$