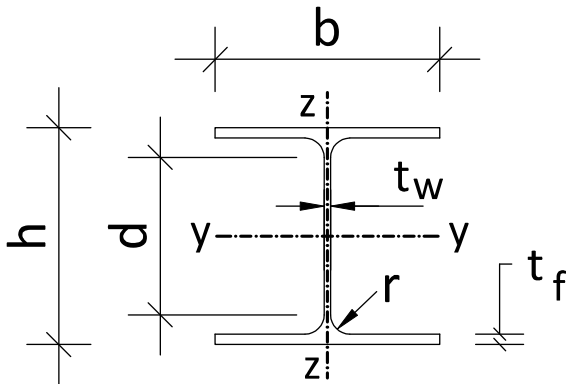


Axiale trek volgen NEN-EN 1993-1-1 artikel 6.2.3

Geometrie



Materialen en profiel

Staal	=	S235
f_y	=	235 N/mm ²
f_u	=	360 N/mm ²
Profieltype	=	HEA
Gekozen profiel	=	HEA 140
Oppervlak A	=	3140 mm ²
Flensdikte t_f	=	8,5 mm
gataftrek =	$4 * 18 * 8,5$	= 612 mm ²
Netto oppervlak A_{net} =	$3140 - 612$	= 2528 mm ²

Belastingen

$$N_{Ed} = 600 \text{ kN}$$

Sterkte

$$N_{pl,Rd} = \frac{A * f_y * 10^{-3}}{1,0} = 738 \text{ kN}$$

$$N_{u,Rd} = \frac{0,9 * A_{net} * f_u * 10^{-3}}{1,25} = 655 \text{ kN}$$

$$N_{t,Rd} = \text{MIN}(N_{pl,Rd} ; N_{u,Rd}) = 655 \text{ kN}$$

Toetsing

$$uc = \frac{N_{Ed}}{N_{t,Rd}} = 0,92 \leq 1,00$$