

Propriétés de l'acier de construction

Material coefficients of structural steel

Werkstoffkennwerte von Baustahl

α_a coefficient de dilatation thermique

α_a coefficient of linear thermal expansion

α_a Temperaturdehnzahl

$$\alpha_a = 12 \cdot 10^{-6} \text{ K}^{-1}$$

E_a module d'élasticité

E_a modulus of elasticity

E_a Elastizitätsmodul

$$E_a = 210000 \text{ N/mm}^2 = 210000 \text{ MPa} = 210 \text{ kN/mm}^2 = 21000 \text{ kN/cm}^2 = 210000 \text{ MN/m}^2$$

G_a module de cisaillement

G_a shear modulus

G_a Schubmodul

$$G_a = \frac{E_a}{2(1 + \nu_a)}$$

$$G_a \cong 81000 \text{ N/mm}^2 = 81000 \text{ MPa} = 81 \text{ kN/mm}^2 = 8100 \text{ kN/cm}^2 = 81000 \text{ MN/m}^2$$

ν_a coefficient de Poisson

ν_a Poisson's ratio

ν_a Poisson'sche Zahl

$$\nu_a = 0,3$$

ρ_a masse volumique

ρ_a unit mass

ρ_a Dichte

$$\rho_a = 7850 \text{ kg/m}^3$$