

combined cross section: I 200 + concrete slab 66 mm

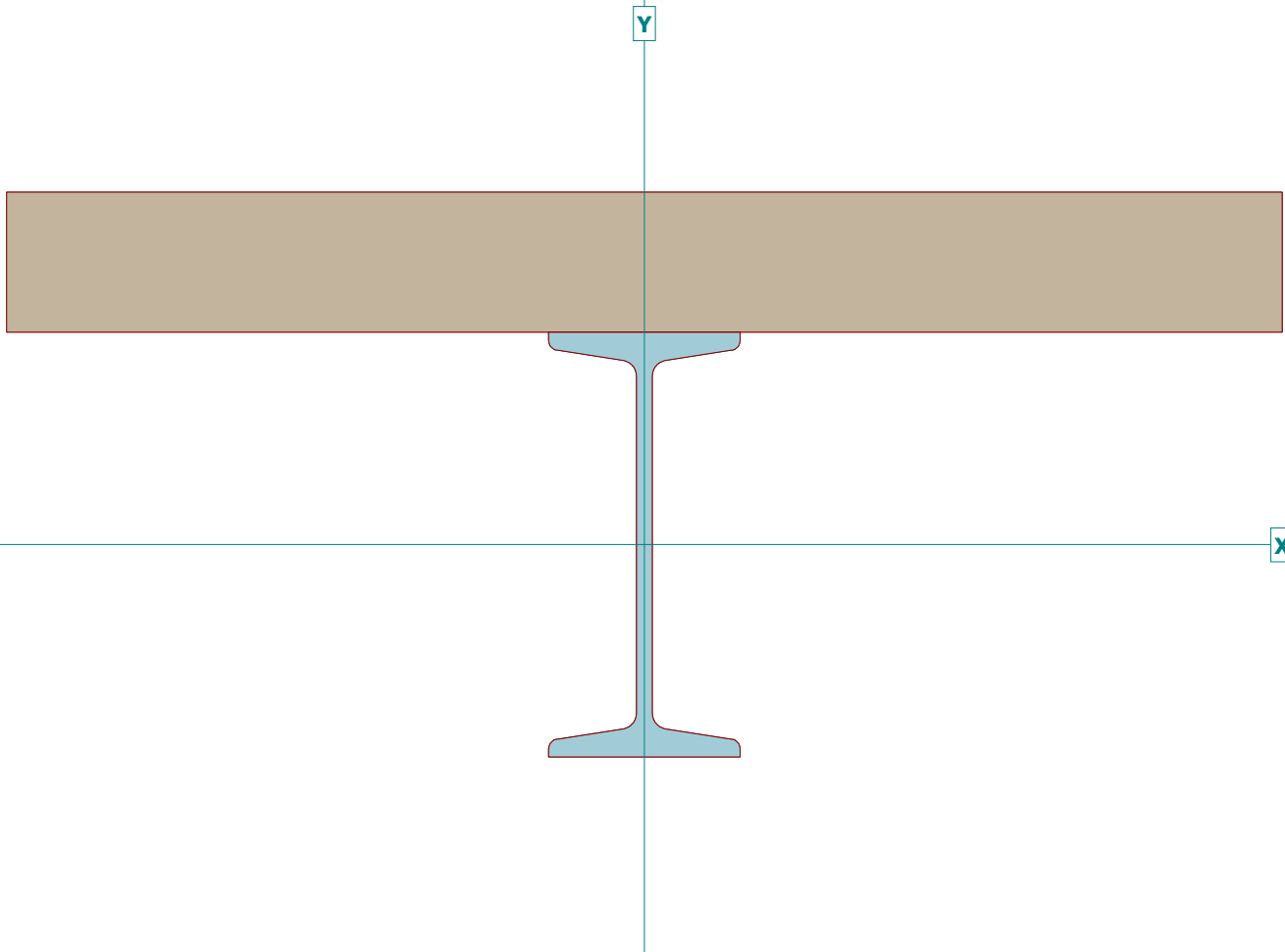


TABLE OF VALUES

Ideal sectional characteristics calculated for material EN 10025 : Fe 430 - EC 3.

Position of centre of gravity with respect to global coordinate system

horizontal position of centre of gravity with respect to origin of coordinate system	$x = 0,0 \text{ mm}$
vertical position of centre of gravity with respect to origin of coordinate system	$y = 88,3 \text{ mm}$

Cross-sectional characteristics

cross-sectional area	$A = 9940,0 \text{ mm}^2$
cross-section perimeter	$P = 2039,1 \text{ mm}$
distance of centroid from left edge of min. cross-section envelope	$y_{cg} = 300,0 \text{ mm}$
distance of centroid from bottom edge of min. cross-section envelope	$z_{cg} = 188,3 \text{ mm}$
moment of inertia w.r.t. horizontal centroidal axis	$I_y = 63,02E+06 \text{ mm}^4$
moment of inertia w.r.t. vertical centroidal axis	$I_z = 199,2E+06 \text{ mm}^4$
mixed moment of inertia w.r.t. centroidal axes	$D_{yz} = 0,000E+00 \text{ mm}^4$
inclination of principal centroidal axes	$\phi = 0,0^\circ$
radius of gyration normal to horizontal centroidal axis	$i_y = 79,6 \text{ mm}$
radius of gyration normal to vertical centroidal axis	$i_z = 141,5 \text{ mm}$
rigidity moment in simple torsion	$I_k = 136,0E+03 \text{ mm}^4$
polar moment of inertia	$I_p = 262,2E+06 \text{ mm}^4$
polar moment of inertia	$i_p = 162,4 \text{ mm}$
cross-sectional modulus w.r.t. centroidal y-axis at upper edge of cross-section	$W_{y1} = 811,2E+03 \text{ mm}^3$
cross-sectional modulus w.r.t. centroidal y-axis at bottom edge of cross-section	$W_{y2} = -334,7E+03 \text{ mm}^3$
cross-sectional modulus w.r.t. centroidal z-axis at right edge of cross-section	$W_{z1} = -663,9E+03 \text{ mm}^3$
cross-sectional modulus w.r.t. centroidal z-axis at left edge of cross-section	$W_{z2} = 663,9E+03 \text{ mm}^3$

Calculated - characteristics, ellipse of inertia.