

Tracks (T)

MATERIAL	
Web (in)	14
Flange (in)	2½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	4.54
Cross Sectional Area: A (in ²)	1.336
Moment of Inertia: Ix (in ⁴)	32.676
Section Modulus: Sx (in ³)	4.668
Radius of Gyration: Rx (in)	4.946
Moment of Inertia: Iy (in ⁴)	0.571
Radius of Gyration: Ry (in)	0.654

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	24.007	21.606
Section Modulus: Sxe (in ³)	2.852	2.44
Allowable Bending Moment: Ma (in-k)	56.35	73.05
Allowable Shear Force: Va (lb)	3656	4324
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	2.264
Torsional Warping Constant: Cw (in ⁶)	20.967
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.967
Radius of Gyration on the Centroid Principal axis: Ro (in)	5.082

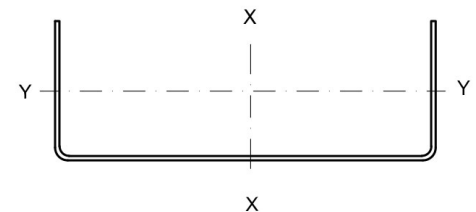


PRODUCT ID

1400T250-68 (14x2½x14ga)

CODES & STANDARDS

- ASTM A 1003, A 653, & C 955
- AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data