

Tracks (T)

MATERIAL	
Web (in)	12
Flange (in)	1½
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)	3.63
Cross Sectional Area: A (in ²)	1.068
Moment of Inertia: Ix (in ⁴)	18.156
Section Modulus: Sx (in ³)	2.964
Radius of Gyration: Rx (in)	4.122
Moment of Inertia: Iy (in ⁴)	0.127
Radius of Gyration: Ry (in)	0.345

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	17.571	16.568
Section Modulus: Sxe (in ³)	2.283	1.988
Allowable Bending Moment: Ma (in-k)	45.12	59.53
Allowable Shear Force: Va (lb)	2712	2712
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.8105
Torsional Warping Constant: Cw (in ⁶)	3.795
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.450
Radius of Gyration on the Centroid Principal axis: Ro (in)	4.161



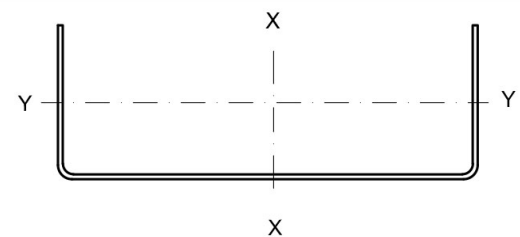
PRODUCT ID

1200T150-68 (12x1½x14ga)

CODES & STANDARDS

ASTM A 1003, A 653, & C 955

• AISI S100-16



See Hermes/Hephaistos Technical Manual
for complete design data