

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	1¼
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)	2.54
Cross Sectional Area: A (in ²)	0.748
Moment of Inertia: Ix (in ⁴)	6.000
Section Modulus: Sx (in ³)	1.455
Radius of Gyration: Rx (in)	2.833
Moment of Inertia: Iy (in ⁴)	0.070
Radius of Gyration: Ry (in)	0.307

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	5.999	5.958
Section Modulus: Sxe (in ³)	1.358	1.217
Allowable Bending Moment: Ma (in-k)	26.84	36.44
Allowable Shear Force: Va (lb)	4086	4086
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	1.267
Torsional Warping Constant: Cw (in ⁶)	0.920
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.427
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.881

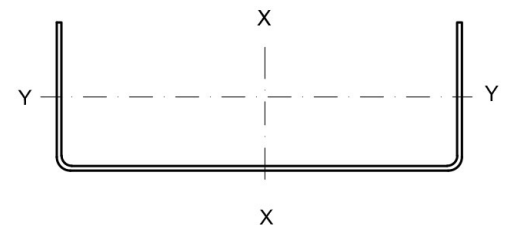


PRODUCT ID

800T125-68 (8x1¼x14ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data