

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	1½
Yield Strength Fy (KSI)	33, 50
Tensile Strength Fu (KSI)	45, 65
Design Thickness (in)	0.0451
Minimum Thickness (mil)	43
Gauge	18
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.69
Cross Sectional Area: A (in ²)	0.496
Moment of Inertia: Ix (in ⁴)	4.145
Section Modulus: Sx (in ³)	1.016
Radius of Gyration: Rx (in)	2.892
Moment of Inertia: Iy (in ⁴)	0.077
Radius of Gyration: Ry (in)	0.395

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	3.690	2.729
Section Modulus: Sxe (in ³)	0.656	0.551
Allowable Bending Moment: Ma (in-k)	12.96	16.50
Allowable Shear Force: Va (lb)	1030	1051
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.336
Torsional Warping Constant: Cw (in ⁶)	0.972
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.584
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.977

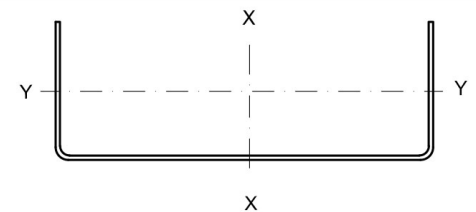


PRODUCT ID

800T150-43 (8x1½x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data