

Tracks (T)

MATERIAL	
Web (in)	8
Flange (in)	3
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)	2.12
Cross Sectional Area: A (in ²)	0.624
Moment of Inertia: Ix (in ⁴)	6.083
Section Modulus: Sx (in ³)	1.521
Radius of Gyration: Rx (in)	3.123
Moment of Inertia: Iy (in ⁴)	0.537
Radius of Gyration: Ry (in)	0.928

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	3.719	3.258
Section Modulus: Sxe (in ³)	0.723	0.258
Allowable Bending Moment: Ma (in-k)	11.93	14.91
Allowable Shear Force: Va (lb)	1,051	1051
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.423
Torsional Warping Constant: Cw (in ⁶)	5.973
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.680
Radius of Gyration on the Centroid Principal axis: Ro (in)	3.666

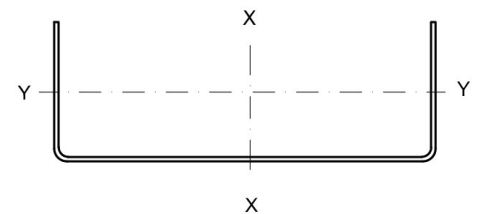


PRODUCT ID

800T300-43 (8x3x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data