

Tracks (T)

MATERIAL	
Web (in)	5½
Flange (in)	1¼
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)	1.23
Cross Sectional Area: A (in ²)	0.360
Moment of Inertia: Ix (in ⁴)	1.510
Section Modulus: Sx (in ³)	0.534
Radius of Gyration: Rx (in)	2.047
Moment of Inertia: Iy (in ⁴)	0.043
Radius of Gyration: Ry (in)	0.344

EFFECTIVE SECTION PROPERTIES		
Yield Stress (ksi)	33	50
Moment of Inertia-Deflection: Ixe (in ⁴)	1.429	1.115
Section Modulus: Sxe (in ³)	0.417	0.353
Allowable Bending Moment: Ma (in-k)	8.24	10.58
Allowable Shear Force: Va (lb)	1504	1550
(check web crippling)		

TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in ⁴)	0.2443
Torsional Warping Constant: Cw (in ⁶)	0.252
Shear Center to Centroid on Principal X-axis: Xo (in)	-0.537
Radius of Gyration on the Centroid Principal axis: Ro (in)	2.144

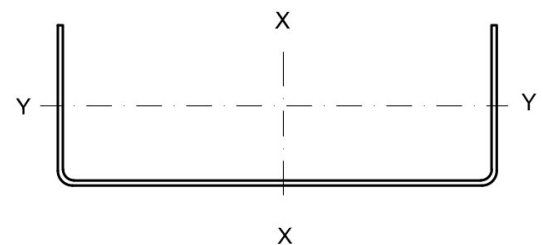


PRODUCT ID

550T125-43 (5½x18ga)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual
for complete design data