Structural Stud (S)

MATERIAL	
Web (in)	2½
Flange (in)	1⅝
Lip (in)	0.500
Yield Strength Fy (KSI)	50
Tensile Strength Fu (KSI)	65
Design Thickness (in)	0.0713
Minimum Thickness (mil)	68
Gauge	14
Available Finish G60, G90	

GROSS SECTION PROPERTIES	
Weight of Member: (lb/ft)	1.51
Cross Sectional Area: A (in^2)	0.443
Moment of Inertia: Ix (in^4)	0.450
Section Modulus: Sx (in^3)	0.360
Radius of Gyration: Rx (in)	1.008
Moment of Inertia: Iy (in^4)	0.162
Radius of Gyration: Ry (in)	0.605

EFFECTIVE SECTION PROPERTIES	
Moment of Inertia-Deflection: Ixe (in^4)	0.451
Section Modulus: Sxe (in^3)	0.358
Local Buckling Allowable Moment: Mal (in-k)	11.97
Distortional Buckling Allowable Moment: Mad (in-k)	11.73
Allowable strong axis shear away from punch: Vag (lb)	2866
Allowable strong axis shear at punch: Vanet (lb)	519
(check web crippling)	

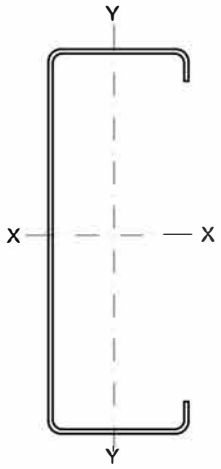
TORSIONAL SECTION PROPERTIES	
St. Venant Torsional Constant: Jx1000 (in^4)	0.752
Torsional Warping Constant: Cw (in^6)	0.268
Shear Center to Centroid on Principal X-axis: Xo (in)	-1.424
Radius of Gyration on the Centroid Principal axis: Ro (in)	1.847

PRODUCT ID

250S 162-68(2½x1⅝x14ga) (Grade 50)

CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual for complete design data

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