

# Tracks (T)



| MATERIAL                              |        |
|---------------------------------------|--------|
| Web (in)                              | 10     |
| Flange (in)                           | 1 ½    |
| Yield Strength F <sub>y</sub> (KSI)   | 33, 50 |
| Tensile Strength F <sub>u</sub> (KSI) | 45, 65 |
| Design Thickness (in)                 | 0.0566 |
| Minimum Thickness (mil)               | 54     |
| Gauge                                 | 16     |
| Available Finish G60, G90             |        |
|                                       |        |

| GROSS SECTION PROPERTIES                             |       |
|------------------------------------------------------|-------|
| Weight of Member: (lb/ft)                            | 2.50  |
| Cross Sectional Area: A (in <sup>2</sup> )           | 0.736 |
| Moment of Inertia: I <sub>x</sub> (in <sup>4</sup> ) | 9.061 |
| Section Modulus: S <sub>x</sub> (in <sup>3</sup> )   | 1.777 |
| Radius of Gyration: R <sub>x</sub> (in)              | 3.511 |
| Moment of Inertia: I <sub>y</sub> (in <sup>4</sup> ) | 0.100 |
| Radius of Gyration: R <sub>y</sub> (in)              | 0.368 |

| EFFECTIVE SECTION PROPERTIES                                     |       |       |
|------------------------------------------------------------------|-------|-------|
| <b>Yield Stress (ksi)</b>                                        | 33    | 50    |
| Moment of Inertia-Deflection: I <sub>xe</sub> (in <sup>4</sup> ) | 8.703 | 8.573 |
| Section Modulus: S <sub>xe</sub> (in <sup>3</sup> )              | 1.451 | 1.168 |
| Allowable Bending Moment: M <sub>a</sub> (in-k)                  | 28.77 | 34.96 |
| Allowable Shear Force: V <sub>a</sub> (lb)                       | 1561  | 1500  |
| (check web crippling)                                            |       |       |
|                                                                  |       |       |

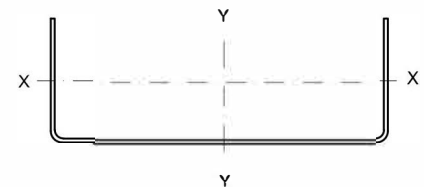
| TORSIONAL SECTION PROPERTIES                                           |        |
|------------------------------------------------------------------------|--------|
| St. Venant Torsional Constant: J <sub>x1000</sub> (in <sup>4</sup> )   | 0.785  |
| Torsional Warping Constant: C <sub>w</sub> (in <sup>6</sup> )          | 2.011  |
| Shear Center to Centroid on Principal X-axis: X <sub>o</sub> (in)      | -0.515 |
| Radius of Gyration on the Centroid Principal axis: R <sub>o</sub> (in) | 3.567  |
|                                                                        |        |

## PRODUCT ID

1000T150-54 (10x1 ½x16ga)

## CODES & STANDARDS

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



See Hermes/Hephaistos Technical Manual  
for complete design data