



Astrolite / Tricor Alloys
California Division
 201 Bernoulli Circle, Units B & C
 Oxnard, CA 93030
 Phone: 805-487-7131
 Fax: 805-487-9694

Tricor Metals
Ohio Division & Corp. H.Q.
 3225 W. Old Lincoln Way
 Wooster, Ohio 44691
 Phone: 330-264-3299
 Fax: 330-264-1181

Tricor Metals
Texas Division
 3517 North Loop 336 West
 Conroe, Texas 77304
 Phone: 936-273-2661
 Fax: 936-273-2669

Tricor Metals
Michigan Division
 44696 Helm St.
 Plymouth, MI 48170
 Phone: 734-454-3485
 Fax: 734-454-7110

www.astrolite.com

www.tricormetals.com

Astrolite® 321 Stainless

Astrolite 5689

Product Description:

Astrolite® 321 Stainless (also known as 321SS, 18.Cr 10.5Ni 0.40T) is an austenitic chromium-nickel stainless steel containing Titanium. The titanium addition reduces or prevents carbide precipitation during welding and in 800 – 1500°F (427 – 816°C) service. It also eliminates the need for anneal after welding. Alloy 321 provides excellent resistance to oxidation and corrosion and possesses good creep strength. 321 Stainless is used for aircraft collector rings, exhaust manifolds, expansion joints.

Astrolite® UltraGrade™ surface finish on the spooled wire promotes smooth feeding through welding equipment which may result in reduced tip wear in contact tips.

Astrolite UltraGrade™ wire cleaning processes insure very clean wire surface for reliable welding performance.

Specifications:

AMS5689 (Chemistry only), AWS A5.9 ER321, UNS S32100

Need [pricing?](#)

Nominal Composition (% by weight) & Mechanical properties:

| | |
|---------------------|------------|
| Iron | Bal |
| Chromium | 17 - 19 |
| Nickel | 9 - 12 |
| Titanium | 5x(C+N) |
| Other interstitials | Unreported |

| | |
|--------------------------|-------|
| Tensile (ksi) | 94 |
| Density (LBs/Cubic inch) | 0.286 |

Available Product Forms and Sizes, Packaging & Identification:

| Straight Lengths | Spooled |
|---|---|
| AMS-2813 – Standard packaging AMS-2814 – Premium packaging <i>available upon request</i> Vapor barrier packaging <i>available upon request</i> . <i>1 LB and 5 LB bags available.</i> | Precision layer wound, with controlled cast and helix AMS-2813 – standard packaging AMS-2814 – Premium, vapor barrier packaging <i>available upon request</i> . |
| 36" (914 mm) – Standard length. Other lengths <i>available on request</i> . Flag tagged on one end per AMS-2816. <i>Tagging of both ends available upon request.</i> Color coding to AMS-2819 or customer-specific specification is <i>available upon request</i> . | 12" – Standard spool diameter <i>Other spool diameters; 4" & 8" diameter spools available on request.</i> |
| Diameters: 0.020", 0.025", 0.030", 0.035", 0.040", 0.045", 0.062", 0.078", 0.093", 0.125" | <i>Upon request special diameters and shapes may be available.</i> |

DFARS Compliant

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