UNITED PERFORMANCE METALS
QUALITY SOLUTIONS. TRUSTED PARTNERS.
AN ONI COMPANY

ALLOY MP159
AMS 5842

Alloy 159® is a nickel based alloy in the multi-phase family of materials. This grade offers high strength, with good ductility and tension strength. It has excellent resistance to crevice corrosion and is often used in corrosive environments.

Alloy 159® can perform well in environments up to 1100 Degrees F. Designed to meet the demands of turbine engine manufacturers, Alloy 159® is commonly found in aerospace fasteners.

159 Chemical Composition

- Co Cobalt – 36.00%
- Ni Nickel – 25.00%
- Cr Chromium – 19.00%
- Fe Iron - 9%
- Mo Molybdenum – 7.00%
- Ti Titanium – 3.00%
- Nb Columbium – 0.60%
- Al Aluminum – 0.20%

Maximum unless range is specified

Other Inventory Specifications

- PWA-LCS
- GE Aviation S-SPEC-35 AeDMS S-400
- GE Aircraft Engine (GT193)
- RR SABRe Edition 2
- DFARS Compliant

Standard Inventory Specifications

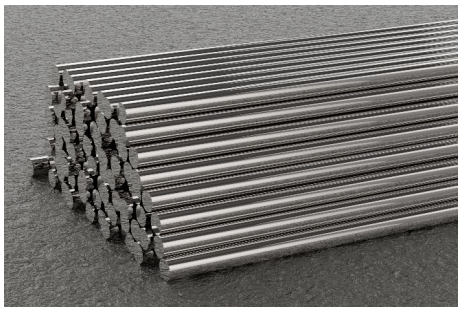
- AMS 5842

Forms Stocked

Please contact us for more information on available bar sizes of alloy 159

Applications

- Landing gears
- Bolt and fastener material
- Solid rocket boosters
- Jet engines
- Chemical processing
- Pulp and paper processing
- Power gen equipment
- Marine equipment



Call 1.888.282.3292

Or click here to view our product page and request a quote on alloy MP159

Features

- Excellent corrosion resistance
- Suitable for turbine engine manufacturing for environments up to 1100 degrees F

Physical Properties

- Density: 0.304 lb/in³ (8.14 g/cm³)

Mechanical Properties in the Annealed Condition

Material	Condition	Tensile Strength MPA	Yield Strength MPA	Elongation %	Reduction of Area %
MP159	Annealed	843	398	60	69