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

Stainless 347

347 is a stabilized stainless steel that offers excellent resistance to intergranular corrosion following exposure to temperatures in the chromium carbide precipitation range from 800 to 1500°F. It is stabilized by the addition of columbium and tantalum. Type 347 is advantageous for high-temperature service because of its good mechanical properties, as well as its high creep rupture properties.

Specifications

AMS: 5512, 5646, 5680
ASTM: A269, A479
ASME: SA 240

Chemical Composition, %

	Cr	Ni	Mn	Si	P	S	C
MIN	17.0	9.0	–	–	–	–	–
MAX	19.0	13.0	2.0	1.0	0.040	0.030	0.080

Features

- Excellent resistance to inter-granular corrosion
- Advantageous for high-temperature service
- High creep and stress rupture properties

Applications

- Aircraft Collector Rings
- Aircraft Exhaust Stacks
- Boiler Casings
- Cabin Heaters
- Furnace Heating Elements
- Heavy Wall-Welded Equipment
- Chemical Processing
- Gaskets

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

Stainless 347

Physical Properties

Density: .288 lb/in^3	Melting Range: 1398 - 1446°C
Specific Heat Capacity	500 J/kgK
Thermal Conductivity (@100 °C)	16.3 [W/mK]

Mechanical Properties

Yield Strength, Mpa	205
Tensile Strength, Mpa	515
Elongation, %	40
Hardness [Brinell]	201