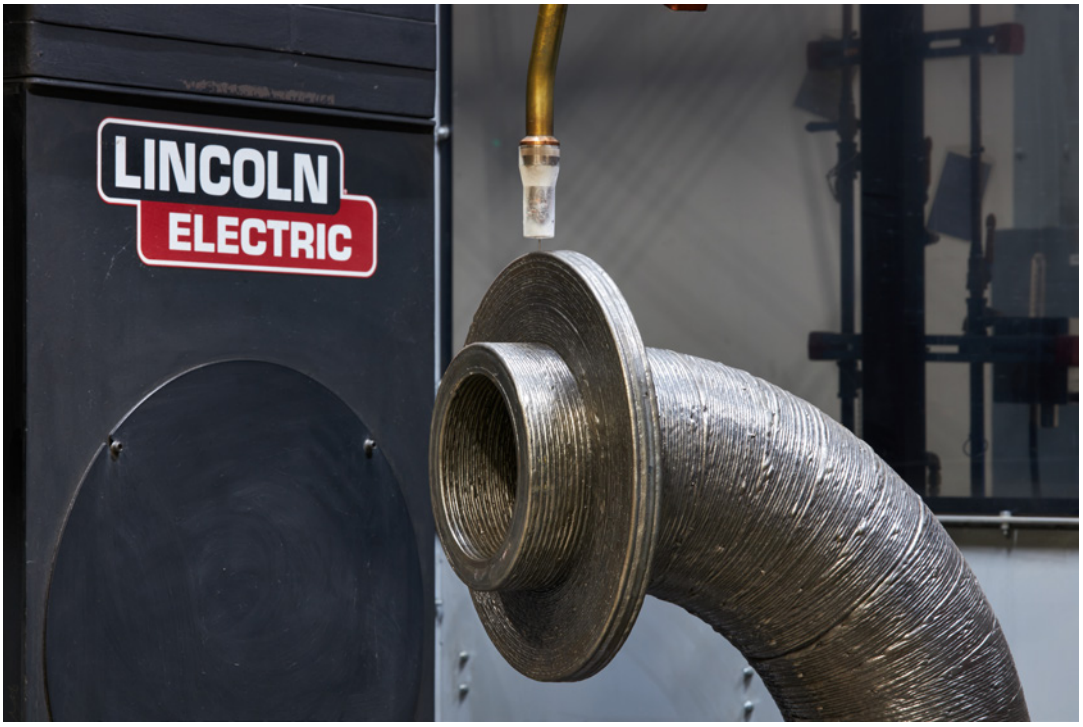
Inconel 617

LINCOLN ELECTRIC ADDITIVE SOLUTIONS



KEY FEATURES

Inconel 617 is known for its high strength and oxidation resistance at temperatures over 1800°F (980°C). Its thermal expansion is lower than that of most other austenitic alloys, and is readily formed and welded by conventional techniques. These properties make Inconel 617 ideal for components used in aircraft and land-based gas turbines, chemical processing plants, and fossil fuel and nuclear power generation plants.

Inconel 617 mechanical properties compare favorably to the following nickel alloy grades:

ASTM B166, Alloy UNS N06617
ASTM B168, Alloy UNS N06617
ASTM B408, Alloys UNS N06617 & UNS N08810
ASTM B409, Alloy UNS N08810
ASTM B564, Alloys UNS N06617 & UNS N08810
AMS 5887

Typical Applications »
Gas Turbine Components
Petrochemical Processing
Nitric Acid Production
Heat Treating Equipment
Power Generation

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NOMINAL MECHANICAL PROPERTIES[1]

GMAAM[2]	Room Temperature Strength				Toughness	Hardness
Wire Feedstock	YS @ 0.2% Off (ksi)	UTS (ksi)	Elong (%)	ROA (%)	ft-lbs @ 70°F	Vickers HV10
Inconel 617	54	102	44	42	81	192

(1) Printed indicates deposits were not subject to post-weld heat treatment
(2) Gas Metal Arc Additive Manufacturing

The Lincoln Electric Company
22801 St. Clair Avenue · Cleveland, OH · 44117-1199 · U.S.A.

www.lincolnelectric.com