

Inconel 660 (A-286)

DESCRIPTION

INCONEL 660, also known as A-286 or UNS S66826, is a high-strength, age-hardenable iron-nickel-chromium alloy. It is recognized under ASTM A453, AMS 5731, and BS HR 660, ensuring compliance with international standards for quality and performance.

TYPICAL PHYSICAL PROPERTIES

Density	lb/in ³	0.286
Melting point	°F	2550

Chemical Composition (% by weight)

Elements	Min	Max
C	-	0.040
Mn	-	1.0
Si	-	0.50
P	-	0.020
S	-	0.015
Ni	-	25.5
Fe	-	54
Cr	-	14.8
Ti	-	2.13
Mo	-	1.30
V	-	0.30
Al	-	0.18
B	-	0.0060

Machinability

Conventional machining techniques are used to readily machine super Inconel 660 (A-286). This machining process involves turning, drilling and milling. In the turning operations, the usage of cemented carbide tools is recommended for high cutting rates.

APPLICATIONS

INCONEL 660 is used in aerospace applications for turbine blades, exhaust systems, and other components where high strength and resistance to high temperatures are crucial.

TYPICAL MECHANICAL PROPERTIES

Tensile Strength	Mpa	1035
Yield Strength	Mpa	759
Elongation	%	25
Hardness Rockwell	C	32
Reduction of area	%	40
Hardness, Knoop		330
Hardness, Vickers		318
Hardness, Brinell		304

SPECIFICATIONS

- ws 1.4980
- AMS 5525
- AMS 5723
- AMS 5726
- AMS 5731
- AMS 5732
- AMS 5734
- AMS 5737
- AMS 5853
- AMS 5858
- AMS 5895
- BS HR51
- BS HR52
- BS HR650
- AECMA PrEN 2171
- AECMA PrEN 2119
- AECMA PrEN 2172
- AECMA PrEN 2173
- AECMA PrEN 2303
- AECMA PrEN 2304
- AECMA PrEN 2398
- AECMA PrEN 2399
- AECMA PrEN 3510
- AECMA PrEN 2175
- AECMA PrEN 2417

Special Purpose Alloys & Metals From Stock

Controlled Expansion | Glass Sealing

Kovar ASTM F 15 Alloy

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

Alloy 32/42/48/49

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

VIM VAR CORE IRON

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

SUPRA 510 (Ni50FeCr10)

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

TITANIUM ALLOYS

TITANIUM TI-6AL-4V GRADE 5

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

TITANIUM GRADE 2

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

TITANIUM 6-2-4-6

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

TITANIUM BT20

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

PH ALLOYS

17-7PH

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

15-5PH

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

17-4PH

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

ALUMINIUM HARD ALLOYS

7475 AA7475/7449 AA7449

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

7075 UNS A97075

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

7050 AMS 4050

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

7175 UNS A97075

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

2014 AMS 4121

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

2024 UNS A92024

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

2618 UNS A92618

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

2017 AMS 4037

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

2011 UNS A92011

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

NICKEL BASED ALLOYS

WASPALLOY

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL X750

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL 945

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL 945X

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

NIMONIC C263

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

NIMONIC 75

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL 909

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL 718

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

INCONEL 660

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

HIGH TEMP ALLOYS

HAYNES 188

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

L605

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

MP35N

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

MP159

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

RENE41

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

HAYNES 230

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

ELGILOY

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

HAYNES 242

- Forms: Plate, sheets, Round Bar, Rod, Strips, Coil

JUST-IN-TIME DELIVERY: All of our standard stock items can be delivery as per commitment. All materials are certified with shipment. For special orders and non-stock materials, contact our sales team for our competitive pricing and delivery.