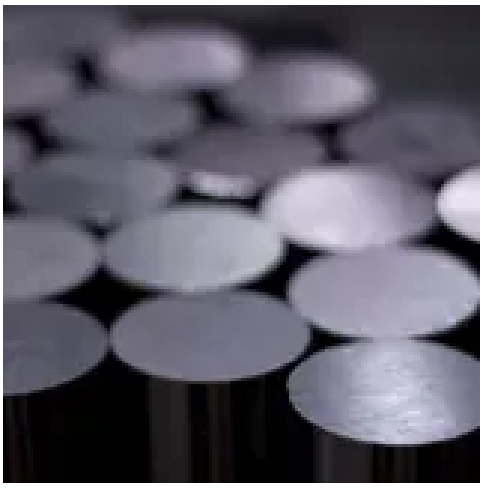
17-7PH Stainless Steel

Typical Applications

Chemical processing equipment

Oil and Petroleum refining equipment

Food processing equipment



AMS 5528, AMS 5529, AMS 5644 Suppliers and Stockholders

Dynamic Metals is a specialist supplier and stockholder of 17-7 PH stainless steel, supplying aerospace and high-performance industries with certified material to AMS 5528, AMS 5529 and AMS 5644 since 1997. No minimum order quantities.

17-7 PH is a semi-austenitic precipitation hardening stainless steel that develops high strength and hardness through heat treatment. Conforming to AMS 5528 and AMS 5529, it is well suited to components requiring good formability in the annealed condition with minimum distortion during hardening.

Its aluminium content (0.75-1.50%) promotes the formation of a strengthening phase during aging. This gives 17-7 PH tensile strength between 1241 MPa and 1448 MPa in the hardened condition, placing it among the strongest sheet-form stainless steels available.

17-7 PH is particularly valued for flat spring applications operating up to 315°C, where its combination of high strength, good fatigue resistance, and corrosion resistance makes it the preferred choice. The aerospace industry, diaphragm and bellows manufacturers, and producers of precision formed parts also benefit from its ability to be formed in the soft condition before hardening to final properties.

The material is available in sheet and strip, making it practical for components produced by forming, stamping, or roll forming prior to heat treatment.

Related Products

15 5Ph Stainless Steel

17 4Ph

17 7Ph

431 - 1-4057 STAINLESS STEEL

A286 Bar

A286 Sheet

Aermet 100

Ph 13 8Mo

S145 Stainless Steel

Technical specification

Related Specifications

AMS 5528

AMS 5529

Mil S 25043

UNS S17700

Specific Gravity

7.81 g/cm3

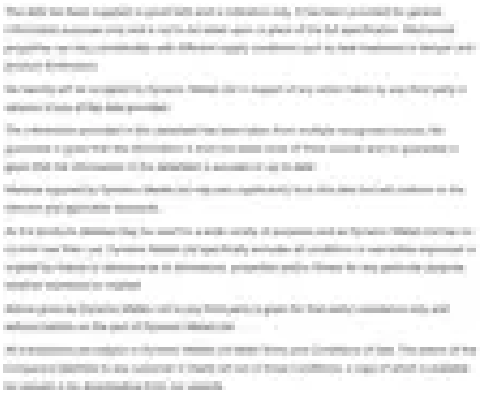
Chemical Composition (WT %)

	Min	Max

C	-	0.09
Mn	-	1.00
P	-	0.040
S	-	0.030
Si	-	1.00
Ch	16.00	18.00
Ni	6.50	7.75
Al	0.75	1.50
Cr	16	18
Fe	Bal	-

Typical Mechanical Properties in the Annealed Condition

		Min	Max
0.2% Proof Stress	MPA	1035	-
Tensile Strength	MPA	1241	1448
Elongation	%	4	6
Hardness	HRC	38	46



Need more information? ***Get in touch***

General Enquiries

+44(0) 1525 217 556

Email us here

Head Office

40 Eden Way
Chartwell Business Park
Leighton Buzzard
Bedfordshire
LU7 4FY

T: +44 (0)1525 217 556

Conversion Centre

Suite 2 Meadowhall Riverside
Meadowhall Road
Sheffield
South Yorkshire
S9 1BW

T: +44 (0)1143 030 320

Useful Links

Privacy Policy

Sitemap