



钢铁之家

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全球钢号百科!

Global Steel Grade Encyclopedia



涵盖的行业或国家与地区类别



美国材料与试验协会

GJB

国家军用标准



动力机械工程师协会

EU

前欧洲标准化

AISI

美国钢铁学会



德国工业标准

AMS

航空航天材料规范



国际标准

JASO

日本汽车标准组织

EN

欧洲标准

JB

中国机械行业标准

UNS

统一编号系统

UNI

意大利标准



美国机械工程师协会

SS

瑞典标准



国家标准



日本工业标准

6061 Aluminium

Technical Datasheet

Commercial Aluminium Alloy

Service. Quality. Value.

Applications

- Shipbuilding
- Motorboats
- Aircraft structures
- Truck bodies
- Pylons & towers
- Rail coaches

Product Description

6061 aluminium is an American alloy and one of most versatile of the heat-treatable alloys. The alloy is typically used in heavy duty structures. It is a medium to high strength heat-treatable material with very good corrosion resistance and medium fatigue strength. 6061 in the annealed condition offers excellent weldability and formability and is readily disposed to furnace brazing.

Key features:

- Medium to high strength heat-treatable alloy
- Medium fatigue strength
- Very good corrosion resistance
- Typically used in heavy duty structures

Corrosion Resistance

Very good

Availability

Sheet, plate and extrusions

Chemical Composition (weight %)

	Mn	Fe	Mg	Si	Cu	Zn	Ti	Cr	Al			
min.			0.80	0.40	0.15			0.04	Bal			
max.	0.15	0.70	1.20	0.80	0.40	0.25	0.15	0.35	Bal			

Mechanical Properties

Tensile Strength	310 MPa
Proof Stress	270 MPa
Shear Strength	190 MPa
Elongation A50 mm	12%
Brinell Vickers	100 HV

Physical Properties

Density	2.70 g/cm ³
Melting Point	650 °C
Thermal Expansion	23.4 x10 ⁻⁶ /K
Modulus of Elasticity	70 GPa
Thermal Conductivity	166 W/m.K