

7075 Aluminium Forgings

Smiths Advanced Metals

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High Strength Forged Aluminium

Our 7075 forgings include die forgings, hand forgings, and forging stock.

7075 is a high strength heat treatable aluminium alloy with excellent hardness properties.

The alloy finds significant use in small and medium aircraft structures which require ultimate strength combined with reduced weight. Specific design and processing procedures may cause these forgings to become susceptible to stress-corrosion cracking.

7075 represents one of the more popular 7xxx series forged aluminiums which is used extensively in the production of highly stressed parts.

We have available 7075 aluminium forgings in a wide range of sizes and tempers (including F, O-annealed, O1, and T73 tempers).



Grades / Specifications

- AMS4126
- AMSA22771
- AMS QQ A 367

Physical Properties

Temper	T6
Density g/cm ³	2.80
Melting Range °C	475 - 635
Thermal Conductivity (% IACS)	32.9
Electrical Conductivity (% IACS)	33
Modulus of Elasticity x10 ³ N/mm ²	72

Chemical Composition (weight %)

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others (ea)	Others (total)	Al
min.			1.20		2.10	0.18	5.10				Rem
max.	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.15	

Key Applications

- Aerospace structural components
- Commercial components
- High technology applications
- Highly stressed parts

Benefits

- High strength
- Good machinability in the annealed condition
- May be formed by conventional means
- Melting point of 477°C (891°F)

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