

# 7075 Aluminium Tube

Smiths Advanced Metals

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## Superior Strength & Hardness

7075 is used to make highly stressed parts

7075 aluminium tube combines high tensile and yield strength to create an alloy that offers excellent hardness and fracture toughness.

The product should be considered for use in applications where high strength is a critical aspect, and high corrosion resistance is not a requirement. 7075 tube offers reasonable machinability and can be easily formed in the annealed condition. The alloy may be spot or flash welded. As a high strength alloy, our material offers an excellent strength to weight ratio, which is why 7075 alloy is a favoured material in aerospace and motorsport applications.

7075 aluminium tube offers good stress corrosion cracking resistance (SSC). We stock aluminium tubes are produced to tight tolerances.

We have stock availability of [7075 aluminium tubes](#) in a wide range of sizes and tempers, including T6, T73, T7351 and T76.



## Grades / Specifications

- AMSWWT700/7
- AMSQQA200/11
- BS EN 573, BS EN 755, BS EN 754

## Key Applications

- High stressed parts
- Motorsport components
- Aerospace structural parts
- Bulkheads
- Bridges & cranes

## 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	

## Mechanical Properties (min. drawn tube, wall thickness ≤ 20mm)

Temper	MPa $R_m$	MPa $R_{p0.2}$	Elongation A(%)	Hardness HBW Typical
T6	540	485	7	150
T73	455	385	10	135

Properties as per BS EN 754-2

## Physical Properties

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

[www.smithsadvanced.com](http://www.smithsadvanced.com)
[info@smithsadvanced.com](mailto:info@smithsadvanced.com)