7068 Aluminium Bar

Smiths Advanced Metals

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Aluminium with the Strength of Steel

7068 reduces weight while retaining strength.

Designed as a higher strength alternative to 7075 alloy, 7068 aluminium is one of the highest strength aluminiums available today.

With 30% greater strength than 7075, the alloy utilises zinc as a main alloying element. With good ductility and good machinability, the material offers engineers and designers greater flexibility to increase the strength of critical components without increasing weight. 7068 aluminium offers good dimensional stability.

Smiths Advanced Metals stocks 7068 aluminium bars in various shapes, sizes and tempers (including F, T6, T651 and T6511 tempers).

Grades / Specifications

AMS4331

Cut to bespoke shape service:

We offer a comprehensive billeting services using a range of modern processing equipment. Bars are cut to tight tolerances which often negates the need for further cutting which may save our customers time and money.

Technical sales support:

To find out more about the 7068 aluminium bar and for other technical advice, contact Smiths Advanced Metals today. We provide additional technical support via our UKAS Accredited testing Laboratory.



Key Applications

- Aircraft structural parts
- Medical parts
- Racing components

Benefits

- Very high tensile and compressive strength
- Good strength retention at high temperatures
- Very good machinability

Chemical Composition (weight %)												
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Zr	Others (ea)	Others (total)	Al
min.			1.60		2.20		7.30		0.05			Rem
max.	0.12	0.15	2.40	0.10	3.00	0.05	8.30	0.10	0.15	0.05	0.15	

Mechanical Properties (minimum values unless stated)							
	MPa R _m	MPa R _{p0,2}	Elongation A (%)				
	683	655	5				

Properties from AMS 4331

Physical Properties	
Density at 20°C	2.85 kg/dm ³
Melting Range	476 - 635°C
Thermal Conductivity at 20°C	190 W.m-1.K ¹
Electrical Conductivity at 20°C	31 % IACS
Modulus of Elasticity	73.1 GPa

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