

Grade 7020 is a heat treatable aluminium alloy with zinc added as the main alloying element. This enhances the mechanical property attributes of the material and increases its resistance to fatigue stress.

The 7020 grade is primarily used in aerospace applications and offers a reasonable machinability. As a result the surface finish allows the material to be protective anodised but it will not lend itself to aesthetic anodising.

### Chemical Composition

Aluminium	Rem	Silicon	0.35% max
Copper	0.20% max	Iron	0.40% max
Manganese	0.05-0.50%	Magnesium	1.0-1.4%
Zinc	4.0-5.0%	Zirconium	0.08-0.20%
Chromium	0.10-0.35%	Zirconium + Titanium	0.08-0.25%
Total Others	0.15% max		

### Related Specifications

BS4300/15	AZ5G	UNS: A97020	BS H17
EN AW-7020	Al Zn4.5Mg1	DIN W/S 3.4335	BA 733

### Key Features

- Very good Mechanical Strengths
- Good resistance to fatigue strength.
- Good Machinability

### Typical Physical Properties

Density	2.78 g/cm <sup>3</sup>
Thermal conductivity	134 W/m <sup>2</sup> K
Thermal expansion coefficient	23.1 x 10 <sup>-6</sup>
Electrical Conductivity	37.5 IACS
Electrical resistivity	0.046 microhm m
Modulus of elasticity	68 GPa

### Fabrication Properties

Cold Formability	Good
Machinability	Good
Weldability	This grade is weldable, but for more details contact the HD technical department.

### Typical Applications

Grade 7020 is generally used in aerospace applications and for radiator and heat exchanger components.

This technical information is given by Holme Dodsworth Metals without charge and the user shall employ such information at their own discretion and risk. For more detailed technical advice on temper, selection, fabrication, joining, machining, physical and

mechanical data please contact us as space does not permit the listing of every feature of the material.