



SoluMag® Magnesium Alloy

Luxfer MEL Technologies SoluMag® alloy

Luxfer MEL Technologies is the world leader in the development and supply of highly functional magnesium alloys. SoluMag® is a new high strength magnesium alloy that has a high corrosion rate in aqueous chloride environments. This lightweight alloy is available as balls, extruded rods, bars, tubes and profiles to produce components that have high strength and ductility in demanding environments as well as a controlled corrosion rate that will effectively dissolve the component in a known time.

Product forms

- Balls
- Machined components
- Round rod
- Square/rectangular sections
- Solid profiles
- Tube

Typical applications

- Balls for hydraulic fracturing systems
- Machined components for downhole completion tools in oil and gas applications
- Time activated sub-sea devices
- Flooding plugs for IP protection

Specifications

- ASTM B107 for extruded products, dimensions only
- Corrosion rate according to agreed testing protocol
- Manufactured to aerospace quality metal cleanliness standards

Component sizes

- Machined balls from ½ inch to 5 inches diameter
- Extruded round rod from ½ inch to 5 inches diameter
- Standard bar length 3 ft / 1 m
- Other sizes, lengths and machined parts upon request

Mechanical properties

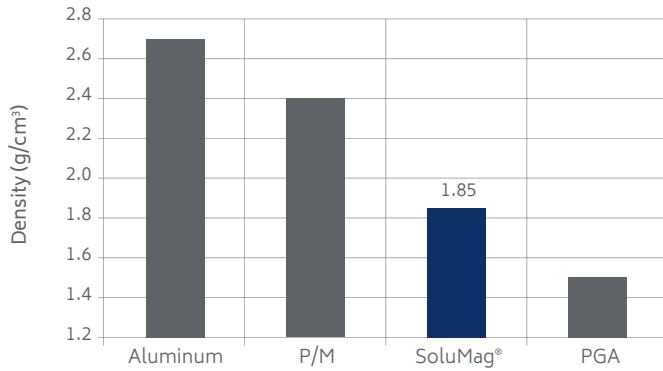
Typical Tensile Properties	Diameter	
	≤4"	>4"
Tensile yield strength (ksi/MPa)	31/210	29/200
Ultimate tensile strength (ksi/MPa)	46/315	45/310
Elongation (%)	19	19
Compressive yield strength (ksi/MPa)	32.5/224	

Corrosion properties (3% KCl aq)

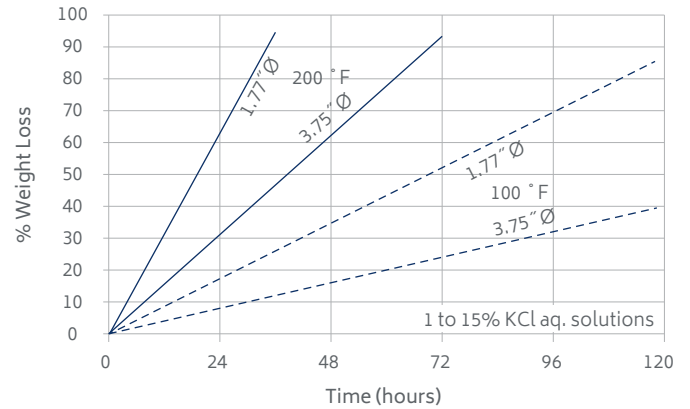
- 200 °F: 900 - 1300 mg/cm²/day (MCD)
- 100 °F: 200 - 400 mg/cm²/day (MCD)

SoluMag® Magnesium Alloy

SoluMag® density comparison



SoluMag® weight loss



Product details [LINK](#)

Discover more at
www.luxfermeltechnologies.com



† The information contained within is meant as a guideline only

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