



## 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

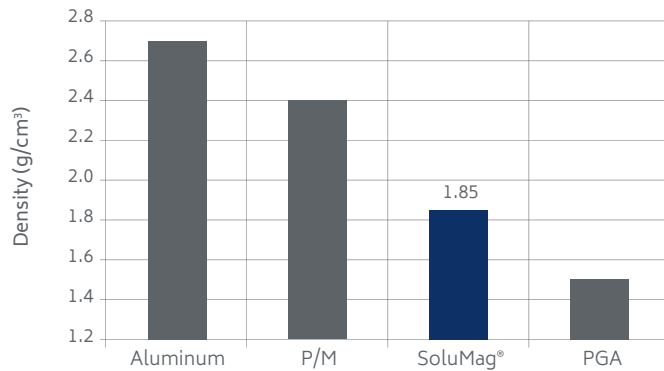
Typical Tensile Properties	Diameter	
	≤4"	>4"
Tensile yield strength (ksi/MPa)	31/210	29/200
Ultimate tensile strength (ksi/MPa)	46/315	45/310
Elongation (%)	19	19
Compressive yield strength (ksi/MPa)	32.5/224	

### Corrosion properties (3% KCl aq)

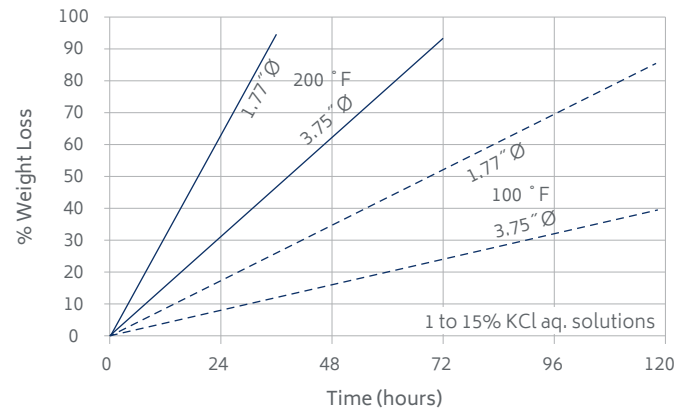
- 200 °F: 900 - 1300 mg/cm<sup>2</sup>/day (MCD)
- 100 °F: 200 - 400 mg/cm<sup>2</sup>/day (MCD)

# SoluMag® Magnesium Alloy

## SoluMag® density comparison



## SoluMag® weight loss



## Product details [LINK](#)

### Further information

For more detailed information, please contact:

#### In North America

Bill Warfield  
T +1 303 589 3189  
bill.warfield@luxfer.com

#### For the Rest of the World

Rick Tonge  
T +44 161 911 1055  
rick.tonge@luxfer.com

Discover more at [www.luxfer.com](http://www.luxfer.com)

 [@elektronoandg](https://twitter.com/elektronoandg)

† The information contained within is meant as a guideline only

SoluMag®, UK Patent No 2529062B. July 2015.

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**Luxfer MEL Technologies** Elektron Technology Centre,  
Lumns Lane, Manchester, M27 8LN  
T +44 (0) 161 911 1000

**Luxfer MEL Technologies** 500 Barbertown Point  
Breeze Road, Flemington, NJ 08822  
T +1 908 782 5800