



## SoluMag™ MAGNESIUM ALLOY

### MAGNESIUM ELEKTRON SOLUMAG™ ALLOY

Magnesium Elektron 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 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 & 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 standards

### COMPONENT SIZES

- Machined balls from 1/2 inch to 5 inch diameter
- Extruded round rod from 1/2 inch to 5 inch diameter
- Standard bar length 3 ft / 1 m
- Other sizes and machined parts upon request

### MECHANICAL PROPERTIES

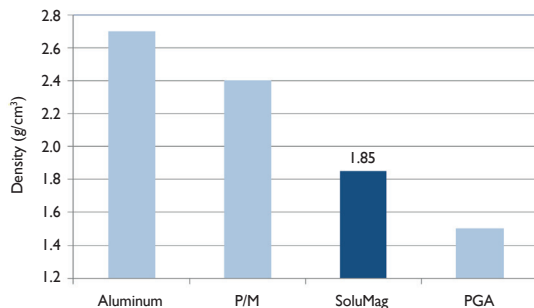
Typical Tensile Properties:	Diameter		
	Up to 1"	1" - 3"	>3"
Tensile Yield Strength (ksi/MPa)	35/240	31/210	29/200
Ultimate Tensile Strength (ksi/MPa)	49/340	46/315	45/310
Elongation (%)	20	19	19
CYS	32.5 Ksi / 224 MPa		

### CORROSION PROPERTIES (1% - 15% KCL aq)

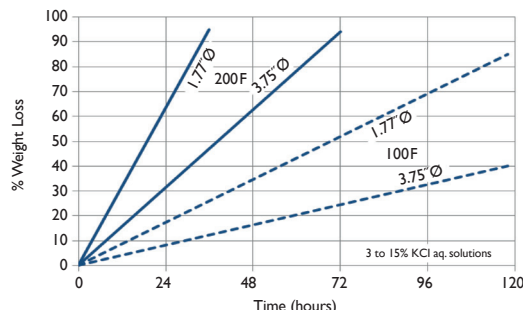
- 200°F: 1300 - 1500 mg/cm<sup>2</sup>/day (MCD)
- 100°F: 200 - 400 mg/cm<sup>2</sup>/day (MCD)

# SoluMag™ MAGNESIUM ALLOY

## SoluMag™ DENSITY COMPARISON



## SoluMag™ WEIGHT LOSS



## FURTHER INFORMATION

For more detailed information, please contact:

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† The information contained within is meant as a guideline only

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