



SoluMag® ND80 Alloy

Luxfer MEL Technologies SoluMag® alloy

Luxfer MEL Technologies is the world leader in the development and supply of highly functional magnesium alloys. SoluMag ND80 is a lightweight, high strength non-dissolving, corrosion resistant magnesium alloy that provides an excellent balance of strength and corrosion performance while being cost effective. Component designs in SoluMag ND80 can be 20% to 30% lighter than a corresponding aluminum design. The properties of SoluMag ND80 are well suited for its use as feedstock material from which to machine downhole components. This lightweight alloy is available as extruded rods, bars, and tubes to produce components for demanding downhole environments.

Product forms

- Seamless tubes and round bars
- Solid profiles
- Balls/Spheres

Mechanical properties

Extruded bar and tube – Imperial units			
Bar diameter [in]	Longitudinal direction		
	0.2% proof stress [ksi]	Tensile strength [ksi]	Elongation [%]
<0.249	30	47	4
0.250-2.499	33	48	4
2.500-4.999	30	45	2
>5.000	Provided on request for information only.		

Component sizes

- Extruded round rod from 1/2 inch to 5 inches diameter
- Other tube and bar sizes available upon request

Typical applications

- Machined components for downhole completion tools in oil and gas applications

Specifications

- ASTM B107 and B107M – Extrusion

Extruded bar and tube – Metric units			
Bar diameter [mm]	Longitudinal direction		
	0.2% proof stress [MPa]	Tensile strength [MPa]	Elongation [%]
<6.30	205	325	4
6.30-60.00	230	330	4
60.00-130.00	205	310	2
>130.00	Provided on request for information only.		

Product details [LINK](#)

Discover more at

www.luxfermeltechnologies.com

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