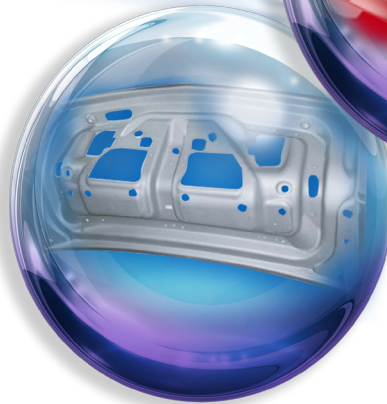


LUXFER®
MAGNESIUM
ROLLED PRODUCTS

ELEKTRON 717



GLOBAL COMPANY
WITH LOCAL SUPPORT

Excellent Formability

Elektron 717 is a rolled magnesium sheet product that has exceptional formability and corrosion resistance. This makes it suitable for engineering applications that require a lightweight solution for thin panel sections, such as skins and enclosures.

ELEKTRON 717

HIGHLY FORMABLE MAGNESIUM SHEET

Control of the crystal structure during rolling promotes isotropy in the sheet for higher formability

Improved corrosion resistance from precise control of the chemistry greatly reduces levels of impurities

30% weight saving relative to aluminum sheet in modern engineering designs with no compromise in performance

Sheet can be formed into enclosures using room temperature dies with material temperatures around 215°C (420°F)

Lower temperature in high speed stamping allows the use of oil based lubricants

Easier lubricant removal using standard caustic washes found in all industrial coating application systems

Elektron 717 can also be superplastically formed at higher temperatures

Significantly higher superplastic elongation than aluminum alloys

Smaller runs and very deep and complex curvature components are easily manufactured

Superplastic forming runs of 5,000 to 20,000 pieces is suitable for high value, niche applications

High formability makes it ideal for warm hemmed applications and testing has shown that hemming can be done with temperatures as low as 120°C (248°F)

It can be bent at 1.5 r/t ratio at room temperature

Good material corrosion resistance

Salt fog testing with commercially available coating systems have been shown to exceed 1000 hrs exposure and meet the criteria to pass OEM requirements for filiform corrosion

Coating systems for enclosures are conversion coating or plasma electrolytic oxidation to promote adhesion, e-coat, followed with a top coat. These systems are commercially available in both the USA, Europe and Japan.

SPECIFICATION MINIMUM PROPERTIES

Gauge Range	0.2% Proof Stress	Tensile Strength	Elongation
Inches (mm)	ksi (MPa)	ksi (MPa)	%
.040"-.059" (1mm-1.52mm)	18 (124)	30 (207)	15
.060" - 0.25" (1.53mm -6.35mm)	15 (103)	30 (207)	15

CHEMICAL COMPOSITION

Zinc	1.0-1.5%
Rare Earths	0.12-0.22%
Zirconium	0.2% min
Magnesium	Balance

SPECIFICATIONS

ASTM B90

ASTM DESIGNATION

ZE10A



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Visit www.luxfermrp.com for more information.

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