



# Magnesium Elektron

SERVICE & INNOVATION IN MAGNESIUM

# Magnesium Extrusions Summary

## Datasheet 333A Summary

(KSi units)

The information contained within is meant as a guideline only †

† Disclaimer: The information provided within this document is aimed to assist manufacturers and other interested parties in the machining and use of magnesium alloys. Magnesium Elektron accepts no liability in whole or in part from use and interpretation of the data herein.



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A Luxfer Group Company

## MAGNESIUM ELEKTRON EXTRUSIONS: A SUMMARY

Magnesium Elektron has supplied high quality magnesium extrusion into safety critical applications for the past 50 years. Recently, Magnesium Elektron has increased production capacity with a new 2750 ton press. Both Magnesium Elektron's presses are predominantly dedicated to magnesium extrusions.

### PRODUCTS:

- Round Bar
- Square / Rectangular Sections
- Hollow Tubes / Sections / Custom Profiles
- Multi-Hollow Sections / Custom Profiles
- Weld Rod / Weld Wire

### APPLICATIONS:

- Forging Feedstock
- Machining Feedstock
- Solid, Hollow or Multi-Hollow custom profile shapes.

### ALLOYS:

Where appropriate, alloys are also available heat treated.

- Elektron® 43, Elektron® 675, Elektron® 21, Elektron® WE43, Elektron® WE54
- ZK60A , ZW3
- AZ80A, AZ61A, AZM, AZ31B
- M1A, ZM21
- Pure
- Custom Alloys

### SPECIFICATIONS:

- ASTM B107-07
- ASTM B91
- AMS 4352H
- AMS 4350M
- Customer defined specifications

Ultrasonic Inspection to AMS 2154 Class B, A, AA and AAA.

Magnesium Elektron has state of the art, custom built immersion ultrasonic testing equipment.

**SIZES:**

Lengths: 1" thru 13ft

Round Rod Diameters:  
1/16" thru 9"

**Square / Rectangular Sections:**

Thickness: 3/8" thru 11"

Width: 3/8" thru 11"

Thickness and width are inter-dependant. Please see Figure 1.

**Custom Profiles:**

If the profile you wish to extrude fits within the red lines of the capability diagram (Figure 1), please contact Magnesium Elektron to discuss availability.

**PROPERTIES:**

The minimum expected properties of common magnesium extrusion alloys are shown in the table below.

ASTM B107-07 Specification Minimums for  
Common Magnesium Extrusion Alloys – Solid  
Extrusions

	<b>UTS ksi</b>	<b>Yield ksi</b>	<b>Elongation %</b>
Elektron 43 T5*	49	33	12
ZK60A-T5	45	36	4
AZ80A-T5	45	30	2
AZ61A-F	40	22	7
AZ31B-F	32	20	7

\*soon to be entered into ASTM B107-07

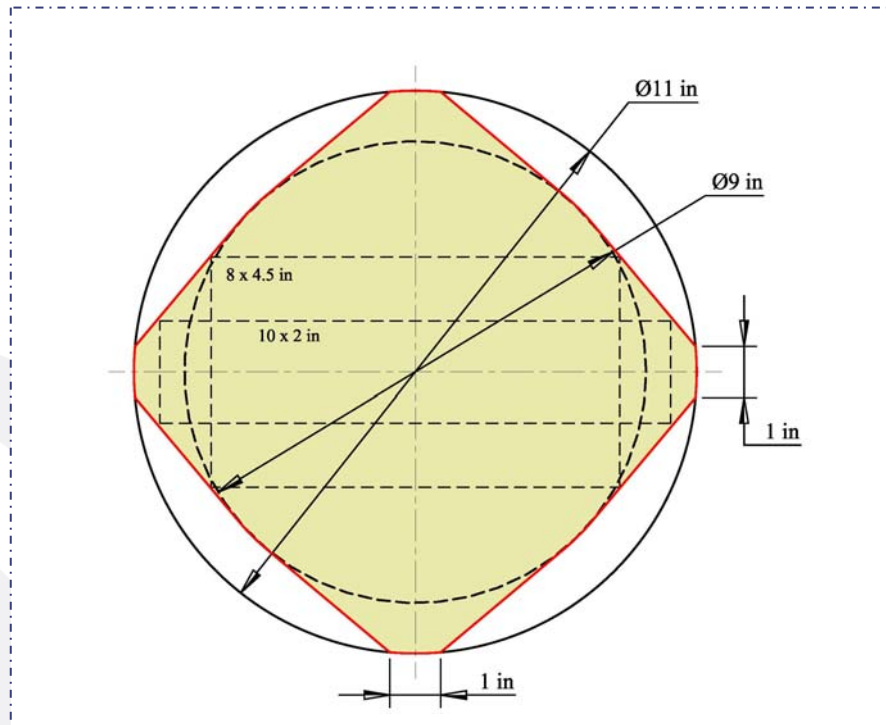


Figure 1: Extrusion Press Size Capability

## FURTHER INFORMATION:

For more detailed information please contact:

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