AM60 Magnesium Alloy – Technical Datasheet

1. Product Description

AM60 is a magnesium—aluminum—manganese alloy designed for high–pressure die–casting (HPDC). It provides an excellent combination of ductility, impact resistance and energy absorption, with higher strength than AM50A while retaining good castability. AlloyOne Metal supplies AM60 ingots that meet international specifications for structural automotive and industrial components.

2. Main Applications

- Automotive crash-management and safety components
- Seat frames and seat structures
- Instrument panel carriers and brackets
- Steering system and chassis brackets
- Housings and thin-wall die-cast parts requiring strength and ductility

3. Chemical Composition (typical ranges)

Element	Specification (%)
Al	5.5 — 6.5
Mn	0.26 — 0.60
Zn	⩽ 0.22
Si	⩽ 0.10
Cu	⩽ 0.008
Ni	⩽ 0.002

Fe	⩽ 0.004
Others (each)	⩽ 0.02

Values represent typical AM60 die-casting alloy ranges. Contractual composition can be adjusted within these windows according to customer requirements.

4. Mechanical Properties (typical HPDC values)

- Tensile Strength (Rm): ~250 MPa
- Yield Strength (Rp0.2): ~140 MPa
- Elongation: 7—10%
- Hardness: ~60 HB

5. Surface Condition

- Standard as-cast surface
- Clean and free from excessive oxidation, metal chips, or inclusions
- Fresh production suitable for melting and die-casting

6. Dimensions & Weight

- Dimensions: approx. 110 — 120 mm × 59 — 75 mm × 590 — 636 mm
- Weight per ingot: 7—8 kg
- Bundle weight: 900—1200 kg

7. Packaging & Loading

- Bundled on wooden or magnesium-alloy pallets
- Wrapped with plastic foil and secured with PP straps
- Fresh production; free from corrosion or oxidation
- 20-ft container loading: approx. 25 MT

• 40-ft container not recommended (weight & safety considerations)

8. HS Code

8104.19