

## Material: ONORM EN 1753 EN-MBMgAl5Mn

### Standard Specification for Magnesium Alloy Ingots and Castings

**Group:** Non-Ferrous Magnesium Alloy

**Sub Group:** ONORM EN 1753 Magnesium Alloy Ingots and Castings

**Application:** Intended for Valve, Pump, General Engineering, Automotive and Other Industries Grade

**Belongs to the Industry:** Ingot and Casting

| Chemical Composition |      |               | Heat Treatment               |          |
|----------------------|------|---------------|------------------------------|----------|
| Aluminium            | Al % | 4.500 - 5.300 | As-Cast                      |          |
| Copper               | Cu % | 0.008 max.    |                              |          |
| Iron                 | Fe % | 0.004 max.    |                              |          |
| Manganese            | Mn % | 0.270 max.    |                              |          |
| Nickel               | Ni % | 0.001 max.    |                              |          |
| Other                | Ot%  | 0.010 max.    |                              |          |
| Silicon              | Si % | 0.050 max.    |                              |          |
| Zinc                 | Zn % | 0.200 max.    |                              |          |
| Magnesium            | Mg % | Balance       | <b>Mechanical Properties</b> |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
| -                    | -    | -             |                              |          |
|                      |      |               | Tensile Strength in Mpa      | 200 min. |
|                      |      |               | Yield Strength in Mpa        | 110 min. |
|                      |      |               | Elongation in %              | 10 min.  |
|                      |      |               | Reduction of Area in %       | -        |
|                      |      |               | Hardness in HB               | 58 min.  |
|                      |      |               | Impact in Joule              | -        |

| Cross Reference Table |          |                |                              |
|-----------------------|----------|----------------|------------------------------|
| Material              | Standard | Country        | Grade Belong to the Industry |
| AM50A                 | ANSI/AA  | USA            | Casting                      |
| EN-MB21220            | ONORM    | Australia      | Ingot and Casting            |
| EN-MB21220            | CSN      | Czech Republic | Ingot and Casting            |
| EN-MBMgAl5Mn          | CSN      | Czech Republic | Ingot and Casting            |
| B94 AM50A             | ASTM     | USA            | Casting                      |
| B275 AM50A            | ASTM     | USA            | Casting                      |
| B951 AM50A            | ASTM     | USA            | Casting                      |

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