Castaman®-35
[AlSi10MnMg]

RHEINFELDEN
Solutions thru Innovation

Castaman®-35 *The ductile HPDC alloy for standard applications*

Ductile HPDC alloy with high-quality recycling material and very good mechanical properties. Further optimization of properties can be realized by defined adjustment of the Mg-content in conjunction with one or two stage heat treatments.

Good mechanical properties will be achieved already at the as cast state F.
High yield strength $Rp_{0.2}$ in conjunction with good values for the elongation.

Treatment condition	0.2% YTS	UTS	Elongation A
F	120 - 150 MPa	200 - 270 MPa	4 - 9%
T6	180 - 280 MPa	250 - 340 MPa	6 - 12%

- **Wide range of mechanical properties for various applications:**
  - Automotive engineering
  - Aircraft industry
  - Architecture
  - Mechanical engineering
  - Defense technology
  - Cooling technology
  - Shipbuilding
  - Food industry
  - and many more
- **Castaman®-35 is largely based on high-quality recycling material and is characterized by a low carbon footprint.**
- **Excellent dynamic fatigue strength** and highly resistant to stress corrosion cracking.
- **Very suitable for applications in vehicle constructions.**
  Heat treatable to high elongation and high energy absorption capability.
- **Replaces steel sheet constructions in vehicle designs.**
  Significant cost and weight reductions realizable, together with improved function integration.
- **Excellent machinable and very suitable for welding processes.**
- **Suitable for self-riveted joints, clinched joints, crimped joints and adhesive bonds.**
- **Good corrosion resistance:** Coatings are often unnecessary.
- **Excellent castable HPDC alloy:**
  Solidification range, shrinkage behavior and expected die casting die endurance are comparable to that of AlSi9 and AlSi10Mg alloys.
- Best mould release: No sticking to the die casting die.
- Excellent pourable for castings with wall thickness from 1.5 mm.

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New alloy developments made as technology progresses after printing are included in later versions.

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