

HIGH-STRENGTH CAST ALUMINUM ALLOYS

Areas of Application

The alloys can be used for producing cast and 3D-printed parts in automotive and aviation industries

Specification

Mechanical properties of cast alloys after thermal treatment:

tensile strength, MPa	500 – 575
yield stress, MPa	360 – 520
plasticity, %	3.3 – 1.0

Mechanical properties of rods produced by the ingot extrusion method after thermal treatment:

tensile strength, MPa	556
yield stress, MPa	460
plasticity, %	8.5



Ingot and rod obtained by the extrusion method

Advantages

Due to a unique combination of mechanical, cast, and tribotechnical properties the alloys can be used both as cast and after deformation. The wear resistance under dynamic load exceeds 2 times that of some existing wrought industrial alloys; the fluidity exceeds 1.3 times that of the best commercial aluminum-silicon alloys

Stage of Development.

Suggestions for Commercialization

IRL3, TRL3

Vending of patent based on license agreement

IPR Protection

IPR3

Contact Information

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