

DIRECT METAL LASER SINTERING

ALUMINUM AlSi10Mg

MATERIAL SPECIFICATIONS



PRODUCT DESCRIPTION:

AlSi10Mg is an aluminum master alloy often specified for casting or die casting parts. It is characterized by having an excellent strength-to-weight ratio among aluminum alloys, but it has a lower elongation at break. It has good high-temperature characteristics, corrosion resistance, and fatigue resistance.

APPLICATIONS:

Due to its high strength-to-weight ratio, AlSi10Mg is a good choice among casting materials for automotive and aerospace applications, notably gearboxes, housings and brackets that are subject to high loading.



KEY BENEFITS:

- High strength
- Excellent temperature and corrosion resistance
- Good tensile, fatigue, creep, and rupture strength

PROPERTIES:

Standard	Ultimate Tensile Strength (ksi)	0.2% Yield (ksi)	Elongation (%)	Hardness (HRB)
ASTM F3318-18	35	20	10	47.2