Aluminum 2014 | 3.1255 | 24345 | AlCu4SiMg

Aluminum 2014 is easily machined and can be hardened to get strengths comparable to steel, but is prone to corrosion.

Mechanical properties

Ultimate tensile strength	190-245 MPa
Yield strength	100-125 MPa
Young's modulus (modulus of elasticity)	72 - 73.3 GPa
Elongation at break	11 - 16 %

Physical properties

Corrosion resistance	Poor
Magnetism	Non-magnetic
Weldability	Fair

Thermal properties

Maximum service temperature	210 °C
Thermal expansion coefficent	23 - 24.4 10^-6/ºC
Thermal conductivity	150 - 154 W/(m·°C)

Electrical properties

Electrical resistivity	4.32 µΩ*cm

Post treatments

Post-Processing	Annealing, Aging, Hot working, Hardening
Anodizing compatibility	Suitable

Common applications

Truck frames	

Aerospace & Defense industry	

Aluminum 2014 CNC Machining Applications & Parts

Aluminum 2014 is a high-strength alloy with excellent machining characteristics in the T6 condition. It is commonly used for heavy-duty forgings, aerospace structures, and high-stress applications.

Typical Parts We Machine from 2014:

- **Aerospace Forgings:** Wing ribs, fuselage stringers, bulkheads, landing gear parts
- **Industrial:** Heavy-duty machine parts, polley blocks, hydraulic valves

Our Machining Advantage:

We machine 2014-T6 to achieve excellent surface finishes and tight tolerances on complex forged components, meeting the stringent demands of the aerospace sector.

Get an Instant Quote for your custom Aluminum 2014 parts today.