Aluminum 2024-T351 | 3.1355 | 24530 | AlCu4Mg1

Aluminum 2024-T351 delivers high strength and fatigue resistance for aerospace parts.

Mechanical properties

Ultimate tensile strength	395-470 MPa
Yield strength	275-310 MPa
Young's modulus (modulus of elasticity)	71 - 73.1 GPa
Elongation at break	9-15 %

Physical properties

Corrosion resistance	Poor
Magnetism	Non-magnetic
Weldability	Good

Thermal properties

Maximum service temperature	200 °C
Thermal expansion coefficent	23 - 24.7 10^-6/ºC
Thermal conductivity	121 W/(m·°C)

Electrical properties

Electrical resistivity	5.82 µΩ*cm

Post treatments

Post-Processing	Hot & cold working, Age hardening
Anodizing compatibility	Suitable

Common applications

Aircraft fuselage	

Wing tension members	
Critical Aircraft structures	
Commercial & military aircraft	

Aluminum 2024-T351 CNC Machining Applications & Parts

Aluminum 2024-T351 is a high-strength alloy with excellent fatigue resistance and a good strength-to-weight ratio. Its primary application is in the aerospace industry for structural components.

Typical Parts We Machine from 2024-T351:

- **Aerospace Structures:** Aircraft fuselage skins, wing tension members, shear webs, rib sections
- **High-Stress Components:** Truck wheels, gear parts, pistons, and other parts requiring good fatigue performance

Our Machining Advantage:

We machine 2024-T351 in the T351 temper to maximize its mechanical properties, delivering components with exceptional fatigue life and reliability for critical aerospace applications.

Get an Instant Quote for your custom Aluminum 2024-T351 parts today.