

CRITICAL RAW MATERIALS IN AIR PLANES



Aluminium

Aluminum alloys are corrosion resistant, comparatively easy to fabricate and very lightweighted.

Magnesium

Magnesium is one of the lightest structural metals, used in hundreds of vital spots in airplanes. Some wing panels are constructed entirely from magnesium alloys.

Scandium

The addition of scandium with other alloy materials improves **strength and heat tolerance**, promotes **corrosion resistance** and extends **weldability** and weld strength to an array of aluminum alloy materials..

Cobalt

The **high-pressure turbine** is subject to the most severe conditions (high temperatures and pressures). The parts in this area are generally **nickel and cobalt alloy** based. **Turbojet engines** are machines of very complex design that must withstand **intense thermal, mechanical and vibratory stress** and meet **high operating constraints**.

Titanium

Lightweight, strong, corrosion resistant metal. Titanium is unaffected by long exposure to seawater and marine atmosphere.