



MOLYBDENUM SCRAP

Molybdenum does not occur as a free metal in nature, but rather in various oxidation states in minerals. Industrially, molybdenum compounds are used in high pressure and high temperature applications, as pigments and catalysts.

The ability of molybdenum to withstand extreme temperatures without significantly expanding or softening makes it useful in applications that involve intense heat, including the manufacture of aircraft parts, electrical contacts, industrial motors and filaments. Molybdenum is also used in alloys for its high corrosion resistance and weldability. Molybdenum contributes corrosion resistance to type 316 stainless steel by 'gettering' residual carbon, preventing the formation of chromium carbide at grain boundaries. Most high-strength steel alloys contain 0.25% to 8% molybdenum. Despite such small portions, more than 43,000 tons of molybdenum are used as an alloying agent each year in stainless steels, tool steels, cast irons and high-temperature superalloys.