

DATA SHEET

MA 300 | 1.6354

Major specifications

UNS K93120 | AMS 6514 | WL 1.6354

Product forms

Round bars: 23,0 mm and 32,0 mm Diameter

Key features

Maraging 300 is a cobalt-containing martensitic age-hardening steel that offers very high strength with moderate toughness. This steel is suitable for use at temperatures up to 450°C and maintains constant notch impact properties at temperatures down to -50°C. Maraging 300 has a martensitic microstructure in the annealed state and achieves its high strength through precipitation heat treatment at a relatively low temperature. Maraging 300 is used for highly dynamic components in aviation and aerospace, high-performance motorsports and precision engineering.

Areas of application

Ball bearings, high performance components for motorsports, tools, drive shafts and gears.

CHARACTERISTIC

Chemical composition limits in %

Fe	Rest
Ni	18,00 - 19,00
Co	8,00 - 9,50
Mo	4,60 - 5,20
Ti	0,55 - 0,80
Al	0,05 - 0,15
Mn	max. 0,10
Si	max. 0,10
C	max. 0,03
S	max. 0,01

Physical constants and thermal properties

Density	8,0 g/cm ³
Melting point	1410 °C
Thermal conductivity at 20°C	25,5 W/m • °C
Coefficient of expansion at 21-100°C	11,3 µm/m • °C

Minimum mechanical properties per WL 1.6354

(room temperature, fully heat treated condition)

Yield strength	1910 MPa
Tensile strength	1960 MPa
Elongation	4,5% longitudinal direction 3,5% transverse direction

All information is subject to change without notice.

The properties correspond to the material in the heading. They may vary for other specifications. Please contact us for more details.