

MIM-Material Specification and Applications

Composition

Material: Triabloy T-400

Standards: UNS R30400

Typical composition:	<i>Element</i>	<i>Composition (%)</i>
	C	< 0.08
	S	< 0.03
	P	< 0.03
	O	< 0.15
	Co	Balance
	Cr	7.5 – 9.5
	Fe	< 1.5
	Mo	27 - 30
	Ni	< 1.5
	Si	2.2 – 3.0
	Fe + Ni	< 3.0

Properties

		Gesintert
Density		≥ 8.70 g/cm ³
Hardness		≥ 48 – 58 HRC
HV / HRC	20°C	680 / 58
	100°C	665 / 58
	200°C	660 / 58
	300°C	650 / 58
	400°C	620 / 57
	500°C	585 / 54
	600°C	495 / 49
	700°C	385 / 39
Tensile strength R _m		680 MPa
Elongation A		<< 1%
Surface roughness R _a		≤ 3.2 μm

Applications / Remarks

T-400 combines excellent mechanical wear resistance with good corrosion resistance. T-400 contains hard intermetallic phases of Mo and Si which impart excellent surface properties over a wide temperature range. T-400 is particularly suitable where lubrication is a problem. Especially at elevated temperatures, and in similar applications to Stellite 12 or Stellite 1 T-400 has excellent resistance against galling. T-400 shows excellent corrosion resistance in boiling Acetic Acid (50%), Formic Acid (45%). Excellent corrosion resistance is also observed in Phosphoric Acid (85%) at 66°C.

The data given are based on our experience to date. However, no liability can be assumed.