

MoldMax XL®

MoldMax XL is a high strength copper mold alloy with good thermal conductivity, which is free of beryllium. The alloy's hardness is comparable with AISI P-20 tool steel, but its thermal conductivity is two to three times higher. MoldMax XL is used as injection mold cores and cavities. The alloy provides excellent toughness, wear resistance and surface finish. MoldMax XL Alloy typically machines faster than tool steels, and with appropriate machine tools, metal removal rates several times higher can be obtained.

CHEMICAL COMPOSITION (weight- %)

Alloy	Nickel	Tin	Copper
MoldMax XL	8,5 – 9,5	5,5 – 6,5	Balance

PHYSICAL PROPERTIES

E-Modulus	Melting Point (Solidus)	Density	Thermal Expansion	Thermal Conductivity	Heat Capacity (100 °C)
117 GPa	925 °C	8,91 g/cm ³	16,2 x 10 ⁻⁶ /°C	70 W/mK	0,39 J/gK

TYPICAL MECHANICAL PROPERTIES*

0.2% Offset Yield Strength (nominal)	Ultimate Tensile Strength	Fatigue Strength 10 ⁷ Cycles (R = -1)	Elongation	Impact Strength	Härte
725 MPa	795 MPa	240 MPa	6 %	13 J	30 HRC

* Properties may vary by shape and thickness

AVAILABLE DIMENSIONS

MoldMax XL is available in plate condition with different thicknesses ex stock in Appenweiler (GER).

RELATED INFORMATION

Further technical information on our MoldMax® Products can be found on our webpage www.edro.com or by calling +49 7805 915790. For pricing and availability information, please feel free to contact us.