

MoldMax V®

The high conductivity, moderately high strength, copper nickel silicon chromium alloy MoldMax V is an alloy typically used in applications like injection molding and blow molding. MoldMax V is made for cores and cavities, where an excellent thermal conductivity is required.

CHEMICAL COMPOSITION (weight- %)

Alloy	Ni	Si	Cr	Cu
MoldMAX V	6.4 – 7.6	1.5 – 2.5	0.6 – 1.2	Balance

PHYSICAL PROPERTIES

Elastic Modulus	Melting Point (Solidus)	Density	Thermal Expansion	Thermal Conductivity (typical @100 °C)	Heat Capacity (typical @100 °C)
130 GPa	~980 °C	8.69 g/cm ³	17.5 x 10 ⁻⁶ °C ⁻¹	160 W/m °C	0.41 J/g °C

MECHANICAL PROPERTIES*

Size Range Product	0.2% Offset Yield Strength Rp0.2	Ultimate Tensile Strength	Fatigue Strength 10 ⁷ Cycles (R = -1)	Minimum Elongation	Impact Strength	Minimum Hardness
12.5 – 89 mm Ø	790 MPa	860 MPa	275 MPa	7%	7 J	(27 HRC)
100 – 125 mm Ø	725 MPa	790 MPa	275 MPa	5%	7 J	(25 HRC)
12.5 – 63.5 mm plates	690 MPa	790 MPa	275 MPa	5%	7 J	(25 HRC)

*Hardness is tested via Brinell Test Method at 3000 kgf load and equivalent HRC values converted per ASTM-E-140, Table I. Properties may vary by shape and thickness.

FORMS AVAILABLE

Rounds and plates in different dimensions are available ex stock Appenweier (GER).

RELATED INFORMATION

Additional technical information on MoldMAX® products can be obtained by visiting www.edro.com or by calling +49 7805 915790. For pricing and availability in Europe please feel free to contact us.