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MOLDMAX BeCu

WROUGHT ROD & PLATE

MATERION

Moldmax : Beryllium Copper Alloy. High Strength, High Hardness and Wear resistance, Excellent Corrosion Resistance, Very Good Thermal Properties.
For: Injection Moulds, Core Cavity Inserts, Blow Mould Pinch Offs, Neck Rings, Handle Inserts, Hot Runner systems, Injection Nozzles and Manifolds.

INCREASED CYCLE TIMES FOR PLASTIC MOULDING

Moldmax : Provides strength and wear resistance similar to many tool steels , but with thermal conductivity up to ten times greater than steel.

Through the unique combination of thermal conductivity and strength Moldmax gives:

- **Shorter Cycle Time**
- **Improved Plastic Part Dimensional Control.**
- **Better Parting Line Maintenance**
- **Mated with a variety of materials.**

MOLDMAX Chemical Composition		
Copper %	Beryllium %	Cobalt %
REM	1.6 – 2.0	0.2 – 0.3

Moldmax Typical Mechanical Properties					
Temper	Tensile Strength	Yield Strength	Elongation (%)	Hardness	
High Hard	170 Ksi	145 KSi	5	RC 40	
HH	1170 MPa	1000 MPa	5	BH 373	
Low Hard	140 Ksi	110 Ksi	15	RC 30	
LH	965 MPa	760 MPa	15	BH 277	

Moldmax Physical Properties					
Elastic Modulus	Melting Point (Solidus)	Density	Thermal Expansion	Thermal Conductivity (100 C)	Heat Capacity (100 o C)
19,000 Ksi	- 1600 o F	0.302 1b/in3	9.7x 10-6 oF-1	90 BTU/ hr ft 0 F	0.10 BTU/ lb oF
131 GPa	-- 870 o C	8.36 g/cm3	1.75 x 10-5 oC-1	155 W/m-K	0.44 x J/g.K