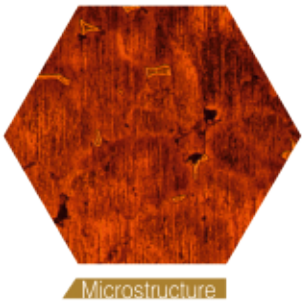

Microstructure

Alloy
CuSn12Ni2

iz-metal

Characteristics & Typical Applications

Tough and hard material with very high wear resistance, also suitable at high sliding speeds and surface pressures. Good corrosion resistance, seawater-resistant, resistant to cavitation stress, medium machinability. High-speed worm and helical wheel rims.

Chemical Composition

Elements	Cu	Sn	Ni	P	Al	Fe	Mn	Pb	S	Sb	Si	Zn
EN 1982	84,5-87,5	11-13	1,5-2,5	0,05-0,4	0,01 max	0,2 max	0,2 max	0,3 max	0,05 max	0,1 max	0,01 max	0,4 max
Average Nominal	85	12	2	0,05	0,01	0,2	0,1	0,2	0,03	0,01	0,01	0,38

Typical Mechanical Properties

		Continuous Cast	Centrifugal Cast
Tensile Strength Rm	MPa(min)	300	300
%0,2 Yield Stress	MPa(min)	180	180
Elongation	%(min)	10	8
Hardness	HB(min)	95	95

Physical Properties

Density	Specific Heat Capacity	Electrical Conductivity	Thermal Conductivity
8.77 gm/cm^3 at 20°C	377.1 J/kg. $^\circ$K at 20°C	0.056 Mega Siemens/ cm at 20°C	70.6 W/m.$^\circ$K at 20°C

Fabrication Processes

Joining Technique	Soldering	Brazing	Oxyacetylene Welding	Gas Shielded Arc Welding	Coated Metal Arc Welding	Machinability Rating
Suitability	Excellent	Good	Fair	Fair	Fair	20

Related Specifications

EN 1982	ASTM B 427
CC484K	C91700

Tin Nickel Bronze