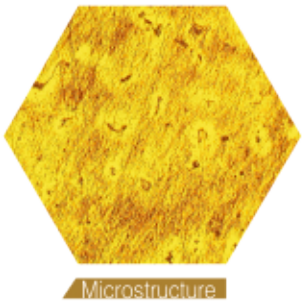

Microstructure

Alloy
CuSn10

iz-metal

Characteristics & Typical Applications

This alloy is recommended for high static loads. The high tin content and the phosphorus addition impart to the alloy excellent wear resistance, fatigue strength, and bearing properties. The most commonly used wrought forms are strip and wire. The other areas of usage are bearings, gearboxes, valve bodies, and worm gears.

Chemical Composition

Elements	Cu	Sn	Ni	Pb	Zn	Sb	Fe	P	Mn	S	Si	Al
EN 1982	88 - 90	9,0 - 11,0	2,0 max	1,0 max	0,5 max	0,2 max	0,2 max	0,2 max	0,1 max	0,05 max	0,02 max	0,01 max
Average Nominal	88	10	1	0,22	0,3	0,1	0,1	0,1	0,1	0,05	0,02	0,01

Typical Mechanical Properties

		Continuous Cast	Centrifugal Cast
Tensile Strength Rm	MPa(min)	280	280
%0,2 Yield Stress	MPa(min)	170	160
Elongation	%(min)	10	10
Hardness	HB(min)	80	80

Physical Properties

Density Specific	Heat Capacity	Electrical Conductivity	Thermal Conductivity
8.80 gm/cm^3 at 20°C	377.1 J/kg. at 20°C	70.6 W/m at 20°C	0.056 MegaSiemens/ cm at 20 °C

Fabrication Processes

Joining Technique	Soldering	Brazing	Oxyacetylene Welding	Gas Shielded Arc Welding	Coated Metal Arc Welding	Machinability Rating
Suitability	Excellent	Good	Not recommended	Fair	Fair	20

Related Specifications

EN1982	BS1400	ASTM B271	ASTM B505
CC480K	CT1	C90500	C90700

Tin Bronze