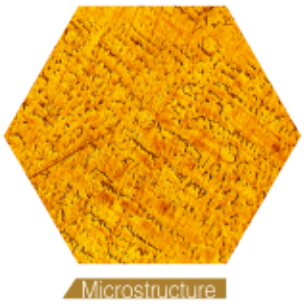

Microstructure

Alloy
CuSn11P

iz-metal

Characteristics & Typical Applications

It is typically found in gear, high-strength bushing, and bearing applications where low speeds and heavy loads are present. Other high-strength applications for these alloys include pump impellers, piston rings, steam fittings, and valve bodies.

Chemical Composition

Elements	Cu	Sn	P	Pb	Fe	Ni	Sb	Mn	S	Zn	Al	Si
EN 1982	87,0 - 89,5	10,0 - 11,5	0,5-1,0	0,25 max	0,1 max	0,1 max	0,05 max	0,05 max	0,05 max	0,05 max	0,01 max	0,01 max
Average Nominal	88	10,5	0,9	0,2	0,1	0,1	0,05	0,05	0,04	0,04	0,01	0,01

Typical Mechanical Properties

		Continuous Cast	Centrifugal Cast
Tensile Strength Rm	MPa(min)	350	330
%0,2 Yield Stress	MPa(min)	170	170
Elongation	%(min)	5	4
Hardness	HB(min)	85	85

Physical Properties

Density	Specific Heat Capacity	Electrical Conductivity	Thermal Conductivity
8.77 gm/cm^3 at 20^{o}C	377.1 J/kg. ^{0}K at 20^{o}C	0.056 MegaSiemens/ cm at 20 °C	70.6 W/m ^{0}K at 20^{o}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

EN1982	BS1400
CC481K	PB2

Tin Bronze