

COPPER ALLOY WEARLESS® 954

CuAl11Fe4-C



Composition

Element	Al	Cu	Fe	Mn	Ni ^a	Others
w/w	%	%	%	%	%	%
min.	10,0	83,0	3,0			
max.	11,5		5,0	0,5	2,5	0,5

^aNi+Co

Mechanical properties

Casting process and designation	Proof Strength <i>R_{p0,2}</i> [MPa]	Tensile strength <i>R_m</i> [MPa]	Elongation <i>A₅</i> [%]	Brinell hardness HBW [HB]
-03 (sand)	≥205	≥515	≥12	≥150
-15 (continuous)	≥220	≥585	≥12	≥160
-15 (centrifugal)	≥205	≥515	≥12	≥150

Physical properties

Density [g/cm ³]	Young's modulus [GPa]	Thermal conductivity [W/mK]	Electrical conductivity [%IACS]
7,45	110	59	13

Fabrication properties

Machinability	Weldability	Solderability	Stress-relieving temperature
Good	Excellent	Good	315 °C

Applications

Pump impellers, bearings, gears, worms, bushings, valve seats and guides, rolling mill slippers, slides, nonsparking hardware, bearing segments for the steel industry, heavily loaded worm gears, high-strength clamps, landing gear parts, machine parts, pawl, pickling hooks, pressure blocks for the steel industry, pump parts, spur gears, valve bodies, valve guides, valve seats, valves, worm gears

Comparable standards

US standard UNS C95400