

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISi9Cu

Alloy designation: EN AB and EN AC 46200

CHEMICAL COMPOSITION % - EN 1676

Alloy	Elements													Each	Total
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti				
EN AB-46200	min	7,5		2,0	0,15	0,15									
	max	9,5	0,7	3,5	0,65	0,55	-	0,35	1,2	0,25	0,15	0,20	0,05	0,25	

MECHANICAL PROPERTIES FROM SEPARATELY CAST TEST PIECES - EN 1706

Casting process	Temper designation	Tensile strength		Yield strength		Elongation		Brinell hardness	
		Rm	MPa min.	Rp0,2	MPa min.	A	% min.	HBW	min.
Sand	F	150		90		1		60	
Permanent mould	F	170		100		1		75	
	T5 / T6	190 / 280		130 / 250		< 1		80 / 95	
High pressure die casting									

MECHANICAL AND OTHER PROPERTIES - EN 1706

Fluidity	B	Ability to be polished	C
Resistance to hot tearing	B	Strength at room temperature	B
Pressure tightness	B	Strength at elevated temperature at 200 °C	A
Machinability as cast	B	Ductility (Shock resistance)	C
Machinability after heat treatment	-	Linear thermal expansion 10 ⁻⁶ /K 293K373 K	21
Resistance to corrosion	D	Electrical conductivity MS/m	14 to 18
Decorative anodizing	E	Thermal conductivity W/(m k)	110 to 130
Ability to be welded	B	Fatigue resistance MPa	60 to 90

A: Excellent B: Good C: Fair D: Poor E: Not advisable F: Unsuitable