

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISi9Cu

Alloy designation: EN AB and EN AC 46400

**CHEMICAL COMPOSITION % - EN 1676**

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-46400	min	8,3		0,8	0,15	0,30							
	max	9,7	0,7	1,3	0,55	0,65	-	0,20	0,8	0,10	0,10	0,18	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		Rp0,2		A		HBW	
		MPa min.		MPa min.		% min.		min.	
Sand	F	135		90		1		60	
Permanent mould	F	170		100		1		75	
	T6	275		235		1,5		105	
High pressure die casting									

**MECHANICAL AND OTHER PROPERTIES - EN 1706**

Fluidity	B	Ability to be polished	D
Resistance to hot tearing	B	Strength at room temperature	A
Pressure tightness	B	Strength at elevated temperature at 200 °C	B
Machinability as cast	B	Ductility (Shock resistance)	C
Machinability after heat treatment	B	Linear thermal expansion 10 <sup>-6</sup> /K 293K373 K	21
Resistance to corrosion	D	Electrical conductivity MS/m	16 to 22
Decorative anodizing	E	Thermal conductivity W/(m k)	130 to 150
Ability to be welded	B	Fatigue resistance MPa	60 to 90

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