

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISI9Cu

Alloy designation: EN AB and EN AC 46100

CHEMICAL COMPOSITION % - EN 1676

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-46100	min	10,0	0,45	1,5									
	max	12,0	1,0	2,5	0,55	0,30	0,15	0,45	1,7	0,25	0,15	0,20	0,05

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					
Permanent mould					
High pressure die casting	F	240	140	< 1	80

MECHANICAL AND OTHER PROPERTIES - EN 1706

Fluidity	A	Ability to be polished	C
Resistance to hot tearing	B	Strength at room temperature	B
Pressure tightness	C	Strength at elevated temperature at 200 °C	B
Machinability as cast	C	Ductility (Shock resistance)	D
Machinability after heat treatment	-	Linear thermal expansion 10 ⁻⁶ /K 293K373 K	20
Resistance to corrosion	D	Electrical conductivity MS/m	14 to 18
Decorative anodizing	E	Thermal conductivity W/(m K)	120 to 130
Ability to be welded	F	Fatigue resistance MPa	60 to 90

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