

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AlSi(Cu)

Alloy designation: EN AB and EN AC 47000

CHEMICAL COMPOSITION % - EN 1676

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-47000	min	10,5			0,05								
	max	13,5	0,7	0,9	0,55	0,35	0,10	0,30	0,55	0,20	0,10	0,15	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	F	150		80		1		50	
Permanent mould	F	170		90		2		55	
High pressure die casting									

MECHANICAL AND OTHER PROPERTIES - EN 1706

Fluidity	A	Ability to be polished	C
Resistance to hot tearing	A	Strength at room temperature	D
Pressure tightness	A	Strength at elevated temperature at 200 °C	B
Machinability as cast	C	Ductility (Shock resistance)	C
Machinability after heat treatment	-	Linear thermal expansion 10 ⁻⁶ /K 293K373 K	20
Resistance to corrosion	C	Electrical conductivity MS/m	16 to 22
Decorative anodizing	E	Thermal conductivity W/(m k)	130 to 150
Ability to be welded	A	Fatigue resistance MPa	60 to 90

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