

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISI

Alloy designation: EN AB and EN AC 44100

**CHEMICAL COMPOSITION % - EN 1676**

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-44100	min	10,5											
	max	13,5	0,55	0,10	0,55	0,10	-	0,10	0,15	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	70	4	50
Permanent mould	F	170	80	5	55
High pressure die casting					

**MECHANICAL AND OTHER PROPERTIES - EN 1706**

Fluidity	A	Ability to be polished	D
Resistance to hot tearing	A	Strength at room temperature	D
Pressure tightness	A	Strength at elevated temperature at 200 °C	C
Machinability as cast	C	Ductility (Shock resistance)	B
Machinability after heat treatment	-	Linear thermal expansion 10 <sup>-6</sup> /K 293K373 K	20
Resistance to corrosion	B/C	Electrical conductivity MS/m	16 to 23
Decorative anodizing	E	Thermal conductivity W/(m K)	130 to 160
Ability to be welded	A	Fatigue resistance MPa	60 to 90

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