

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISi

Alloy designation: EN AB and EN AC 44400

CHEMICAL COMPOSITION % - EN 1676

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-44400	min	8,0											
	max	11,0	0,55	0,08	0,50	0,10	-	0,05	0,15	0,05	0,05	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	170	80	4	50
Permanent mould	F	180	90	5	55
High pressure die casting	F	220	120	2	55

MECHANICAL AND OTHER PROPERTIES - EN 1706

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

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