

Standard: SS-EN 1676 and SS-EN 1706

Alloy group: AISi7Mg

Alloy designation: EN AB and EN AC 42000

CHEMICAL COMPOSITION % - EN 1676

Alloy	Elements												
	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Each	Total
EN AB-42000	min	6,5				0,25							
	max	7,5	0,45	0,15	0,35	0,65	-	0,15	0,15	0,15	0,05	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	MPa min.	Rp0,2	MPa min.	A	% min.	HBW	min.
Sand	F	140		80		2		50	
	T6	220		180		1		75	
Permanent mould	F	170		90		2,5		55	
	T6 / T64	260 / 240		220 / 200		1 / 2		90 / 80	
High pressure die casting									

MECHANICAL AND OTHER PROPERTIES - EN 1706

Fluidity	B	Ability to be polished	C
Resistance to hot tearing	A	Strength at room temperature	B
Pressure tightness	B	Strength at elevated temperature at 200 °C	C
Machinability as cast	B/C	Ductility (Shock resistance)	C
Machinability after heat treatment	B	Linear thermal expansion 10 ⁻⁶ /K 293K373 K	22
Resistance to corrosion	B/C	Electrical conductivity MS/m	19 to 25
Decorative anodizing	D	Thermal conductivity W/(m K)	150 to 170
Ability to be welded	B	Fatigue resistance MPa	80 to 110

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