



Continuous casting aluminium alloys.

Standard: **UNI EN 1676 and 1706**

Alloy group: **Al Cu**

Alloy designation: **EN AB and AC 21100 Al Cu 4 Ti**

Replaces:

CHEMICAL COMPOSITION %

ALLOY		ELEMENTS												
		Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Pb	Sn	Ti	Individual impurities	Global impurities
EN AB 21100	min			4,2								0,15		
	max	0,15	0,15	5,2	0,55	-	-	-	0,07	-	-	0,25	0,03	0,10
	min													
	max													

MECHANICAL FEATURES DETECTED FROM SEPARATE CASTING TEST SPECIMENS

Casting process	Temper designations	Rm Tensile strenght		Sp 0,2 Yield strenght		A Elongation		HB Brinell hardness	
		EN 1706		EN 1706		EN 1706		EN 1706	
		Mpa	N/mm2	Mpa	N/mm2	%	%	HBW	HB
SAND (as cast)	T6	300	430 - 475	200	360 - 400	3	3 - 4	95	125 - 140
	T64	280	300 - 360	180	200 - 240	5	8 - 12	85	90 - 100
SHELL (as cast)	T6	330	450 - 475	220	360 - 400	7	4 - 7	95	130 - 140
	T64	320	360 - 400	180	190 - 230	8	17 - 23	90	90 - 110
PRESSURE DIE (as cast)									

PHYSICAL PROPERTIES (indicative values subject to the UNI EN and ex UNI Standards)

DENSITY	2.79 Kg/dm ³	THERMAL CONDUCTIVITY at 20°C	1.1 - 1.4 W/cmK
MELTING RANGE or MELTING POINT	540 °C 650 °C	LINEAR THERMAL EXPANSION from 20 t 100°C	
SPECIFIC HEAT (at 100)°	0.91 J/Gk	LINEAR THERMAL EXPANSION from 20 t 200°C	23.0-10-6/°C
LINEAR SHRINKAGE IN SAND PROCESS	1.1 - 1.5 %	LINEAR THERMAL EXPANSION from 20 t 300°C	
LINEAR SHRINKAGE IN SHELL PROCESS	0.9 - 1,2 %	SUGGESTED MAXIMUM TEMPERATURE	750 °C
ELECTRIC CONDUCTIVITY	16 - 23 MS/m	SUGGESTED CASTING TEMPERATURE	
MODULUS OF ELASTICITY	7200 Kg/mm ²	°in sand	700 - 750 °C
		°in shell	700 - 730 °C
		°in pressure die	

TECHNOLOGICAL FEATURES, QUALITATIVE INDICATIONS

STRENGTH AT ELEVATED TEMPERATURE(to 200°C)	SUFFICIENT	RESISTANCE TO HOT TEARING	MEDIUM
GENERAL RESISTANCE TO CORROSION	LOW	PRESSURE TIGHTNESS	SUFFICIENT
MACHINABILITY	EXCELLENT	WELDABILITY	MEDIUM
CASTABILITY	MEDIUM	DECORATIVE ANODISING	MEDIUM
POLISHING	EXCELLENT	PROTECTIVE ANODISING	GOOD

Address: Veliköy Sanayi Bölgesi 1. Kısım Osman Uzun Cad. No: 2/1 Çerkezköy / Tekirdağ / TURKEY
Email: info@bayrammetal.com.tr - **Phone:** +90 282 746 10 41 (Pbx) - **Web:** bayrammetal.com.tr