

SPECIFICATION SHEET

Aluminum sheet/plate For mould making

Shanghai Metal Corporation is a leading Aluminum Sheet for Mold Making manufacturer and supplier. Aluminum plate for Mold making generally uses 5 series,6 series,7 series thick aluminum plate, Shanghai Metal Corporation produces the mold aluminum plate, thickness can achieve 600mm, width is 3000mm, can meet the needs of various mold industries.

No	Alloy	Thickness	Width	Length
1	5052/5083/6061/6082/ 7075	1.0 -600.0 mm	100 – 3300 mm	Customized

Chemical composition (%)

Standard: GB/T 3190-2008

Grade	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al
5052	0.25	0.40	0.10	0.10	2.2-2.8	0.15-0.35	-	0.10	-	Rest
5083	0.40	0.40	0.10	0.40-1.0	4.0-4.9	0.05-0.25	-	0.25	-	Rest
6061	0.40-0.8	0.7	0.15-0.40	0.15	0.8-1.2	0.04-0.35	-	0.25	0.15	Rest
6082	0.7-1.3	0.50	0.10	0.40-1.0	0.6-1.2	0.25	-	0.20	0.10	Rest
7075	0.40	0.50	1.2-2.0	0.30	2.1-2.9	0.18-0.28	-	5.1-6.1	0.20	Rest

Mechanical Properties

Standard: GB/T 3880.2-2006

Alloy	Alclad classify	Temper	Sample Temper	Thickness /mm	Tensile strength R _m /MPa	Yield strength R _{p0.2} /MPa	Elongation/%		Bending Radius ^{*1}
							A _{50mm}	A _{5.65}	
5052	-	O H111	O H111	>0.20-0.50	170-215	65	12	-	0t
				>0.50-1.50			14	-	0t
				>1.50-3.00			16	-	0.5t
				>3.00-6.00			8	-	1.0t
				>6.00-12.50			19	-	2.0t
				>12.50-50.00			-	18	-
5083	-	O H111	O H111	>0.20-0.50	275-350	125	11	-	0.5t
				>0.50-1.50			12	-	1.0t
				>1.50-3.00			13	-	1.0t
				>3.00-6.00			15	-	1.5t
				>6.00-12.50			16	-	2.5t
				>12.50-50.00			-	15	-
6061	-	T4	T4	0.40-1.50	205	110	12	-	1.0t
				>1.50-3.00			14	-	1.5t
				>3.00-6.00			6	-	3.0t
				>6.00-12.5			18	-	4.0t
		T6	T6	0.40-1.50	290	240	6	-	2.5t
				>1.50-3.00			7	-	3.5t
				>3.00-6.00			10	-	4.0t
				>6.00-12.5			9	-	5.0t

6082	-	T4	T4	0.40-1.50	205	110	12	-	1.5t
				>1.50-3.00			14	-	20t
				>3.00-6.00			15	-	3.0t
				>6.00-12.5			14	-	4.0t
		T6	T6	0.40-1.50	310	260	6	-	2.5t
				>1.50-100			7	-	3.5t
				>1.00-3.00			10	-	4.5t
				>6.00-12.5			9	-	6.0t
7075	-	T6	T6	>0.50-1.00	525	460	7	-	-
				>1.00-3.00	540	470	8	-	-
				>3.00-6.00	540	475	8		

*1 Coil samples bending 90°, t – thickness of coil

Physical Properties

Property	Value	Unit
Density(20°C)	2.72	g/cm ³
Melting Point	620-650	°C
Thermal Expansion	23.5	(10-6K-1)(20/100°C)
Specific heat capacity	899	J/(Kg.K)(0/100°C)
Modulus of Elasticity	70	GPa
Thermal Conductivity	205	W/(m. K) 20°C
Resistivity	32	nΩ .m

Formability
Very Good

Weldability
Good

Machinability
Very Good

Corrosion Resistance
Very Good

Applications

1. Injection mold, stamping mold manufacturing
2. Gears and shafts
3. Instrument shafts and gears
4. Aircraft parts, aerospace and defense applications
5. Turbine
6. Key making

Products



Packing

Shanghai Metal Products are packed and labeled according to the regulations and customer's requests. Great care is taken to avoid any damage which might be caused during storage or transportation. In addition, clear labels are tagged on the outside of the packages for easy identification of the product I. D. and quality information.

- 1) Shanghai Metal Standard
- 2) Customization

