



TECHNICAL DATA SHEET

PRODUCT: A91350 ALUMINUM ALLOY PLATE & WIRE / SHEET

Aluminum 1350 is known for its high electrical conductivity and is used for producing transformers and switchgear. As with all 1000 series alloys, aluminum 1350 has an exceptionally high aluminum content. It has good formability, making it ideal for producing electronics.

PRODUCT BASIC INFORMATION:

Alloy:	1350
Form:	Sheet, Coil
Temper:	O, H14, H24, H18
Dimension:	Thickness: 0.20mm to 6.0mm Width: 20.0mm to 2,600mm Length: 1,000mm to 4,000mm, or Coil
Surface Finish:	Mill Finish
Standard Specification:	GB/T 3880
Application:	General Use

CHEMICAL COMPOSITION:

Element		Percentage (%)
Aluminum	(Al)	99.50
Silicon	(Si)	0.1 max
Iron	(Fe)	0.40 max
Copper	(Cu)	0.05 max
Manganese	(Mn)	0.05 max
Magnesium	(Mg)	--
Chromium	(Cr)	0.01 max
Zinc	(Zn)	0.05 max
Titanium	(Ti)	0.03 max
Remainder Each		0.03 max
Remainder Total		-

MECHANICAL PROPERTIES:

		O	H22	H24	H26
Ultimate Strength Rm/MPa		97	83 –117	103 -138	117–152
Yield Strength Rp0.2/MPa		≥ 20	≥ 75	≥ 75	-
Elongation Min. %	≥ 0.2~0.5mm	≥ 15%	≥ 2%	≥ 2%	≥ 1%
	≥ 0.5~0.8mm	≥ 20%	≥ 3%	≥ 3%	≥ 2%
	≥ 0.8~1.5mm	≥ 20%	≥ 4%	≥ 4%	≥ 3%
	≥ 1.5~3.0mm	≥ 28%	≥ 5%	≥ 5%	≥ 4%
	≥ 3.0~6.0mm	≥ 28%	≥ 6%	≥ 6%	-
Bend Radius (90°)	≥ 0.2~0.8mm	0t	0.5t	0.5t	-
	≥ 0.8~6.0mm	0t	1.0t	1.0t	-

PHYSICAL DATA :

Density (20°C):	2.6-2.8 g/cm3	g/cm3
Melting Point:	657°C	
Thermal Expansion (20°C ~100°C):	230	W/mK
Modulus of Elasticity:	70 - 80	GPa
Thermal conductivity (Temper O):	230	W·m-1·K-1
Electrical Resistivity (Temper O):	28 10 ⁻⁹	W·m
Conductivity (Temper O):	61 – 61.5	%IACS
Magnetic performance:	No	
Color:	Silver	
Odour:	No	

TOLERANCE ON FORMS AND DIMENSIONS:

Thickness Tolerance:	Thickness	Width			
		≤1000mm	>1000~1250mm	>1250~1600mm	>1600~2000mm
	≥ 0.2~0.4mm	± 0.02mm	± 0.04mm	± 0.05mm	-
	> 0.4~0.5mm	± 0.03mm	± 0.04mm	± 0.05mm	± 0.06mm
	> 0.5~0.6mm	± 0.03mm	± 0.05mm	± 0.06mm	± 0.07mm
	> 0.6~0.8mm	± 0.03mm	± 0.06mm	± 0.07mm	± 0.08mm
	> 0.8~1.0mm	± 0.04mm	± 0.06mm	± 0.08mm	± 0.09mm
	> 1.0~1.2mm	± 0.04mm	± 0.07mm	± 0.09mm	± 0.10mm
	> 1.2~1.5mm	± 0.05mm	± 0.09mm	± 0.10mm	± 0.11mm
	> 1.5~1.8mm	± 0.06mm	± 0.10mm	± 0.11mm	± 0.12mm
	> 1.8~2.0mm	± 0.06mm	± 0.11mm	± 0.12mm	± 0.14mm
	> 2.0~3.0mm	± 0.07mm	± 0.12mm	± 0.13mm	± 0.15mm
	> 3.0~4.0mm	± 0.10mm	± 0.15mm	± 0.17mm	± 0.18mm
	> 4.0~6.0mm	± 0.18mm	± 0.22mm	± 0.24mm	± 0.25mm

Width Tolerance:	Thickness	Width				
		≤300mm	>300~500mm	>500~1250mm	>1250~1650mm	>1650mm
	≥ 0.2~0.6mm	+ 0.4mm	+ 0.6mm	+ 1.5mm	+ 2.5mm	+ 3.0mm
	> 0.6~1.0mm	+ 0.5mm	+ 1.0mm	+ 1.5mm	+ 2.5mm	+ 3.0mm
	> 1.0~2.0mm	+ 0.7mm	+ 1.2mm	+ 2.0mm	+ 2.5mm	+ 3.0mm
	> 2.0~3.0mm	+ 1.0mm	+ 1.5mm	+ 2.0mm	+ 2.5mm	+ 4.0mm
	> 3.0~6.0mm	+ 1.5mm	+ 2.0mm	+ 3.0mm	+ 3.0mm	+ 5.0mm

Length Tolerance:	Thickness	Length			
		≤1000mm	>1000~2000mm	>2000~3000mm	>3000mm
	≥ 0.2~3.0mm	+ 3mm	+ 4mm	+ 6mm	+ 8mm
	> 3.0~6.0mm	+ 4mm	+ 6mm	+ 8mm	+ 10mm

Flatness Tolerance:	Thickness	Total Deviation		
		On Length	On Width	Partial Deviation
	≥ 0.2~0.5mm	By agreement	By agreement	By agreement
	> 0.5~3.0mm	≤ 0.4%	≤ 0.5%	≤ 0.5%
	> 3.0~6.0mm	≤ 0.3%	≤ 0.4%	≤ 0.4%

Lateral Curvature Tolerance:	Width	Lateral Curvature for Specified Length			
		≤1000mm	>1000~2000mm	>2000~3500mm	>3500mm
	≤300mm	≤ 2.0mm	≤ 4.0mm	≤ 8.0mm	-
	>300~600mm	≤ 1.5mm	≤ 3.0mm	≤ 5.0mm	-
	>600~1000mm	≤ 1.0mm	≤ 2.0mm	≤ 4.0mm	≤ 5.0mm
	>1000~2000mm	-	≤ 2.0mm	≤ 4.0mm	≤ 5.0mm
	>2000mm	-	-	≤ 4.0mm	≤ 5.0mm

Squareness Tolerance:	Length	Squareness Tolerance for Specified Width			
		≤1000mm	>1000~1500mm	>1500~2000mm	>2000mm
	≤1000mm	≤ 4.0mm	-	-	-
	>1000~2000mm	≤ 4.0mm	≤ 5.0mm	≤ 6.0mm	-
	>2000~3000mm	≤ 5.0mm	≤ 5.0mm	≤ 7.0mm	≤ 8.0mm
	>3000~5000mm	≤ 6.0mm	≤ 8.0mm	≤ 8.0mm	≤ 10.0mm

OTHER PROPERTIES:

Principal Design Features --

Machinability --

Forming --

Welding	--
Heat Treatment	A non-heat treatable alloy.
Hot Working	--
Cold Working	--.
Annealing	--
Aging	--
Hardening	--

APPLICATIONS

Typical Applications	--
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PACKAGING, HANDING & STORAGE:

Package:	Packed in waterproof Kraft, fastened by steel straps on wood pallets, suitable for handling, loading and unloading from the trunks or containers, suitable for export ocean forwarding.
Handling:	Prevent the goods hurting the people who are moving, loading, unloading, especially pay attention to the rolling and dropping for the coils.
Storage:	Stored in indoor area on plain floor, free away from moisture, water, snow, animal oils and dye wastes, avoid storing with acid or basic chemical goods.

