ALUMINIUM ALLOYS SPECIALISTS

METALCO EXTRUSIONS GLOBAL LLP

Erstwhile METAL EXTRUSIONS

rolling@metalcoglobal.com

www.metalcoglobal.com

NVT QUALITY CERTIFICATION INTERNATIONAL

CERTIFICATE

Certificate Number: 298007

This is to certify that

METAL EXTRUSIONS

No A-17, 1st Cross, 10th Main,
3rd Stage Peenya Industrial Area,
Yeshwanthpur Hobli,
Nallakadarnahalli, Bangalore – 560058.

has implemented and maintains a Quality Management System for its

MAIN SCOPE:

STOCKING AND DISTRIBUTION OF ALUMINIUM ALLOY PLATES, SHEETS, COILS, BARS, RODS AND VARIOUS FORMS OF EXTRUSIONS, CUT TO CUSTOMER SPECIFIED SIZES FOR DEFENCE AND AEROSPACE APPLICATIONS.

Certification structure: Multi site

Through an audit, performed in accordance with the requirements of AS 9104/1 issued 2012-01, and including the implementation, meets the requirements of the standard:

AS 9120B

(Based on and including ISO 9001:2015)

Quality Management Systems – Requirements for Aviation, Space and Defence Distributors

The file that forms the basis of this certificate: 298007

Date of Initial Certification : September 17, 2020
Date of Current Revision : November 15, 2023
Certification Expiry Date : September 15, 2026

K.G. Garg

K.G. Garg
Chairman & Chief Executive

NVT QC

ANAB
ANSI National Accreditation Board
ACCREDITED
ISO/IEC 17021-1
MANAGEMENT SYSTEMS CERTIFICATION BODY

iaqg

Accredited Office: NVT Quality Certification International LLP, Bangalore, India
Marketing Office : NVT Quality Certification International, Milpitas, CA, USA

NVT Quality Certification International LLP is accredited by ANAB under ICOP scheme and recognized by IAQG.

Note: Please verify current validity of certificate from NVT Quality Certification International LLP at nvt@nvtquality.com.

METALCO EXTRUSIONS GLOBAL LLP

ALUMINIUM ALLOYS SPECIALIST

(ERSTWHILE METAL EXTRUSIONS)

IMPORTER | EXPORTER | WHOLESALERS

ADITYA BIRLA HINDALCO

JINDAL

PRODUCTS

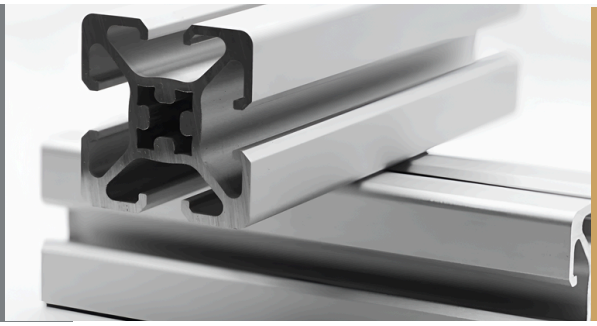
- ALUMINIUM SHEETS, PLATES & COILS
- ALUMINIUM ALLOY EXTRUSIONS & DRAWNS
- ALUMINIUM FOR AEROSPACE & DEFENCE
- CUT TO SIZE AVAILABLE (BANDSAW CUTTING)

STOCKIST OF:

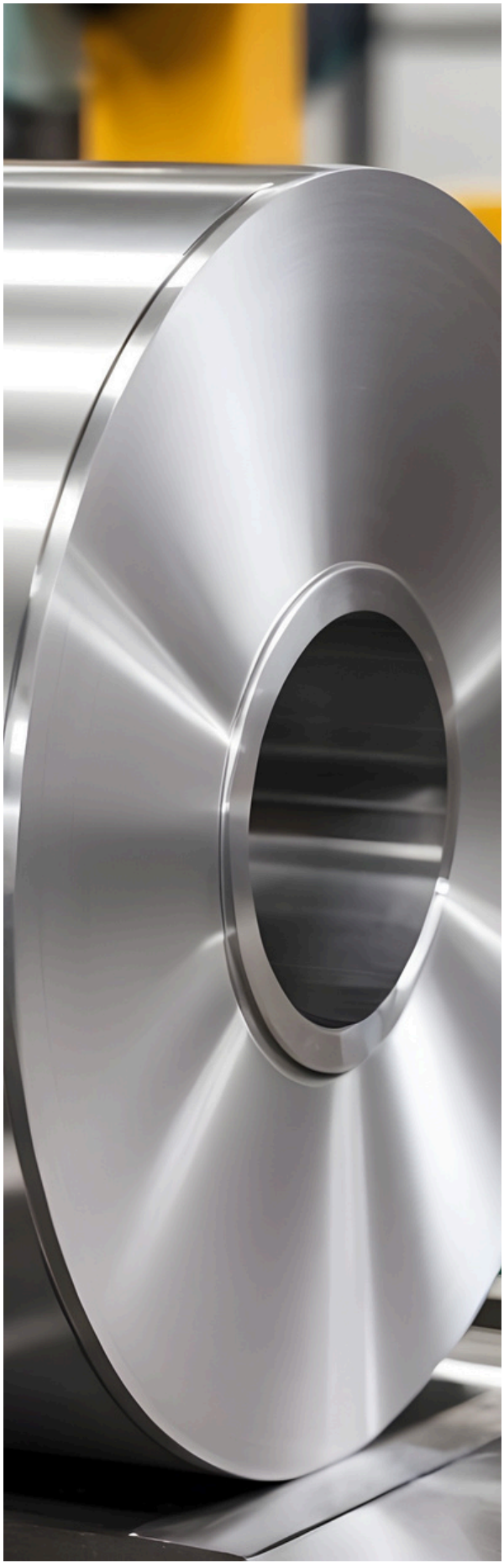
AA1050, 1100, 2024, 2014, 2017, 3003, 5052, 5083, 5086, 5754, 6061, 6063, 6351, 6082, 7075, 7050, 6101 & 8011

Address

No. 46, Sundar Industrial Compound, New Timberyard Layout, Mysore Road, Bengaluru - 560026



COMPANY PROFILE



INTRODUCTION :

Metalco Extrusions Global LLP – Aluminium Alloys Specialist is a leading certified aluminium alloy stockist company located in Bengaluru, Chennai, Ahmedabad & Pune that caters to the Aerospace and Defence sectors. With a well-trained team, we are equipped to meet client's expectations ensuring a quality supply of raw materials. Our products range from raw materials to finished parts.

SPECIALIZATION:

With a strong local presence in the Aerospace segment of India, we ensure excellent liaison with customers and subcontractors to meet their specific requirements. Our USP is the supply of material cut to size and machined exactly as per the need, which sets us apart in this segment. This helps in instant processing with zero wastage.

MACHINERY:

Machines with the capacity of cutting blocks up to 600 mm in Height, 1600 mm in Width, and 4000 mm in length are virtually burr-free. Our strategic alliance with leading mills across the globe to source material with assured quality and continuous supply to meet our customers' timely requirements.

35+ YEARS OF
UNDEFEATED SUCCESS

PRODUCT & STOCK DETAILS:

We stock the below materials in both rolled forms of sheets, plates, coils, and extrusions in Bars, Rods, Squares, and various special dies customized to the client's requirements.

Sl. NO.	Metal l	Grade
1	MAGNESIUM & SILICON-BASED ALUMINIUM ALLOYS	6061, 6082, 6351, 6101 in tempers of T6, T651, and T6511 conditions
2	ZINC-BASED ALUMINIUM ALLOYS	7075, 7050 in tempers of T6, and T651 conditions
3	MAGNESIUM BASED ALUMINIUM ALLOYS	5052, 5754, 5083, in hardness of H32, H34, H38, H22, and H111 conditions
4	COPPER-BASED ALUMINIUM ALLOYS	2017, 2014, 2024 in tempers of T4, T351, T6, and T651 conditions
5	99% PURE BASED ALUMINIUM ALLOYS	1100, 1050,1060 in hardness of H14, H15, and H22 conditions

SUPPLY CAPABILITIES:

Our major supplier is KUMZ (KAMENSK URALSKY METALLURGICAL WORKS). Additionally, we also import from mills in Korea, China, Taiwan, Europe, and the US to fulfill the demands in the aerospace & defence segment.

WAREHOUSE DETAIL:

Our warehouse comprises 5 units spread across Bangalore, Chennai and Ahmedabad with a stocking capacity of 800 Plus tons. With tactical locations and better connectivity with the national highway of the units, we ensure a timely logistic supply of products.

VISION

The company wants to achieve maximum customer satisfaction and goodwill in the market by serving its customers in the best way possible.

MISSION

To focus on market expansion and to gain maximum global market share.

EXPANDING HORIZONS ONE EXPORT AT A TIME

We are Excited to announce that we have expanded our services to include import and export operations in the UAE, Bahrain, Oman, Qatar, Thailand, Indonesia, Malaysia, Sri Lanka, and Bangladesh.

We continue to explore new territories and broaden our reach!

EXHIBITIONS

Attended by Metalco Extrusions Global LLP

AERO INDIA 2023

- The Runway to a Billion Opportunities 13 Feb 2023

IREE 2023

- Pragati Maidan, New Delhi 12-14 October 2023

DUBAI AIRSHOW 2023

- DWC, November 2023

DEFENCE AND SECURITY 2023

- IMPACT, Muang Thong Thani, Thailand 6-9 November 2023

MSME DEFENCE 2024

- 24th - 26th Feb 2024 Pune International Exhibition

ELASIA INTERNATIONAL EXHIBITION 2024

- May 2024 at Bangalore International Exhibition Centre

AERO INDIA 2025

- 10 to 14 February 2025 Air Force Station, Bengaluru, India

IMTT EXPO 2025

- April 11th - 13th – 2025 Hotel Hills Exhibition Centre, Hosur, Tamilnadu

AERODEF INDIA MANUFACTURING EXPO

- May 1st, 2nd, and 3rd, 2025 Yashobhoomi, IICC, Dwarka New Delhi.

And Even more to come

TABLE - 1

WROUGHT ALLOYS : NEAR EQUIVALENT DESIGNATIONS

INDIA		U.S.A. (A.A.)	BRITAIN (B.S.)	CANADA	GERMANY (DIN)	RUSSIA	I.S.O.	FRENCH ND
NEW I.S.	OLD I.S.							
19501	1E	1050(E.C)	1E	C 1S	E-Al 99.5	-	-	-
19500	1B	1050	1B	1S	A-99.5	-	Al-99.5	1050A
24345	H15	2014	H15	B265	AL-CU-SI	AK	-	-
24534	H14	2017	H14	17S/16S	-	D1	Al-Cu-4Mg Si	-
-	-	2024	-	24S	Al-Cu.Mg2	-	Al-Cu-4Mg 1	2024
31000	N3	3003	N3	3S	Al-Mn	A-Mn	Al-Mn 1	3003
52000	N4	5052	N4	M57S	Al-Mg.2	A-Mg	Al-Mg-2.5	5051
53000	N5	5086	N5	54S	-	A-Mg-3	Al-Mg-4	-
54300	N8	5083	N8	D54S	Al-Mg-4.5 Mn	-	Al-Mg-4.5 Mn	5083
65032	H20	6061	H20	65S	Al-Mg-Si Cu	-	Al-Mg-1Si Cu	-
63400	H9	6063	H9	50S	Al-Mg-Si 0.5	-	Al-Mg Si	-
64430	H30	6351	H30	B51S	Al-Mg-Si 1	AV	Al-Si-1 Mg	6081
64423	H11	6066	H11	C62S	-	-	-	-
62400	-	6005	-	C51S	-	-	-	-
63401	91E	6101	91E	D50S	E.Al.Mg.Si 0.5	-	-	-
64401	-	6201	-	-	-	-	-	-
74530	-	7039	-	D74S	Al-Zn-Mg.1	-	-	3004
-	-	7075	DTD 5124	75S	Al-Zn-Mg Cu 1.5	-	Al-Zn 6 Mg Cu	7075

TABLE - 2

WROUGHT ALLOYS : GUIDE TO SELECTION

Alloy	Temper	Resistance to Corrosion	Workability (Cold)	Machinability	Brazeability	Weldability	Commonly available forms	Indications of use
EC/1050, 1060 (1B) (19501) (19500) (19600)	F, O	A	A	D	A	A	Flats, Rods, Tubes & Other Section	Electric conductors, cable shealthing, impact- extruded products, pressing utilities of anodizing quality, pen caps, piping etc.
1100 (1C) (19000)	F, O	A	A	D	A	A	Flats, Rods, Tubes & Other Section	Packaging lightly stresses and decorative assemblies in architecture and transport, equipment for chemcial, food and brewing industries.
2014 (H 15) (24345)	T4 T6	C C	C D	B B	D D	C C	Rods & Bars Rods & Bars	Highly stressed component of all types in aircraft, ordnance and general engineering.
2017 (H 14) (24534)	T4	C	C	B	D	C	Rods & Bars	Highly stressed part in aircraft and other structure, screw machine products.
2024	T4	C	C	B	D	C	Rods & Bars	Load cell, highly stressed component of all types in aircraft ordnance and general engieering.
4043 (N 21) (43000)	F, O	A	A	D	A	A	Rods & Other Section	Welding wire, architectural applications.
5005 (52000A)	O, F	A	A	D	B	A	Flats, Rods, Other Section	Structures exposed to marine attractive anodized finish, architectural, electrical conductors etc.
5052 (N 4)	O, F	A	A	D	C	A	Flats, Rods, Tubes & Other Section	Structures exposed to marine atmosphere, aircraft parts, wire rope ferrules, rivet stock.
5086 (N 5) (53000)	O, F	A	A	D	D	A	Flats, Rods & Other Section	Ship building and other marine applications, rivets, coinage etc.
5056 (N 6) (55000)	O, F	A	A	D	D	A	Rods	Zips, Welding Rods and Rivets.
6061 (H 20) (65032)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Rods,Flats Tubes & Other Section	Heavy-duty structures, building hardware, sections for bus building, truck and rail coach, fumiture, rivets etc.
6063 (H9)	O, F T4 T6 T5	A A A A	A B C C	D C C C	A A A A	A A A A	Rods,Flats Tubes & Other Section	Building hardware, architectural section with good surface finish, medium strength fumiture and anodized sections.

TABLE - 2

WROUGHT ALLOYS : GUIDE TO SELECTION

Alloy	Temper	Resistance to Corrosion	Workability (Cold)	Machinability	Brazeability	Weldability	Commonly available forms	Indications of use
6066 (22450)	O, F T4 T6	B B B	B C C	D B B	A A A	A A A	Rods & other soild sections	For welded structures, textile parts, heavy duty machine parts.
6101 (91 E) (63401)	T4 T6	A A	B B	C C	A A	A A	Rods, Flats, Tubes & other sections	High strength electrical busbar sections.
6201 (64401)	T4	A	A	C	A	A	Redraw Rod	Overhead conductors, ACAR and AAAC
6351 (H 30) (6430)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Rods, Flats,Tubes & other sections	Structural and general engineering items such as rail & road transport vehicles, bridges, cranes, roof trusses, rivets etc.
7039 (D74S) (74530)	O, F T4 T6	A A A	A C D	D C C	A A A	A A A	Flats,Tubes, Rods & other sections	Defence structures like mobile bridges etc. Tread and chequered plates, Excellent welding
7075 (DTD5124)	O, F T4 T6	A A A	A A D	A A A	A A A	A A A	Rods	Highly stressed structural applications

Notes :

1. Relative ratings for corrosion, workability and machinability in decreasing order of merit A, B, C and D.
2. Weldability & brazeability ratings A, B, C and D are relative ratings defined as follows:

   A. Generally weldable by the commercial procedure & methods.
   B. Weldable with special technique.
   C. Limited weldability due to crack sensitivity or loss in corrosion resistance and mechanical properties.
   D. Generally not weldable.

3. Availability of other forms subject to special enquiries and methods.

TABLE - 3

WROUGHT ALLOYS: CHEMICAL COMPOSITION LIMITS (PERCENT)

Alloy (ISS) Old	New	Equivalent alloy (AA) U.S.A	Copper		Magnesium		Silicon		Iron	Magnesium		*Other (Total)	Remarks
			Min.	Max.	Min.	Max.	Min.	Max.	Max.	Min.	Max.	Max.	
1 C	19000	1100	-	0.10	-	-	-	0.5	0.6	-	0.1	0.1	Aluminium 99.0% Min
1 B	19500	1050	-	0.05	-	-	-	0.25	0.4	-	0.05	0.1	Aluminium 99.5% Min
1 E	19501	-	-	0.04	-	-	-	0.15	0.35	-	0.03	0.1	Aluminium 99.5% Min
-	19600	1060	-	0.05	-	-	-	0.25	0.35	-	0.03	0.1	Aluminium 99.6% Min
H 15	24345	2014	3.8	5.0	0.2	0.8	0.5	1.2	0.7	0.3	1.2	0.5	-
H 14	24534	2017	3.5	4.7	0.4	1.2	0.2	0.7	0.7	0.4	1.2	0.5	-
		2024	3.8	4.9	1.2	1.8	-	0.5	0.5	0.3	0.9	0.15	Zn 0.25
N 3	91000	3003	-	0.1	-	0.1	-	0.6	0.7	1.0	1.5	0.4	-
		4032	0.8	1.3	0.8	1.3	-	13.5	0.6	-	0.2	0.15	Ni 0.8 - 1.3
N 4	52000	5052	-	0.1	1.7	2.6	-	0.6	0.5	-	0.5	0.4	Cr + Mn = 0.5
M 5	53000	5086	-	0.1	2.8	4.0	-	0.6	0.5	-	0.5	0.4	Cr + Mn = 0.5
N 8	54300	5083	-	0.1	4.0	4.9	-	0.4	0.7	0.5	1	0.4	Chromium up to 0.25
H 20	65032	-	0.15	0.4	0.7	1.2	0.4	0.8	0.7	0.2	0.8	0.4	**Cr = 0.15 - 0.35
-	-	6061	0.15	0.4	0.8	1.2	0.4	0.8	0.7	-	0.15	0.4	Chromium 0.04 to 0.35
H 9	63400	6063	-	0.1	0.4	0.9	0.3	0.7	0.6	-	0.3	0.4	-
-	-	6066	0.7	1.2	0.8	1.4	0.9	1.8	0.7	0.6	1.1	0.4	-
-	64423	-	0.5	1.0	0.5	1.3	0.7	1.3	0.8	-	1	-	-
9 1E	63401	6101	-	0.05	0.4	0.9	0.3	0.7	0.5	-	0.03	0.1	-
H 30	64430	6351	-	0.1	0.4	1.2	0.6	1.3	0.6	0.4	1.0	0.3	-
		6082	-	0.1	0.6	1.2	0.7	1.3	0.5	0.4	1.0	0.3	Chromium up to 0.25
-	74530	7039	-	0.2	1.0	1.5	-	0.4	0.7	0.2	0.7	0.4	Zinc 4.0 - 5.0 %
-	-	7075	1.2	2.0	2.1	2.9	-	0.5	0.5	-	0.3	0.2	Zinc (5.1 - 6.1)% & Chromium(0.18-0.28) %

* Titanium and/or other grain refining elements

** Either Mn or Cr shall be present

TABLE - 4

WROUGHT ALLOYS : MECHANICAL PROPERTIES

Heat Treatable Alloys					
AlloyAA Old (ISS) New (ISS)	Temper	Ultimate Tensile Strength Strength Kg/mm²		0.2% Proof Stress Kg/mm²	Elongation on 50mm GL
		Min.	Max.		
2014 [H15 [24345]	T4[W] T6 [WP]	39 49	-	24.0 43.0	10 6
2017 [H14] [24534]	T4[W]	39	-	24.0	10
2024 [H9]	T4	40.5	-	26.5	12
6063 [H9] [63400]	T4[W] T6 [WP]	14 19	-	8.0 15.5	14 7
6061 [H20] [65032]	M T4[W] T6 [WP]	11.2 19 28.5	-	5.1 11.5 24.0	12 14 7
6351 [H30] [64430]	M T4[W] T6 [WP]	11.2 19 31.5	-	8.2 12.0 27.5	12 14 7
6066	M T4[W] T6 [WP]	11.0 28 35	-	17.5 31.5	12 14 7
6101 [91E] [63401]	T4[W] T6 [WP]	14 20.5	-	8.0 17.0	12 10
6201 [64401]	T4[W] T6 [WP]	16 32	-	7.0 -	14 3
7039 [74530]	T4[W] T6 [WP]	28 31.5	-	23.5 26.5	9 7
7075	T6 [WP]	54	-	46.5	6

Properties indicated herein are typical properties and are given for information only. However properties of all the profiles in specific alloy shall be as per I. S. Specification.

TABLE - 5

WROUGHT ALLOYS : TYPICAL TENSILE PROPERTIES AT VARIOUS TEMPERATURES (KG/MM^2)

Alloy & Tempet	Tensile Strength	Temp.°C									
		Below zero			Above Zero						
		-200	-80	-25	25	100	150	200	250	300	250
1100M (19000)	Ultimate Yield	17.5 4.2	10.5 3.9	10.0 3.5	9.0 3.5	7.0 3.2	5.5 3.0	4.0 2.4	3.0 2.0	2.0 1.4	1.5 1.1
2014T6* (24345)	Ultimate Yield	59.0 50.0	52.0 45.5	50.5 43.5	49 42	44.0 40.0	28.0 24.5	11.0 9.0	6.0 5.0	4.5 3.5	3.0 2.5
2017T4 (24534)	Ultimate Yield	56.0 37.0	45.5 29.5	45.0 29.0	43.5 28.0	40.0 27.5	28.0 21.0	11.0 9.0	6.5 5.0	4.0 3.5	3.0 2.5
3003M (31000)	Ultimate Yield	23.0 6.0	14.0 5.0	12.0 4.5	11.0 4.0	9.0 4.0	7.5 3.5	6.0 3.0	4.0 2.5	3.0 1.7	2.0 1.3
5052M (52000)	Ultimate Yield	31.0 11.0	20.5 9.0	19.5 9.0	19.5 9.0	19.0 9.0	16.0 9.0	4.0 7.5	8.5 5.0	5.0 4.0	3.5 2.0
5086M (53000)	Ultimate Yield	38.5 17.0	27.5 15.0	26.5 15.0	26.5 15.0	26.5 15.0	20.5 13.5	15.5 12.0	12.0 7.5	7.5 5.0	4.0 3.0
6061T4 (65032)	Ultimate Yield	35.0 19.5	26.5 15.5	25.0 15.0	24.5 14.5	_ _	21.0 14.5	13.5 10.5	5.0 3.8	3.0 1.8	2.0 1.5
6061 T6	Ultimate Yield	49.0 33.0	34.5 29.5	33.0 28.5	31.5 28.0	29.5 26.5	24.0 21.5	13.5 10.5	5.0 3.5	3.2 1.9	2.1 1.3
6063T4 (63400)	Ultimate Yield	26.0 12.0	20.5 12.0	19.5 10.5	15.5 9.0	_ _	15.5 9.0	6.5 4.5	3.5 2.8	2.1 1.8	1.8 1.4
6063 T6	Ultimate Yield	33.0 25.0	26.5 23.0	25.0 22.5	24.5 21.5	21.5 19.5	14.5 14.0	6.5 4.5	3.0 2.5	2.5 1.8	1.6 1.4

TABLE - 6

WROUGHT ALUMINIUM & ALUMINIUM ALLOYS: MECHANICAL AND ELECTRICAL PROPERTIES

Alloy		Temper Designation	Tensile Strength Min.	0.2 Percent Proof Strees Min.	Percent Elongation on 5.65√Sa Min.	Electrical Conductivity at 20 C, Min	Maximum Electrical Resistivity at 20°C	Thickness	Inside bend radius Min	Coeff. of thermal Expansion	Themal Conductivity
AA	IS		Mpa	Mpa		%IACS	ohm mm/mm^2	mm		per °C at 20°C typical	CGS at 25°C typical
1050	19501	M	60	-	25	60.00	0.02874	upto 12	1 x thickness	23.8×10^{-6}	0.56
6101	63401	W	140	80	12	-	-	-	-	-	-
6101	63401	WP (range 1)	170	135	12	56.50	0.03052	3.00 to 9.50	1 x thickness	23.4×10^{-6}	0.52
6101	63401	WP (range 2)	200	170	10	55.00	0.03135	3.00 to 9.50	1 x thickness	23.4×10^{-6}	0.52
6201	-	T81	-	-		52.50	0.3283		235 x 10^{-6}	0.50	

Notes :

1MPa=1N/mm^2 = 0.102 kg/mm^2

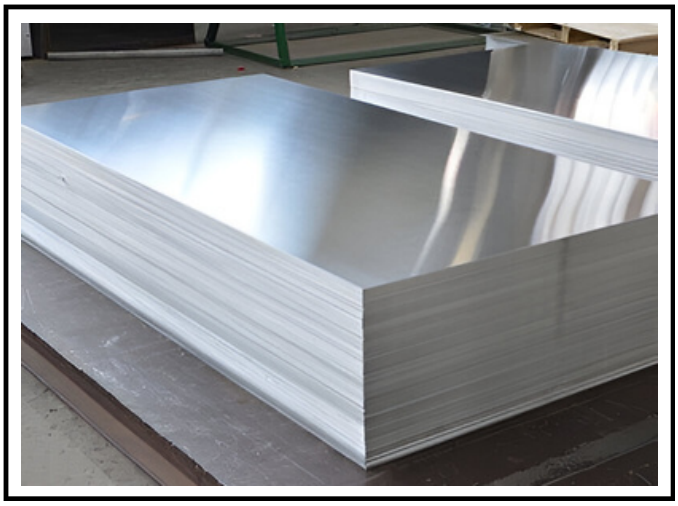
Properties in M temper are only typical values and are given for information only.

If required the cross-section shall be calculated from the mass and length of a straight test piece taking density 2.705 for grade 19501 and 2.700 for grade 63401

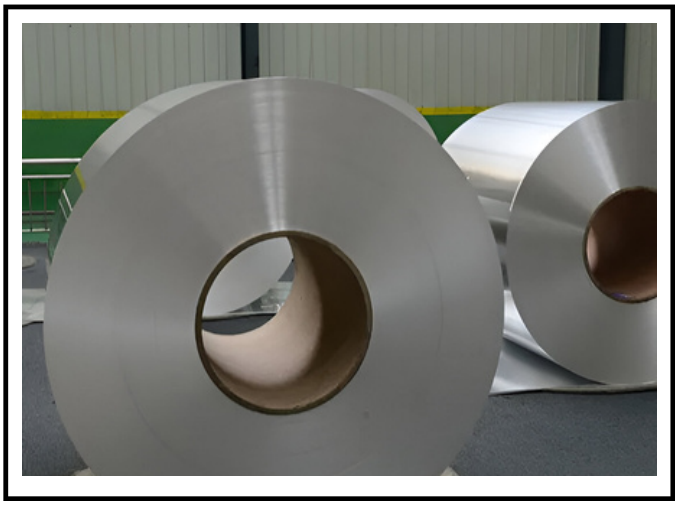
AA1050

CHEMICAL COMPOSITION

Alloy (ISS)		Equivalent alloy (A.A)	Copper		Magnesium		Silicon		Iron		Managanese Others* (Total)
Old	New	U.S.A	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Max
1 B	19500	1050	—	0.05	—	—	—	0.30	0.4	—	0.05



1050 Aluminum Sheet



1050 Aluminum Coils

1050 ALUMINUM SHEET DESCRIPTION:

1050 aluminum sheet contains more than 99.5% aluminum, which is one of the industrial pure aluminum. 1050 aluminum sheet has the characteristics of high plasticity, corrosion resistance, good electrical and thermal conductivity, but low strength

1050 aluminum sheet is often used in daily necessities, lighting fixtures, reflectors, decorations, chemical industry containers, heat sinks, signs, electronics, lamps, nameplates, electrical appliances, stamping parts and other products. In some occasions that require high corrosion resistance and formability, but not high requirements for strength, chemical equipment is its typical application.

TECHNICAL PARAMETER OF AA1050

- Temper :- F, O, H12, H14, H16
- H18, H19, H22, H24, H26, H28, H111, H112, H114
- Thickness（mm）:- 0.2-500
- Width（mm）:- 100-2650
- Length（mm）:- 500-16000

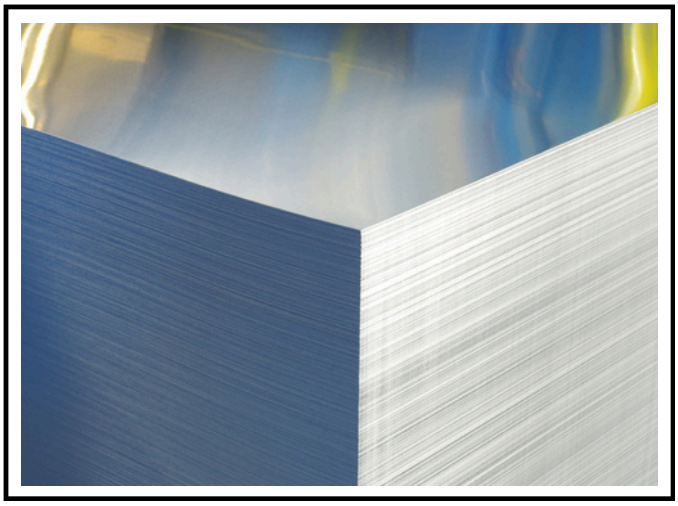
APPLICATIONS OF AA1050

- Automotive
- Building
- Electrical
- Aerospace
- Packaging & Transportation

AA1060

CHEMICAL COMPOSITION

	Fe	Si	Mg	Mn	Cu	Zn	Ti	Al
Aluminium 1060	0.15 - 0.20	0.10 - 0.15	0.01 - 0.03	0.01 - 0.03	0.01 - 0.05	0.01 - 0.03	0.020 - 0.030	99.60



1060 Aluminum Sheet

1060 Aluminum Coils

1060 ALUMINUM SHEET DESCRIPTION:

1060 aluminum sheets have high elongation, tensile strength, excellent electrical conductivity, and high formability, and can meet conventional processing requirements (stamping, stretching). our Aluminum's ultra-wide and ultra-thick 1060 aluminum plate can eliminate internal stress and cut without deformation.

The width can reach 2650mm and the thickness can reach 500mm. It is a rare domestic manufacturer that can produce ultra-wide and ultra-thick aluminum plates.

TECHNICAL PARAMETER OF 1060

- Temper :- F, O, H12, H14, H16
- H18, H19, H22, H24, H26, H28, H111, H112, H114
- Thickness（mm）:- 0.2-500
- Width（mm）:- 100-2650
- Length（mm）:- 500-16000

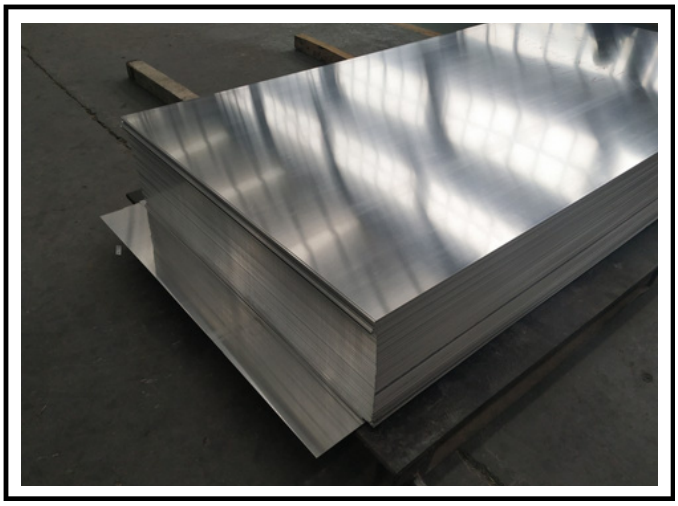
APPLICATIONS OF AA1060

- Chemical and food handling equipment
- Containers
- Railroad tank cars
- Electrical and chemical industries
- Aircraft components
- Automotive panels
- Construction materials

AA1100/1200

CHEMICAL COMPOSITION

Aluminum, Al	Silicon, Si + Iron, Fe		Copper, Cu.	Titanium, Ti	Manganese, Mn	Other (each)	Other (total)
≥ 99	≤ 1	≤ 0.10	≤ 0.050	≤ 0.050	≤ 0.050	≤ 0.050	≤ 0.15



1100/1200 Aluminum Sheet

1100/1200 Aluminum Coils

1100/1200 ALUMINUM SHEET DESCRIPTION:

1100 aluminum sheets are industrial pure aluminum, which has the advantages of high elongation, tensile strength, excellent electrical conductivity, and high formability. Corrosion, does not require high-strength parts.

1100 aluminum sheet plate belongs to pure aluminum, the production process is simple, the price of 1100 aluminum sheet is much lower than that of 5xxx series and 6xxx series aluminum.

TECHNICAL PARAMETER OF AA1100/1200

- Temper O,H12,H14,H16, H18, H19, H22, H24 , H26, H28, H112
- Thickness（mm） 0.1-500
- Width（mm） 20-2650
- Length（mm） 500-16000

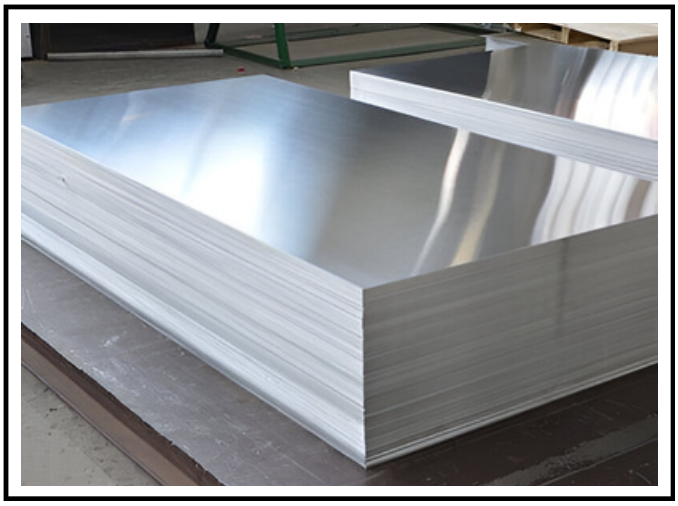
APPLICATIONS OF AA1100/1200

- Automotive
- Building
- Electrical
- Aerospace
- Packaging & Transportation

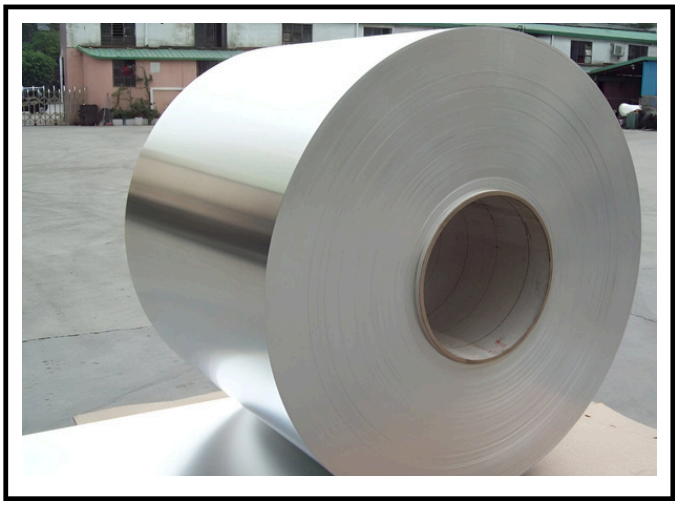
AA8011

CHEMICAL COMPOSITION

Grade	Si	Fe	Cu	Zn	Mn	Mg	Ti	Cr	Al	Others(Total)
Aluminium	0.40 – 0.80	0.70 max	0.15-0.40	0.25 max	0.15	0.8-1.2	0.15 max	0.04-0.35	Balance	0.15 max



8011 Aluminum Sheet



8011 Aluminum Coils

8011 ALUMINUM SHEET DESCRIPTION:

8011 is an alloy of aluminum, magnesium, and manganese, and it has many uses in a range of industries.

8011 is used in the production of products such as aircraft components, aluminum foil and insulation materials. It can also be used to manufacture building elements such as window frames, doors and siding. Due to its strength and lightweight, it is also used in the automotive industry for car body parts and wheels.

TECHNICAL PARAMETER OF AA8011

- Temper O,H12,H14,H16,H18,
- Thickness（mm） 0.3 to 3.0
- Width（mm） 900-1400
- Length（mm） : customized

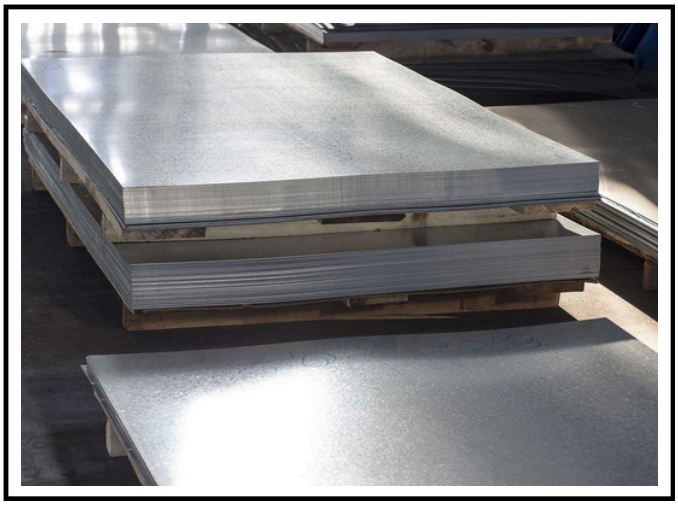
APPLICATIONS OF AA8011

- Food packaging
- Radiator reflectors
- Metal matrix composites
- Engineering applications

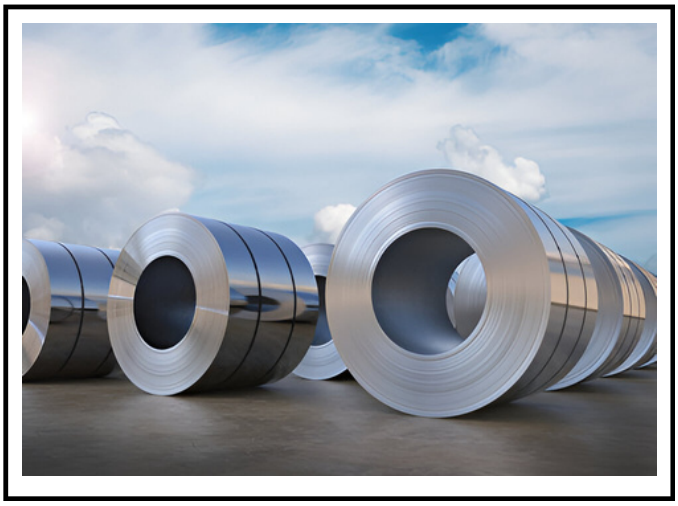
AA3003

CHEMICAL COMPOSITION

Alloy	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others-Each	Others Total	Al Min	Al Min
3003	0.6	0.7	0.05-0.20	1.0-1.5	–	–	–	–	0.05	0.15	Remainder



3003 Aluminum Sheet



3003 Aluminum Coils

3003 ALUMINUM SHEET DESCRIPTION:

3003 is the most widely used of all aluminum alloys. It is essentially commercially pure aluminum with the addition of manganese which increases the strength some 20% over the 1100 grade. Thus, it has all the excellent characteristics of 1100 with higher strength. It has excellent corrosion resistance.

It has excellent workability and it may be deep drawn or spun, welded or brazed. It is non heat treatable. Applications: cooking utensils, decorative trim, awnings, siding, storage tanks, chemical equipment.

TECHNICAL PARAMETER OF AA3003

- Temper F,O,H12,H14,H16 H18,
- H19,H22,H24, H26,H28,H111,H112,H114
- Thickness（mm） 0.1-500
- Width（mm） 100-2650
- Length（mm） 500-16000

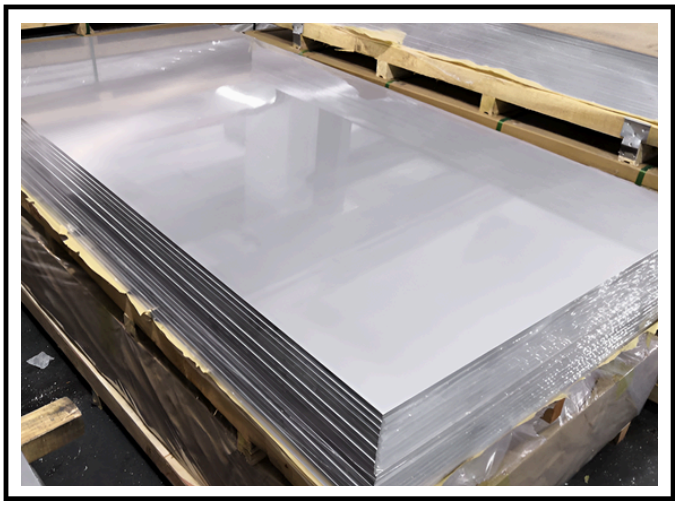
APPLICATIONS OF AA3003

- General sheet metal works requiring greater strength
- Architectural signage and canopy panels
- Insulation panels
- Profiled building sheets and panels
- Metal facades
- Industrial applications

AA3105

CHEMICAL COMPOSITION

Elements	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others	Al
Content (max)	0.6	0.70	0.30	0.3.-0.80	0.20-0.80	0.20	0.40	0.10	0.15	remain



3105 Aluminum Sheet

3105 Aluminum Coils

3105 ALUMINUM SHEET DESCRIPTION:

3105 alloy aluminum sheet belongs to a series of AL-Mn alloy, with good Anti-Rust performance and good electrical conductivity, in which the aluminum content is 98%, due to the addition of 0.3% of copper elements, so the electrical conductivity up to 41%.

3105 alloy aluminum sheet can not be strengthened by heat treatment, so the cold working method to improve its mechanical properties: good corrosion resistance, good weldability, can be machinability of poor performance.

TECHNICAL PARAMETER OF AA3105

- Temper F,O,H12,H14,H16
- H18,H19,H22,H24, H26,H28,H111,H112,H114 Thickness （mm） 0.2-500
- Width （mm） 100-2650
- Length （mm） 500-16000

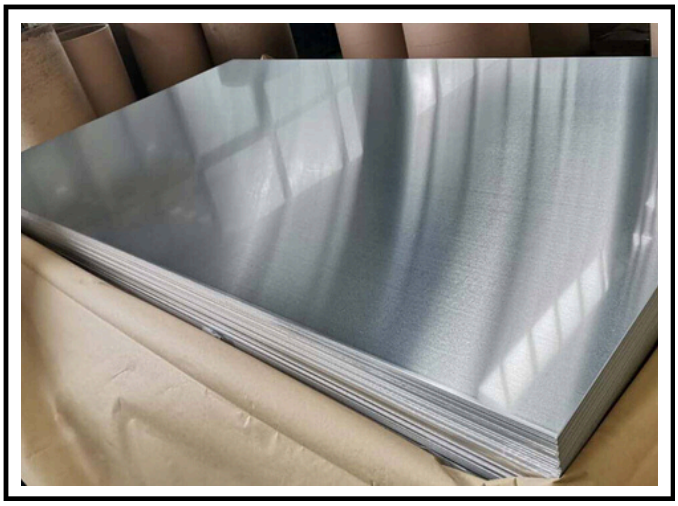
APPLICATIONS OF AA3105

- Vehicle Bodies
- Bottle Caps
- Gutters
- Rigs
- Oil/Gas Piping
- Armor

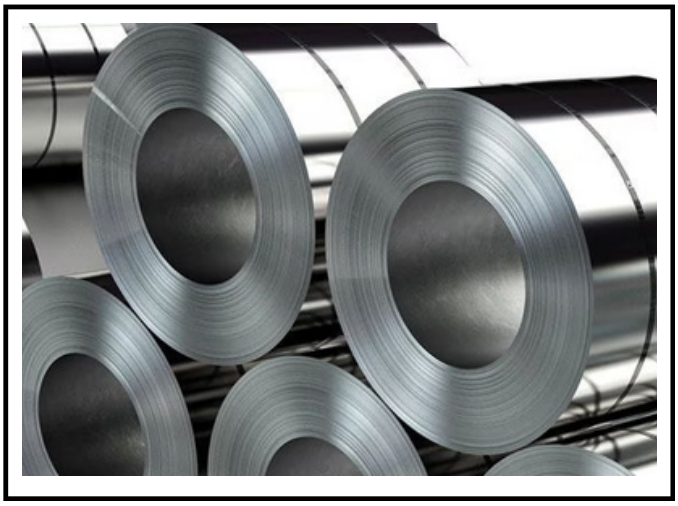
AA5005

CHEMICAL COMPOSITION

Alloy	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others-Each	Others Total	Al Min	Al Min
5005	0.30	0.7	0.20	0.20	0.5-1.1	0.10	0.25	–	0.05	0.15	Remainder



5005 Aluminum Sheet



5005 Aluminum Coils

5005 ALUMINUM SHEET DESCRIPTION:

5005 contains nominally 0.8% magnesium. It has medium strength, good weldability, and good corrosion resistance in marine atmospheres. It also has the low density and excellent thermal conductivity common to all aluminium alloys. It is the most commonly used grade of aluminium in sheet and plate form.

5005 has the same high resistance to general corrosion as other non heat treatable aluminium alloys. It also has the higher resistance to slightly alkaline conditions common to the 5000 series alloys.

TECHNICAL PARAMETER OF AA5005

- Temper O, H14, H32, H34, H38
- Thickness（mm） 0.2-250
- Width（mm） 100-2600
- Length（mm） 500-10000

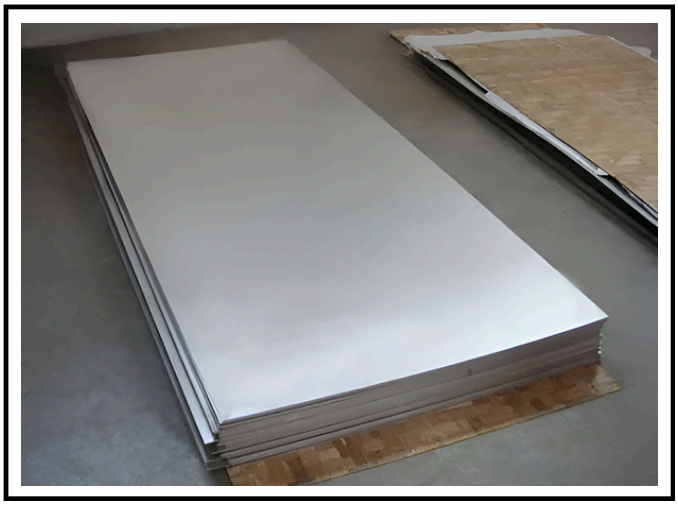
APPLICATIONS OF AA5005

- Architectural applications
- General sheet metal work
- High strength foil

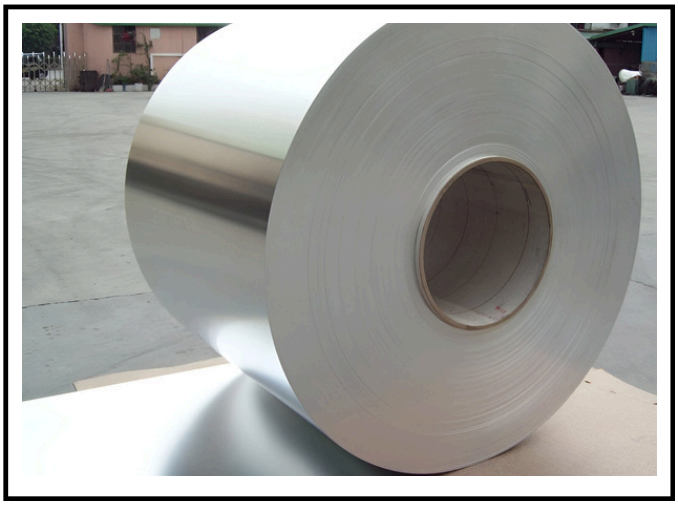
AA5052

CHEMICAL COMPOSITION

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
5052	0.45 Si/Fe	0	0.1	0.1	2.2/2.8	0.15/0.35	0.1	0



5052 Aluminum Sheet



5052 Aluminum Coils

5052 ALUMINUM SHEET DESCRIPTION:

5052 aluminum sheet contains 2.5% magnesium and 0.25% chromium. It has good workability, medium static strength, high fatigue strength, good weldability, and very good corrosion resistance, especially in marine atmospheres. so many customers use this alloy for ship building, like 5052 H32 is always used for small boat building.

TECHNICAL PARAMETER OF AA5052

- Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114
- Thickness（mm） 0.2-500
- Width（mm） 100-2650
- Length（mm） 500-16000

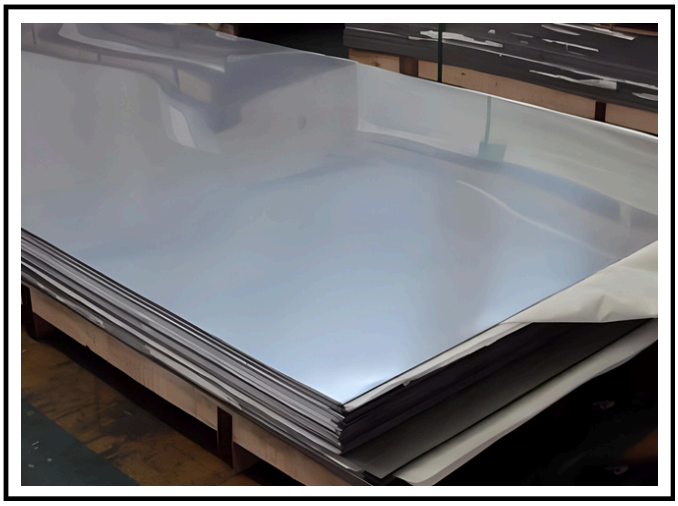
APPLICATIONS OF AA5052

- **Its strength is also one advantage**
- It has good formability
- The alloy is easy to machine

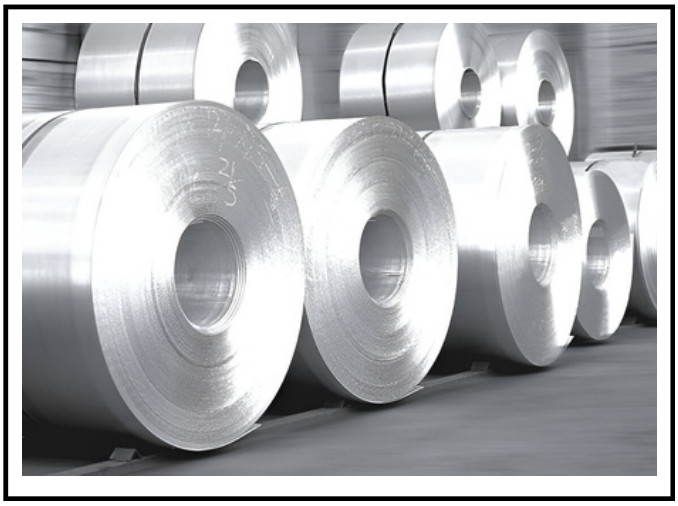
AA5754

CHEMICAL COMPOSITION

Si	Fe	Cu	Mn+Cr	Mg	Zn	Ti	Others -Each	Others Total	Al Min	
5754	0.40	0.40	0.10	0.10 -0.6	2.6-3.6	0.20	–	0.05	0.15	Remainder



5754 Aluminum Sheet



5754 Aluminum Coils

5754 ALUMINUM SHEET DESCRIPTION:

5754 aluminum sheet is a non-heat treated Al-Mg alloy and is also an anti-rust aluminum sheet. 5754 aluminum properties show excellent corrosion resistance, good welding, and excellent machining formability. Most notably, anodizing and other surface treatments of 5754 aluminum alloy have obvious effects, making it widely used in automobile/ship components, tanks, billboards, building decoration and other aspects of the strength, welding, and surface treatment have all high requirements

TECHNICAL PARAMETER OF AA5754

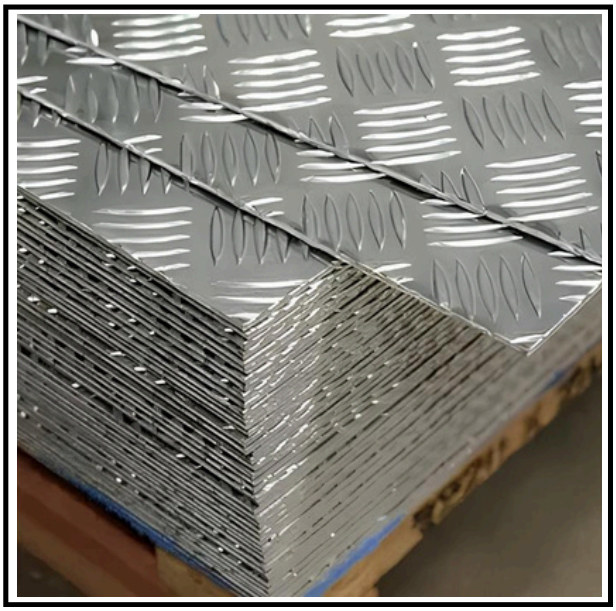
- Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114
- Thickness（mm） 0.4-600 mm; customizable
- Width（mm） 20-2650, customizable
- Length（mm） 500-16000, customizable

APPLICATIONS OF AA5754

- Vehicle bodies
- Shipbuilding
- Treadplate:
- Roofing
- Signage

5754 CHEQUERED PLATES

CHEMICAL COMPOSITION



Aluminium Grade	Temper	Thickness	Width	Length
5754 Aluminium Chequered plate	H114	1.5mm to 6.35mm	800mm to 2250mm	up to 6000mm length
5052 Aluminium Chequered plate	H114	1.5mm to 6.35	800mm to 2250mm	up to 6000mm length

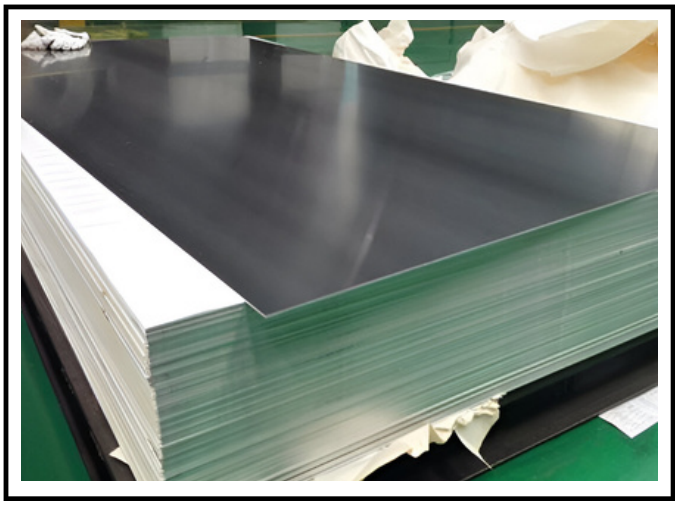
Wind power is a kind of green energy resource. Utilizing wind power for electric generation is a trend now. Compared with others mineral energy, wind power generation is more environmental. Through wind power generation, there will be no waste gas, waste water, solid waste and carbon dioxide pollution. And with the economic development and deterioration of the ecological environment, more and more countries focus on the wind power generation business.

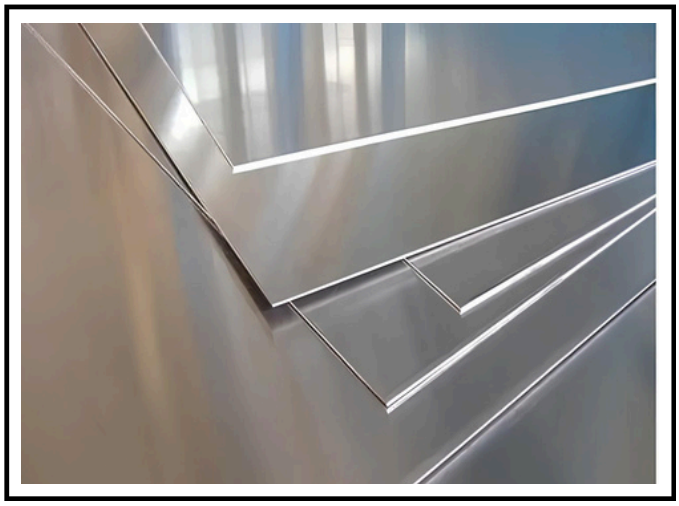
"For your wind power generation business, our aluminum chequered plate is an ideal choice for constructing wind power generation towers. It is commonly used for anti-slip flooring, making it perfect for installation in the tower. This ensures safer operations and easier maintenance. Our 5754 aluminum chequered plates are specifically designed for wind turbine construction, providing durability and reliability for use as flooring within the turbine tower

AA5083

CHEMICAL COMPOSITION

Al	Si	Fe	Cu	Mn	Cr	Mg	Ti	Zn	Other Each	Others Total
Bal	0.40 max	0.40 max	0.10 max	0.40 / 1.0	0.05 / 0.25	4.0 / 4.90	0.15 max	0.25 max	0.05 max	0.15 max





5083 Aluminum Sheet

5083 ALUMINUM SHEET DESCRIPTION:

5083 aluminum sheet belongs to Al-Mg series alloy. It is the highest strength corrosion-resistant alloy among practical non-heat-treated alloys. And it is suitable for welding structures. Also, it is worth mentioning that 5083 aluminum sheet has good resistance to seawater and low-temperature characteristics.

Therefore, 5083 aluminum sheet has become the most suitable choice for marine-grade aluminum

TECHNICAL PARAMETER OF AA5083

- Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114
- Thickness（mm） 0.4-500
- Width（mm） 100-2650
- Length（mm） 500-16000

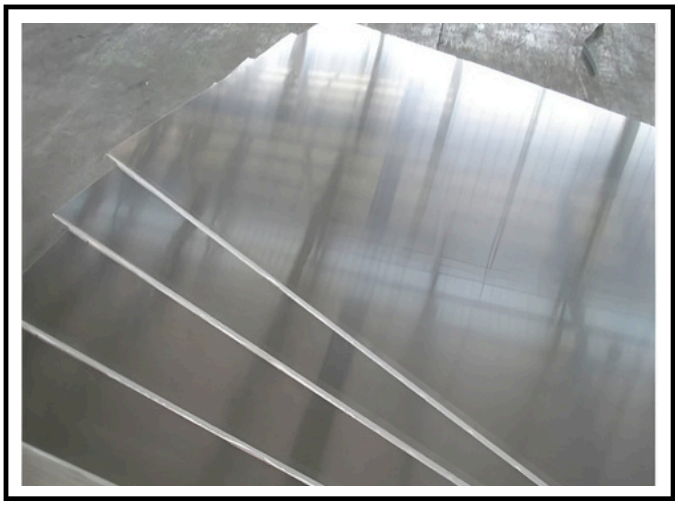
APPLICATIONS OF AA5083

- Shipbuilding
- Railroads
- Vehicles
- Pressure vessels
- Cryogenics

AA5086

CHEMICAL COMPOSITION

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others, each	Others, total	Al
0.4	0.5	0.1	0.20-0.70	3.5-4.5	0.05-0.25	0.25	0.15	0.05	0.15	Balance



5086 Aluminum Sheet

5086 Aluminum Coils

5086 ALUMINUM SHEET DESCRIPTION:

5086 Anti-Rust aluminum plate sheet have even higher strength than 5052 or 5083 and its mechanical properties vary significantly with hardening and temperature. it is is widely used where high corrosion resistance, good weldability, moderate strength are required:

such as weldable parts for ships, automobiles, airplanes; pressure vessels, refrigeration units, TV towers, loading probe equipment, transportation equipment, missile parts, armor, etc. where strict fire protection is required

TECHNICAL PARAMETER OF AA5086

- Temper F,O,H12,H14,H16 H18,H19,H22,H24, H26,H28,H111,H112,H114
- Thickness（mm） 0.4-500
- Width（mm） 100-2650
- Length（mm） 500-16000

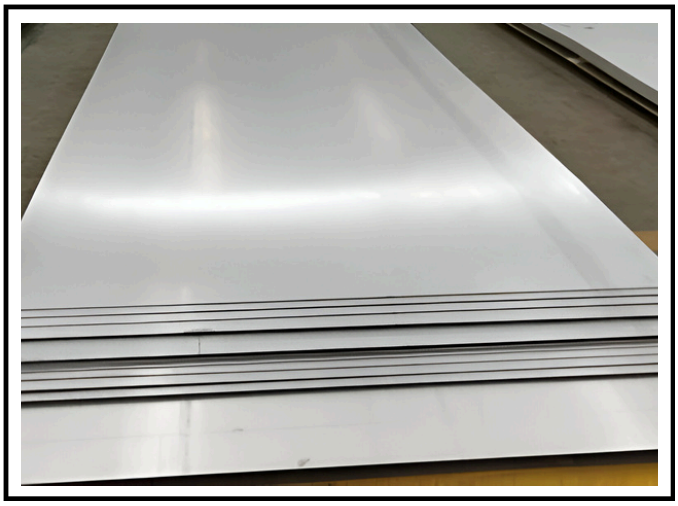
APPLICATIONS OF AA5086

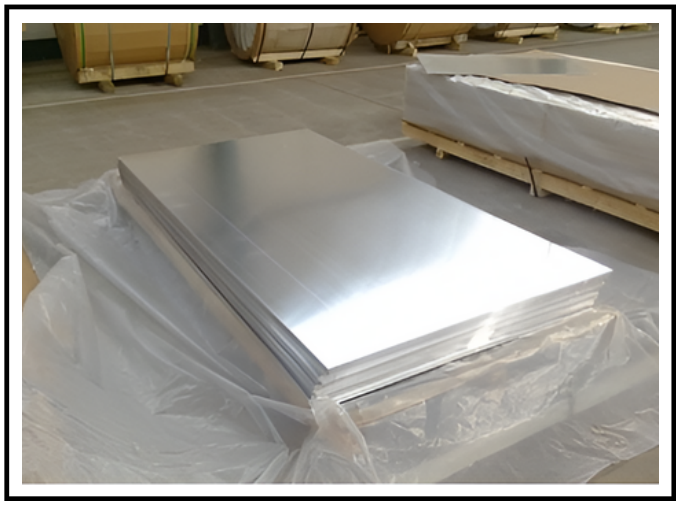
- Marine and defense:
- Oil/gas piping
- Cryogenics
- Pressure vessels
- Packaging & Transportation

AA6061

CHEMICAL COMPOSITION

Mn	Si	Cr	Cu	Fe	Zn	Al	Mg	Ti	OtherEach/Total
0.15	0.4-0.8	0.15-0.35	0.15-0.4	0.7	0.25	Remainder	0.8-1.2	0.15	0.005/0.15





6061 Aluminum Sheet

6061 ALUMINUM SHEET DESCRIPTION:

6061 aluminum sheet is a high-quality alloy product produced by heat treatment and pre-stretching. Although its strength cannot be compared with 2000 series alloy or 7000 alloy series, the composition of 6061 aluminum alloy is mainly Mg and Si, so 6061 aluminum sheet exhibits excellent processing performance, excellent weldability and electroplating, good corrosion resistance, high toughness and other characteristics.

It is worth mentioning that the dense structure of the 6061 aluminum sheet does not deform after processing. In addition, 6061 aluminum alloy can be an easily polished, coloured film, etc.,

TECHNICAL PARAMETER OF AA6061

- Temper F, O, T4, T6, T651, H112
- Thickness（mm） 0.3-500; customizable
- Width（mm） 20-2650, customizable
- Length（mm） 500-16000, customizable

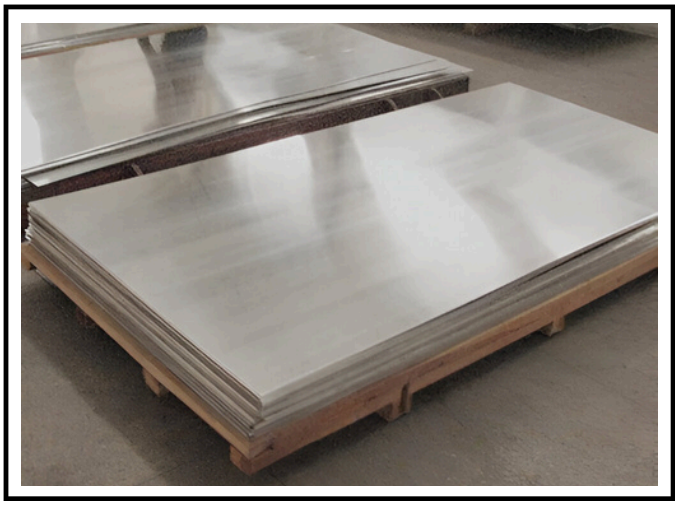
APPLICATIONS OF AA6061

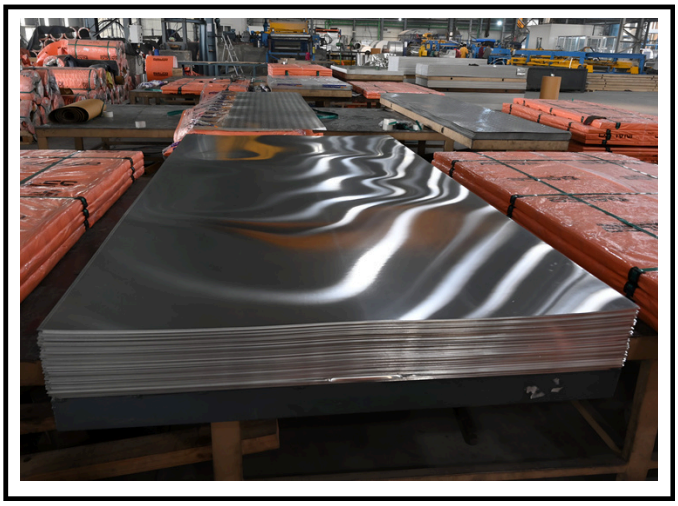
- Marine equipment
- Consumer electronics
- Food and beverage
- Furniture
- Packaging & Transportation

AA6082

CHEMICAL COMPOSITION

Weight%	Al	Si	Fe	Cu	Mn	Cr	Mg	Zn	Ti	Other Each	Others Total
Aluminium 6082	Bal	0.7 - 1.3	0.50 max	0.10 max	0.40-1.00	0.25 max	0.06-1.20	0.20 max	0.10 max	0.05 max	0.15 max





6082 Aluminum Sheet

6082 ALUMINUM SHEET DESCRIPTION:

6082 aluminum sheet is a relatively good alloy aluminum sheet in the 6 series aluminum plate (Al Mg-Si). The 6 series is aluminum alloy with magnesium and silicon as the main alloying elements. T6 and t651 temper. 6082 aluminum sheet is widely used in many fields from thin sheets to thick sheets. If it is an ultra-wide and thick 6082 aluminum sheet, it is more used in transportation fields such as automotive 6082 aluminium sheet is a perfect lightweight material. 6082 aluminium alloy is a medium strength alloy with excellent corrosion resistance. Aluminium alloy 6082 has the highest strength of the 6000 series aluminium alloy. It has replaced alloy 6061 in many applications.

TECHNICAL PARAMETER OF AA6082

- Temper F, O, T4, T6, T651, H112
- Thickness（mm） 0.3-500; customizable
- Width（mm） 20-2650, customizable
- Length（mm） 500-16000, customizable

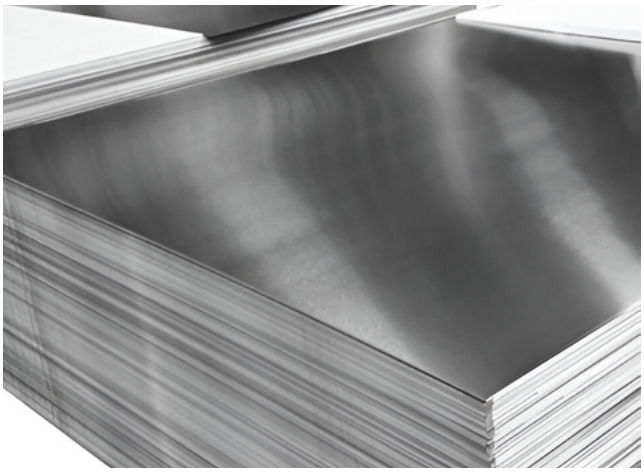
APPLICATIONS OF AA6082

- Construction
- Transport
- Electrical
- Food and beverage
- Packaging & Transportation

AA7075

CHEMICAL COMPOSITION

Weight %	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Each	Total
Minimum	-	-	1.20	-	2.10	0.18	5.10	-	-	-
Maximum	0.40	0.50	2.00	0.30	2.90	0.28	6.10	0.20	0.05	0.15



7075 Aluminum Sheet

7075 ALUMINUM SHEET DESCRIPTION:

7075 aluminum sheet belongs to Al-Zn-Mg-Cu super duralumin, which is a cold-treated forging alloy with high strength and hardness, far better than soft steel. Due to the fine grain structure inside 7075 aluminum alloy, it has excellent deep drilling performance, enhanced wear resistance of tools, good mechanical properties, anode reaction

At present, 7075 aluminum sheet is the preferred metal material under the requirement of lightweight conditions with lower density and higher hardness. It is one of the most potential alloys for commercial use. And It is widely used in the manufacturing of shoe mold, high-hardness mold.

TECHNICAL PARAMETER OF AA7075

- Temper F, O, T6, T651, T7451, H112
- Thickness（mm） 0.5-500; customizable
- Width（mm） 200-2650, customizable
- Length（mm） 500-16000, customizable

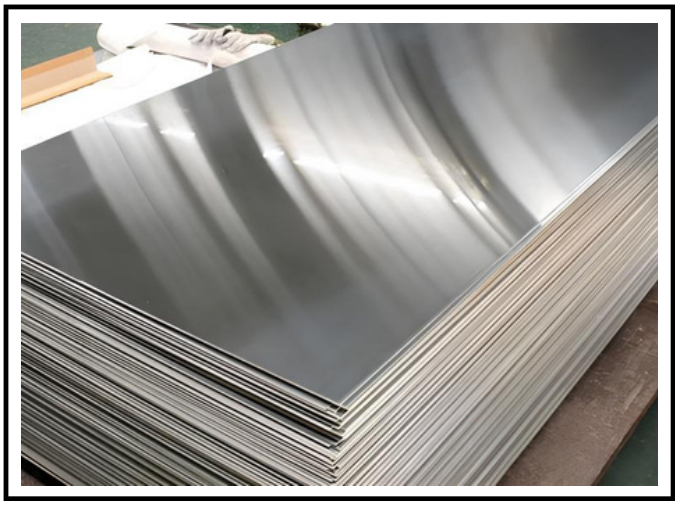
APPLICATIONS OF AA7075

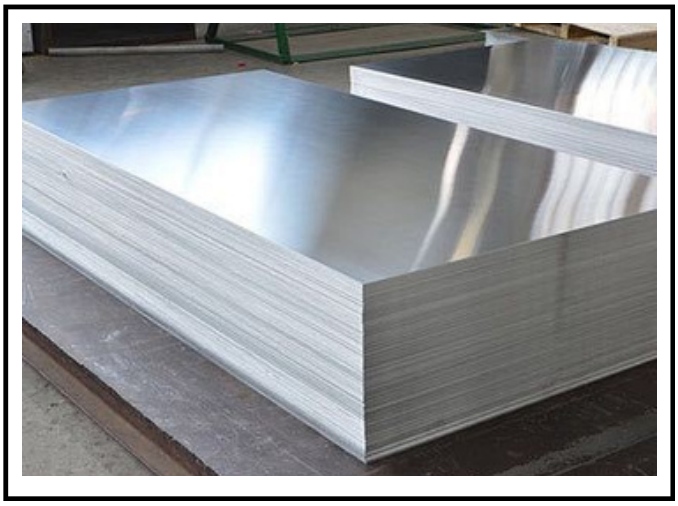
- Automotive
- Building
- Electrical
- Aerospace
- Packaging & Transportation

AA7050

CHEMICAL COMPOSITION

Weight %	Zn	Cu	Mg	Zr	Fe	Si	Mn	Ti	Cr	Others(total)
Minimum	5.7	2.0	1.9	0.08	-	-	-	-	-	-
Maximum	6.7	2.6	2.6	0.15	0.15	0.12	0.10	0.06	0.04	0.15





7050 Aluminum Sheet

7050 ALUMINUM SHEET DESCRIPTION:

7050 aluminum sheet is a high-strength heat treatable alloy. It is based on 7075 aluminum alloy, which increases the Zn, Cu content and Cu / Mg ratio to increase the strength, and it replaces Cr with Zr to overcome the quenching sensitivity problem and inhibit recrystallization.

7050 aluminum sheet is an alloy that has been existing for decades and is known for its ability to remain strong over time. Although other alloys are available which are stronger on a one-off comparison basis, they do not necessarily prove the longevity which the 7050 products can offer

TECHNICAL PARAMETER OF AA7050

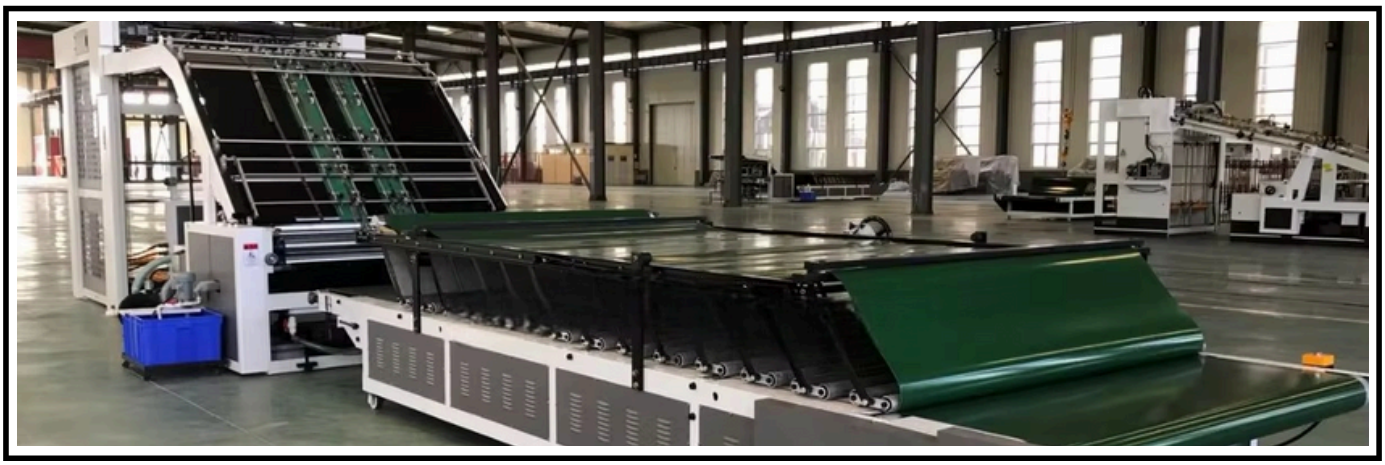
- Temper F, O, T6, T651, T7451, H112
- Thickness（mm） 0.5-500; customizable
- Width（mm） 200-2650, customizable
- Length（mm） 500-16000, customizable

APPLICATIONS OF AA7050

- Automotive
- Building
- Defense
- Aerospace
- Packaging & Transportation

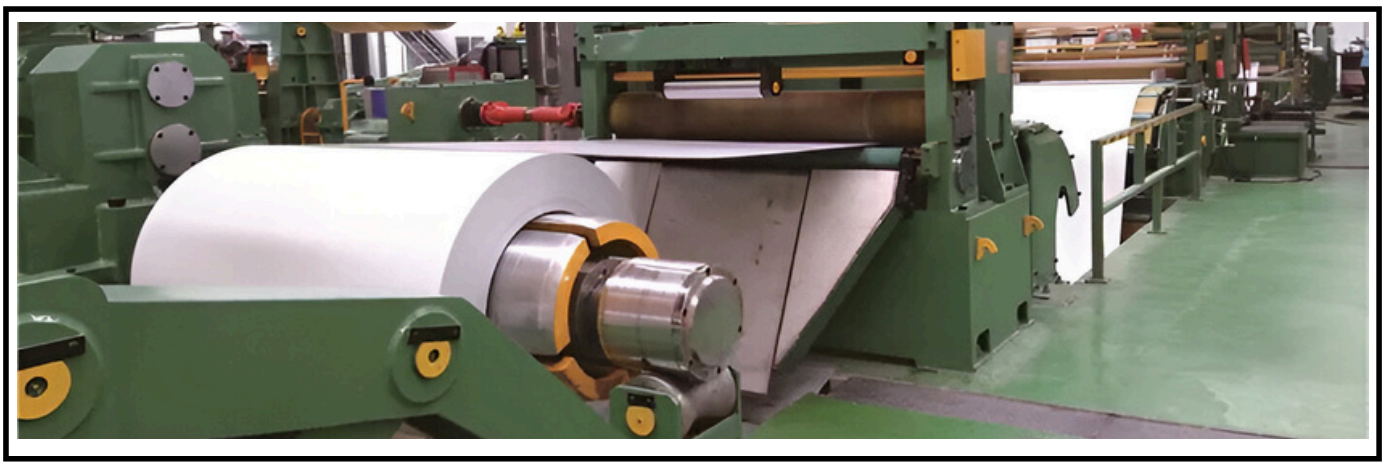
MACHINE FACILITY

ALUMINIUM SHEET OF ALL THICKNESS LAMINATION MACHINE



ALUMINIUM COIL SLITTING MACHINE OF ALL THICKNESS

ALUMINIUM SHEET CUT TO LENGTH MACHINE



WAREHOUSE

For more details kindly visit our website

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Thank You

Scan For All Our Units

HEAD OFFICE
NO.46, Sundar Industrial Compound, New Timber Yard Layout, Mysore Road,
Bengaluru - 560026

Telephone
080-26744727

Website
www.metalcoglobal.com