02 SHANGHAI METAL CORPORATION

COMPANY OVERVIEW Overview Purpose Vision Mission Statement Core Values Goals



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FACTORY

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Testing Packaging Labels

QUALITY CONTROL



Shanghai Metal Corporation



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To maintain Long Lasting Relationships with our clients, and always dedicate our efforts to create Quality Products and Reliable Service, while building Global Value through our belief in Environmental Stewardship and Sustainability

Fair and Transparent Management – Provide clients with only the highest quality products – Continuous Innovation – Environmental Stewardship and Sustainability

Maintain customer relationships through our belief in a customer driven culture – Lead the Market through Constant Innovation of our Operation Methods – To provide clients with only the Highest Quality Products through using the Latest developments in Technology and Processes

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SMC Factory















Shanghai Metal Corporation has one DC processing line, which equipped with two heating systems , three cold machines, two foil rolling machines, four tension level machines, four slitting machines and eight nitrogen annealers. From 500mm thickness, the DC processing line can roll the slab ingot to be 6-8mm thickness, after being processed by cold rolling machine and foil rolling machine, the finished thickness can reach 0.2mm qualified thickness. We can supply you DC material of 1XXX, 2 XXX, 3XXX, 4XXX, 5XXX, 6XXX, 7XXX and 8XXX series aluminium sheet and coil, our annul capacity can reach 120000 MT.



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DC Processing Line

ALUMINUM SHEET / PLATE

















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ALUMINUM COIL





ALUMINUM STRIPS











PRODUCT	ALLOY	TEMPER	THICKNESS	WIDTH	LENGTH
	AA1050	All Tempers	0.18-350mm	150-2200mm	Up to 8000mm/coil
Ī	AA1060	All Tempers	0.18-350mm	150-2200mm	Up to 8000mm/coi
	AA1100	All Tempers	0.18-350mm	150-2200mm	Up to 8000mm/coi
	AA2014	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA2024	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA3003	All Tempers	0.18-350mm	150-2200mm	Up to 8000mm/coi
[AA3004	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
[AA3005	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
	AA3104	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
Sheet & Plate & Coil	AA3105	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
	AA4045	All Tempers	0.2-350mm	150-2200mm	Up to 8000mm/coi
Ī	AA5005	All Tempers	0.2-350mm	150-2200mm	Up to 8000mm/coi
	AA5052	All Tempers	0.2-350mm	150-2200mm	Up to 8000mm/coi
[AA5182	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA5083	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
	AA5251	All Tempers	0.3-350mm	150-2200mm	Up to 8000mm/coi
[AA5754	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA6061	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA7075	All Tempers	1.0-350mm	150-2200mm	Up to 8000mm/coi
	AA1100		0.2-4.0mm	Up to 2200mm	300-6000mm
-	AA3003	O H44 H46 H48	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA3004	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA3105	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
Roller coating sheet	AA5005	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
Sheet	AA5052	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA5083	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA5754	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA5754	All Tempers	0.2-4.0mm	Up to 2200mm	300-6000mm
	AA1100	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
	AA1060	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
	AA3003	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
	AA3004	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
[AA3005	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
Roller coating coil	AA3104	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
	AA3105	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
ľ	AA5005	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
ľ	AA5052	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
Ì	AA5083	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil
İ	AA5754	All Tempers	0.2-3.0mm	Up to 2200mm	Up to 6000m/coil

ALUMINUM FOIL











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SPECIFICATIONS

Applications of Aluminum foil

1) Aluminum Foil for Food--including food packaging and food container:

PRODUCT NAME	APPLICATION	ALLOY	TEMPER	THICKNESS	WIDTH
Container Foil		3003/8011	O/H22/ H24	0.045mm-0.12mm	150mm-1650mm
Household Aluminum Foil	ALUMINUMFOR	1235/8011	ο	0.009mm-0.025mm	150mm-1650mm
Battery Aluminum Foil	-THE	1235/1060/ 1100/3003/ 8011	H19/H9	0.01mm-0.03mm	150mm-1650mm
Aluminum Foil for Hot Seal		1060/1235/8011	0	0.03mm-0.07mm	150mm-1650mm
Aluminum Foil for PP Caps		8011	H14	0.18mm-0.24mm	per cutting request

2) Aluminum Foil for Packaging-wide application:

APPLICATION	ALLOY	TEMPER	THICKNESS	WIDTH
	8011	0	0.010mm	150mm-1950mm
	8011	H18	0.018mm-0.030mm	150mm-1950mm
	8079/1235/8011	0	0.006mm-0.009mm	150mm-1950mm
Market Market	8079/1235/8011	0	0.006mm-0.007mm	150mm-1950mm
		Image: Market and Sector and Sec	Image: Non-State	Image: Market

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3) Aluminum Foil for Industry--used in industrial processing:

PRODUCT NAME	APPLICATION	ALLOY	TEMPER	THICKNESS	WIDTH
Aluminum Foil for A/C		1100/1200/ 3003/8011	O/H22/ H24/H26	0.08mm-0.30mm	12mm-1650mm
Hydrophilic Foil		1100/3003/ 3102/8011	O/H22/ H24/H26	0.08mm-0.30mm	12mm-1650mm
PS/CTP base board		1050/1060/ 1070/3003	H18	0.15mm-0.70mm	700mm-1300mm
Aluminum Foil of narrow width		1000/3000/ 8000	O/H14/ H18/ H22/ H24/H26	0.005mm-0.2mm	3mm-600mm
Cable Material	0	1050/1060/ 1100/1235/8011	O/H22/ H24	0.05mm-0.20mm	12mm-1300mm
Adhesive tape foil	JO .	1235/8011/ 8079	0	0.015mm-0.05mm	30mm-1650mm

Our foil plant has 18 foil mills equipped with flatness control system from Siements (AFC) and guage control system from Honeywel (AGC). About 20 separators and 10 slitters for various applications, 4 grinders from Herkules Germany, more than 60 annealing furnaces. The thickness range of our foil is from 0.005mm to 0.2 mm with width up to 1950 mm. Our products include semi-rigid container foil, household foil, beverage foil label, blister foil, foil tape, hot seal foil, tube foil, cigarette foil, flexible packing, capacitor foil and other twenty varieties.





Foil Rolling Line



















Aluminum Tubes/Pipes & Profiles





Extrusion Equipments of Aluminum Industry

Typical Aluminum Alloy Materials' Chemical Composition and Mechanical Properties

Create		Chemical Composition (%)							T	Tensile	Elonga-			
Grade	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Al	Temper	Мра.	tion %	
1050	0.25	0.40	0.05	0.05	0.05	-	-	0.05	0.03	99.50	O/H18/ H112	60-95	22	
1100	0.9	95	0.05- 0.20	0.05	-	-	-	0.10	-	99.00	O/H18/ H112	75-110	22	
2014	0.50- 1.20	0.70	3.9-5.0	0.40- 1.2	0.20- 0.8	0.10	-	0.25	0.15	Remain	O/H112/ T4/T6	375	10	
2024	0.50	0.50	3.8-4.9	0.30- 0.9	1.2-1.8	0.10	-	0.25	0.15	Remain	O/H112/ T4/T6	440	10	
3003	0.60	0.70	0.05- 0.20	1.0-1.5	-	-	-	0.10	-	Remain	O/H14	95-130	22	
5052	0.25	0.40	0.10	0.10	2.2-2.8	0.15- 0.35	-	0.10	-	Remain	O/H14/F	170-240	-	
5083	0.40	0.40	0.10	0.40- 1.0	4.0-4.9	0.05- 0.25	-	0.25	0.15	Remain	O/H14/ H32	270-355	12	
6061	0.40- 0.80	0.70	0.15- 0.40	0.15	0.8-1.2	0.04- 0.35	-	0.25	0.15	Remain	O/H112/ T4/T5/T6	260	9	
6063	0.20- 0.6	0.35	0.10	0.10	0.45- 0.9	0.10	-	0.10	0.10	Remain	O/H112/ T4/T5/T6	205	9	
6082	0.7-1.3	0.50	0.10	0.40- 1.0	0.6-1.2	0.25	-	0.20	0.10	Remain	O/H112/ T4/T6	285	8	
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	Remain	F/T4/T6	560	6	



Aluminum Tubes/Pipes & Profiles : Surface treatments of Aluminum Tubes/Pipes & Profiles

2) Polishing

5) Sand-blast

3) Powder coated

6) Coating film

Typical Aluminum Alloy Materials' Chemical Composition and Mechanical Properties



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Picture 1



Picture1:The 100MN extrusion press by China Taiyuan Heavy Industry

Picture2:The 55MN indirecte tube extrusion press(double acting)by SMS-MEER

Picture3:The 36MN directe extrusion press by China Taiyuan Heavy Industry





Extrusion Equipments of Aluminum Industry





Picture 1	Picture 2
Picture 3	Picture 4
Picture 5	Picture 6

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Picture 1: Casting of extrusion bar Picture 2: Extrusion flow platform Picture 4: Anodizing pool Picture 3: Straighten machinery Picture 5: Machinery of cold drawn Picture 6: CNC mould making center It is well known that flurocarbon lacquer coating (PVDF coating) owes the best acid/alkali resistant and temperature tolerance capabilities of all painting materials. Being the best quality of pre-coated aluminum, PVDF coated coils are especially suitable for outdoor roofing/wallsand hang ceilings manufacturing.















Using high-grade polyester lacquer coating material, the finished coating coils are with delicate color uniform texture, color and diverse. It is the most popular and most common used materials in decorative usage. The PE coated aluminum are widely used in ACP (aluminum composite panel) production and indoor celling usage.

Color precoated aluminum coils for roofing



A3004 color precoated aluminum (for roofing) : The SMC A3004 coated Aluminum of roofing are especially outstanding at its high strength / corrosion resistance and weather resistance because of its using of the A3004 alloy and precoated with the best PVDF coating brands such as PPG/BECKER and VALSPAR, which enables our finished products a warranty of outdoor using for more than 20years. After the processing. Our A3004 coated coils are suitable 20years . After the processing. Our A3004 coated coils are suitable for large - span and big over all roofing installment.

Aluminum coils for building decoration

Aluminum coils for building decoration : SMC prepainted aluminum coils include various series for different celling / home decorative and wall decorative. Now we have the PVDF series / PE series/ nano coating series/pearly luster series / self clean series / anti scratch series and wood grain series. With all the different series, we can meet most of the market requirements.

Manufacturing Process





Wood grain / marble vain color coated aluminum



Properties - chart



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Role Coating Line

			Siliconpolyester	Polyest	er Plasticizedsol	Polyurethane	
	Weath	nering p	erforma	nce	1		
ction	O		0	\times	×		
tion	0		0	\times	×		
esistance	0		0	\times	×		
formance	0	0	0	0	0	0	×
	Physic	cal perf	ormance	e			
ance	0			\times		0	
erforman	0						
.膜柔韧度 ibrane	0	×	×		O	0	×
		0	0	\bigcirc	A	0	0
tches		0	0	0			0
	Chem	ical Re	sistance				
ant degree	0				×		×
	0		0	0	0	A	
	0				0		0



• Spectrometers from British Arun company

• Tensile Strength Tester

• Tester For Hardness

- Microscope Test of Grain Size
- BYK Color Difference Tester
 - Sufix Drying Film Tester from Germany

In order to improve quality of all products, we import 5 ABB Measurement and control systems from Sweden and an advanced spectrometers particularly from the British Arun company, to keep all aluminum sheets & coil have clean surface with excellent quality and high smoothness. The tolerance of their length, thickness, width and diagonal is extremely small; all of them have good Mechanical Performance and Mechanical bending performance, so that we are able to meet different production requirement of clients.







Packaging







Labels of Export Products





Label of Aluminum foil

晶名 PRODUCT	Aluminum Foil 80	011 H22 I	non lubricated	*7607*	
包装号 PACKAGE ID	SD201580609	牌号 Grade	8011 H22	净重(KGS) NET WEIGHT	299
尺寸 DIMENSIONS	0.05 x 411m	订单编号 ORDER NO	1416088-8060	检验员 INSPECTOR	SMC 021
日期 DATE	Feb. 26, 2015	毛重(KGS) GROSS WEIGHT	299		6-21-5830 9368 6-21-5081 9492
托盘号 PALLET NO.	8	产地 留COUCING MREA	MADE IN CHINA BY SMC		shanghaimetal.com anghaimetal.com

Label of Aluminum Alloy Tube



Shanghai Metal Corporation provides professional SMC and neutral labels for our worldwide customers. On the label, Products name, Material grade, Temper, Dimension, Color, Quantity of pcs, Net weight, Gross weight, Invoice number, Inspector No. and other related information will be showed. The anti-corrosion and waterproof label makes the package more professional and trackable, which is in accordance with our digital logistics system.

