

MANUFACTURER OF



PRIME GRADE TINPLATE

THE COMPANY

PERSTIMA, as a manufacturer of prime grade tinplate, has been equipped with an electro-tinning line with a rated capacity of 200,000 MT/annum. The plant which is located in Pasir Gudang Industrial Estate, Johor, Malaysia enjoys excellent logistic support by virtue of its nearness to the seaport (Pasir Gudang Port).



THE PRODUCT

Characteristics of Tinplate

Tinplate has an attractive surface finish and features excellent corrosion resistance, formability, paintability, lacquerability, printability, strength, solderability, weldability and lastly, is beautiful in appearance. Tinplate is widely used in a broad range of applications such as food cans, non carbonated cans, ornament containers, crowns and screw caps, aerosol cans as well as electrical parts and other general cans.

THE PROCESS

PERSTIMA manufactures the tinplate by continuous electro-tinning process, of which the process has superior properties due to the uniformity of coating weights, availability of differential coating and proper chemical treatment.

PERSTIMA is one of the tinplate manufacturers in the world, using the latest technology in electro-tinning process which is called Methane Sulfonic Acid or, better known as MSA. MSA is an acid which has an organic base and is environment-friendly.





PRIME GRADE TINPLATE

10 Reasons Why You Should Choose Our Product

1. High Corrosion Resistance
2. Excellent Scratch Resistance
3. Excellent Lacquer Adhesion
4. Available in Both Cut Sheets and Coils
5. Available in Various Thickness, Temper and Surface Finish
6. Wide Range of Coating Weights
7. Best Material for Longest Shelf Life
8. Excellent Printability and Paintability
9. High Quality Assurance
10. Excellent After Sales Support



FEATURES



Excellent Properties For Can-Making

PERSTIMA electrolytic tinplate incorporates every property vital to the easy production of quality cans: laquerability, printability, formability, weldability and scratch resistance.

Excellent Corrosion Resistance

PERSTIMA electrolytic tinplate is produced in the most up-to-date equipment using the most advanced technology. The tinning operations are closely controlled, as are the chemical composition and surface quality of the base metal. That means the coating weight is uniform, and that corrosion resistance is high.



Wide Choice

PERSTIMA electrolytic tinplate comes in a wide range of specifications to allow selection of the tinplate most suitable for any specific application.

- Wide range of thickness
- Wide range of coating weight
- Differential coatings available
- Choice of bright finish, stone finish, super stone finish and matte finish
- Comes in both cut-sheets (Primary scroll or straight cut) and coils
- Wide range of tempers available
- Wide range of base metals

AVAILABLE SPECIFICATION & APPLICATION

PERSTIMA electrolytic tinplate is produced in conformity with Japanese Industrial Standard (JIS G 3303) or American Iron and Steel Institute (AISI) specification or American Society for Testing And Materials (ASTM).

For more information, you can refer to the following websites : AISI (www.steel.org) and ASTM (www.astm.org)



(a) Available Sizes

Specification	T1, T2, T3, T4, T5		DR8, DR9, DR10	
	Sheets	Coil	Sheets	Coil
Thickness (mm)	0.15 - 0.60	0.15 - 0.60	0.14 - 0.36	0.14 - 0.36
Width (mm)	650 - 988	650 - 988	650 - 988	650 - 988
Length (mm)	457 - 1200		457 - 1200	
Inside Diameter (mm)		406, 508		406, 508
Outside Diameter (mm)		1725		1725
Weight (mtons)	Max. 2	3 - 11	Max. 2	3 - 11

Note : 1. Certain combination of specification is subject to further verification.
2. For primary scroll, please contact us.


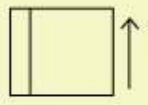
(b) Coating Weight

Letter Symbol of Classification	Type of Coating	Designation of Coating Weight (g/m ²)	Nominal Coating Weight (g/m ²)	Minimum Average Coating Weight (g/m ²)	Coating Number (reference only)
SPTe	Equally Coated	2.8 / 2.8	2.8 / 2.8	4.9	# 25
		5.6 / 5.6	5.6 / 5.6	10.5	# 50
		8.4 / 8.4	8.4 / 8.4	15.7	# 75
		11.2 / 11.2	11.2 / 11.2	20.2	# 100
		2.8 / 5.6	2.8 / 5.6	2.25 / 5.05	# 25/50
	Differential Coated	2.8 / 8.4	2.8 / 8.4	2.25 / 7.85	# 25/75
		2.8 / 11.2	2.8 / 11.2	2.25 / 10.1	# 25/100
		5.6 / 8.4	5.6 / 8.4	5.05 / 7.85	# 50/75
		5.6 / 11.2	5.6 / 11.2	5.05 / 10.1	# 50/100
		8.4 / 11.2	8.4 / 11.2	5.05 / 10.1	# 75/100

Notes :

- Coating weight in g/m² corresponds to JIS G 3303 - 2008.
- Value with slash (/) shows the coating weight on each respective surface; values without slash (/) show the actual coating weight on both surfaces.
- For coating weight not listed in the table, please contact us.

Designation and Marking for Differential Coating

Type	Designation of Coating Weight (g/m ²)	Differential Marking	
		Parallel Lines on Heavier Sides	Edge Line on Lighter Side
Differentially Coated	# 25/50 (2.8/5.6) # 25/75 (2.8/8.4) # 25/100 (2.8/11.2) # 50/75 (5.6/8.4) # 50/100 (5.6/11.2)	Line intervals of either 2" or 4"	A line is marked within 10 mm from an edge.
Examples of Markings			

Note : If different marking is required, please inquire.



(c) Temper

1. Single-Reduce Tinplate

Designation	Aimed Rockwell Hardness Range 30T	Characteristic	Application
T-1	46 - 52	Soft for drawing.	Nozzles, spouts, toys and other applications requiring extra deep drawing.
T-2	50 - 56	Moderate drawing where some stiffness is required.	Rings and plugs, small-deformed cans, and other applications requiring moderately-deep drawing.
T-2.5	52 - 58	Combines the characteristics of T-2 and T-3	Battery cell bodies, small can ends and bodies, and other applications requiring moderately-deep drawing.
T-3	54 - 60	Shallow drawing, general purpose with fair degree of stiffness to minimize fluting.	Can ends and bodies, large diameter closures, crown caps.
T-4	58 - 64	Moderate stiffness.	Can ends and bodies where comparatively high strength is required.
T-5	62 - 68	Increased stiffness to resist buckling.	Can ends and bodies where a combination of high hardness, strength and good formability is required.

2. Double Reduce (DR) Tinplate

Designation	Aimed Rockwell Hardness Range 30T	Application
DR-8	68 - 78	Bodies and ends for small diameter cans requiring high strength.
DR-9	71 - 81	Bodies and ends for small diameter cans requiring high strength.
DR-10	75 - 85	Bodies and ends for small diameter cans requiring high strength.



DR tinplate is thin, strong material developed as a substitute for ordinary tinplate to meet customer's requirements to reduce tinplate thickness.

Features

- Stiffness and strength are greater for same thickness of ordinary tinplate
- Reduced thickness make it possible to increase the number of sheets per unit mass, and consequently reduce costs.





(d) Finishes

Code	Classification	Features
B	Bright	A luster surface provided by a flow-brightened tin coating on a smooth grindstone finish steel base.
R	Stone	Melted finish. This finish has fine grit lines, and is easy to handle because it resists scratching during coating and can-making.
R2	Super Stone	Melted finish. High resistance to scratching, thus making it easy handling during coating and can-making and is widely used for can ends.
M	Matte	Unmelted dull finish. This finish gives the tinplate a unique silver gray surface. It offers exceptional ink adherence and is widely used in crown caps and printed cans.
S	Silver	A luster surface provided by a flow-brightened tin coating on a coarse dull finished steel base.

Note : Double reduced product is available in stone and super stone finish only.



(e) Steel Type

Steel Types	Remarks
MR	Contains low residual elements and has a good corrosion resistance. Commonly used for most tinplate applications.
L	Contain particularly low residual elements such as Cu, Ni, Cr and Mo, and is used for improved corrosion resistance of certain food-product containers.
D	Aluminium killed, is sometimes required for severe drawing applications or to minimize severe fluting and stretcher strain hazards.

PACKAGING AND MARKING

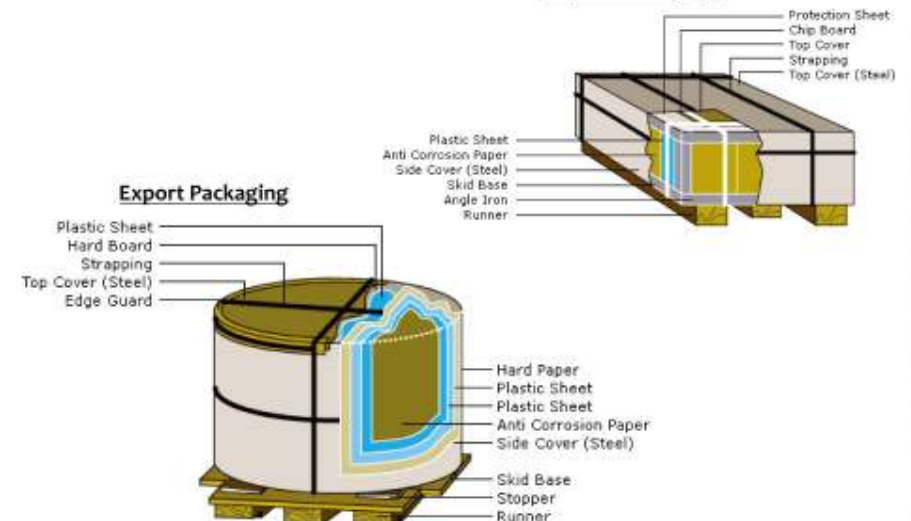
Packaging

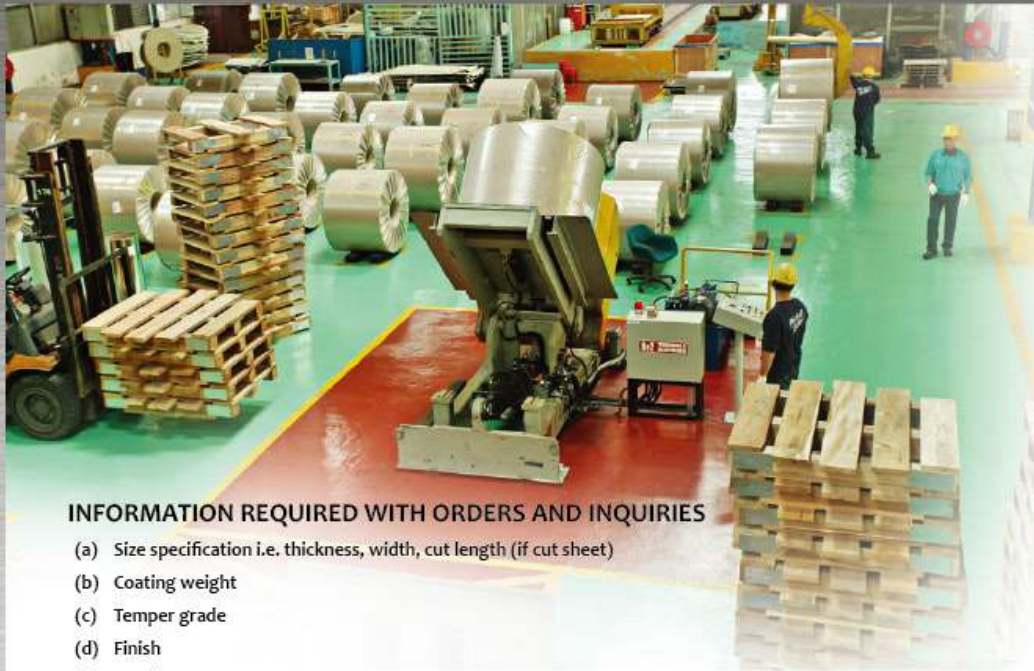
PERSTIMA electrolytic tinplate is packed with special care to prevent rust, abrasion and scratching. In case of cut sheets product, maximum net tonnage is 2 MT. As for coil, maximum net tonnage is 11 mtons.

Marking

Each package is marked with package number specifying product grade, dimensions, designated coating weight, thickness, temper, oiling weight, number of sheets and net weight. Other marks if desired can be requested.

Export Packaging





INFORMATION REQUIRED WITH ORDERS AND INQUIRIES

- (a) Size specification i.e. thickness, width, cut length (if cut sheet)
- (b) Coating weight
- (c) Temper grade
- (d) Finish
- (e) Steel type
- (f) Quantity
- (g) Application
- (h) Number of sheets per packaging (for cut length product)
- (i) Inner diameter and outer diameter (for coil product)
- (j) Minimum and maximum weight (for coil product)
- (k) Other special requirements if any



For enquiries, please contact us at :-



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We do it Better!