

# 馬口鐵產品規格與尺寸 Specifications and Sizes

## 1. 規格標準 Standard Specification

### A. 馬口鐵皮 Tinplate

統一實業所產製的馬口鐵皮係根據CNS 4155、JIS G3303標準產製。

Tinplate produced in Ton Yi meets the requirements of CNS 4155, JIS G3303 standard.

### B. TFS鐵皮 Tin Free Steel

統一實業產製的TFS鐵皮(Tin Free Steel)係根據CNS 11241、JIS G3315標準產製。

Tin Free Steel produced in Ton Yi meets the requirements of CNS 11241, JIS G3315 standard.

## 2. 產品尺寸 Product Size

類別 Item	厚度Thickness mm	寬度Width mm	長度Length mm	圈鐵重量Coil WT M/T	圈鐵內徑Inside DIA. mm(in)
裁片 Sheet	0.14~0.60	680~950	508-1,050	-----	-----
圈鐵 Coil	0.14~0.60	680~950	-----	max 11	406(16), 419(16.5), 508(20)

## 3. 鋼種 Steel Type

鋼種 Steel Type	特 性 Characteristics
MR	殘留元素含量少，具有良好之耐蝕性，通常用於容器等之一般用途。 It contains few residual minor constituents and has a good corrosion resistance, so that it is widely used for such application as containers.
L	銅，鎳，鉻，鉬及其它殘留元素含量特少，適用於具有更佳耐蝕性之食品容器。 It contains particularly few residual minor constituents such as Cu, Ni, Cr, Mo, so that it is suitable for the material of containers which require improved corrosion resistance.
D	鋁脫氧全靜鋼，適用於深衝加工或加工時易發生呂德線(Luder's Lines)者。 It is aluminum killed steel, so that it is suitable for the application which bear deep drawing or other working that is liable to produce Luder's lines

## 4. 調質度 Temper Designation

記號 Designation		洛氏表面硬度 (HR30T5m)			用途 Usage
		厚度 Thickness (mm)			
		t≤0.210	0.210<t≤0.280	0.280<t	
一次軋延 (SR) Single Reduced	T-1	50±4	49±4	48±4	需要特別加工性質的深衝罐或噴嘴等。 Drawn requirements, nozzles, spouts, closures
	T-2	54±4	53±4	52±4	中等程度深衝罐，如小型罐身，橢圓形罐。 Applications where moderate drawability and some stiffness are required small square and oval.
	T-2.5、 T-2.5CA	56±4	55±4	54±4	介於 T-2 與 T-3 之間硬度，如小型罐身、罐蓋。 Items requiring the drawability of T2 in combination with the stiffness of T3.
	T-3、 T-3CA	58±4	57±4	56±4	一般空罐罐身，罐蓋用或王冠瓶蓋。 Can ends and bodies, large diameter closures, crown caps.
	T-4、 T-4CA	62±4	61±4	60±4	需要較 T-3 硬度條件稍高的罐身或王冠瓶蓋。 General line cans, crowns and others requiring higher stiffness than T3.
	T-5CA	66±4	65±4	64±4	大型罐罐身或罐蓋，以及內壓大的容器用。 Large can ends and bodies where excellent bulking resistance is required.

二次退延(DR) Double Reduced	DR-7.5CA	71 ± 4	3 片罐罐身、罐蓋。 3-piece can body and end.
	DR-8CA	72 ± 4	2 片罐罐身、3 片罐罐身、罐蓋，啤酒、碳酸飲料罐身。 2-piece can body, 3-piece can body, can end. Can body for beers and carbonated beverages.
	DR-8.5CA	73 ± 4	3 片罐罐身、罐蓋。 3-piece can body and end.
	DR-9CA	75 ± 4	2 片罐罐身、3 片罐罐身、罐蓋，大型罐的罐身。 2-piece can body, 3-piece can body, can end. Large can body.

- 註：1. 規格記號CA者乃連續退火處理的馬口鐵皮，其優點為硬度高，機械性質均一，耐蝕性高，適合高速製罐。
2. DR-8CA，DR-9CA乃將原板經退火後再次軋成極薄而有強度的馬口鐵皮。
3. 連續退火處理及DR馬口鐵皮具有機械方向性，故在使用來製造罐身時，壓延方向須與空罐圓周平行。

Remarks:

- The suffix CA means continuous-annealing. CA tinplate has superior features due to the greater rigidity, high corrosion resistance and uniformity of mechanical properties and is ideal for speedy can-making.
- DR: Base metal produced by double cold reduction process ---the base metal has received a second major cold reduction following annealing. Consequently, it offers greater rigidity and strength than conventional base metals.
- Both CA and DR tinplates have the property of mechanical direction. It is necessary to have the rolling direction of tinplate parallel with the can circle.

## 5. 表面鍍錫量 Tin Coating Weight Designation



種類 Type of Coating	符號 Designation of Coating Weight		標稱表面錫量 Nominal Coating Weight		最小平均表面錫量 Minimum Ave. Coating Weight	
	CNS, JIS		g/m <sup>2</sup>	1b/B.B.	g/m <sup>2</sup>	1b/B.B.
等厚鍍錫 Equal Coating	1.1/1.1	#10	1.1/1.1	0.05/0.05	0.9/0.9	0.04/0.04
	2.8/2.8	#25	2.8/2.8	0.125/0.125	2.45/2.45	0.11/0.11
	5.6/5.6	#50	5.6/5.6	0.25/0.25	5.05/5.05	0.23/0.23
	8.4/8.4	#75	8.4/8.4	0.375/0.375	7.55/7.55	0.35/0.35
	11.2/11.2	#100	11.2/11.2	0.50/0.50	10.1/10.1	0.45/0.45
差厚鍍錫 Differential Coating	2.8/5.6	#25/50	2.8/5.6	0.125/0.25	2.45/5.05	0.11/0.23
	2.8/8.4	#25/75	2.8/8.4	0.125/0.375	2.45/7.55	0.11/0.35
	2.8/11.2	#25/100	2.8/11.2	0.125/0.50	2.45/10.1	0.11/0.45
	5.6/8.4	#50/75	5.6/8.4	0.25/0.375	5.05/7.55	0.23/0.35
	5.6/11.2	#50/100	5.6/11.2	0.25/0.50	5.05/10.1	0.23/0.45
	8.4/11.2	#75/100	8.4/11.2	0.375/0.50	7.55/10.1	0.35/0.45

- 註：1. 兩面鍍錫量不同之表示，依客戶需要可有S-mark及A-mark可區分兩面之錫量。
- 在高鍍錫量全面以平行線條表示(A-mark)
  - 在標示S記號之鍍錫量一面距邊約3mm處以白線條表示(S-mark)
  - 在低鍍錫量面以斷續平行線表示(標示記號，買賣雙方協議)
2. 鍍錫量高於11.2(#100)或低於1.1(#10)條件，請予查詢。

Remarks:

- The following designations and markings are used for differentially coated tinplates:
  - A-mark: Continuous parallel lines are marked on the heavily coated surface.
  - S-mark: Single continuous line is marked at 3mm from the edge on the lightly coated surface.
  - Interrupted parallel lines are marked on the lighter coated surface. (The marking symbol may be agreed by the purchaser and the manufacturer)
- For the tin coating mass over 11.2(#100) or below 1.1(#10), please inquire.

## 表面鍍錫標記 Differential Marking

種類 Type	符號 Designation	標 記 Differential Marking	
		高鍍錫面平行線條 Parallel lines on the heavily coated surface	低鍍錫面邊緣線條 A continuous line on the lightly coated surface
差厚鍍錫 Differential Coating	2.8/5.6 (#25/50) 2.8/8.4 (#25/75) 2.8/11.2(#25/100) 5.6/8.4 (#50/75) 5.6/11.2(#50/100) 8.4/11.2(#75/100)	1/2"間距 1/2" line spacing 1"間距 1" line spacing 1-1/2"間距 1-1/2" line spacing 1/2", 1" 間距交替 1/2", 1" alternating 1/2", 1-1/2" 間距交替 1/2", 1-1/2" alternating 1", 1-1/2" 間距交替 1", 1-1/2" alternating	在標示S記號之鍍錫面邊緣約3mm作線條標記 A continuous line should be given on the lightly coated surface at 3 mm from the trimmed edge
範例 Examples of Marking		2.8/5.6A(#25/50A)  壓延方向 Rolling Direction	2.8S/5.6(#25S/50)  壓延方向 Rolling Direction

## 6. 表面處理 Surface Finish

標示記號 Mark	區 分 Classification	特 徵 Specific Features
B	光面處理 Smooth Finish	光面處理的原板於鍍錫後進行熔融處理，產出表面光澤之電鍍鍍錫鋼片。 The original plate with smooth surface treatment is melted after tin plating to produce electroplated tin-plated steel sheet with glossy surface.
R1	粗面處理 Stone Finish	粗面處理之原板於鍍錫後進行熔融處理，產出表面光澤之電鍍鍍錫鋼片。 The original plate with stone surface treatment is melted after tin plating to produce electroplated tin-plated steel sheet with glossy surface.
R2	極粗面處理 Super Stone Finish	極粗面處理之原板於鍍錫後進行熔融處理，產出表面光澤之電鍍鍍錫鋼片。 The original plate with super stone surface treatment is melted after tin plating to produce electroplated tin-plated steel sheet with glossy surface.
MA、MB、MC、S1、S2	銀面處理 Silver Finish	鈍面處理的原板於鍍錫後進行熔融處理，產出表面光澤之電鍍鍍錫鋼片。 The original plate with matt surface treatment is melted after tin plating to produce electroplated tin-plated steel sheet with glossy surface.
M1、M2、M3	鈍面處理 Matt Finish	鈍面處理的原板於鍍錫後不進行熔融處理，產出表面無光澤之電鍍鍍錫鋼片。 The original plate with matt surface treatment is not subjected to melting treatment after tin plating to produce electroplated tin-plated steel sheet with no glossy surface.

## 包裝與標示 Packing and Identification

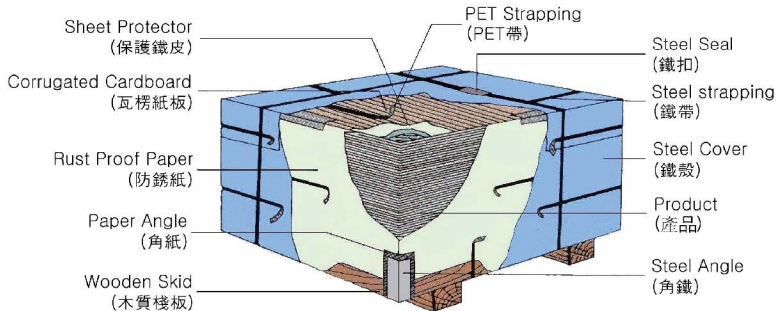
### 1. 包裝 Packing

為確保馬口鐵品質，統一馬口鐵皮產品特別注重包裝的密閉性與安全性。通常以1500張馬口鐵皮為一包裝箱，但可視客戶要求而另定包裝張數。

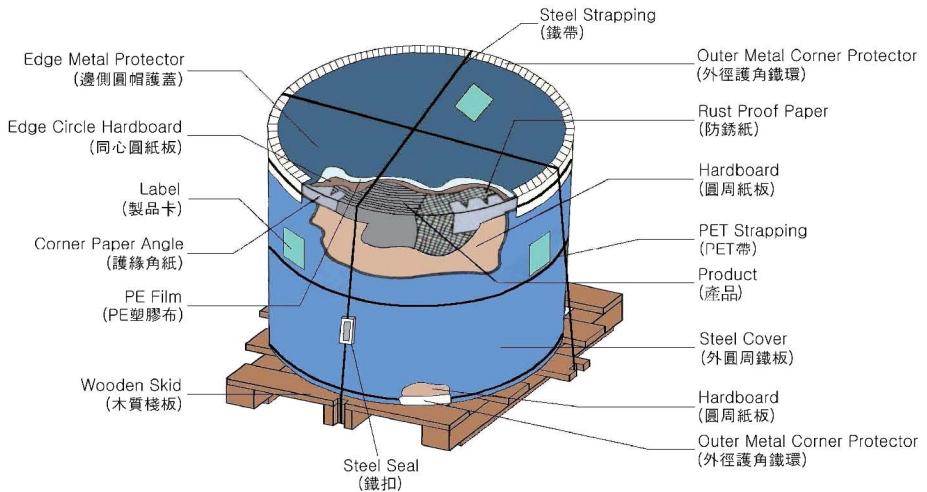
Ton Yi packing has been specially developed to guarantee its product during the handling, transportation and warehousing. Tinplates in cut lengths are usually shipped in lots containing 1500 sheets in one skid. The quantity of sheets per package can be modified when required.



## SHEET包裝型式



## UP-END包裝型式



## 2. 標示 Identification

本公司馬口鐵皮產品在包裝上附有標示卡，內容包括鋼種、調質度、鍍錫量、尺寸、張數及檢查號碼。

**All packages of cut length are attached with labels carrying STEEL TYPE, TEMPER, SURFACE FINISH, DIMENSIONS, WEIGHT, QUANTITY OF SHEETS CONTAINED, INSPECTION NO, etc.**

## 客戶訂貨須知 Order Requirement

統一公司為提供高品質及符合客戶需要之產品，因此希望 貴客戶在訂貨時請惠予提供以下資料：

**When an inquiry is made or when an order is placed for Ton Yi please give the following information.**

### ■ 1. 馬口鐵種類及規格 Tinplate specification

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**A. 鋼種 Steel type**

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**B. 尺寸 Dimension**

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**C. 鍍錫量 Tin coating weight**

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**D. 調質度 Desired temper designation**

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**E. 表面處理 Surface finish required**

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### ■ 2. 用途 Specific end use

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### ■ 3. 包裝方式 Packing and marking requirement

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### ■ 4. 交貨期 Delivery requirement

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### ■ 5. 其他有關事項 Any other information, if required.

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