

公司簡介

台暉鋁業股份有限公司位在台南市官田工業區，於1982年創立官田總廠，2006年增建官田二廠。

台暉公司擁有熔鑄設備、熱軋產線、冷軋產線及精檢設備。熱軋機年產能10萬噸，主要設備達到國際先進水準。

主要生產 1000系、3000系、5000系合金之鋁平片、鋁捲片。公司技術研發能力強，有多項檢測儀器，已建立 ISO9001 品質系統驗證。

鋁片廣泛應用於電子資訊、電器通信、家電器具、空調散熱、金屬製品、包裝材料、建築材料、交通運輸等行業。

台暉公司全體員工秉持「品質、服務、創新」的理念、專業的生產技術，致力提升品質，期能發展鋁品工業。

INTRODUCTION

Taiwell Aluminum Corporation, located in Kuan-Tien Industrial Park of Tainan City founded Head Plant in 1982 and extended Second Plant in 2006.

Taiwell owns casting equipments, hot rolling line, cold rolling line and finishing equipments. The annual capacity of hot rolling is about 100,000 metric tons. Main facilities reach the international advanced level.

Taiwell mainly produces high quality aluminum sheets and coils involved alloys 1000 series, 3000 series, 5000 series with advanced technology R&D capability. Taiwell equipped variety of test facilities and instruments and has been established ISO 9001 quality system certification

Taiwell aluminum alloy sheets and coils are extensively applied to electronic parts, electric communication, household appliances, air conditioner and heat sink, metal products, packing and cans, building materials, transportation and so on.

We, Taiwell, keep the faith "Committed to quality, Service and Innovation", specialized production technique devoted to improve quality and expect to develop aluminum product industrial.

熔鑄 MELTING & CASTING

鑄造機

熔爐熔煉後的鋁湯經過線上除氣、除渣、細化後，注入水冷式鑄模中，藉由嚴格控制溫度、速度、水流等關鍵技術來鑄造鋁扁錠。

D.C. CASTER

After being online degassed, de-dross and refined, molten aluminum is poured into casting mold with water cooling system to cast slabs with strict control of temperature, speed, water flow and relevant key techniques.

熔爐

熔解鋁錠、廢鋁、母合金添加劑，配製成客戶需求合金的化學成份後，將熔解鋁液鑄造成鋁扁錠。

MELTING FURNACE

Melting aluminum ingots, scrap, main alloy component are mixed to customers' need for chemical composition, it melts aluminum liquid and cast into aluminum slabs.

扁錠

經鑄造成形長度達5000mm且品質優異之鋁扁錠，以提供生產高品質之熱軋鋁板及鋁捲。

SLABS

The casting length is up to 5000mm with excellent quality aluminum slabs to produce high quality hot-rolling aluminum sheets and coils.





熱軋 HOT ROLLING

熱軋機

產出的鋁扁錠經過匏皮機、加熱爐和四重熱軋機，進行多道次壓軋，製成適合冷軋工藝的高品質熱軋捲。



HOT ROLLING MILL

The Slabs through scalping machine, reheating furnace and four reversing hot rolling mill, multi-pass rolling to produce high quality hot rolling coil that suitable for cold rolling.

匏皮機

採雙面一次匏削，去除扁錠表面的氧化層，以提高熱軋產品的表面品質。

SCALPING MACHINE

Shave both sides at a time, remove the surface oxide layer and enhance the surface quality of hot rolling product.

加熱爐

加熱鋁扁錠，使扁錠達到熱軋作業所要求的溫度。加熱時，始終保持一定的溫度，直到扁錠均勻受熱。

REHEATING FURNACE

Reheating the aluminum slabs to make slabs achieve the hot rolling desired temperature. Constantly maintain regular temperature to reheat until evenly heated.

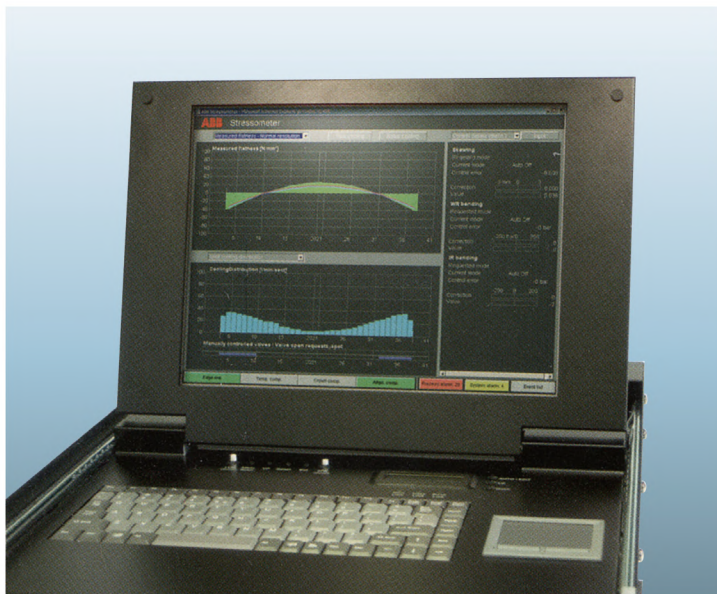


冷軋 COLD ROLLING

N.1 冷軋機

單向四重冷軋機可產出高品質產品。透過自動片形控制AFC和自動厚度控制AGC能保證產品質量，並提供多種規格之產品。

生產厚度 6.0 mm ~ 0.1 mm



N.1 COLD ROLLING MILL

One set of four high non-reversing cold rolling mill to output high-quality products. The plant automatically controls flatness and thickness by AFC and AGC for wide range of final products from thickness 6.0mm~0.1mm

自動化片形控制 AFC

AUTOMATIC FLATNESS CONTROL

自動化厚度控制 AGC

AUTOMATIC GAUGE CONTROL

N.2 冷軋機

冷軋機均配置自動片形控制AFC及自動厚度控制AGC以保證產品質量，符合國際標準。

N.2 COLD ROLLING MILL

N.1 and N.2 cold rolling mills are all equipped with AGC and AFC to ensure the thickness and flatness of aluminum strip to meet the international standard.





精檢 FINISHING

張平機

張平機具有裁邊、清洗、整平與分捲功能，並使鋁捲、片擁有良好的平坦度以符合客戶之需求。

分條機

按照客戶需求準確的切割產品寬度，以提供尺寸精密度高、品質佳之鋁捲。

切片機

經過整平後按照客戶需求準確的切割長度滿足客戶的多種需求。

TENSION LEVELLER

Function of Tension Levelling are to side trim, degrease, level, slice and to make aluminum coils and sheets with good flatness to meet customer's needs.

SLITTING LINE

Width of product accurately slit to meet customers need and to provide high precision, good quality slitted aluminum coils.

| Thickness | Width | Inside Dia |
|-----------|---------|----------------|
| 0.2~5.0 | 15~1220 | 200/305/508 mm |

CUT TO LENGTH

After levelling, length is accurately cut to meet the various needs of customers.



品質管理 QUALITY MANAGEMENT

分光儀

SPECTROMETER

將材料經過火花放電就所逸出之能量分解為光譜線的科學儀器，因每一元素之原子序不同將逸出之光譜傳導至光學系統中，轉換為電荷進行測量各元素之比率。



金相顯微鏡

METALLURGICAL MICROSCOPE

To identify and analyze metal structure, equipped with camera device to measure the optical spectra and analysis for editing, output, storage, management, etc.



深沖試驗機

CUPPING TESTER

A test to measure material Drawability. To determine the metal material press performance and measure the earing are according to stamping cup depth.



萬能試驗機

UNIVERSAL TESTING MACHINE

試驗各種材料之抗拉強度、降伏、伸長率、撕裂、扭力、破裂等功能。利用材料的變形程度來測得材料狀況。



產品規格

PRODUCT SPECIFICATION

化學成份 Chemical Composition

| 合金編號 Alloy No. | 化學成份 Chemical Composition % | | | | | | | | |
|-------------------|-----------------------------|------|-----------|-----------|-----------|-----------|------|------|---------|
| | Si | Fe | Cu | Mn | Mg | Cr | Zn | Ti | Al(Min) |
| 1070 | 0.20 | 0.25 | 0.04 | 0.03 | 0.03 | - | 0.04 | 0.03 | 99.70 |
| 1050 | 0.25 | 0.40 | 0.05 | 0.05 | 0.05 | - | 0.05 | 0.03 | 99.50 |
| 1100 | Si+Fe=0.95 | | 0.05-0.20 | 0.05 | - | - | 0.10 | - | Rem |
| 3003 | 0.60 | 0.70 | 0.05-0.20 | 1.00-1.50 | - | - | 0.10 | - | Rem |
| 5052 | 0.25 | 0.40 | 0.10 | 0.10 | 2.20-2.80 | 0.15-0.35 | 0.10 | - | Rem |
| 5657 | 0.08 | 0.10 | 0.10 | 0.03 | 0.60-1.00 | - | 0.05 | - | Rem |

特性與用途 Characteristics & Applications

| 合金編號 Alloy No. | 特性 Characteristics | 用途 Applications |
|-------------------|----------------------------------|---|
| 1070 | 熱及電傳導性高，加工成形性、耐蝕性、陽極處理性良好。 | 化妝品配件、軟管、電容器、旋鈕、裝飾品、反射板、銘板、相框、照明器具。 |
| 1050 | 加工成形性、耐蝕性良好。 | 化妝品配件、散熱片、電容器外殼、燈罩、燈帽。 |
| 1100 | 加工成形性、耐蝕性、熱傳導性、陽極處理性良好。 | 建築材料、車牌、導引片、家電器具、炊具、散熱片、電子基座、鞋眼、鉚釘、瓶蓋、風扇、散熱片、保溫材。 |
| 3003 | 加工成形性、耐蝕性良好，強度較1100高。 | 鋁帷牆、炊具、蒸發皿、手提箱、瓶蓋、各種容器、印刷板、建築材料。 |
| 5052 | 耐蝕性佳，尤其耐海水腐蝕，加工成形性及焊接性良好，陽極處理性佳。 | 電腦外殼、背光板、車輛及船舶材料、貨櫃外箱板、家電器具、齒輪、光學儀器、罐蓋、鐘錶面板、百葉簾。 |
| 5657 | 耐蝕性佳，加工成形性及焊接性良好，陽極處理性佳。 | 化妝品配件、汽車與家電裝飾用料。 |

機械性質 Mechanical Properties

| 合金 Alloy | 鍊度 Temper | 厚度 Thickness, mm | 抗拉強度 Tensile Strength, kgf/mm ² | | 降伏強度 Yield, kgf/mm ² | 延伸率 Elongation, % |
|-------------|--------------|---------------------|---|------|------------------------------------|----------------------|
| | | | Min | Max | | |
| 1070 | O | 0.15-0.50 | 6.0 | 9.0 | ≥1.53 | 15 |
| | | 0.51-1.27 | | | | 22 |
| | | 1.28-12.7 | | | | 25 |
| 1070 | H14 | 0.15-0.50 | 9.0 | 13.0 | ≥6.63 | 1 |
| | | 0.51-0.80 | | | | 3 |
| | | 0.81-1.30 | | | | 4 |
| | | 1.31-3.20 | | | | 5 |
| 1050 | O | 0.15-0.50 | 7.0 | 10.0 | ≥2.04 | 15 |
| | | 0.51-1.27 | | | | 20 |
| | | 1.28-12.7 | | | | 25 |
| 1050 | H14 | 0.15-0.50 | 10.0 | 14.0 | ≥7.65 | 1 |
| | | 0.51-0.80 | | | | 3 |
| | | 0.81-1.30 | | | | 4 |
| | | 1.31-3.20 | | | | 5 |
| 1100 | O | 0.15-0.50 | 7.7 | 10.9 | ≥2.46 | 15 |
| | | 0.51-1.27 | | | | 20 |
| | | 1.28-12.7 | | | | 25 |
| 1100 | H14 | 0.15-0.50 | 11.3 | 14.8 | ≥9.84 | 1 |
| | | 0.51-0.80 | | | | 3 |
| | | 0.81-1.30 | | | | 4 |
| | | 1.31-3.20 | | | | 5 |
| 3003 | O | 0.15-0.50 | 9.9 | 13.4 | ≥3.52 | 18 |
| | | 0.51-1.27 | | | | 20 |
| | | 1.28-12.7 | | | | 23 |
| 3003 | H14 | 0.15-0.50 | 14.1 | 18.3 | ≥11.95 | 1 |
| | | 0.51-0.80 | | | | 3 |
| | | 0.81-1.30 | | | | 4 |
| | | 1.31-3.20 | | | | 5 |
| 5052 | O | 0.15-0.50 | 17.6 | 21.8 | ≥6.68 | 14 |
| | | 0.51-1.27 | | | | 16 |
| | | 1.28-12.7 | | | | 20 |
| 5052 | H32 | 0.15-0.50 | 21.8 | 26.7 | ≥16.17 | 4 |
| | | 0.51-1.27 | | | | 5 |
| | | 1.28-12.7 | | | | 7 |
| 5657 | H241 | 0.80-2.30 | 12.7 | 16.2 | - | 13 |

產品用途 APPLICATIONS



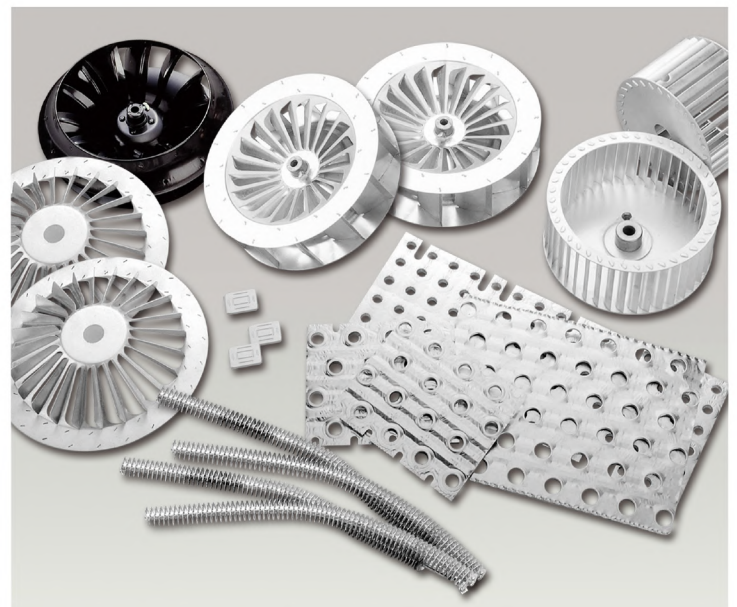
電子資訊 Electric 3C Material



電氣通信 Electric & Cables



空調設備 Cold Chain



散熱配件 Heat Changer



金屬製品 Metal Products



化妝品配件 Cosmetic accessories



建築材料 Building & Construction



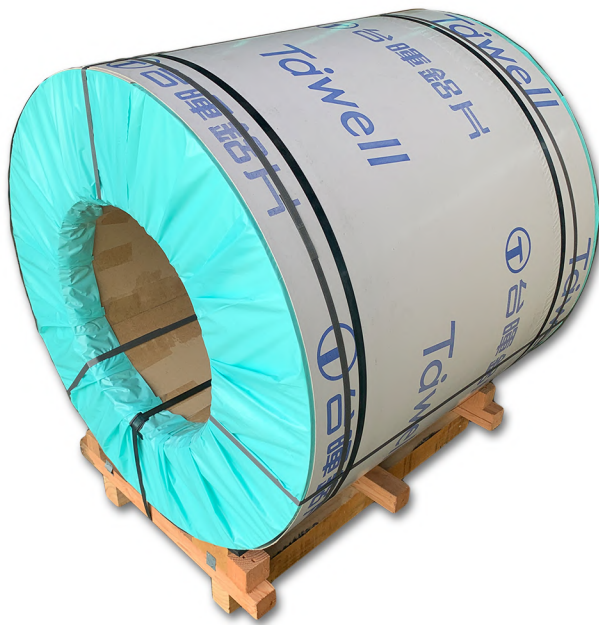
交通運輸 Transportation

產品包裝 Package

鋁卷

Aluminum Coil

【臥式】Eye to the wall



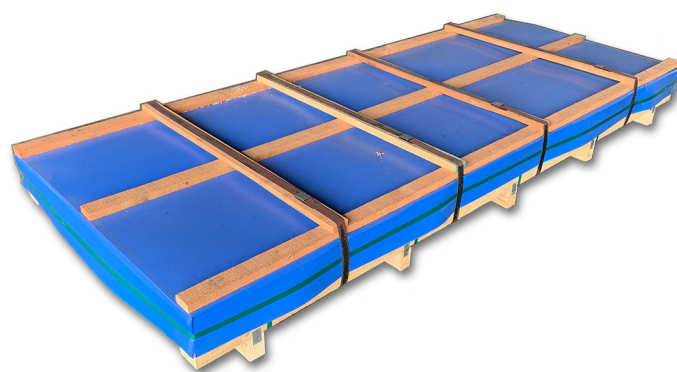
【立式】Eye to the sky



包裝材料

Packaging materials

| | | | |
|------|-------------------|---------------------|---|
| 棧板 | ：木棧板、煙燻棧板、鐵棧板 | Pallet | ：Wooden pallet, Fumigated pallet, Iron pallet |
| 固定繩索 | ：塑鋼帶、鐵帶 | Packaging strap | ：PET, Metal strap |
| 內層包裝 | ：聚丙烯(PP)、聚乙烯(PE) | Interior package | ：Polypropylene(PP), Physical Education(PE) |
| 外層包裝 | ：紙板(Taiwell Logo) | Outside package | ：Cardboard Paper |
| 防潮 | ：乾燥劑 | Moisture-proof | ：Desiccant |
| 緩衝 | ：PU泡棉(聚胺酯) | Cushioning material | ：Polyurethane(PU) |

鋁板片**Aluminum Sheet****【內銷】 Domestic sales****【外銷】 Export sales****包裝材料****Packaging materials**

| | | | |
|------|---------------|---------------------|--|
| 棧板 | ：木棧板、煙燻棧板、鐵棧板 | Pallet | : Wooden pallet, Fumigated pallet, Iron pallet |
| 固定繩索 | ：塑鋼帶、鐵帶 | Packaging strap | : PET, Metal strap |
| 內層包裝 | ：聚丙烯(PP) | Interior package | : Polypropylene(PP) |
| 外層包裝 | ：中空版(PP)、三合板 | Outside package | : Corrugated Plastic Sheet, Plywood |
| 防潮 | ：乾燥劑 | Moisture-proof | : Desiccant |
| 緩衝 | ：瓦楞紙板 | Cushioning material | : Corrugated Board |

產品 Product

一般 Normal

1xxx系鋁合金 1xxx Series Aluminium Alloy

1070、1050、1100

| 鍊度 Temper | 厚度 Thickness mm | 寬度 Width mm | 內徑 Inside Diameter mm | 形狀 Shape |
|--------------|---------------------|----------------|--------------------------|--------------------|
| F, O | 0.15-5.0 1.0-6.5 | 915/1230 | 308/508 - | 卷 Coil 板片 Sheet |
| H1n, H2n | 0.15-3.2 1.0-6.5 | 915/1230 | 308/508 - | 卷 Coil 板片 Sheet |

3xxx系鋁合金 3xxx Series Aluminium Alloy

3003

| 鍊度 Temper | 厚度 Thickness, mm | 寬度 Width, mm | 內徑 Inside Diameter, mm | 形狀 Shape |
|--------------|---------------------|-----------------|---------------------------|--------------------|
| F, O | 0.15-5.0 1.0-6.5 | 915/1220 | 308/508 - | 卷 Coil 板片 Sheet |
| H1n, H2n | 0.15-3.2 1.0-6.5 | 915/1220 | 308/508 - | 卷 Coil 板片 Sheet |

5xxx系鋁合金 5xxx Series Aluminium Alloy

5052^[1]、5657^[2]

| 鍊度 Temper | 厚度 Thickness, mm | 寬度 Width, mm | 內徑 Inside Diameter, mm | 形狀 Shape |
|---------------|---------------------|-----------------|---------------------------|--------------------|
| [1] F, O, H3n | 0.4-3.0 1.0-3.0 | 915/1220 | 308/508 - | 卷 Coil 板片 Sheet |
| [2] H241, H2n | 0.4-3.0 1.0-3.0 | 915/1220 | 308/508 - | 卷 Coil 板片 Sheet |

壓花 Embossed

1xxx系鋁合金 1xxx Series Aluminium Alloy

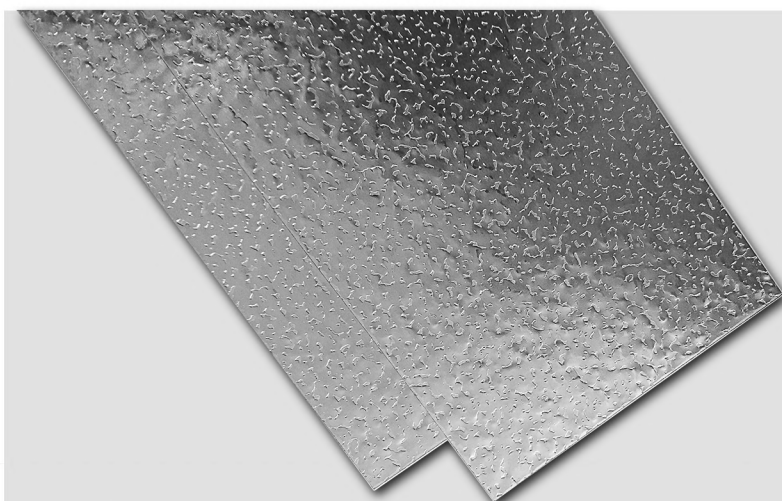
1050、1100

| 鍊度 Temper | 厚度 Thickness mm | 寬度 Width mm | 內徑 Inside Diameter mm | 形狀 Shape |
|--------------|--------------------|----------------|--------------------------|--------------------|
| O | 0.4-1.2 | 900-1250 | 508 - | 卷 Coil 板片 Sheet |
| H1n | 0.4-1.2 | 900-1250 | 508 - | 卷 Coil 板片 Sheet |

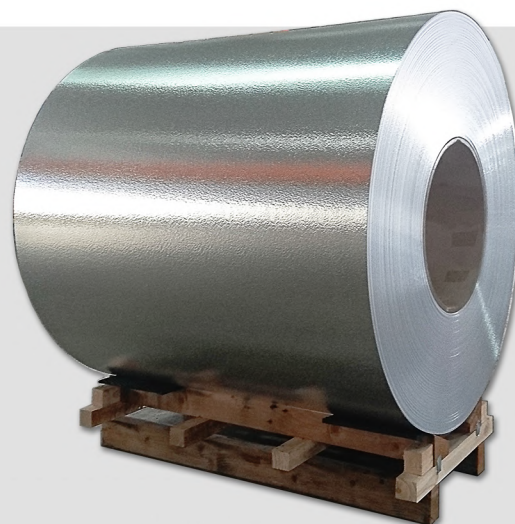
3xxx系鋁合金 3xxx Series Aluminium Alloy

3003

| 鍊度 Temper | 厚度 Thickness mm | 寬度 Width mm | 內徑 Inside Diameter mm | 形狀 Shape |
|--------------|--------------------|----------------|--------------------------|--------------------|
| O | 0.4-1.2 | 900-1250 | 508 - | 卷 Coil 板片 Sheet |
| H1n | 0.4-1.2 | 900-1250 | 508 - | 卷 Coil 板片 Sheet |



鋁花片
Aluminum Embossed Sheet



鋁壓花卷
Aluminum Embossed Coil