

# HANCHEN METAL

Focus on quality, make every transaction  
merit a repeat order



Shandong Hanchen Metal Co.,Ltd

Address:Huijin Industrial Park,High Tech Zone,Zibo,Shandong,China.

Email:sales@hanchenmetal.com

Tel: +86 13969310856

[www.hanchenmetal.com](http://www.hanchenmetal.com)

# COMPANY INTRODUCTION

“We grow relationships by efficiently meeting your needs.”

**Hanchen Metal** is dedicated to the production, trade and service of color coated aluminum coils. Our company have been certified with ISO9001 in Quality Management Systems , ISO14001 in Environmental Management Systems , ISO 45001 for Occupational Healthy and Safety.

Our office is located in Zibo city, Shandong, China, near Jinan, Qingdao.Our factory (Shandong KunYue) is loacted in Binzhou city. We have 2 fully automatic color coating production lines that can provide color coated aluminum coils in various alloy series and temper and supporting customized services to meet your most demanding specifications requirements and be shipped on time to all parts of the world.



HANCHEN metal

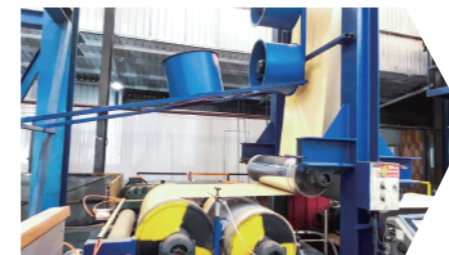
# OUR TEAM

Hanchen Metal always adheres to the concept of providing customers with the highest level of service and works with you to meet your unique needs.We has the professional production team will fully consider the needs of customers and do their best to produce high-quality products better matches customer expectations.



## Regular training

Hanchen will regularly organize professional skills training to improve ourselves to meet the more stringent requirements of customers.



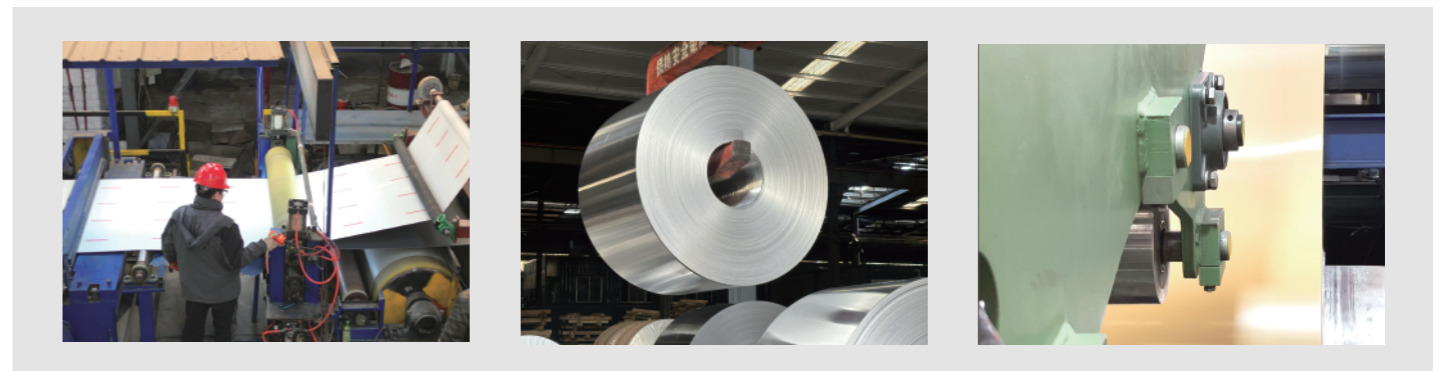
## Safety Production

Hanchen Metal always puts safety in production first, strictly follows the requirements to take safety measures, wears safety helmets and gloves.

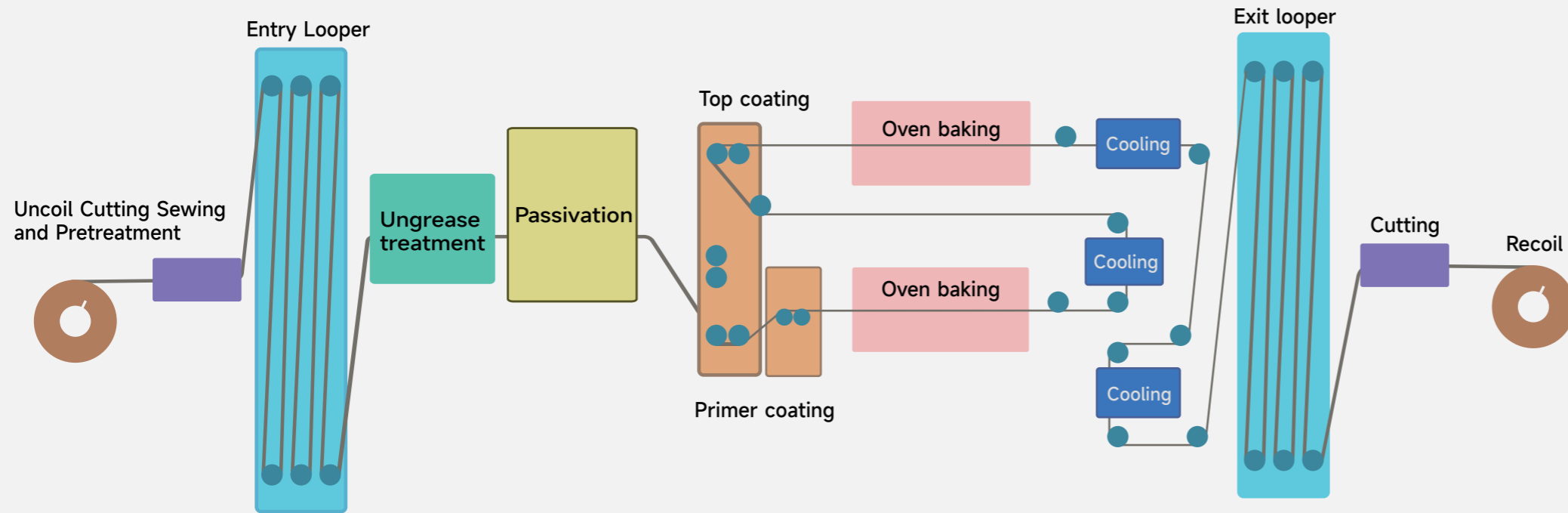


## Team Activity

Hanchen Metal regularly organizes team dinners, trips and vacations, so that every colleague can enjoy the life in their spare time.



# PREPAINTED ALUMINUM COILS TECHNOLOGICAL PROCESS OF PRODUCTION



## FIRM COATING

The 30m long efficient cleaning system fully cleans the raw material strip and is equipped with a better passivation coating to ensure the coating firmness.



## ENVIRONMENTALLY FRIENDLY

Using chromium-free primer, the product is more environmentally friendly.



## RTO EXHAUST GAS INCINERATION SYSTEM

At high temperature, organic matter (VOCs) in the exhaust gas is oxidized into the corresponding carbon dioxide and water, and the main three-chamber RTO exhaust gas decomposition efficiency reaches more than 99%, and the heat recovery efficiency reaches more than 95%.



## UNIFORM COATING

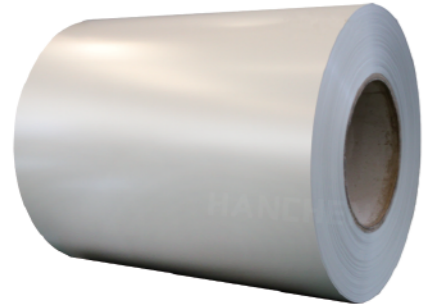
The U-shaped coater changes color quickly, and pressure sensors are equipped on both sides of the coater to achieve more uniform film thickness control. It is also equipped with an extra-long curing oven to fully cure the coating and improve the adhesion and stability of the coating.



## COLOR DIFFERENCE WORRY FREE

The fresh air system of the extra-wide oven ensures that similar products will control the color difference according to ASTM D2244 standard.

# COLORED ALUMINUM COIL



**Aluminum series:**

1 series(1050,1060,1100),3 series(3003,3004,3105),5 series(5052)

**Aluminum temper:**

H12 H14 H16 H18 H22 H24 H26 H32 H34 H36 O

**Surface Finish:**

Bright, Matte, Mirror, Brushed

## Choose the Right Coating Based on Application Environment Requirements and Architectural Design



PVDF has the best weather resistance and corrosion resistance ,with the service life of about 20-25 years. It suitable for high-end, long-term buildings in harsh application environments (coastal, acid rain, high UV).



HDP has good corrosion resistance, weather resistance, UV resistance, strong impact resistance and the service life of about 10-15 years. It suitable for industrial and commercial buildings in high temperature and high humidity application environments.



PE has good color performance but poor weather resistance and corrosion resistance and the service life of about 8-10 years. It suitable for temporary projects or indoor ceilings or normal application environments.

## PVDF HDP PE Performance Comparison



**Weather resistance**

PVDF Coating > HDP Coating > PE Coating



**Corrosion resistance**

PVDF Coating > HDP Coating > PE Coating



**Color performance**

PE Coating > HDP Coating > PVDF Coating



**Coating Adhesion**

PVDF Coating > HDP Coating > PE Coating



**Coating Flexibility**

HDP Coating > PVDF Coating > PE Coating



**Wear resistance**

PVDF Coating > HDP Coating > PE Coating

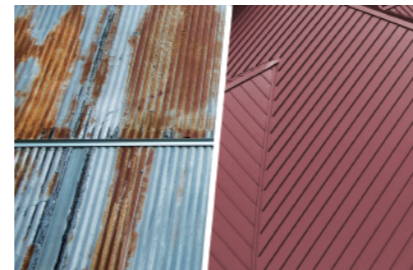
## Choose Coating According to Application Environment

Application Environment	PVDF	HDP	PE
Coastal	Most applicable strong corrosion resistance and not easy to fade	Applicable Corrosion resistance is not as good as PVDF	Not Applicable Poor corrosion resistance
High temperature and high humidity	Applicable Strong anti-UV and anti-oxidation capabilities	Most Applicable Better weather resistance and lower cost than PVDF	Not Applicable Poor weather resistance and easy to fade
Serious industrial pollution	Most applicable Strong acid and alkali resistance, chemical corrosion resistance	Applicable Compared with PE, it can resist chemical corrosion	Not Applicable Easily corroded by chemicals
Normal environment	Applicable Higher cost, long-term, high-end public buildings are optional	Applicable More durable than PE and lower cost than PVDF	Most Applicable Good color performance, high cost performance
Interior decoration	Not Applicable Low cost performance	Not Applicable More applicable for outdoor environment	Most Applicable Applicable for indoor ceilings, high cost performance

# WHAT ARE THE ADVANTAGES OF ALUMINUM MATERIALS?

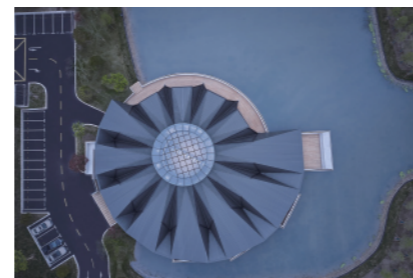
## Good Corrosion Resistance

The surface can form an oxide layer to prevent oxidation and erosion, and also acid and alkali resistance. Especially suitable for seaside houses and factories with acid and alkali gases.



## Long Service Life

Stable and reliable performance and easy maintenance, excellent durability and corrosion resistance, the service life can reach more than 30 years, more suitable for outdoor public buildings.



## Excellent Weather Resiatance

Our coils are exposed to harsh natural environments for a long time, and can withstand sunlight, rain and seasonal temperature changes, still maintain their performance and appearance.



## 100% Recycling

Aluminum coils can be 100% recycled and is an environmentally friendly material that reduces pollution. It is becoming more and more common in building construction.



# OVER 100+ COLORS TO CHOOSE FROM



RAL 1001 BEIGE	RAL 7048 PEARL MOUSE GREY	RAL 8001 OCHRE BROWN	RAL 1015 LIGHT IVORY
RAL 8003 CLAY BROWN	RAL 8004 COPPER BROWN	RAL 8008 OLIVE BROWN	RAL 8011 NUT BROWN
RAL 8012 RED BROWN	RAL 8014 SEPIA BROWN	RAL 9016 TRAFFIC WHITE	RAL 7035 LIGHT GREY
RAL 8023 ORANGE BROWN	RAL 8024 BEIGE BROWN	RAL 3002 CARMINE RED	RAL 3003 RUBY RED
RAL 9001 CREAM	RAL 9002 GREY WHITE	RAL 9003 SIGNAL WHITE	RAL 9005 JET BLACK
RAL 9006 WHITE ALUMINIUM	RAL 9007 GREY ALUMINIUM	RAL 9010 PURE WHITE	RAL 9011 GRAPHITE BLACK
RAL 7023 CONCRETE GREY	RAL 7024 GRAPHITE GREY	RAL 7044 SILK GREY	RAL 7045 TELE GREY1
RAL 7026 GRANITE GREY	RAL 7030 STONE GREY	RAL 7046 TELE GREY2	RAL 7047 TELE GREY4
RAL 1013 OYSTER WHITE	RAL 1014 IVORY	RAL 1015 LIGHT IVORY	RAL 1017 SAFFRON YELLOW

# COLORED ALUMINUM APPLICATION

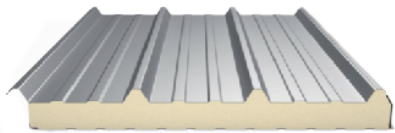
HANCHEN metal



## Aluminum roofing

- **Application:** Used for overall roofs with large spans and large areas
- **Process Design:** The surface can be coated with PE or PVDF coating according to the color required by the customer, which is durable and weather-resistant
- **Advantages:** Aesthetically Pleasing, excellent weather resistance, corrosion resistance, acid and alkali resistance
- **Aluminum alloy:** AA1050 AA 1060 AA1100 AA3003 AA3004 AA3105
- **Colored:** Customized colors according to customer requirements
- **Width:** 40mm-1600mm, support customized colors according to customer requirements
- **Thickness:** 0.2-2mm, support customized colors according to customer requirements

## Alumimun Sandwich Panels



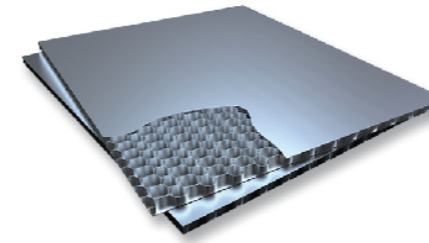
- **Application:** The inner and outer layers of the sandwich panels are aluminum sheet
- **Advantages:** Excellent weather resistance, corrosion resistance self-cleaning and thermal insulation properties.
- **Aluminum alloy:** AA1050 AA 1060 AA1100 AA3003 AA3004 AA3105
- **Color:** Customized colors according to customer requirements
- **Width:** 40-1600mm, support customized colors according to customer requirements
- **Thickness:** 0.2-2mm, support customized colors according to customer requirements

## Aluminum Ceilings Panels



- **Application:** Integrated ceiling, industrial ceiling, aluminum square tube, aluminum strip buckle, aluminum hanging sheet
- **Process design:** The surface of the aluminum alloy ceiling is treated with PE roller coating
- **Advantages:** Good fireproof and moisture-proof performance, easy installation and maintenance, and good appearance
- **Aluminum alloy:** AA1050 AA 1060 AA1100 AA3003 AA3004 AA3105
- **Color:** The color can be customized according to customer requirements, the commonly used color is white, such as ral9002,9016
- **Width:** It can be cut to any width for customers
- **Thickness:** Common thicknesses include 0.6mm,0.7mm,0.8mm, 0.9mm,1.0mm

## Aluminum Honeycomb Panels



- **Application:** The inner and outer layers of the aluminum alloy honeycomb panel are aluminum sheet, and the honeycomb core is bonded with the aluminum alloy surface plate using structural adhesive.
- **Advantages:** Highly resistant to corrosion and scratches, and have good sound insulation, heat insulation, fire prevention and thermal insulation effects.
- **Aluminum alloy:** AA1050 AA1060 AA1100 AA3003 AA3004 AA3105
- **Color:** Customized colors according to customer requirements
- **Width:** 40-1600mm, support customized colors according to customer requirements
- **Thickness:** 0.2-2mm, support customized colors according to customer requirements

## COLORED ALUMINUM COIL SPECIFICATION

Thickness	0.15mm-2mm
Width	Max 1650mm, support customer customization
Coating thickness	≥18 microns (PE), ≥25 microns (PVDF), or as customer request
Color	RAL color card or customization as customer sample color
Glossiness	10-90%
Coating	PVDF / HDP/PE
Coil inter diameter	405mm, 505mm, 605mm
Warranty	8-10 years for PE coating , 20-25 years for PVDF coating
Packing and Loading	Eye to wall ,Eye to sky, as export packaging and pallet , support customer customization



# QUALITY INSPECTION

In production, we insist to strict quality standard control. Each processing part will be assigned 1-2 specialized QC technicians to control production. After production completed, we will randomly selected samples for T-bend, hardness (with pencil), adhesive performance, color difference, thickness, gloss, MEK testing according to ASTM standards. The unqualified products will be reworked until they meet the standards.



## 01 After-sales service

**Quality problem:** If there is a quality problem with the products received, our sales will confirm the problem with you as soon as possible and propose a solution within 24 hours.

**Regular follow-up:** Our sales will regularly contact customers for product feedback to ensure that the performance of the product in application meets expectations.

## 02 Quality Warranty

Our color-coated aluminum coils will strictly select high-quality aluminum alloy materials and high-quality brand coatings (such as AkzoNobel) that have passed the test. The coating systems meet all ASTM physical property requirements.

Coating service life guarantee:

**PE coating:** service life 8-10 years, glossiness according to ASTM D 523.

**PVDF coating:** service life 15-20 years, color difference  $\leq 0.5\Delta E$ , chalk resistance according to ASTM D 4214, glossiness according to ASTM D 523.

### Disclaimer

Please understand that color-coated aluminum coils are fragile products. Improper storage or use will affect the service life of color-coated aluminum coils. HanchenMetal will not provide after-sales service for quality problems caused by the following situations.

**Improper storage or use:** color-coated aluminum coils are exposed to acidic and alkaline environments for a long time, and are scrubbed with non-recommended cleaning agents.

**Artificially damaged:** damage caused by scratches, impacts, improper construction, etc. during transportation.

**Exceeding the service life:** natural aging and slight fading that exceed the warranty period.

**Force majeure:** damage caused by force majeure factors such as earthquake, flood, fire, war, etc.

## 03 Delivery Warranty

Our color coated aluminum coils are produced in accordance with ASTM B209 standard and meet customer order requirements.

**Thickness tolerance:** The thickness tolerance of aluminum alloy is controlled within  $\pm 0.02\text{mm}$ , and the coating thickness is strictly in accordance with customer requirements.

**Color consistency:** Precision color matching technology is used to ensure that the color error of the same batch of products is  $\leq 0.5\Delta E$ .

**Packaging:** All products are packaged in moisture-proof, anti-oxidation, and anti-damage packaging, which meets export standard packaging.

**Delivery time:** Conventional colored aluminum coil 7-10days, customized products 15-30days.