



CASE STUDY

Galvanized Steel & Color-Coated
Steel Construction Project



PREFACE



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Every construction project cannot be separated from the support of high-quality materials. We are committed to providing customers with excellent galvanized steel, color-coated steel and other high-performance materials. From complex environmental adaptability to material durability, we have been listening carefully to customers' needs and tailoring reliable solutions for each project.

This case collection records many classic projects that we have completed with our customers. Behind each case, there are breakthroughs in technical challenges and tacit cooperation. Whether it is the toughness and cold resistance of Antarctica or the high-strength demand of industrial bases, our materials have consistently performed excellent performance and protected the stability and beauty of each building.

We hope these cases can make you feel our dedication and insistence on quality, and we also look forward to providing you with more support in the future and jointly achieving more wonderful projects.

PUBLIC ARCHITECTURE



NATIONAL GRAND THEATRE

The National Grand Theatre has high strength and durability requirements for building materials, especially structural steel, which must have both stable performance and long-term corrosion resistance. Customers require steel to have reliable corrosion resistance and high-quality processing adaptability to meet the needs of complex designs.

Through strict process control, we provided 800 tons of high-quality St01Z hot-dip galvanized steel plates, each of which has excellent corrosion resistance and processing performance.

PUBLIC ARCHITECTURE

SHANGHAI WORLD FINANCIAL CENTER

The Shanghai World Financial Center is the second tallest building and the third tallest building in the world, and has extremely high performance requirements for the exterior curtain wall materials. The curtain wall needs to have excellent aesthetics, flatness and long-term weather resistance to ensure the stability and visual effects of the 492-meter-high building under complex climatic conditions. The customer requires the material to have a high galvanizing content and a high weather resistance coating to ensure the long-term service life and protective performance of the curtain wall.

We provided HDP color-coated plates with a thickness of 1.3mm, the brand is S280GD, and the galvanizing content is 280g/m². With excellent materials, it successfully met the building's high requirements for aesthetics and flatness, while ensuring the durability of the curtain wall.



PUBLIC ARCHITECTURE



NATIONAL EXHIBITION & CONVENTION CENTER

As one of the world's largest and most comprehensive exhibition complexes, the exhibition center needs to use materials with excellent corrosion resistance, color durability and long-term stability to meet the construction needs of its large-scale indoor and outdoor exhibition halls and supporting facilities. The customer requires the color of the color coated plate to be National Exhibition Gray, the coating structure to be 2/2, and the use of high-quality PE coating to ensure the durability and consistency of the material.

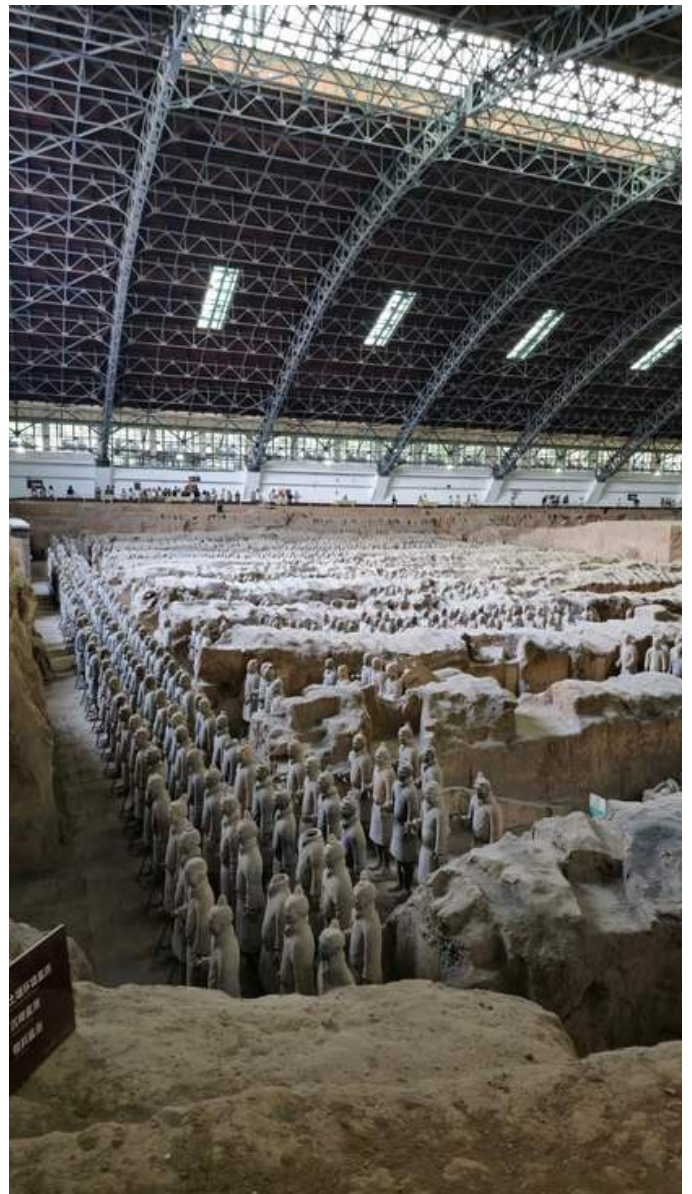
We supplied DX51D+AZ aluminum-zinc color-coated plates with a coating weight of 150g/m². With its excellent protective performance and stable coating structure, it successfully met the project requirements and helped build a world-class exhibition complex.

PUBLIC ARCHITECTURE

XI'AN TERRACOTTA WARRIORS EXHIBITION HALL

As a display venue for world cultural heritage, this project has strict quality and aesthetic requirements for building materials. The exhibition hall needs to use high-performance building materials that can adapt to the climatic conditions in the Xi'an area for a long time and coordinate with the solemn atmosphere of the historical and cultural sites. The customer requires steel to have excellent durability, corrosion resistance and color stability to ensure the long-term use of the building.

We provided sea blue polyester color-coated steel sheets (PE) with a galvanizing amount of 180 g/m², which successfully met the construction needs of the exhibition hall with its stable quality and excellent protective performance.



PUBLIC ARCHITECTURE



CAPITAL INTERNATIONAL AIRPORT

We participated in the construction of Terminal 3 of Beijing Capital International Airport. As one of the world's busiest aviation hubs, Terminal 3 has dual requirements for high performance and high aesthetics for building materials, especially for steel used in exterior walls and roof systems, which need to have excellent weather resistance and appearance stability.

We provided 2,789 tons of high-quality color-coated panels DX51D for the exterior walls and roof construction of the terminal. With its excellent coating adhesion and long-term protection ability, it successfully met the customer's requirements for anti-corrosion performance, color durability and weather resistance.

PUBLIC ARCHITECTURE

SHANGHAI PUDONG INTERNATIONAL AIRPORT

Pudong Airport is located in the coastal area and is affected by high humidity and salt spray environment all year round. Roofing materials need to have excellent corrosion resistance and long-term stability to cope with complex climate challenges. Customers require steel to have superb corrosion resistance and color durability, while meeting the special design requirements of large roofing systems.

We provided 3,290 tons of three-coated color-coated steel plates, made of TS280GD+Z and TS250GD+AZ. The coating design can effectively resist salt spray erosion and extreme weather conditions.



PUBLIC ARCHITECTURE

CHENGDU TIANFU INTERNATIONAL AIRPORT



This project puts forward strict quality standards and fast delivery requirements for building materials, especially in the steel structure construction of the cargo area and Sichuan Airlines base, the materials need to have both high strength and weather resistance. The customer requires the use of thick-coated, high-film-thickness fluorocarbon color-coated plates to ensure long-term stability and durability in large-span steel structures.

We supplied 2,400 tons of high-strength structural grade color-coated plates for multiple projects such as domestic cargo terminals, international cargo terminals, inspection centers, express centers, and Sichuan Airlines base maintenance areas. After receiving the order, we gave full play to the advantages of production, sales, and research collaboration, and completed the entire process from production to delivery in just 12 days, meeting the tight delivery cycle requirements and demonstrating efficient production and delivery capabilities.

PUBLIC ARCHITECTURE

QINGDAO PORT

As China's second largest foreign trade port with a throughput of 100 million tons, Qingdao Port has strict performance requirements for building materials during its expansion, especially in the port environment. The materials need to have excellent corrosion resistance and long-term stability to adapt to the complex conditions of high humidity and salt spray erosion along the coast. The customer requires the color-coated plate to have excellent protective performance and long-lasting color stability, while meeting the high-strength requirements of port infrastructure.

We supplied HDP hot-dip galvanized color-coated steel plates with the grade of DX51D+Z, the aluminum-zinc layer weight of 120 g/m², and the colors of sea blue and white gray. With its high weather resistance and stability, the material has been successfully used in many links of the Qingdao Port expansion project.



PUBLIC ARCHITECTURE

"BIRD'S NEST" NATIONAL STADIUM



As the main venue of the 2008 Beijing Olympic Games, the Bird's Nest has extremely high requirements for building materials, especially the steel used in the ventilation system, which must be both beautiful and high-performance. Customers require steel zinc flowers to be uniform and beautiful, with excellent anti-corrosion performance and stable quality to ensure that they meet the needs of complex structures and long-term use.



By optimizing the manufacturing process, we provide DX51D large zinc flower galvanized sheets with excellent performance, which not only meets the customer's design requirements, but also stands out in terms of cost performance. In the end, we supplied 5,000 tons of galvanized sheet and completed the delivery ahead of schedule, providing high-quality guarantee for the construction of ventilation systems for the two major venues, the "Bird's Nest" and the "Water Cube".

PUBLIC ARCHITECTURE

NATIONAL AQUATICS CENTER

As one of the landmark buildings of the 2008 Beijing Olympic Games, the "Water Cube" has put forward dual requirements for building materials, namely, innovation and environmental protection, especially for the steel used in ventilation ducts, which needs to have both corrosion resistance and high environmental protection performance. Customers require steel to have excellent corrosion resistance and outstanding appearance to adapt to the design concept of "green building".

We use advanced color coating technology to provide DX51D+AZ aluminum-zinc HDP white-ash color-coated steel plate, with an aluminum-zinc layer weight of 150 grams/square meter, which fully meets the structural performance and environmental protection requirements for ventilation duct construction.

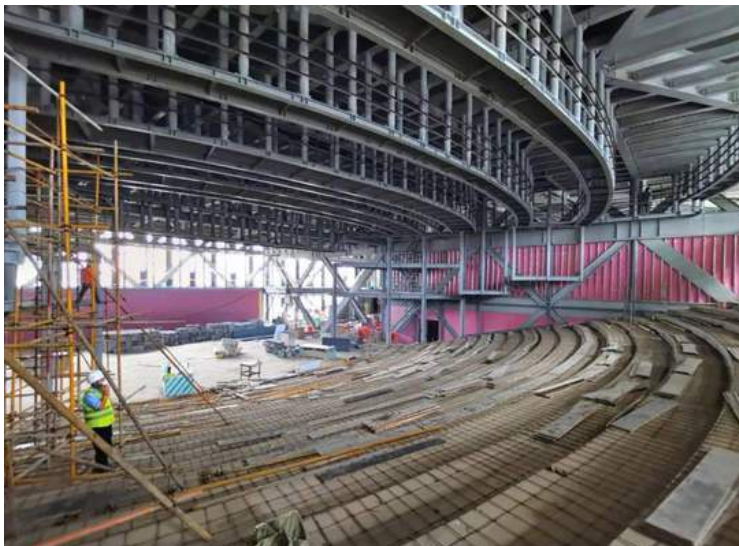


PUBLIC ARCHITECTURE

WINTER OLYMPIC WUKESONG ICE SPORTS PROJECT



As an important Winter Olympic venue to be built in 2019, the project puts forward dual requirements for building materials with high durability and environmental performance, especially the materials used for the roof, which need to have excellent corrosion resistance and stable structural strength to adapt to long-term use and extreme climate conditions.



The customer requires the roof plate to have stable coating weight and excellent anti-oxidation performance, while meeting the environmental protection standards of international event venues. We provided 0.8mm thick aluminum-zinc plate, coating weight of 150g/m², steel grade S280GD+AZ, and a total steel consumption of 150 tons.

PUBLIC ARCHITECTURE

XIONG'AN NEW AREA

As the first EPC model project in the new area construction plan, Rongcheng No. 1 has extremely high requirements for the quality and delivery cycle of color-coated plates. Color-coated plates need to meet high quality levels and be delivered in a short time. We have optimized the production process through close cooperation with product manufacturing departments and production units to meet the requirements of customers to adjust their needs many times.

In the end, we supplied 731 tons of color-coated plates required for the project and completed the delivery of the first batch of goods in just one week, which is more than 10 days shorter than the normal cycle. With excellent product quality, fast service response and precise delivery time, we have won high recognition from customers and laid a good foundation for subsequent cooperation.



FACTORY & RESIDENTIAL CONSTRUCTION

The plant is located in Nansha District, Guangzhou, a subtropical coastal area. The climate is warm, rainy and high in humidity, which places strict requirements on the anti-corrosion performance of building materials. We provided Baosteel aluminum-zinc fluorocarbon color-coated steel plate (S350GD+AZ), with an aluminum-zinc coating of 150g/m² and a bone white color. With its excellent weather resistance and anti-corrosion performance, this material was successfully used in the project construction in 2005, providing a reliable guarantee for the long-term stable operation of the plant.

GAC Toyota Plant



Tianjin Ruijin International School



The school is located in Hexi District, Tianjin. It is a new school building project of Ruijin International School in Meijiangan Residential Area. The customer put forward the requirements of aesthetics and durability of building materials to meet the design needs of classical shape and modern architectural style. We provided Baosteel color-coated plates (DX51D, PE coating, galvanized amount 180g/m²) for roof panel construction. This batch of color-coated plates successfully met the project requirements with its excellent quality and decorative effect, added unique charm to the school building, and ensured its stability in long-term use.

FACTORY & RESIDENTIAL CONSTRUCTION

Shandong Zibo Ceramic Industrial Park Project



The ceramic industrial base needs building materials that can cope with the complex challenges of high temperature, humidity and industrial environment for a long time. The customer requires the roof panels to have excellent corrosion resistance, high coating stability and reliable load-bearing capacity to meet the needs of large-scale industrial parks. We provided 3,100 tons of S350GD+AZ galvanized steel sheets with a thickness of 0.8mm and a coating weight of 150g/m².

Flag Dairy

The project is located in Chabei Management District, Zhangjiakou City. It integrates scientific research, breeding, processing and sales, and puts forward high standards for the weather resistance and aesthetics of building materials. We provided color-coated panels DX51D+Z, with a zinc layer weight of 180 g/m² and HDP coating in brocade blue and coffee colors, which are used for the exterior walls and roofs of the project buildings. With its excellent durability and stable color effects, the color-coated panels successfully met the dual needs of the dairy complex for functionality and aesthetics.



FACTORY & RESIDENTIAL CONSTRUCTION

Huawei has set extremely strict quality and performance requirements for the materials used in the project, ensuring that the products have excellent weather resistance, high strength and zero-defect production processes.



Huawei 5G Cloud Data Center

Customers require that the materials reach the industry's top level in terms of coating thickness, surface quality and production accuracy to meet the stringent requirements of the "Huawei Standard". We use thick film fluorocarbon coating and three-coating and three-baking processes, optimize the production plan, strictly control the process parameters, and overcome the technical difficulties of 3-4 times the film thickness. In the end, we successfully completed the production delivery and provided high-quality, zero-defect material support for Huawei's 5G Cloud Data Center.

FACTORY & RESIDENTIAL CONSTRUCTION

Coca-Cola has put forward dual requirements for high performance and environmental protection for the construction materials of the plant. The Shanghai plant is located in Minhang District, where the climate is changeable. The building materials must have excellent corrosion resistance, aging resistance and good thermal insulation performance to ensure the long-term stable operation and energy saving of the plant.

Coca-Cola Shanghai Plant

The customer requires the color of the color-coated panels to be uniform and beautiful, and to meet the high standards of environmental protection and brand image. We provided DX51D+AZ and S350GD+AZ color-coated panels, with coating types of HDP and PVDF, and colors of imperial white and thermal insulation white.



FACTORY & RESIDENTIAL CONSTRUCTION

As an important support base for China's aerospace industry, the launch site has strict weather resistance and quality stability requirements for building materials. Tianjin is located in the coastal area and is affected by complex climates such as salt spray, moisture and strong winds. Building materials must have excellent corrosion resistance and long-term durability.



Shenzhou-8 Tianjin Launch Base

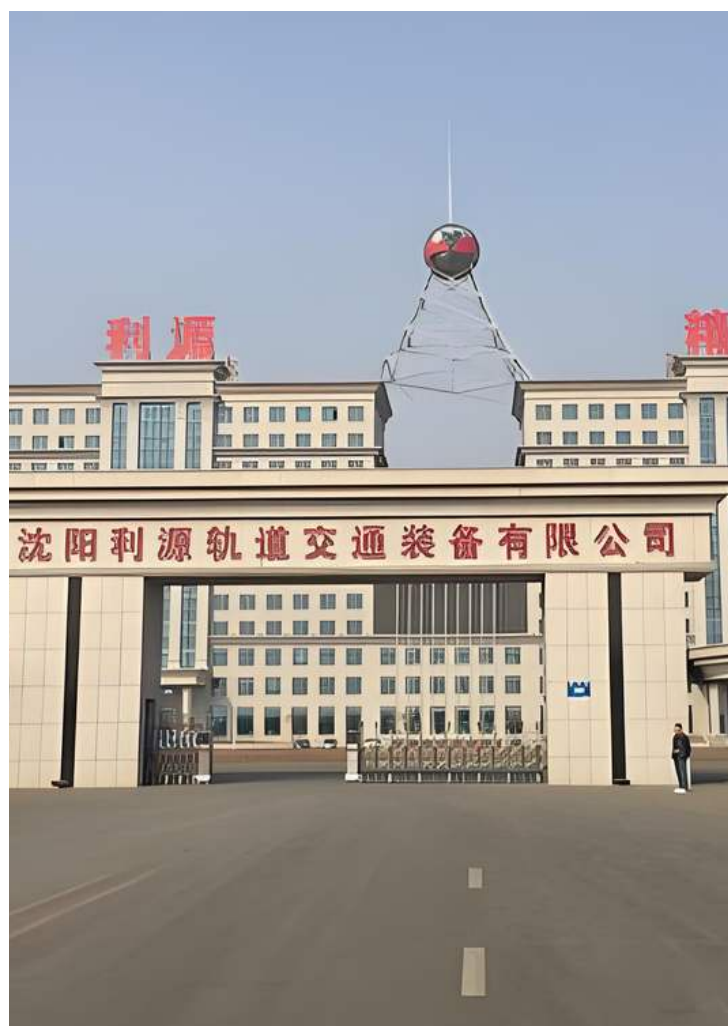
Customers require that the color-coated steel plates not only have excellent protective performance, but also have a beautiful appearance to reflect the design concept of the high-tech base. We provided galvanized color-coated steel plates with a grade of DX51D, a galvanizing amount of 180 g/m², a high weather resistance coating type, and a moon blue color to enhance the visual effect.

FACTORY & RESIDENTIAL CONSTRUCTION

The factory located in Shenbei New District, Liaoning Province needs to cope with the cold climate and windy environment in Northeast China, which places strict requirements on the weather resistance and corrosion resistance of building materials. The project has a planned area of 1.07 million square meters and needs to meet the high standards of deep processing of rail vehicles and aluminum profiles.

Liyuan Rail Transit

We provided 12,000 tons of Baosteel color-coated sheets (DX51D+AZ). The roof panels are made of fluorocarbon brick red, the wall panels are made of fluorocarbon silver, and the inner panels are white gray. With its excellent durability and color stability, color-coated boards can successfully cope with severe cold and windy and sandy weather, providing a reliable guarantee for the high-quality operation of rail transit bases.



FACTORY & RESIDENTIAL CONSTRUCTION

Sany Heavy Industry's factory is located in Changsha, which is hot, humid and rainy with significant seasonal changes. Building materials need to have good corrosion resistance and long-term weather resistance to cope with humid environments and high temperature weather.



Sany Heavy Factory Building Construction

Customers require exterior wall panels and roofing materials to have excellent protective properties and visual effects. We provide color-coated panels DX51D+AZ for exterior walls, with a coating weight of 150 g/m², using PVDF silver coating and embossing to enhance corrosion resistance and aesthetics. At the same time, the roof is made of galvanized light panels, which provides superior protection capabilities for the factory building.

FACTORY & RESIDENTIAL CONSTRUCTION

Ningbo has a changeable climate and frequent disasters. Customers require color-coated plates with high corrosion resistance and color stability to adapt to the frequent typhoons, rainstorms and other harsh environments.

Ningbo Baoxin Stainless Steel Plant Construction

In this project, we provided dark gray-green fluorocarbon color-coated plates with 280 g/m² hot-dip galvanized substrates for low-slope roof construction. The test results in 2016 showed that the color difference value of the coating after 19 years of use was only 2.4, and there was no obvious corrosion on the edges, which fully met the requirements of high corrosion resistance and stability, and provided reliable support for the construction of the Yangtze River Delta heavy chemical base.



ANTARCTIC CONSTRUCTION

GREAT WALL STATION

The station is located in the low latitudes of Antarctica, where the climate is extremely changeable. There are 205 days of strong winds throughout the year and strong ultraviolet rays. Our blue fluorocarbon color-coated steel plate (PVDF) and hot-dip galvanized substrate with a galvanizing amount of 180 g/m² were used during the expansion. So far, the roof and wall panels have not required maintenance, the coating is intact, and the color has not changed, showing excellent durability.



ZHONGSHAN STATION

The station is located in the extremely cold and dry Antarctic Circle and has been dealing with low temperatures of -36.4°C and extreme windy environments for a long time. We provided color-coated plates with crimson ordinary polyester coating (PE) and a galvanizing amount of 180 g/m² for the construction of station sandwich panels. Since its use in 1993, the building quality has been intact and the color has not changed, fully demonstrating its excellent weather resistance.

ANTARCTIC CONSTRUCTION



KUNLUN STATION

Kunlun Station is located in the Dome A area, with a temperature below -89.2°C . It is an extremely cold and oxygen-deficient place that is inaccessible. We provided fluorocarbon color-coated steel plates (DX51D+Z, PVDF) with a galvanizing amount of 280 g/m^2 and colors of national flag yellow and national flag red.

The material was tested at a low temperature of -90°C , and all performances remained unchanged and were used normally, providing reliable protection for the expedition station. The construction technicians also passed the plateau training to ensure the success of the station construction.

TAISHAN STATION

Taishan Station is located in the inland area of Antarctica at an altitude of 2,621 meters, with an average annual temperature as low as -36.6°C . We provided aluminum-zinc-coated fluorocarbon color-coated steel plates (S350GD+AZ, PVDF) with an aluminum-zinc-coated amount of 150 g/m^2 and colors of brick red and ivory for the construction of the outer panels. These materials provide reliable protection for Taishan Station with excellent weather resistance and stability, meeting the needs of the 20 expedition team members to spend the summer.



OVERSEAS PROJECTS

QATAR WORLD CUP STADIUM

Customers specifically require that products close to the limit width must have excellent plate shape and surface quality. We supplied more than 600 tons of DX52D+Z galvanized products, which successfully met the needs of venue construction with their durable characteristics, excellent toughness and processing adaptability.



In order to meet the high standards of world-class event venues, customers have strict quality and process requirements for building materials. Project materials must have excellent durability and tensile and deep drawing properties to meet the needs of complex structural design and high-intensity use.

OVERSEAS PROJECTS

AILANG MOROCCO MEGAWATT WIND BLADE FACTORY

We supplied a total of 2,300 tons of high-quality color-coated products. Through close cooperation with the construction unit, we provided qualification certification materials and carefully made product samples, and optimized product solutions and delivery plans many times to ensure that customer needs are met.



As an important demonstration project of Sino-Moroccan cooperation, the project puts forward strict requirements on high performance and international certification for building materials. Customers need color-coated products with excellent protection performance and stable quality to adapt to the complex production environment and long-term use requirements of wind power plants.

OVERSEAS PROJECTS

PRODUCTS EXPORTED TO ISRAEL

We customized and developed 275g ultra-thick zinc layer varnish coated galvanized color-coated plates with a total volume of 300 tons for customers. By optimizing the production process of hot-dip galvanizing raw materials and adjusting the color coating process parameters, we successfully solved technical problems such as zinc flow lines and poor coating, ensuring that the surface quality and performance of the products meet customer expectations.



As an important market along the "Belt and Road", Israel has put forward strict performance and appearance requirements for high-end structural building materials. Customers need materials that have both excellent corrosion resistance of color-coated plates and beautiful patterns of galvanized plates. They are mainly used for high-end structural building materials such as cable brackets and high-strength workshops.

OVERSEAS PROJECTS

KUANTAN JOINT STEEL PLANT, MALAYSIA

Based on customer needs, we provide optimized and cost-effective color-coated plate solutions, which fully meet the owner's fine requirements for corrosion resistance and project costs. After many technical communications and exchanges, the solution was recognized by the customer, and successfully received the order of 1,000 tons of color-coated plates for the first section, and the purchase agreement of nearly 400 tons of materials required in the second section in advance.



As an important project of the "Belt and Road" cooperation, the customer has put forward strict requirements for high corrosion resistance and cost-effectiveness of building materials. The project needs to use color-coated plates with stable performance and high cost-effectiveness to ensure the long-term use of the steel plant in high humidity and complex environments.

OVERSEAS PROJECTS

COLD ROLLING PROJECT OF TOSYALI STEEL PLANT IN ALGERIA

We undertook the installation of steel structures, equipment, pipelines and electrical equipment for all workshops including continuous annealing, galvanizing, color coating and intermediate warehouses, as well as public auxiliary areas. Through efficient organization and refined construction, we ensured that the project was carried out as planned.



This project is an important industrial construction project in northwest Africa, covering an area of 273,000 square meters and a construction area of 223,000 square meters. It places extremely high demands on building materials and construction plans. The materials must have high strength, corrosion resistance and stability to adapt to Algeria's complex climatic conditions and long-term use needs.

OVERSEAS PROJECTS

INDONESIAN RIVER MANAGEMENT PROJECT

We successfully completed the production task of 398 tons of galvanized wire. By optimizing the wire drawing and galvanizing processes, we ensured that the zinc coating amount met the standards, the surface was flawless, and the performance was stable. We successfully met customer needs and provided reliable support for the river management project.



The tropical high humidity and high salt environment places extremely stringent requirements on the anti-corrosion performance and stability of galvanized wire materials. The customer specified the use of galvanized wire with a diameter of 3.0 mm, which must meet the positive difference standard and impose strict requirements on the outer diameter size, coating uniformity and surface finish.

OVERSEAS PROJECTS

EAST SIBERIA-PACIFIC OCEAN PIPELINE

We provided more than 2,000 tons of color-coated panels for the project. These color-coated panels were processed into rock wool board buildings and used for the exterior wall construction of more than 900 booster stations and service centers. With excellent weather resistance, anti-corrosion performance and stable quality, our color-coated panels perform well under low temperature climate conditions, providing reliable support for the safe operation and stable service of the pipeline system.



As an important pipeline system connecting Russian crude oil exports to the Asia-Pacific market, the project has extremely high requirements for cold resistance and reliability of building materials. The pipeline covers the Siberian region with a low temperature climate along the way. A booster station and service center need to be set up every 3 kilometers, and the exterior wall materials need to be able to withstand the extreme cold environment for a long time.

SUPPLY SERVICES

While providing high-performance galvanized steel and color-coated steel for many landmark buildings and infrastructure projects, we also provide material support for many well-known industry leaders. In the field of home appliances, we are a long-term supplier of well-known brands such as Gree, Midea, Changhong, Haier, and TCL; in the field of automobile manufacturing, we provide high-quality galvanized steel for Mercedes-Benz, BMW, Toyota, BYD, GAC, etc.; in addition, our products are also widely used in engineering machinery manufacturers such as Sany Heavy Industry and Zoomlion Heavy Industry.

Through tailor-made solutions and stable and reliable supply chain services, we are always committed to meeting the diverse needs of customers in different fields for material performance, and providing solid guarantees for high-end manufacturing and construction projects around the world.

If you are looking for galvanized steel or color-coated steel with excellent performance, or want to find a reliable material partner for your project, please feel free to contact us. Let us work together to create more outstanding projects and create a better future!



THANK YOU!

CONTACT

Inspired by SteelPRO Group's success story?

Get in touch with us to start your journey toward outstanding results.

ZHONGNAN GOLD STONE
INTERNATIONAL PLAZA, HUANGDAO
DISTRICT, QINGDAO
[+86 130-0884-1344](tel:+8613008841344)
SUPPORT@STEELPROGROUP.COM

