

# SANG CHAREON GALVANIZE GROUP

## COMPANY PROFILE



SANG CHAREON GALVANIZE GROUP  
HOT DIP GALVANIZING SERVICE

### Contact Us

TEL : 086-307-3851 (Phatumthani)

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**Sangcharoen Galvanize Co.,Ltd.** was established in 1994 with the initial register capital of 25,000,000 baht on the area 6,400 square-meters for supporting works of construction and telecommunication business with the kettle size 7 meters. Kettle size 4 meters was built after for galvanizing nuts, screws, and studs by technology as call After growth of Thai Industries and Construction Investment between 1995-2007, capacity of the factory was not enough to support customer expansion.



**Sangcharoen Hot Dip Galvanize Co., Ltd.** is the second factory. It was established in 2004 with the registered capital of 30,000,000 baht on the area 52,800 square meters which it is able to support the work by the bigger kettle size 9.0 meters (capacity more than 4,500 Metric Tons). British Standard was applied on new factory with LPG system supply burners and Kettle was imported from Germany caused by better ferrous materials.

**Sang Charoen Eastern Galvanize Co.,Ltd.** is a new factory in our group. It is located at Hemaraj Chonburi Industrial Estate which the area total is 52,800 sqm. It was established in 2011 for supporting the large structure steel galvanizing which the kettle can be galvanizing long-est at 14 meters.





# PLANT CAPACITY

We offer a board range of galvanizing covering a wide range of applications. With its excellence corrosion resistant properties combined with very strong adhesion to the base steel, galvanizing is recommended as a surface protection coating system in wide range of applications from construction industry, lifestyle buildings, bridges, stadia, aircraft hanger, street (lighting pole- side post, guardrails), shipyards, oil and gas installation, power generation and distribution, etc.

**Sang Chareon Eastern Galvanize Co.Ltd.**  
in Chonburi at WHA Hemraj Industrial Estate.  
Capable of handling 200 tons of production per day. offering comprehensive job shop facility. The facility has a kettle size:  
Galvanizing Bath Size: 14 m x 1.8m x 2.5m  
Bath Dipping Size: 13.9 m x 1.7m x 2.4m  
Maximum Lift: 10 tons



1000 tons of steel of either incoming or finished goods. Can find adequate storage space in our large open storage area. Efficient and prompt service being our striving motto, the plant is operated on 24 hours basis; 365 days of the year.  
**Worker:** 200 people

**Facility Size:** 5,200 Square Meters  
**Factory Size:** 3,500 Square Meters  
**Stockyard Size:** 2,450 Square Meters





**Sang Chareon Hot Dip Galvanize Co.Ltd** is the leading independent provider of hot-dip galvanizing coating solutions to a broad range of end-markets. Collectively, our business segments provide sustainable, unmatched metal coating solutions that enhance the longevity and appearance of buildings, products and infrastructure that are essential to everyday life.

With the company's slogan as **"Focus on Development to The Best Hot Dip Galvanizing Company"** Our motto is customer satisfaction, Through timely delivery, right quality and competitive pricing.



*We're small enough to care about our customers, but big enough to cater*

## PLANT CAPACITY

### Phase A

**Kettle Size:** 9.0 x 1.7 x 2.2 meters Max.

**Size:** 8.4 x 1.6 x 2.1 meters Hot Dip

**Capacity Max:** 5,500 MT/Month Finishing

**Capacity Max:** 4,500 MT/Month Facility

**Size:** 6,764 Square Meters.

**Factory Size:** 5,000 Square Meters. Stock

**Yard Size:** 16,900 Square Meters.



### Phase B

**Kettle Size:** 7.0 x 1.5 x 2.0 meters Max.

**Size:** 6.5 x 1.1 x 1.8 meters Hot Dip

**Capacity Max:** 3,000 MT/Month Finishing

**Capacity Max:** 2,500 MT/Month Facility

**Size:** 6,764 Square Meters.

**Factory Size:** 5,000 Square Meters.

**Stock Yard Size:** 16,900 Square Meters.







**Size and Weight Centrifuge process** Small items are placed into a basket to be dipped and centrifuged. The size of baskets, centrifuges and other equipment will vary, just like general galvanizing baths. Typically this process involves all the same stages as the general galvanizing process with the added centrifuging (or spinning) stage that occurs after withdrawal from the molten zinc. The centrifuging (or spinning) removes the excess zinc from the small articles, including from any threads or holes. The coating thickness and mass requirements differ from other batch galvanized pieces due to the spinning process removing excess zinc.



**Note:** Not all galvanizers have centrifuge facilities and not all small items will be galvanized via the centrifuge process.

## PLANT CAPACITY

**Sang Chareon Galvanize Co.Ltd.**  
was established in 1994  
on Ladlumkeaw Pathumthani (Thailand).



### Kettle:

**Kettle Size:** 1.5 x 0.8 x 1.0 meters. Max.  
**Size:** 1.0 x 0.3 x 0.5 meters

### Spinning Kettle:

**Kettle:** 4.0 x 1.2 x 2.0 meters  
**Max. Size:** 3.5 x 1.0 x 0.9 meters  
**Hot Dip Capacity Max:** 1,000 MT/Month  
**Finishing Capacity Max:** 1,000 MT/Month  
**Facility Size:** 3,764 Square Meters.  
**Factory Size:** 2,000 Square Meters.  
**Stock Yard Size:** 3,900 Square Meters.





**At SCG**, our commitment to ensuring our plants are safe places to work and visit is 100%. Health and safety in any workplace are essential, but they're critical in an industrial galvanizing plant. Galvanizing plants can pose considerable risks to workers if proper safety measures are not in place. This is due to heavy machinery, hazardous materials, chemicals, fumes, and baths of molten zinc at temperatures of 450°C. By implementing health and safety policies, procedures, and systems into our culture, ensuring all directors, managers, and supervisors hold formal health and safety qualifications and introducing an occupational health scheme to protect and maintain a healthy workforce, we have an industry-leading safety record.

## Health and safety standards

Look for a plant with exemplary health and safety standards. One where the plant managers work hard to keep all colleagues and visitors safe with up-to-date equipment, sufficient PPE, good air quality, and clear-to-follow rigorous shop floor processes. And one where team members work safely on every job by thoroughly inspecting steel from the point it is delivered and at key intervals of the galvanizing process to ensure projects will not pose health and safety risks. Training Look for a galvanizer that not only trains team members on all aspects of safety in galvanizing, but also teaches clients and the wider industry. At SCG Galvanizing for example, we issue 'Safe Design for Hot Dip Galvanizing' posters to our clients as reference guides for steel preparation.



## Environment

- Compliance with all environmental legislation.
- Minimize all negative environmental impacts from our operations emissions to air, water and land.
- Minimize our resource usage and support a circular economy.
- Reduce our carbon emissions and work towards achieving Net Zero carbon emissions.







The products have obtained  
*ISO9001 quality system certification*

## QUALITY SYSTEM



Compliance with environmental regulations and guidelines and strict quality control standards have helped us gain ISO 9001:201 Certification. That indeed is our most cherished achievement. One that motivates us to get better each time, every time. A test certificate is issued for every peace of steel. Galvanized or processed. In addition, an effective system of tracking and trace-ability is in place with ensures smooth and timely delivery to our customer.

## 1. Preparing / Classified



All fabricated steel that enters an SCG galvanizing plant for processing is thoroughly inspected to ensure drainage and venting requirements are met.



**2. Degreasing :** Caustic soda 10% at the temperature 60-80 °C Steel is cleaned using a caustic solution. This remove oil, grease ,dirt and paint.

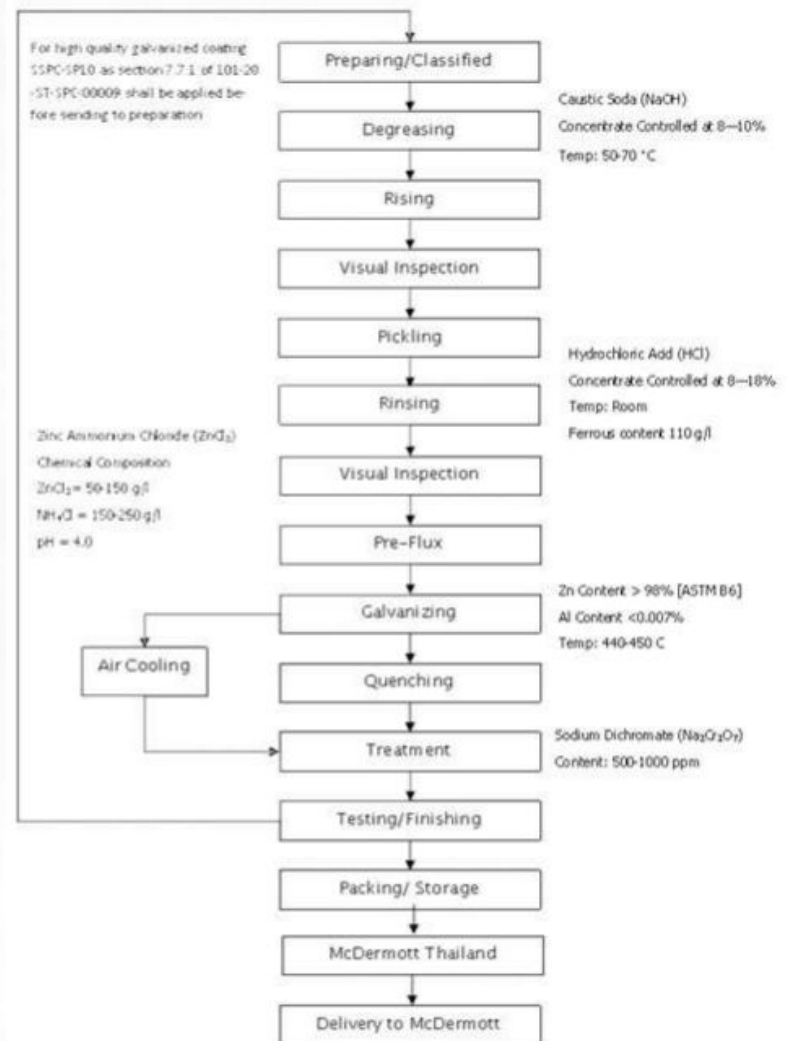


## 3. Rinsing/Visual Inspection

The caustic cleaning solution is rinsed off.



## HOT DIP GALVANIZE PROCESS



It involves cleaning steel and immersing it in molten zinc to obtain a coating.

Hot dip galvanizing is the process of coating iron or steel with a layer of zinc by immersing the metal in a bath of molten zinc at a temperature of around 450 °C (842 °F).





#### 4. Pickling Hydrochloric Acid (HCL)

Concentrate Control at 5-18% The Steel is pickle in an acidic solution to remove mill scale and oxide.



**5. Rinsing/ Visual Inspection** The next and final bath before the actual zinc dip is a low-pH zinc ammonium chloride mixture which acts as a fluxing agent. It also contains a chlorine salt that encapsulates the metal and prevents it from oxidizing again



**6. Pre-Flux** A flux, often zinc ammonium chloride is applied to the steel to inhibit oxidation of the cleaned surface upon exposure to air. The flux is allowed to dry on the steel and aids in the process of the liquid zinc wetting and adhering to the steel.

**7. Galvanizing** The steel dipped into the molten zinc batch and held there until the temperature of the steel equilibrates with that of the batch. Bath chemistry >98% pure zinc Up to 2% additives Temperature control (440°C~450 °C)



**8. Quenching:** Cooling When the steel is removed from the galvanizing kettle. The quench tank contains mostly water help cool it down before the final cleaning process.



**9. Treatment:** A possible chemical passivation (sodium dichromate concentration 300-500 ppm)



The final step in most hot dip gal- vanizing processes is a quench to promote passivation of the zinc surface and to control the growth of the zinc-iron alloy layers. As soon as it's removed from the galvanizing kettle, the steel is quenched in aqueous sodium dichromate at ambient temperature



**10. Finishing:** 100% finishing and visual check



Once galvanized, the coated sur- face of the steel is cleaned of any dirt, drip marks or excess zinc to ensure the final product is ready for testing.

## 11. Inspection and Testing



The steel is then moved outside and placed on poles for millage tests. These tests verify that the process was successful and that the zinc coating is the proper thickness. Different applications for the steel can call for different coating thickness.





## CONTACT US

### **Ladlumkaew - Pathumthani (Plant 1)** **Kettle Size 9 m. x 1.7 m. x 2.2 m.**

Sangcharoen Hot Dip Galvanize Co,Ltd  
1/1 m.4 Kookhwang, Ladlumkaew  
Phrathumthani 12140

**Phone:** 02-599-4115-8, 02-599-4197  
**Mobile:** 092-279-2059, 086-307-3851

### **Ladlumkaew - Pathumthani (Plant 2)** **Kettle Size 7 m. x 1.5 m. x 2.0 m.**

Sangcharoen Hot Dip Galvanize Co,Ltd  
1/1 m.4 Kookhwang, Ladlumkaew  
Phrathumthani 12140

**Phone:** 02-599-4115-8, 02-599-4197  
**Mobile:** 092-279-2059, 086-307-3851

### **Sriracha-Chonburi** **Kettle Size 14 m. x 1.8 m. x 2.5 m.**

Eastern Galvanize 371 m.6 Bowin,  
Sriracha Chonburi 20230

**Phone:** 038-599-345258-9,038-346-151-2  
**Mobile:** 086-970-8424, 086-387-6811

### **Ladlumkaew - Pathumthani (Plant 3)** **Kettle Size 2 m. x 1.2 m. x 2 m.(Spinning)**

Sangcharoen Hot Dip Galvanize Co,Ltd  
5/2 m.1 Kookhwang, Ladlumkaew  
Phrathumthani 12140

**Phone:** 0-2976-2118-20, 0-2976-3021-2  
**Mobile:** 086-367-2763, 086-341-1408

