

# **Canaan Metal Finishing**

Canaan Site Furnishings recognizes the importance of high-quality finish on our products. Therefore, we offer a state-of-art polyester powder finish on all of the metal components. Five key elements are essential to achieve an attractive and durable finish: blasting, proper surface preparation, anti-corrosion treatment, powder coating, cleaning and maintenance.

## 1 Blasting

Blasting is the most rigorous preparation that can be specified. To prepare for smooth and beautiful metal surface, Canaan ensures the surface to be completely free of all contaminants and welding spots. We chip, scap, sand and wire brush/grind to remove welding spots, loose rust and mill scales by hand and powder tool.



### 2 Cleaning and Surface Preparation

Degreasing / Caustic Cleaning

acid degreasing bath or caustic solution to remove the dirt, oil, and grease

Rinsing

rinsing the area with fresh water and simply wipe clean with a soft cloth

Pickling

hydrochloric or sulfuric acid to remove oxides and mill scale

Fluxing

cleaning the steel of all oxidation developed since the pickling and creating a protective coating to prevent the steel from oxidizing before entering the galvanizing kettle

### 3 Anti-corrosion treatment – Electrocoating

This Electrocoating process uses a sacrificial zinc anode suspended in a solution of zinc and saline. An electrical current is introduced to this setup with the zinc anode being attached to the positive side of the power source while the steel to be galvanized is attached to the negative side of the power source. By attaching the power supply in this manner, the positively charged zinc ions given off by the anode are attracted to the negatively charged steel.

Post-treatment: it aims to enhance the galvanized coating. The quench tank contains mostly water but may also have chemicals added to create a passivation layer that protects the galvanized steel during storage and transportation.







# 4 Powder Coating

Powder coating is a process during which a metal product or component is coated in powder paint and then heated in an oven to create a seamless protective coating.

Pre-treatment

Degreasing and cleaning the part, which is a critical step since contaminants such as oil, soil, lubrication grease, metal oxides, welding scales etc. will inhibit a lasting, and quality powder coated finish

Powder Coating

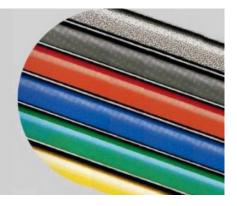
Electrostatic powder coating applied to the products

Curing

Placed into an over and heated after powder is applied, placed to create the final film that will protect the product

#### Beneficial points of Canaan powder coating

Due to high mechanical and chemical performance, Canaan's powder coating can resist to high temperature, UV, acids, solvent. It creates bright smooth and equal finish without paint runs; as well as providing a large selection of colors, effects, or textures that allows accomplishing effects than other paints. Canaan's powder coating is also environmentally friendly: it emits zero or near zero volatile organic compounds (VOC), excessed over-spray powder can be collected and reused to cut down on the waste.



## **5** Cleaning and Maintenance

Simply wipe clean with a cloth and mild detergent. The result of Canaan's multi-step process is weatherand corrosion-resistant furniture that is beautiful and durable for many years of active use with minimal maintenance.