



Ji'nan ShengTai Painting Equipment Co.,Ltd.
Address: East of the intersection of Dongwaihuan Road and Wenhua Road in Wenden Village,
Diaozhen Street, Zhangqiu District, Jinan City, Shandong Province
Email: ceces2018917@gmail.com WhatsApp:+8615854139190

I. Basic parameters

1. Dimensions of the workpiece (mm * mm * mm): 2350x900x1400.
 2. Spray time: 8 hours per day
 3. Production site (m * m): 20x12
 4. Power Supply:
 5. Three phase AC: 240V; Frequency: 60Hz;
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II. Process flow and production capacity

1. Spray painting line: hanging up → spraying with clean water → drying (100–120 °C) → spraying (automatic or manual spraying) → baking paint (adjustable at 180–220 °C) → cooling → hanging down.
 2. Conveyor chain speed: 0.5–0.8m/min.
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III. Process Parameters

Main Install and hang artificial room temperature components

1. Spray pressure: 1.5~2.0bar
 2. Drying electric heating: 7,80–100 °C
 3. powder spraying manual: 2–4 room
 4. Baking Temperature: 180–220 °C Baking temperature can be adjusted according to coating requirements
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IV Equipment process description and structural design

a. Clean water spray cleaning room

1. Clear water spray room: 1 set
 2. Process name: Cleaning
 3. Processing method: Spray
 4. Processing time (minutes): 2
 5. External dimensions of the room (mm): 4000 × 2000 × 3600.
 6. Dimensions of the circulating water tank (mm): 1220 × 610 × 650,
 7. Plate material: 2.0mm, SUS304 stainless steel plate, galvanized carbon steel square tube for the chassis
 8. Spray pipe: hot melt PPR pipe
 9. Spray: PP nozzle
 10. Spray water pump: vertical centrifugal water pump, power 1.5w, 16 m³/h, 1.5bar
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b. Conveyor equipment

1. chain track support frame: 100 × 100 carbon steel square tube.
2. Conveyor chain model: 150 heavy-duty suspension chain, pitch 250mm, total length 72 meters.
3. The hanging load: bearing Y-shaped lifting device
4. load capacity: 55kg, with an interval of 500mm.
5. track Type: a C-shaped structure and 3.5mm steel plate.



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6. total length: 72 meters.
7. Tension adjustment equipment spring type: 1 set.
8. Drive equipment track type: reduction ratio 1:100, motor power 1.5kw,
constant speed, 1 set.

Chain speed design process: Chain speed is $V=0.8\text{m}/\text{min}$ (frequency
converter installed by customer)

c. Drying oven and baking oven

1. Bottom frame of the baking chamber: 80×80 galvanized steel square
tubes, thickness of 2.0mm. insulation board for drying oven chamber:
75mm rock wool sandwich panel
 2. Insulation board for high-temperature drying oven chamber: 125mm rock
wool sandwich panel.
 3. inner and outer panels of the insulation board: 0.6mm thick color coated
boards
 4. middle layer: 100K rock wool insulation material.
 5. outer wall of the chamber temperature: not higher than $10\text{ }^{\circ}\text{C}$ above the
ambient temperature.
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d. Heating system

1. heating device: 2602 (high-temperature pressure resistant ceramic
pieces), natural gas infrared radiation direct heating method



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2. natural gas infrared radiation heater: installed at the bottom of the baking furnace.
3. The dimension of natural gas infrared radiation heater: 930 * 135 * 190 (mm)
4. heating capacity: 10.3 (8.9) kw (kcal/h).
5. Installation Number: 16 sets of drying ovens; 42 sets of high-temperature baking ovens.