

Application Success Stories



Powder Saving

Uniform of film thickness

Precise control

Application Success Stories

Installation Key Data

Parts: Passenger Vehicle Wheels

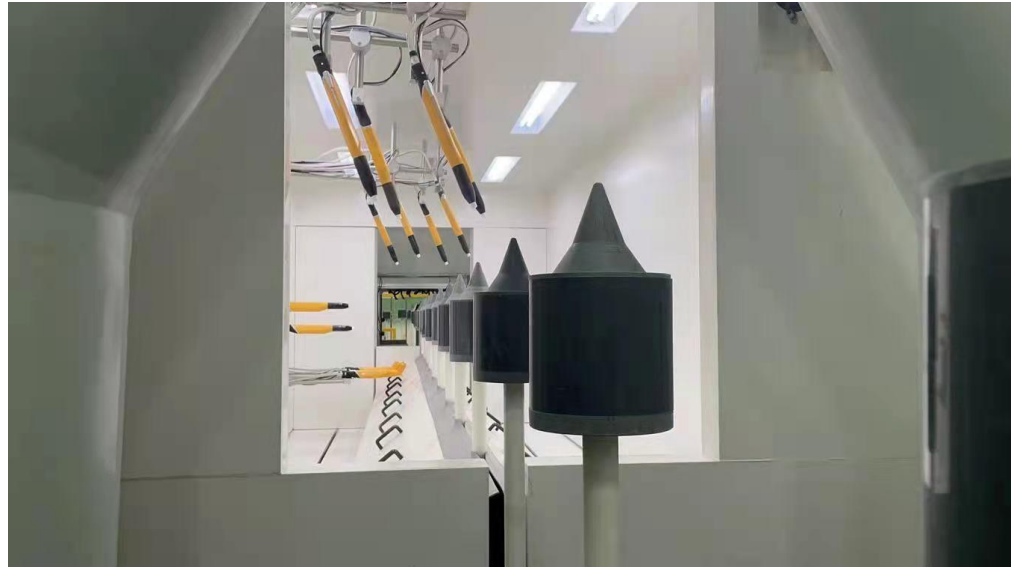
Object sizes: L 580 mm
W 580 mm
L 350 mm

Conveyor Speed:

- 4.5 m/min
- 400 units per hour
- 3 millions unit per year

Scope of delivery:

Gema hub system solution
Installed since Dec, 2021

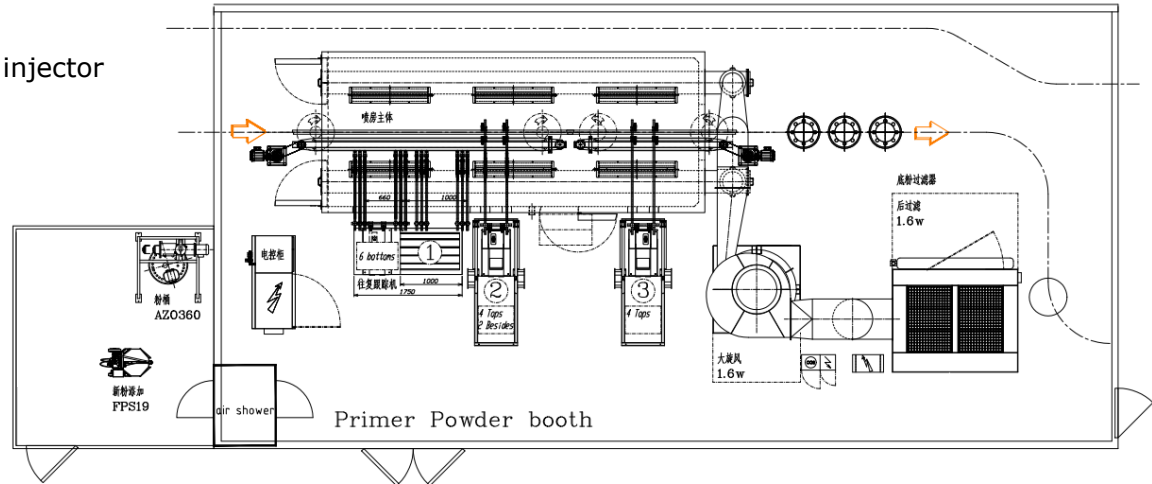


Application Success Stories

Layout: Prime Coat

CONFIG:

- 1 x MagicCompact® EquiFlow® booth
- 1 x After filter, cyclone 16'000m³/h
- 1 x MagicControl 4.0
- 1 x PH150 powder hopper with 8x IG07 injector
- 1 x AZO360 sieve system
- 1 x ZA07/YT04 synchronizing axis
- 2 x ZA08/XT03
- 2 x Manual unit/guns holders
- 16 x OptiGun® GA03
 - Underside 6 units
 - Side 2 units
 - Top 4 + 4 units
- 1 x FPS19 Box fresh powder system

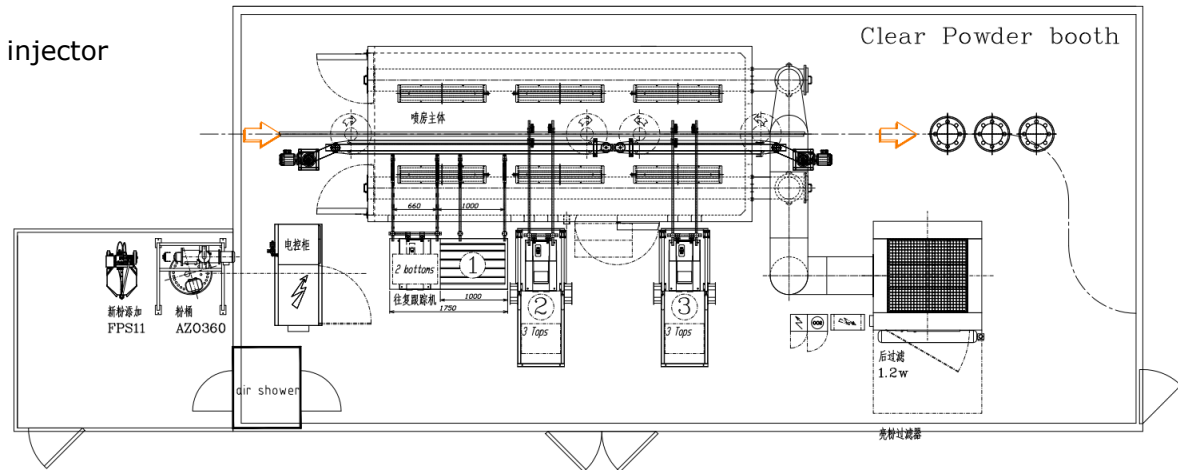


Application Success Stories

Layout: Clear Coat

CONFIG:

- 1 x MagicCompact® EquiFlow® booth
- 1 x After filter 12'000m³/h
- 1 x MagicControl 4.0
- 1 x PH150 powder hopper with 8x IG07 injector
- 1 x AZO360 sieve system
- 1 x ZA07/YT04 synchronizing axis
- 2 x ZA08/XT03
- 8 x OptiGun® GA03
 - Underside 2 units
 - Top 3 + 3 units
- 2 x Manual unit/guns holders
- 1 x FPS19 Box fresh powder system



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More Details in Success

The compact design reduced the cleaning area inside the booth, making cleaning issues such as color changes quicker and easier to solve.

The recovery system of the booth is creating a constant and stable powder flow for outstanding coating results.

With its 95% recovery rate in combination with an AZO sieve, a significant improvement of the filtration as well as transfer rate could be achieved, while the powder waste in the closed circuit of powder coating was reduced immensely.

The application of the Magic Control System is also a guarantee of greater flexibility and reliability, which meets the requirements of a flexible production plan for the coating of a variety of products.

The flexible control of OptiStar and OptiFlex technologies is applied to the coating process regardless of whether the wheels rotate clockwise or counterclockwise, allowing 100% automatic coating without manual post touch-up.

Based on the state-of-the-art wheel coating solution and the experienced specialist team of Gema Switzerland, this equipment provides the best coating results to meet the specific requirements of customers.

The Gema Shanghai team always does its best to meet the needs of customers in the Chinese market.

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Company Profile

The company Dongfeng is a leading wheel manufacturer for passenger cars, light trucks, buses, commercial trucks, and trailers. The Company also produces wheels for agriculture, as well as other off-highway applications. The Company serves its global OEM customers from a vast, globally-connected network that includes 23 plants in 12 countries, and state-of-the-art technical centers in the Americas, Europe, and Asia.



Company Expectation

The customer plans for these coating lines to become the benchmark for wheel production at its local factories. By using Gema's state-of-the-art spray technology, Company D expects to realize a standard production that will produce 3 million units of wheels per year at 400 pieces per hour. In addition, the customer also considers energy consumption and environmental footprint when making decisions.

Key to Success

Similar to the other wheel coating lines, a complete MagicCompact system from Gema was also installed in the new plant. The system line includes the powder management system in combination with the fresh powder system. This newly installed system line operates efficiently with low powder consumption and keeps VOC emissions low.