



Technology makes coating smarter

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Our Wechat



Our WhatsApp



SuperGun AG01 Powder Gun

110kV PowerMaster
easy, efficient, economic



Electrostatic powder gun and control solution
Born for Precise Coating, Process Control, Economic Use



SuperGun AG01

the Capability style of Industry 4.0 intelligent manufacturing
Born for high-precision coating, process control, economic use

The Zeheng AG01 features top technology, achieving the highest first pass T.E and increasing production capacity. This superior, cost-effective, and durable gun delivers optimal results for various workpieces and powders.

6 Advanced Advantages, Makes AG01 Different

110kV

High-performance cascade

CVC

Constant voltage control for a more stable transfer process

MCC

Micro-current control, accurate to 0.1 μ A

PFC

Precise flow control for uniform film thickness

IP64

Dust and water resistance for enhanced durability

Various

Powder pumps compatibility for wider applications

110kV high-performance cascade
& Constant voltage control

The strongest ever, Significantly enhances powder coating efficiency

The AG01 features 110kV high-performance cascade and constant voltage pneumatic control. It enhances powder charging and maintains consistent voltage air-flow during coating, significantly improving coating efficiency and achieving the highest fist pass TE, setting new industry records.

110kV

High-performance cascade

CVC

Constant voltage control

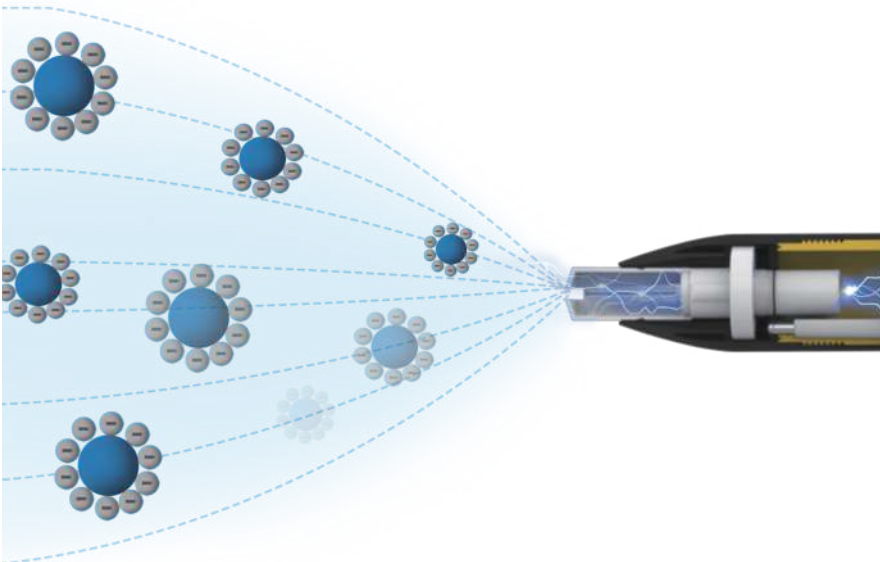


For same production requirements
using AG01 can reduce guns
achieve faster coating speeds



○ Simultaneously charges more powder

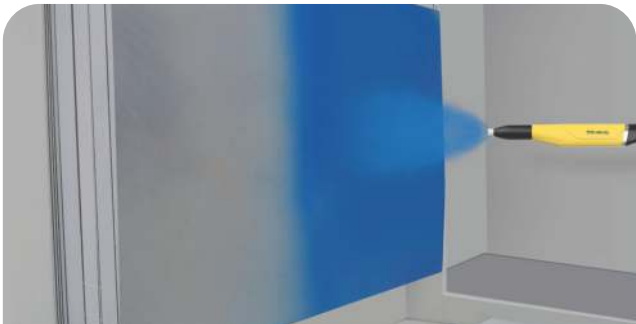
The 110kV high-voltage module efficiently releases static electricity, creating a stronger electric field that increases the powder's charge and improves adhesion to workpieces.



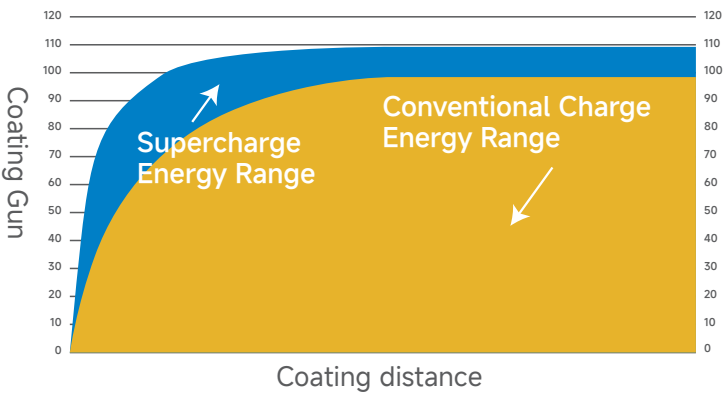
○ Optimal powder charging state

The constant voltage control keeps voltage and airflow stable and intelligently optimized during coating, preventing pressure drops and enabling more powder to achieve optimal charging.

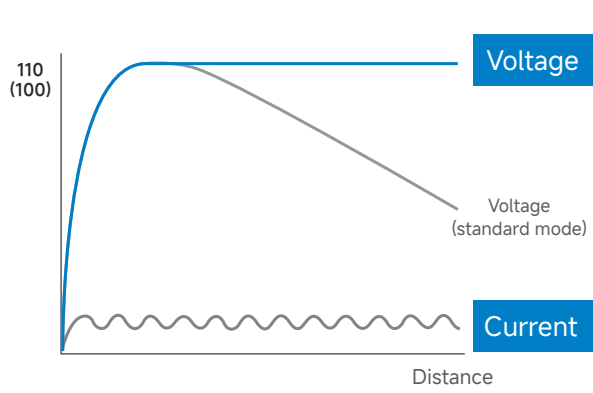
79% first pass TE for flat plate
The highest in current Venturi coat systems.



Comparison of the energy range of supercharge and conventional charge



CVC, constant voltage control applied to inorganic powder



○ Long-lasting stability

Electrode needle triple air intake self-cleaning technology maintains needle tip cleansing, long-lasting and stable static discharge, and optimize powder mist type

Quantity of powder	Powder consumption	Film thickness
130g/min	229g	60μm
Current	Voltage	
110μA	110kV	
Flat plate coating rate (first pass TE)	Size of workpiece	
79%	1920*1250mm	

*This experiment is subject to environmental conditions, depending on the application.

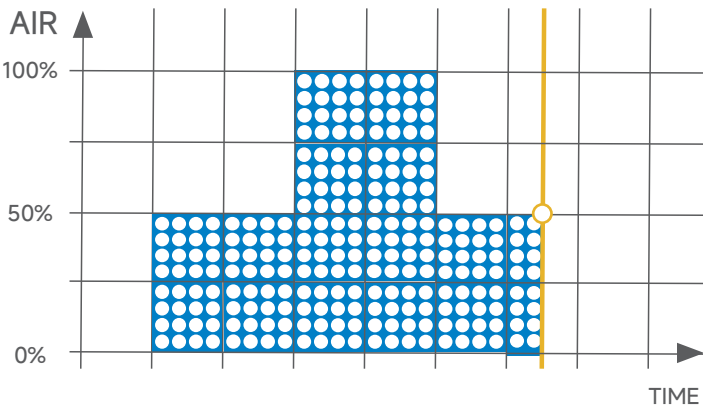
More precise powder output, More uniform coating



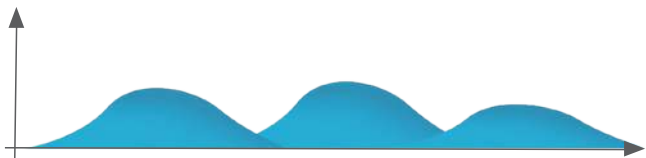
○ PFC Precise Flow Control

Precision powder flow control ensures uniform and excellent powder coating

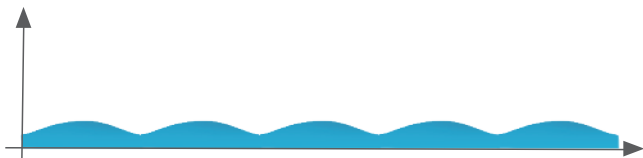
Precise flow control offers high-precision powder flow control for adjustable powder output and coating speeds. It optimizes the flight path of powder particles and the coat pattern, resulting in more uniform and smooth coatings on workpieces.



Powder coating effect of traditional gun



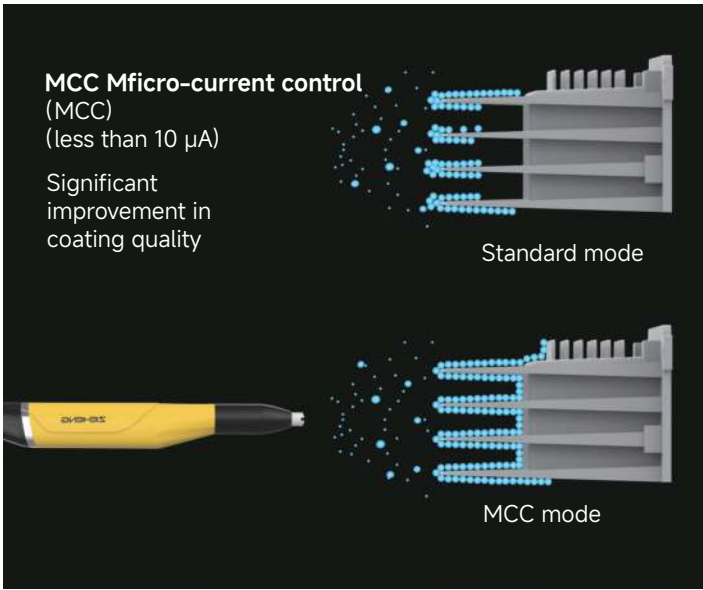
Powder coating effect of Zeheng gun



○ MCC Micro-Current Control

Precise current control leads to a leap in coating quality

Designed for complex geometric product, it achieves precise charge control below 10 μ A, adjustment rate as low as 0.1 μ A, preventing overspray and ensuring uniform, attractive coatings, greatly enhancing coating precision and quality.



Various application scenes mastering any workpiece



○ 4000h experimental certification

Compact structure, sturdy and durable, easy to maintain



IP64 dust and water resistance

Equipped with IP64-level dust and water protection
Suitable for harsh powder working environments



24h continuous operation

Constructed from high-wear engineering materials and quality components
24h uninterrupted operation, longer lifespan and greater reliability



Efficient self-cleaning

Features an air self-cleaning design and direct powder path
Fast internal cleaning, efficient and pollution-free color changes

○ Easy to upgrade

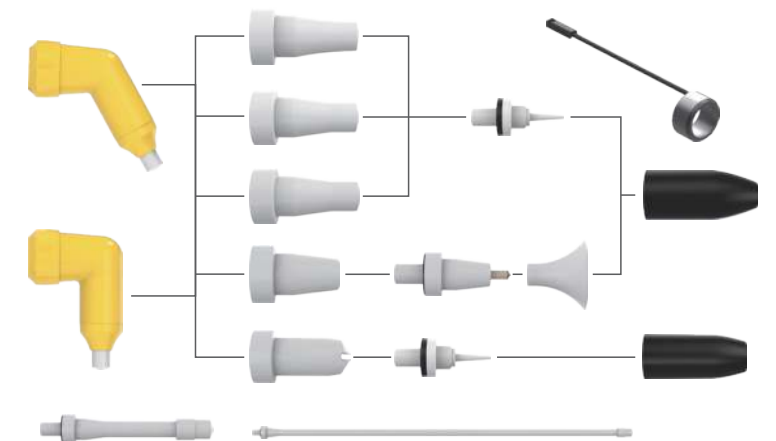
Supports flexible combinations with Venturi powder pumps and dense phase conveying pumps, enabling production line upgrades without changing the gun and easily adapting to future challenges.



Venturi pump 300g/min
DP01 pump 450g/min
DP02 pump 900g/min

○ Various accessories:

Equipped with Nozzles, Extensions
Allows for coating diverse and complex geometric workpieces.
With 110kV high voltage support, it offers a wider atomization range, meeting coverage needs for various powders.



※ The picture shows some model accessories

○ Diversified installation:

Easily integrates into reciprocators and robots, flexibly enabling various automated mechanical applications.



SuperControl AGC01 Controller

Multi-functional and precise control



MCC
micro-current
control



3 types
of coating
gun control



Multi-system
interconnectivity



IP54 dust
and water
resistance



Customized development
Personalized
control system



○ Air supply and powder pump configuration

3 powder pump: Venturi pump, dense phase single pump, dense phase double pump

3 air supply modes provided: balanced, automatic independent, manual independent

○ Operation and efficiency enhancement

Allowing for multi-use: automatic gun, manual gun, and enamel gun

One-click quick cleaning function simplifies the gun maintenance process

Fast formula storage function, precise and repeatable calls of personalized coating formulas

○ Remote control and communication

Supports remote operation from PC and central control, flexible management and monitoring

Uses Ethernet technology, compatible with various protocols, easily integrates into various system environments

○ Intelligent management and user interface

Built-in self-diagnosis system for real-time monitoring of operating status, immediate alerts for potential issues

Supports bilingual display in CN-EN to meet the needs of users in different regions

LCD display control, instant access

Digital display of electric and air settings, quick and smooth parameter adjustments, easy to operate and instantly accessible

Sturdy and durable, IP54 protection

Compact and sturdy structure, resistant to dust and water droplets, ensuring durability



01



Multi-functional Coating gun can be switched freely

Supports control of 3 coating gun types—automatic, manual, enamel—easy to switch without changing the controller. Reduces operation and maintenance costs, making adjustments more convenient.

Full coverage of powder types Intelligent parameter matching

For different powder types like polyester, metallic, and enamel, the system presets optimal voltage and current parameters (adjustable) to ensure the best coating result for each powder.



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ZEHENG



Customized system upgrades broaden production potential

Based on workpiece characteristics, equipment setup, and production conditions, we could provide personalized control systems to meet diverse production needs.

Open integration structure Embracing the era of smart factories

interconnect with various new and old central control systems, and easily integrates into different industrial buses like CANopen, Modbus TCP, and Profinet, providing best operational flexibility



Easy integration Safe and reliable to use

Combined with the control cabinet, one-button start/stop for 21 guns

Modular design, reasonable layout, safe and durable

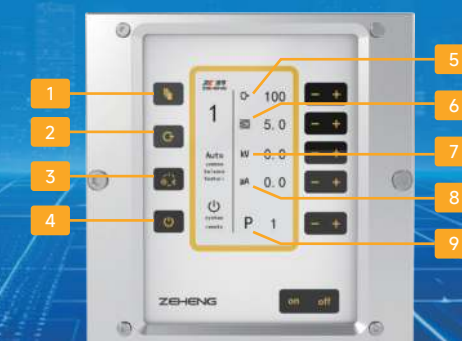
Simple operation

Easily store and access 30 coating programs

Detail and efficient settings for MCC, PFC, and other parameters

03

- | | |
|-------------------------|-----------------------|
| 1 Page display switch | 5 Powder output |
| 2 Hose cleaning | 6 Total amount of air |
| 3 Mode selection | 7 High pressure |
| 4 System parameter mode | 8 Coating power |
| | 9 Preset program |



Core component parameters

Basic parameters of gun		
Weight 0.6kg	Length 530mm	Standard input voltage 12V
Standard output voltage 100kV	Maximum output voltage 110kV	Frequency 18kHz
Polarity Positive/negative electrode	Applicable powder Metal powder, polyester powder	Maximum Powder output 300g/min、900g/min
Level of protection IP64	Explosion-proof rating 21区 (GB),ATEX	
Basic parameters of controller		
Standard input voltage 100-240 VAC	Standard output voltage (to spray gun) 12V	Frequency 50-60Hz
Input pressure 5.5bar,6.0bar	Minimum input pressure (when equipment is in use) 5.5bar	Overall dimensions 173mm*250mm*177mm

Why choose Zeheng coating guns?

- **A deeper understanding of market demands**
With 25 years in the powder coating market, Zeheng custom develops guns tailored to users'characteristics, ensuring every detail matches your usage habits.
- **Rich practical experience in production lines**
Zeheng, certified by 2,700 customers and 1,000 production lines, has gained extensive on-site experience. We understand the nuances and pain points in different fields, enabling us to offer targeted solutions and comprehensive support.
- **More Economic high-performance production lines**
Zeheng gun, developed from years of experience, deliver performance and quality on par with international brands. We offer top-tier technology at a more economical price, ensuring an exceptional production line experience with high cost performance.
- **Optimized product expansion potential**
Zeheng prioritizes technological innovation in product development, integrating cutting-edge technologies like digitalization and AI. Our guns are designed for compatibility with future production line developments, making it easier to meet upcoming upgrade challenges.

