



Lean Spraying Achieves Outstanding Intelligent Manufacturing

Creating a Chinese spray gun that surpasses European and American standards



Pinnacle GC21



A model of intelligent spraying and efficiency innovation, covering all major coating categories, with coating quality under your control as you wish.

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WeChat Official



Official Website



WeChat Channel



After-Sales Service



YouTube



Douyin (Chinese TikTok)

With intelligent technology as the core, the pinnacle Series supports automatic workpiece identification system and remote operation and maintenance management module, seamlessly connects with powder room control system through CAN Bus and I/O interface, and builds data interoperability and intelligent management among equipments; Equipped with the latest ACC adaptive technology and DVC digital valve technology, it accurately controls the powder output, atomization and conveying airflow, which significantly improves powdering efficiency and saves powder significantly; Innovative built-in electrode automatic cleaning airway can continuously clean the electrode needle, which effectively prevents electrostatic discharge and thus improves powder loading rate and reduces powder waste. The innovative built-in electrode automatic cleaning air circuit can continuously clean the electrode needle, effectively preventing powder condensation, thus ensuring excellent electrostatic discharge, thus improving the powder loading rate, reducing powder waste and improving spraying efficiency.

Overview of the Pinnacle Excellence Series Systems

products	Description
	<p>GC21 Controller</p> <p>Built-in 250 programmable spraying programs; 3 daily shortcut programs: flat parts mode, return spraying mode, and shaped parts mode; DVC digital valve technology; adopts key + multi-dimensional incremental knob, integrating multi-dimensional adjustment functions such as air pressure, voltage, and current to realize precise control; international first-line brand hardware;</p>
	<p>GCS Spray Gun Control System</p> <p>Large-scale spray gun group deployment, supporting communication via CAN Bus, up to 127 sites can be supported; can deploy workpiece recognition and remote maintenance system; supports one-click synchronization of parameter settings.</p>
	<p>Automatic Spray Gun AG20</p> <p>Built-in 100kV high-performance pressure doubling module, provides different kinds of nozzles and spray nozzles, such as fan nozzles, 90° spray nozzles, 135° spray nozzles, in order to adapt to any complex shape of the workpiece; can be applied to most of the common types of powder; built-in unique "three times the air intake technology", continuous cleaning of the electrode needle, and to prevent the powder from condensation.</p>
	<p>Powder Pump PPH40</p> <p>Plug and play, quick installation; the maximum powder output is 520g/min, and quick color - changing is supported.</p>
	<p>Manual Spray Gun MG20</p> <p>Built-in 100kV high-voltage module, suitable for the majority of common powders; ergonomic design; spray gun with quick parameter keys</p>

Products	Description
	<p>Trolley Type Manual Spray Gun GC21F</p> <p>Fitted with a 50L powder bucket, paired with a PPH40 powder pump, MG20 manual spray gun, and GC21 controller. Features: High flexibility and applicability, easy and convenient for manual spraying of large workpieces.</p>
	<p>Manual Spray Gun with Vibration Table GC21FZ</p> <p>High-frequency electric vibration plate trolley, equipped with PPH40 powder pump, MG20 manual spray gun, GC21 controller. Features: Expert in complex powder processing, easy and quick color change.</p>
	<p>Wall-mounted Manual Spray Gun GC21SE</p> <p>Mounted on wall bracket, MG20 manual spray gun, GC21 controller. Features: Can be installed on the automatic powder room hand spray position, for powder center to pick up powder.</p>
	<p>Desktop Lab Powder Spray Gun GC21T</p> <p>Equipped with mounting base, 1.34L powder hopper, PPH40 powder pump, MG20 manual spray gun, and GC21 controller. Simulate voltage and air pressure combinations in industrial production to find the optimal spraying parameter range.</p>
	<p>Desktop Lab Powder Spray Gun GC21TU</p> <p>Equipped with installation base, 0.3L small pink cup, MG20 manual spray gun, GC21 manual controller. Features: Significantly shorten the time cost of powder replacement during experiments, improve the efficiency of multi-group comparative experiments.</p>
	<p>Desktop Lab Powder Spray Gun GC21TD</p> <p>Equipped with mounting base, funnel-shaped powder cup design, MG20 manual spray gun, and GC21 controller. Features: Significantly reduces the time cost of powder replacement in experiments, and improves the efficiency of multi-group comparative experiments.</p>

GC21 Controller

Intelligent, safe and stable controller with integrated fault diagnostic system

Equipped with over 250 programmable coating programs and 3 daily quick programs, it can quickly switch between different types of coating workpieces, which enhances production efficiency and reduces consumables. The DVC digital valve technology can precisely control the powder output. The parameters on the LCD display are clear and easy to understand. Meanwhile, it supports CANBus fieldbus networking control or standalone control without a network, and supports the connection of external I/O signals for external control.

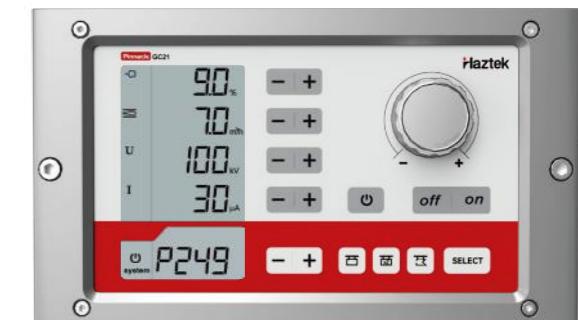


Button + multi-dimensional stepless knob, visual operation interface, instant adjustment of various parameters.

Button + multi-dimensional stepless knob dual adjustment, paired with an LED display screen, makes various parameters intuitive and clear. The stepless knob enables rapid adjustment of all parameters, and the knob integrates voltage, flow, and current adjustment functions for convenience and speed.



Coating procedures for new parts, re-sprayed parts, and complex grooved parts



During production, operators only need to simply select the corresponding mode on the control panel and call up expert-level spraying parameters with one key, eliminating the need for tedious manual adjustments, so as to ensure the stability and high efficiency of spraying quality.



Three Pre-Coating Modes



Precision Control Knob



CANopen Communication



μA PCC Precision Charging



Fault Monitoring & Early Warning



Corona Charging

DVC Digital Valve Technology / Precise Powder Flow Control

DVC (Digital Valve Control) digital valve precise powder flow control technology is one of the core technologies of the HAZTEK spray gun system. This technology achieves stability and high consistency in the spraying process through precise regulation of powder output, atomizing gas and conveying gas.



Stepper motor

GCS gun control system for large-scale coating applications

The GCS spray gun control system is developed based on the x86 platform, featuring excellent adaptability and scalability, with reserved digital interface API. It supports connection through CANBus industrial bus and external I/O signals, facilitating interconnection with other production equipment (such as robots, powder room automation equipment, production line PLC) or intelligent systems (such as MES, ERP), to achieve highly intelligent painting production processes and data collection and traceability.

Highly scalable intelligent control

The system can be expanded to a maximum of 120 spray guns, capable of meeting the needs of large-scale production, and can be freely combined according to the actual type of workpiece, providing flexible and customized spraying solutions.



Massive storage of spray formulations

The system can store thousands of spray formulas, ensuring quick access under different requirements such as workpieces, colors, thicknesses, etc., reducing production changeover time, and significantly improving production efficiency.

Self-diagnosis system

The built-in self-diagnosis function can monitor the device status in real time, automatically detect and prompt for faults, ensuring that the device always operates in the best condition and reduces the risk of downtime due to faults.

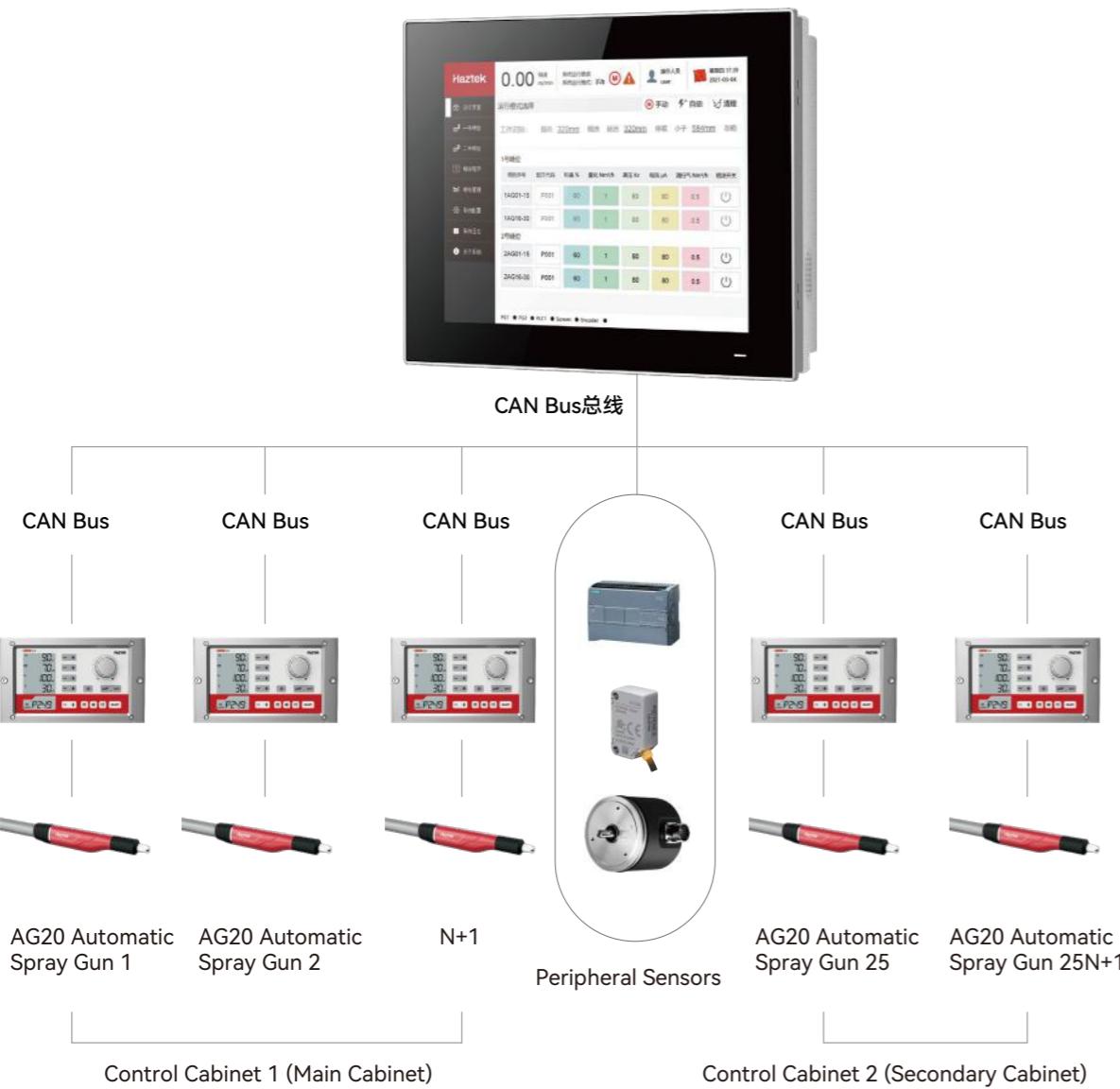
Flexible production support

By integrating the MES system, the system can automatically match the optimal coating formula based on order requirements and workpiece specifications, flexibly adapt to various production tasks, and achieve true flexible manufacturing.

Remote monitoring and management

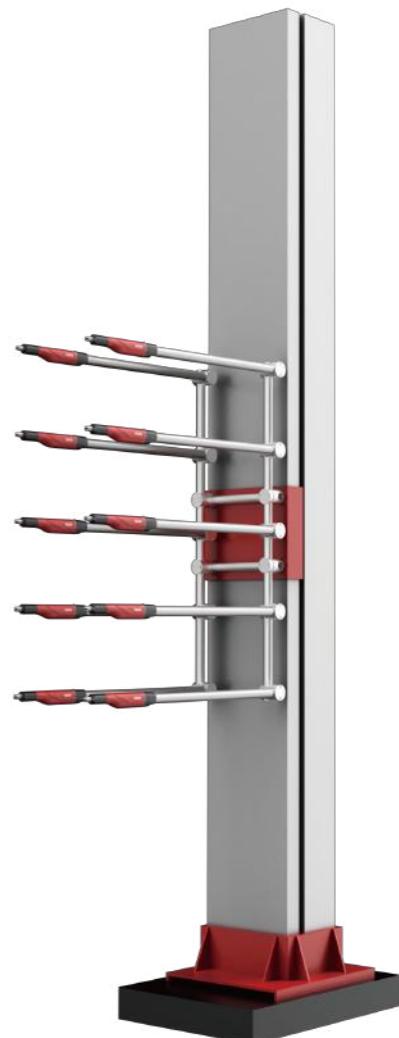
The system supports remote monitoring functionality, allowing users to remotely view the operating status of devices, adjust parameters, and even perform remote maintenance, greatly enhancing the convenience and efficiency of management.

AG20 Automatic Spray Gun



GCS Spray Gun Control System Diagram

CE (Conformité Européenne) certification is a mandatory safety conformity mark for products entering the European Economic Area (EEA) market, indicating that the product complies with EU directives related to safety, health, environmental protection, and consumer protection, representing that the product meets the EU's mandatory regulatory standards. ATEX (Atmosphères Explosibles) certification is a safety certification for equipment used in explosive gas/dust environments by the EU, which has very high requirements for the enterprise's research and development capabilities, safety design standards, and process control. It has a high technical threshold and authority globally, and has a positive effect on exports and project bidding.



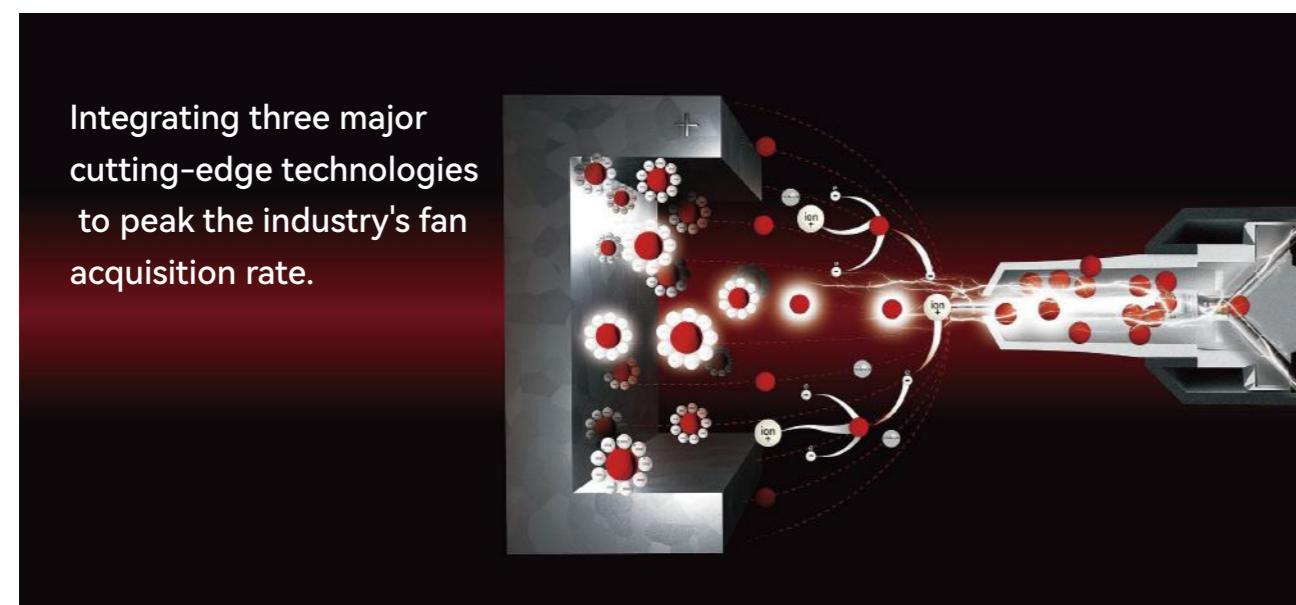
AG20 Automatic Spray Gun—Comparable in quality and performance to top international brands

The AG20 automatic electrostatic powder spray gun comprehensively surpasses other domestic brands in internal structural design, electric field control system, and powder conveying technology, and matches the performance of high-end spraying equipment from Europe and America in multiple key performance indicators.

The spray gun is manufactured with extremely high process standards, and its core components are selected from international first-tier brands, ensuring longer service life and stability. Its precise voltage and current control, combined with modular structural design, enables excellent adaptability and consistency in coating operations for complex structures such as flat surfaces, grooves, and special-shaped parts.



- Modular Structure Design/More Secure and Stable
- International brand accessories/statically dissipative more stable, durable and non-degrading
- Multi-angle elbow nozzle/suitable for various application scenarios
- 100kV high-performance step-up module / extremely high powder coating rate and coating coverage



Robust Electrostatic Performance

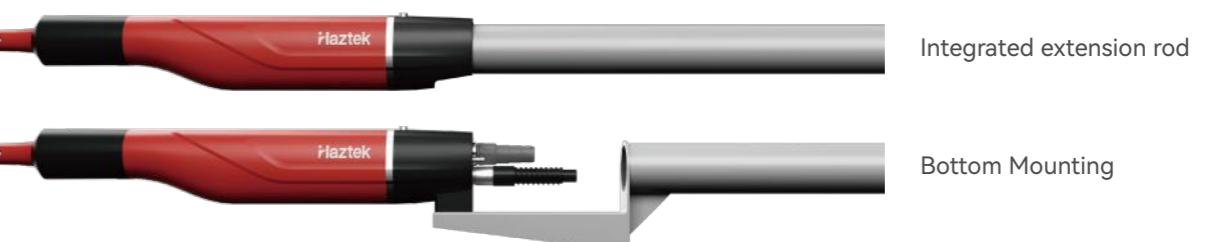
The 100kV voltage multiplier module, combined with the self-cleaning technology of the electrode needle, releases powerful electrostatics, ensuring that each powder coating particle reaches the optimal charging state. The powder adhesion rate is significantly improved, and even complex recesses can be easily covered, greatly reducing powder waste.

Refined powder output state

The DVC digital valve technology provides precise airflow control, combined with the gentle high-concentration powder supply of the PPH40 and the specially designed nozzle, to achieve more stable powder output and excellent atomization effects. This innovative combination significantly improves the uniformity and quality of the coating, making the coating flow more smoothly and providing you with superior spray performance.

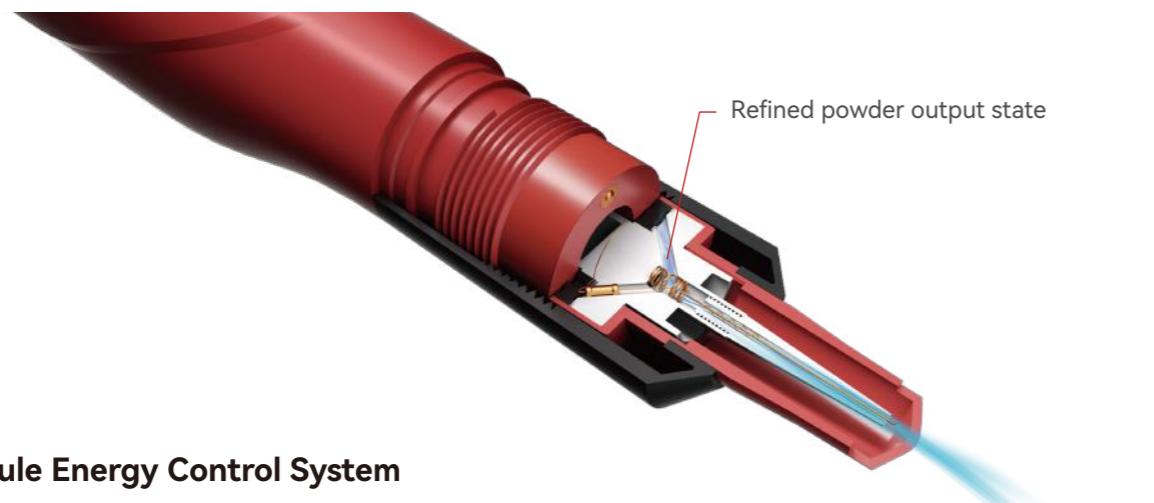
Two types of mounting: base-mounted and integrated extension poles

The AG20 automatic powder spray gun is equipped with two types of mounting methods, namely the integrated extension rod and the base mounting method, which can be flexibly selected according to the actual production factors such as the spray booth space, the reciprocator operation requirements and the distance of the workpiece to meet the requirements of the spraying operation.



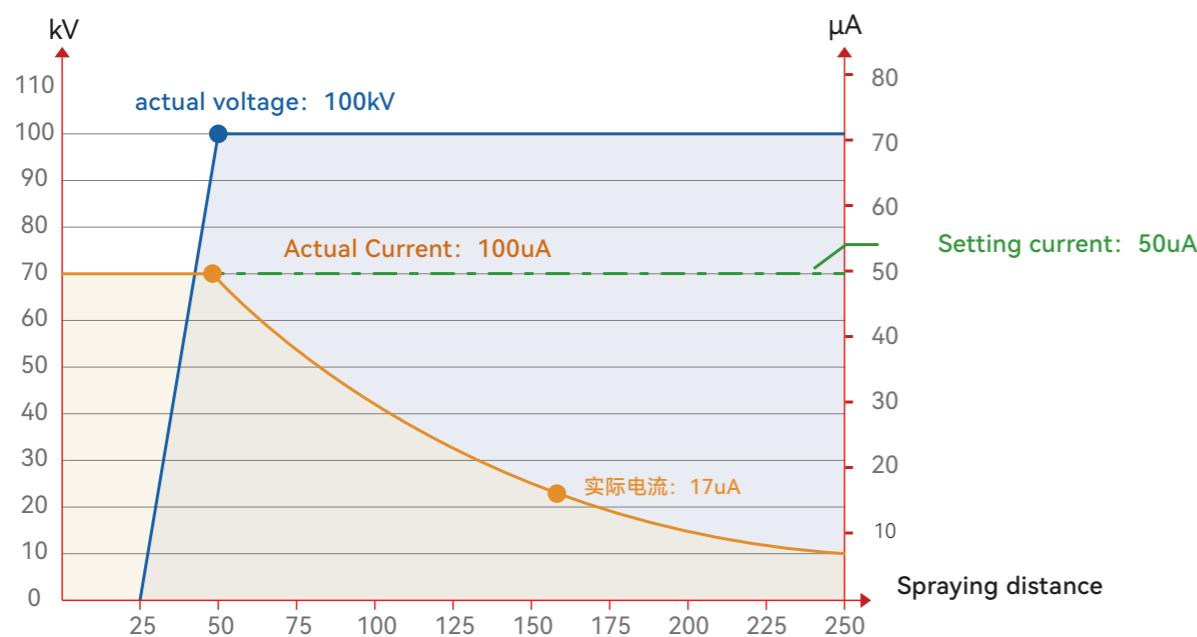
Self-cleaning Electrode Needle Tip / Triple Air Intake Technology

The internal design of the spray gun includes three cleaning gas channels, which can continuously clean the electrode needle tip, effectively preventing powder condensation, thereby ensuring excellent electrostatic release. By maintaining the cleanliness of the electrode needle, the triple intake technology helps to improve the charging efficiency of the powder, thereby enhancing the powder application rate and increasing the spraying efficiency. This technology contributes to extending the service life of the electrode needle, with a service life of up to 514 hours.



Millijoule Energy Control System

"Millijoule Energy Control System": The system is built-in with an advanced "Hao Jiao Energy Control System". When the distance between the workpiece and the spray gun is below the preset safe distance, the output voltage of the spray gun will automatically decrease adaptively, effectively avoiding the phenomena of arc and sparking caused by excessive current, ensuring the safety of operation and production.

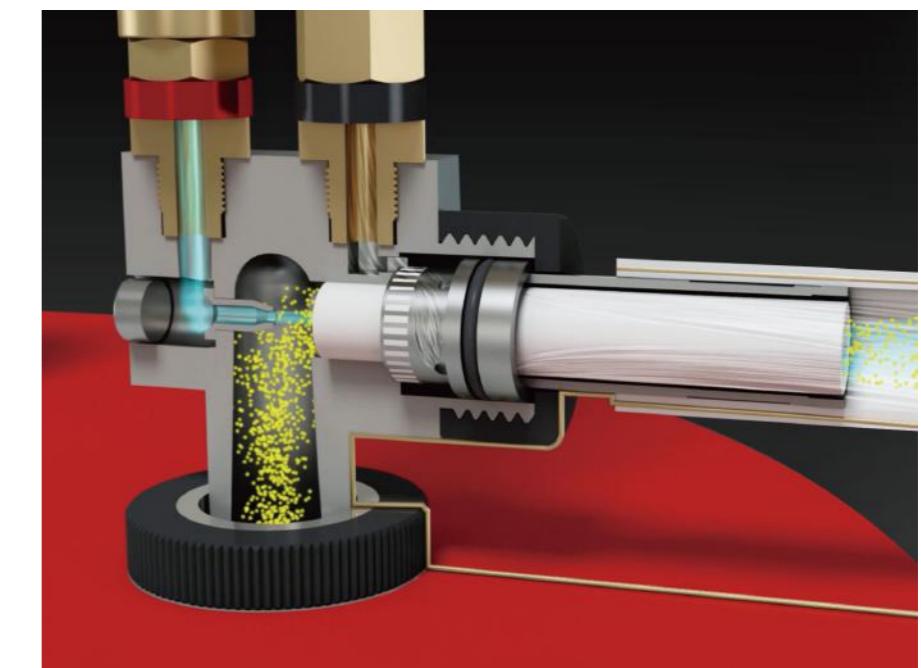


Voltage, Current, and Trend Chart of Spray Working Distance

PPH40 Powder Pump

Suitable for quick color change and quick cleaning

The product meets the "plug and play" functionality, suitable for quick color changes and quick cleaning. The quick insertion design of the powder tube facilitates the separation and connection for cleaning. The Venturi tube is made of high-quality non-stick material and is equipped with a quick connector for connecting compressed air. The powder supply is stable and even, with excellent atomization effect, which helps to form high-quality coatings. The maximum powder output rate can be up to 520g/min (depending on specific configuration and powder type).

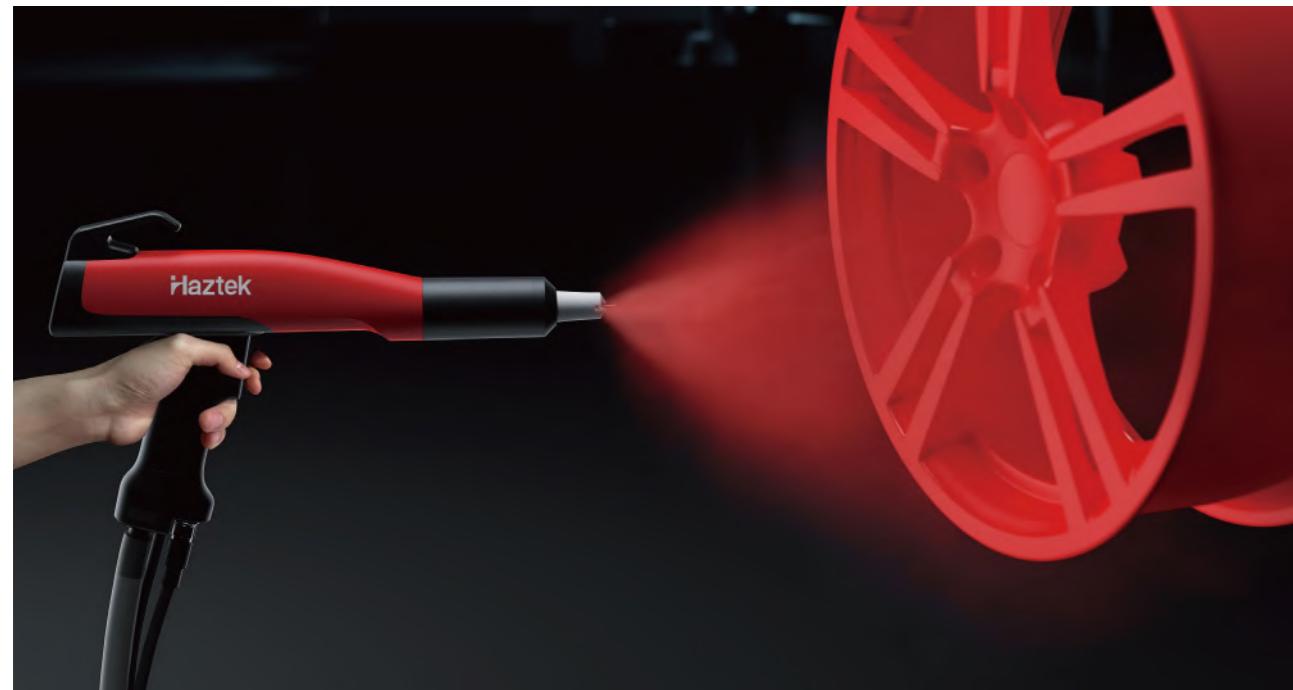


- Easy disassembly from the powder hopper
- With quick-disconnect one-way valve
- Durable Venturi tube
- Stable powder supply
- Excellent atomization effect
- Maximum powder output of 520g/min

■ MG20 Manual Spray Gun

Built-in 100kV high-voltage module, suitable for most common powders.

The built-in 100kV high-efficiency pressure doubler ensures a constant and stable output for excellent powder coating results. It is suitable for most of the common powders, even for those difficult to charge powder coatings, it can also realize efficient coating. In addition, its wear-resistant design and preferred materials further reduce maintenance costs.



The MG20 has an excellent ergonomic design and weighs only 510 grams, making it lightweight while still retaining superior durability. Its unique elevation angle and handle design allow for long hours of operation without fatigue. An external remote touch control module makes adjusting spraying parameters a breeze. A double-click on the trigger quickly switches to a preset spraying program, greatly improving work efficiency.



Can be used with a cart or an experimental or wall-mounted carrier.

Manual spraying equipment shows unique advantages in different application scenarios with its excellent flexibility and adaptability. The mobile cart stands out for its excellent mobility, and with its 50-liter powder container, it makes coating large workpieces easy and convenient. The experimental model, with its small powder container, adapts to changing laboratory environments and the coating of small workpieces with its compactness and flexibility. The wall-mounted models are designed with space utilization in mind, making them easy to install and space-saving for workplaces with limited space. These diverse carrier options ensure that Haztek manual spraying equipment can meet the needs of various scenarios, whether in industrial production, laboratory testing or space-constrained environments, to provide efficient and stable spraying solutions.

GC21F

Adopts a modular trolley support frame, integrating spray guns, powder pumps, controllers, and air source components, supporting quick relocation to different workstations. The trolley is equipped with universal casters and braking mechanisms, enabling flexible deployment in workshops, especially suitable for on-site spraying of large workpieces (such as automotive frames, wheel hubs, construction machinery components, and irregular-shaped plates).



GC21FZ

This vibrating manual spray gun equipment is equipped with an inclined vibrating table and a PPH40 powder supply pump. It can directly draw powder from the powder box without a powder bucket, enabling rapid color changes. The local powder fluidization and quick cleaning functions of the powder pump significantly improve efficiency. The inclined vibrating platform ensures full utilization of powder and a constant output, making it an ideal choice for small-batch production, proofing, and batch testing.



GC21SE

Equipped with a lightweight wall-mounted bracket that supports multi-angle installation and vertical adjustment, it can be installed at the manual spraying station of an automatic powder coating booth or flexibly deployed within the workshop. It can draw powder from either a centralized powder supply system or an independent powder bucket, enabling flexible touch-up spraying requirements.



GC21T

Desktop Experimental Spray Gun System, featuring a base-mounted bracket, is specifically designed for laboratory desktop environments. It is equipped with a spray gun that closely mimics production-grade models, paired with a 1.34L small powder container and powder feeding unit. This setup can highly replicate powder performance in mass production, assisting users in optimizing spraying parameters and comprehensively evaluating the powder adhesion rate, atomization effect, and coating quality of different powder formulations. It is an ideal solution for small-batch trial spraying and proofing. (Note: Wall-mounted bracket is available as an option.)



GC21TU

Integrated Experimental Spray Gun System featuring a 0.3L compact powder container integrated with the powder pump. It supports flexible switching with Venturi pump configurations and comes with a quick-release powder cup for rapid color changes and cleaning, significantly enhancing the efficiency of multi-group comparative experiments. Ideal for evaluating the comprehensive performance of powders with different formulations. (Note: Wall-mounted bracket available as option.)



GC21TD

Adopts a base-mounted bracket combined with a funnel-shaped powder cup design, enabling rapid color changes and cleaning. This significantly reduces the time cost of powder replacement in experiments and improves the efficiency of multi-group comparative tests, especially suitable for quick evaluation of formulations during the powder color matching stage. (Note: Wall-mounted bracket is available as an option.)



Pinnacle GC21 Excellent Series Device Parameters



Standard input voltage: 110-220VAC	100-250VAC	Other Functions
Frequency	50-60 Hz	CANBus fieldbus Support
Standard output voltage(to spray gun)	12V	External control (workpiece recognition system) Support
Standard output current(to spray gun)	1.2 A	Types of coatable powder
Gun output voltage	100kV	Metal powder capability yes
Gun output current	100uA	Other polyester powders capability yes
Polarity	Negative electrode	standard configuration
Protection Level	IP54	Powder hose length(m) 4
Temperature range	-40°C-85°C	Powder hose specificationØ (mm) 11*17
Compressed Air		Powder Tube Material Type POE tape conductive strip
Air inlet pressure	5.5-6bar	
Maximum air consumption	8.5Nm ³ /h	Maximum powder discharge rate 520g/min



Guangdong Haztek Coating Technology Co., Ltd, established in 2012, is a national high-tech enterprise focusing on the research and development, production and system solutions of electrostatic powder coating equipment. The company is committed to providing intelligent, high-efficiency, environmentally friendly spraying equipment for the coating industry, and its main products cover automatic electrostatic powder spray gun, digital control system, and integrated solutions for the whole line.

As a technical pioneer in the field of domestic coating equipment, Haztek owns an independent research and development technology platform, an advanced experimental testing center and a perfect after-sales service system. The company's products are widely used in aluminum profiles, home appliances, hardware, auto parts and other industries, serving customers including Midea, Haier, Opple Lighting, Sanyi Heavy Industry and other well-known enterprises, products are exported to Southeast Asia and the Middle East.

Haztek always adheres to the core competitiveness of "high standard, high service, high supporting", follows the development trend of the industry, promotes the powder coating equipment to digitalization, intelligence, environmental protection, and helps the global coating manufacturing enterprises to realize the double upgrade of efficiency and quality.

National High-Tech Enterprise
Aluminum Processing Equipment Digital Fusion Manufacturing Innovation Practice Enterprise
Guangdong Province Contract-Abiding and Creditable Enterprise
Innovative Small and Medium-sized Enterprise
Provincial Specialized, Special, and New Enterprise



Corporate Qualifications and Team

Empower global brands



Brand expansion across multiple countries worldwide

- Foshan Headquarters
- 1 Southwest China Region
- 2 Central China Region
- 3 East China Region
- 4 North China Region
- 5 Northeast China Region
- 6 Vietnam Region



Five reasons to choose Haztek Coating

No1 A brand with the mission of "continuously creating value for customers."

Haztek, as a leading paint coating equipment brand in China, has always upheld the mission of "continuously creating value for customers." With 20 years of experience in the industry, Haztek has continuously innovated in equipment development, keeping pace with the times and customer needs. In terms of service support, not only does Haztek help customers solve various paint coating challenges, but it also provides multidimensional training to share professional knowledge and production experience with enterprises, thereby assisting them in achieving continuous value creation in production management and paint coating quality.

No2 International Standard Certification for Equipment Quality / User Reputation, Consistent Market Recognition

"No high-standard equipment can withstand the test of the market." - The product philosophy of Haztek is to create Chinese spray guns that exceed European and American standards. We adhere to international certification standards, and CE/ATEX certification is a necessary standard for Haztek products. The stability of the equipment originates from international brand components, such as NXP Semiconductors, TI Instruments, ST Microelectronics, and Japanese Suntan capacitors, etc. It is precisely such benchmarking standards that have earned Haztek products both user reputation and market recognition.

No3 International Standard Certification for Equipment Quality / User Reputation, Consistent Market Recognition

As a national high-tech enterprise, it has a strong engineering technology center and researchers, and has been in long-term cooperation with many top global technology companies, integrating high-quality R&D resources from around the world. To date, it has more than 40 patents, solving many difficult problems in the coating industry through technology implementation. Intelligent control systems: Coatpilot spray management system, PCT proportional valve technology, dense phase pump digital valve and other technologies greatly enhance the convenience of operation and production efficiency.

No4 Customized Service / Customized according to the personalized needs of users

Our customized services cover the entire process from requirement analysis, customized solutions to equipment maintenance. According to the characteristics and needs of different industries (such as home appliances, building materials, aluminum industry, national defense heavy industry, construction machinery, MDF furniture, new energy vehicles, etc.), we tailor complete, lean and intelligent coating production line systems for customers, realizing a one-stop turnkey project.

No5 Brand service guarantee and after-sales support services: full-cycle closed-loop

Pre-sales: Deeply understand customer needs, provide professional consulting and planning suggestions, arrange on-site inspections and project analysis;

During sales: Confirm the implementation plan for the coating scheme, ensure timely delivery and installation of equipment, and have professional engineers follow up on the order progress throughout;

After-sales: Establish a customer service team with 24-hour online response, handle equipment failures, repairs, and maintenance needs in the first time, ensure customer production continuity, and solve customer problems at any time.

Systematic management: Professional after-sales service personnel follow up and remind of key points for equipment maintenance. Timely supply of powder spray guns and various related spare parts, covering consumables and wear parts of coating equipment such as coating production lines, so that these accessories are high-quality original parts from HanZhe. Relying on an efficient logistics distribution service system, ensure that the required accessories are delivered quickly and on time, maintain stable operation of the equipment, and extend the service life of the equipment.

By achieving high standards, high service, and high integration, we create a leading full-cycle closed-loop system for electrostatic powder coating and production management.



Full-cycle service closure