Explore a new path for high-quality

sustainable development of the industry

# BRIGHTMASTER ROBOTICS BROCHURE

Brighten Tech Ecosystem, Master Better Life




## Shenzhen BrightMaster Robotics Co., Ltd.

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* The data in this material is sourced from Laboratory, updated as of Aug 2025.
All graphic and textual materials are for reference only, and the product configuration (incl. technical parameters) is subject to the actual machine delivered.

For more information about BrightMaster Robotics, please scan the following QR code.

BMR Official Website

BMR TikTok

BMR Linkedin



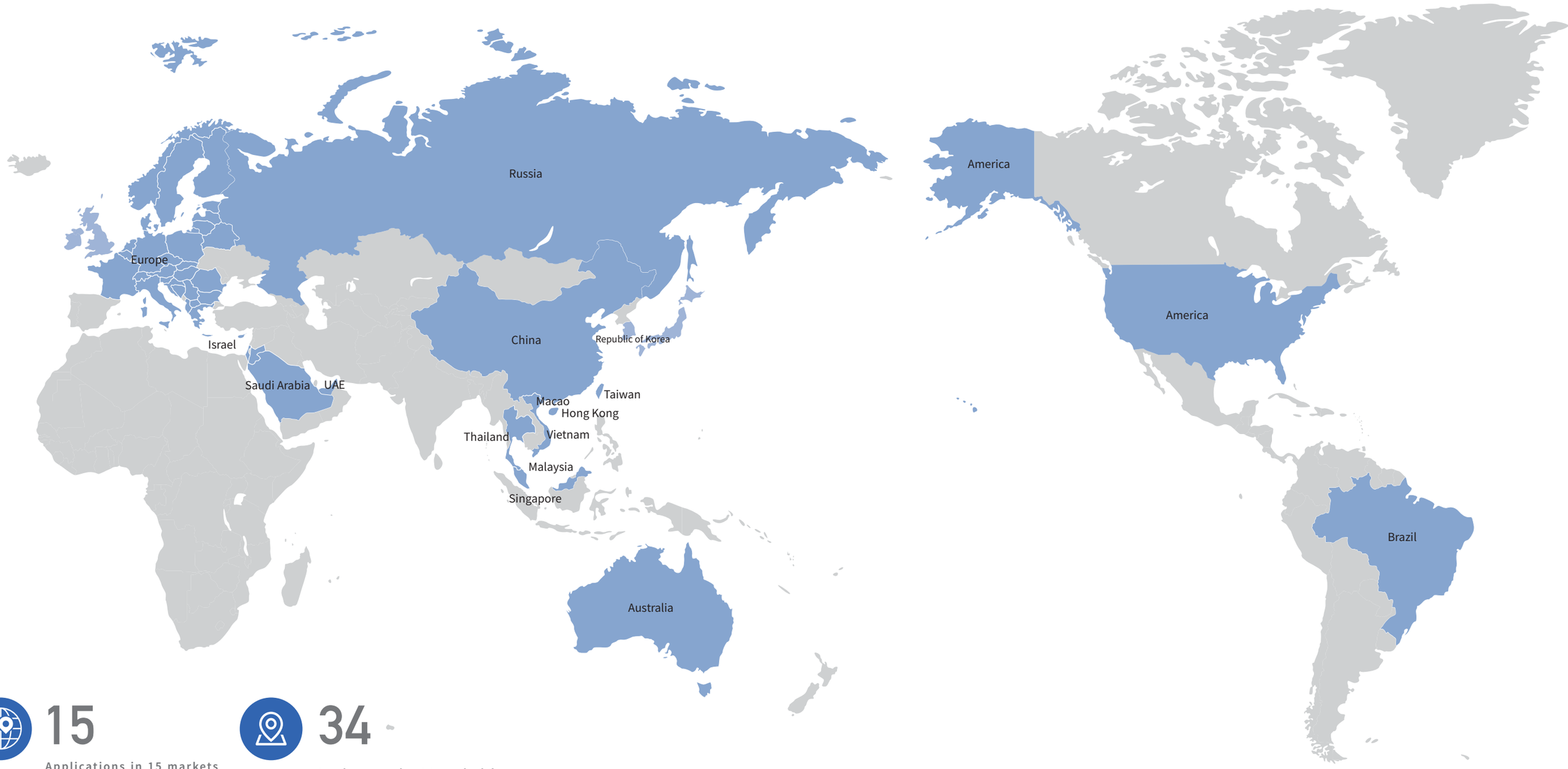
# PIONEERS GO FURTHER

## Company Profile

Shenzhen BrightMaster Robotics Co., Ltd. is a leading intelligent construction robotics company specializing in the R&D, deployment, and lifecycle services of construction robots. Powered by embodied intelligence technology, BrightMaster delivers smart robotic solutions that improve construction efficiency, safety, and quality across multiple scenarios, including grinding, spraying, leveling, and finishing, and other key processes.

With full-stack R&D capabilities and extensive field experience, BrightMaster has deployed over 5,400 robots, completed more than 1,600 construction projects, and supported projects covering over 50 million square meters across 15 countries and regions.

# Business Layout & Key Outcomes




**15**

Applications in 15 markets worldwide (including the Chinese mainland, Hong Kong, Macao, and Taiwan)

**34**

Services covering 34 provincial-level administrative divisions across China

**5400+**

Over 5400 units delivered

**1600+**

Accumulative application in over 1600 construction projects

**50+ MILLION**

Accumulative construction area exceeding 50 million sauare meters

**3100+**

Valid patent applications filed

**1200+**

Invention patents granted

# Brighten Tech Ecosystem, Master Better Life

*Construction robots For intelligent construction processes throughout the entire building lifecycle*



Floor Screeding Robot



Concrete Finishing Robot



Concrete Leveling Robot



Intelligent Follow-up Concrete Placing Pump

**Concrete Construction**



Block Handling Robot



Wall Panel Handling Robot



Mortar Coating Robot

**Secondary Structure**



Wall & Floor Tile Laying Robot



Wallpaper Robot



Intelligent Coating Robot

**Finishing & Decoration**

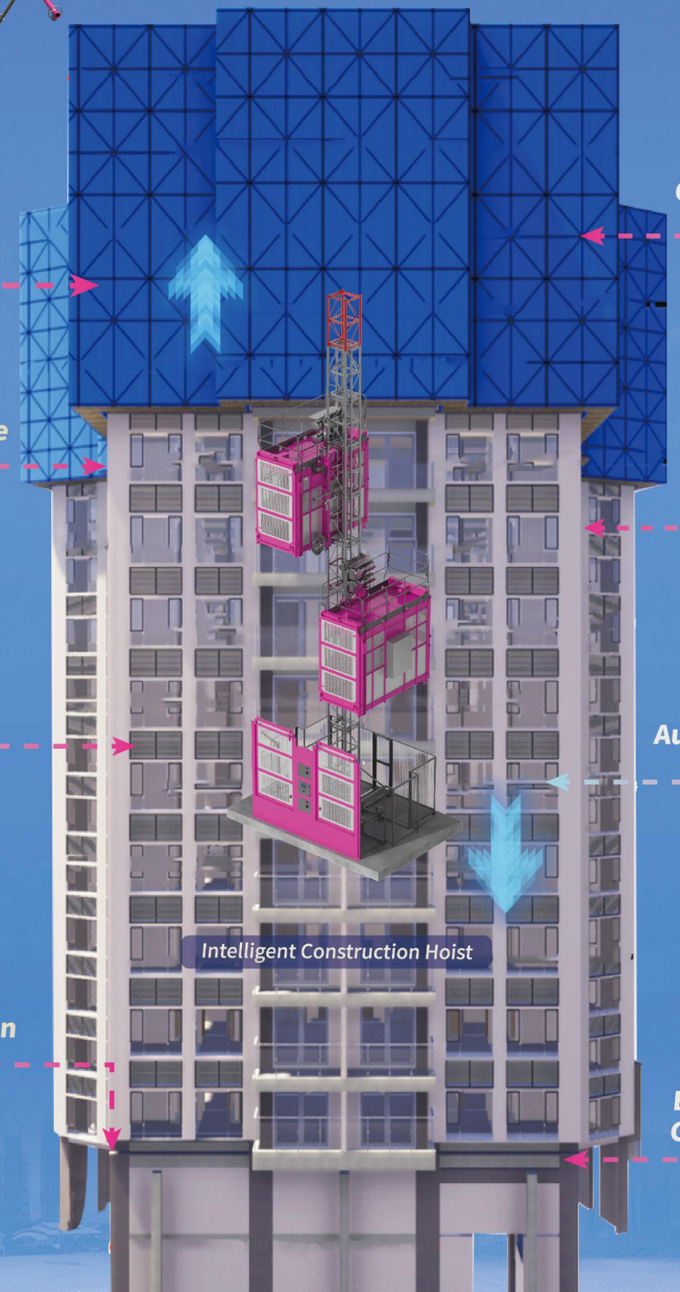


Screw Support Mounting Robot



Drilling Robot

**M&E Installation**




**Concrete Finishing**



Screw Hole Plugging Robot



Concrete Interior Wall & Ceiling Robot

**Exterior Wall Constrcution**



Exterior Wall Coating Robot



Facade Cleaning Robot

**Auxiliary Construction**



Construction Cleaning Robot



Measuring Robot



General-Purpose Logistics Robot



Floor Grinding Robot Series



Floor Coating Robot



Underground Garage Coating Robot

**Basement Construction**

# Intelligent Follow-up Concrete Placing Pump



### Cost Reduction & Labor Saving

Follow-up placing can reduce 2 placing workers, and automatic placing can reduce 1 leveling workers*
Compared with traditional methods, the cost of concrete construction is reduced by approximately 28% by realizing high-precision floors *

### 3x Durability

All structures have undergone rigorous simulation and actual testing.
Main structure life ⩾ 3 years

### Top Level Safety

Unique 10 safety designs to comprehensively improve the safety of the placing process

### Easy Operation

Robots that can be directly operated by traditional workers can realize automatic placing on floor without BIM intervention.

## Product Description*

According to the different requirements of placing radius, the products are divided into four models of 12m, 15m, 18m and 20m, which are suitable for concrete placing operations on different floors and basements.Follow-up placing function: By controlling the movement of the boom and arm through algorithms, only 30% of the manpower is needed to complete the placing work.Automatic placing function: With the advantage of high uniformity of automatic placing, the leveling workload is reduced by 13%*, which helps to achieve high-precision ground.
Multi-mode switching function: can switch between 4 modes: automatic/follow-up/romote/manual - ensures that placing work complete on time under any circumstances.

## Product Parameters*

| Model | Total Weight (T) (excl. counterweight) | Minimum Weight for Transfer between Floors (T) | Max. Placing Radius (m) | Installation Dimensions (m) | Operating voltage (v) | Product Function | Max. Wind Resistance |
|---|---|---|---|---|---|---|---|
| HG20 | 3.3 | 2.5 | 20 | Preformed hole: 1.2x1.2~1.5x1.5 Elevator shaft installation: 2.1x2.1~2.3x2.3 | AC380V (±40V) Three-phase five-wire | Automatic mode (automatic placing according to preset path) Follow-up mode (single-person joystick operation) Remote mode (remote operation of boom and arm) Manual mode (traditional manual pulling) | 13.8m/s (force 6 wind) |
| HG18 | 3.1 | 2.2 | 18 | | | | |
| HG15 | 1.7 | 1.7(2.2) | 15 | Outrigger span 4.2x4.2 | | | |
| HG12 | 1.6 | 1.6(2.2) | 12 | Outrigger span 3.6x3.6 | | | |



# Concrete Leveling Robot




### High Efficiency

1.5 m head net efficiency ⩾ 160 $m^2$/h;
2.5 m head net efficiency ⩾ 300 $m^2$/h*

### High Quality

Precise elevation control; with human–machine cooperation, the pass rate of initial-setting levelness (±5 mm) exceeds 95%*

### Low Cost

Saves 2–3 traditional workers; combined high-precision floor robot operation reduces construction costs by approximately 28%

### Intelligent

Remote positioning, remote machine locking, construction area statistics, real-time equipment status monitoring

## Product Description*

The Concrete Leveling Robot is available in 1.5 m and 2.5 m models and can be used in scenarios requiring concrete leveling, such as residential floors, basements, factories, airports, and shopping malls. The product supports semi-automatic operation via remote control and performs slurry lifting, surface finishing, and elevation control before the initial setting of concrete. Technical Highlights: Independently developed dual-degree-of-freedom adaptive system, integrated intelligent motion control algorithms, high-precision laser recognition measurement, and real-time control technology.

## Product Parameters*

| Item | Concrete Leveling Robot 15SY | Concrete Leveling Robot 15MY | Concrete Leveling Robot 25SY | Concrete Leveling Robot 25MY |
|---|---|---|---|---|
| Leveling Head Size | 1500mm | | 2500mm | |
| Dimensions (LxWxH) | 1650×1600×1650mm | | 2650×2500×2000mm | |
| Weight | 175kg | | 350kg | |
| Laser System | Topcon | MOBA | Topcon | MOBA |
| Tire Size | 3.00-10 all-terrain tubeless tires | | 26x4-18 tubeless tires; optional AT26x9-14 all-terrain tires | |
| Leveling Thickness | 30–150 mm RH | | 30mm-250mm RH | |
| Operational Efficiency | ⩾ 160 $m^2$/h | | ⩾ 300 $m^2$/h | |
| Operation Mode | Remote Control | | | |
| Power Supply Mode | 48V / 40AH | | 48V / 90AH | |
| Operating Endurance | ⩾ 5H | | ⩾ 10H | |
| Battery Charging Time | 2.5H | | 4H | |
| Maximum Travel Speed | 800 mm/s | | | |
| Operating Temperature | 0 °C ~45 °C | | | |

# Concrete Finishing Robot 80SZ




### Labor Saving

Operation via remote control (1 person, 1 machine) or fully automatic construction mode can reduce the need for one traditional finishing worker.

### High Efficiency

The 80 model achieves 300–400 $m^2$/h per single operation*

### High Quality

Improved surface compactness, wear resistance stability, and surface smoothness of the finished floor.

### Intelligent

SLAM mapping, automatic path planning, automatic navigation, and unmanned automatic construction.

## Product Description*

The Concrete Finishing Robot is suitable for large-area concrete finishing and polishing operations in basements, plazas, factories, airports, shopping malls, and similar scenarios. The product supports both fully automatic and remote-control modes, enabling automatic construction on cast-in-place concrete surfaces, including large-area concrete compaction, slurry lifting, surface finishing, and polishing. Technical Highlights: SLAM mapping, fully automatic navigation system, integrated intelligent motion control algorithms, and real-time control technology.

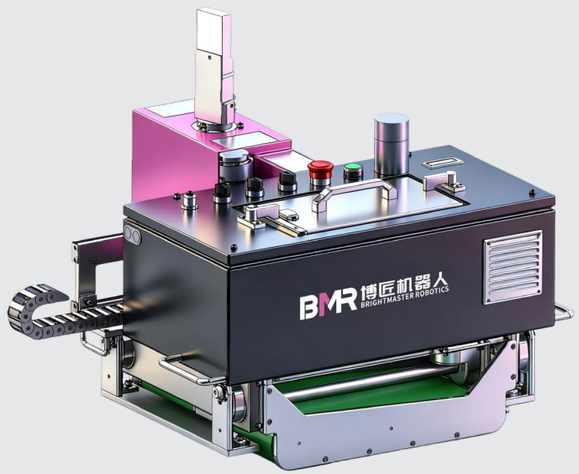
## Product Parameters*

| | |
|---|---|
| Finishing Disc Diameter | 800mm |
| Weight | 340kg |
| Dimensions (LxWxH) | 1600x900x1310mm |
| Single-pass Operating Efficiency | ⩾ 300 ㎡/h |
| Blade Rotation Speed | 0~150r/min |

| | |
|---|---|
| Automatic Operation Navigation Deviation | ⩽ 200mm |
| Power Supply | 48V 160AH |
| Operating Endurance | ⩾ 4h |
| Charging Time | ⩽ 4h |
| Operating Temperature | 0~45°C |



# Floor Screeding Robot 07SY




### High Efficiency

Theoretical productivity ⩾ 130$m^2$/h*

### High Quality

Flatness: 2 m/3 mm*

### Intelligent

One-touch fully automatic operation, positioning, area measurement, and equipment status monitoring

## Product Description*

The Floor Screeding Robot can be used in applications such as residential construction, public building flooring, metro station flooring, and floor screeding after underfloor heating installation; this product achieves one-touch fully automatic operation through a remote controller and is designed to perform dry-mixed mortar screeding operations.

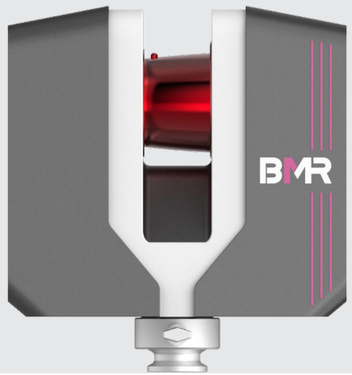
Technical Highlights: Independently developed integrated intelligent motion control algorithms, laser measurement and positioning technology, and real-time control technology.

## Product Parameters*

| Specification | Value |
|---|---|
| Dimensions (L × W × H) | Length ⩽ 790 mm, Width ⩽ 730 mm, Height ⩽ 660mm |
| Weight | 65kg |
| Operating Power | 300W |
| Construction Precision | 2m/3mm |
| Theoretical Productivity | ⩾ 130 ㎡/h |

| | |
|---|---|
| Screeding Thickness | 0 ～ 10cm |
| Power Supply | 48V 25AH |
| Endurance | ⩾ 6h |
| Fast Charging Time | ⩽ 3h |
| Ip Rating | IP54 |
| Operating Environment | -5~40°C |

# Measuring Robot




### High Efficiency

Single scan with full-areacoverage. Single-room measurement takes only 2minutes, with an operating efficiency of over 300 ㎡ /h*

### High Precision

High-precision imaging and image-processing scanner with an accuracy of ±1 mm*

### Low Cost

Measurements can be completed by one person, saving approximately 70% in overall costs compared with traditional construction*

### Intelligent

AI measurement algorithms with intelligent multi-scenario recognition

## Product Description*

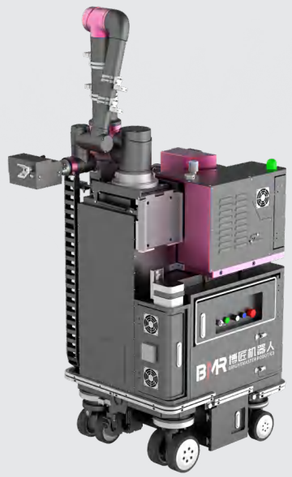
The Measuring Robot is a high-eficiency, high- precision, inteligent, and multi- purpose measuring robot. It is widely appled to construction quality inspection in residential and public buildings, covering scenarios such as indoor as-built measurement, building facade measurement, basement foor flatnes measurement, and concrete surface measurement. The robot supports panoramic image capture, point cloud data acquisition, real-time reverse BIM modeling, and construction material quantity calculation. It can also operate in coordination with concrete finishing robots and interior finishing robots, forming a closed -loop workflow that spans problem detection, issue documentation, and corective execution, thereby enabling comprehensive quality control throughout the construction process.

## Product Parameters*

| Product Name | | Measuring Robot CL10 | Measuring Robot CL100 | Measuring Robot CL400 |
|---|---|---|---|---|
| Main Parameters | Dimensions (LxWxH) | 238x218x120mm | 230x183x103mm | 230x183x103mm |
| | Weight | 3.9kg | 4.4kg | 4.4kg |
| | Measurement Range | 0.6~30m | 0.5~100m | 0.5~400m |
| | Measurement Accuracy | ±1.50mm | ±1.00mm | |
| | Temperature Range | -5 ℃ to+ 45 ℃ | -10 ℃ + 55 ℃ | |
| | Laser Class | Class 1 laser, eye-safe | | |
| | Battery Life | 4h | | |
| | Measurement Efficiency | 2 min/station, 300 $m^2$/h | | |
| As-builtM easurement | Structural Stage | ● | ● | ● |
| | Masonry Stage | ● | ● | ● |
| | Plastering Stage | ● | ● | ● |
| | Finishing Stage | ● | ● | ● |
| | Unit Acceptance Inspection | ○ | ● | ● |
| | Panoramic Photos | ○ | Optional | ● |
| Digital DeliveryDigital Delivery | Point Cloud Models | ● | ● | ● |
| | BIM Model | ● | ● | ● |
| | Multi-robot Linkage | ● | ● | ● |
| | Material Quantity Calculation | ● | ● | ● |



# Intelligent Coating Robot




### High Efficiency

Leveraging mobile coating and dynamic flow-control technology, the robot delivers an overall putty and emulsion paint coating efficiency more than 6x that of manual construction, while putty grinding efficiency exceeds manual work by over 2x. It also supports long-duration, continuous operation.

### High Coverage

With powerful onboard perception combined with fully self-developed motion-control algorithms, the robot automatically performs coating and grinding across architectural features such as walls,ceilings, and bay windows, achieving a coverage rate of over 90%*

### Zero Learning Curve

Featuring fully self-developed real-time perception–based RTPC technology supported by an operation app, the system requires no manual intervention, no drawings, no BIM models, and no handheld scanning as preconditions. It effectively addresses construction challenges caused by real-world deviations and enables one-click start-up.

### High Quality

Based on a fully self-developed robotic painting construction process and methodology, the system achieves precise closed-loop control of all coating and grinding parameters. A three-in-one domain controller dynamically adapts to different application scenarios, ensuring stable, high-quality, and highly consistent construction results.

### High Returns

While significantly reducing labor requirements and greatly improving construction efficiency, the platform-based design offers a low entry threshold across the entire product range. Within a mature human–robot collaborative construction model, it delivers substantial economic benefits.

### Working Height

With a compact body size that allows easy access inside residential interiors, the robot achieves a maximum working height of 4.5 meters. With the optional height-extension module, the maximum working height can be increased to 6.5 meters*

## Product Description*

The Intelligent Coating Robot is a new-generation, fully automated, unmanned smart construction robot. Built on a platform-based concept, it can be equipped with different functional modules to perform putty and emulsion paint coating as well as putty grinding. The maximum working height reaches 6.5 meters. Powered by a robust real-time perception–based RTPC software system, the robot supports one-click operation with no pre-scanning or path planning required.Through different module combinations, available models include coating versions P45 and P65, and grinding versions M40 and M60. The robot enables fully automatic or semi-automatic putty and emulsion paint operations on indoor features such as walls, bay windows, and ceilings, achieving a comprehensive coverage rate of over 90%. It is suitable for residential buildings, schools, hospitals, commercial offices, and large public facilities in both fine and industrial decoration scenarios.

Compared with traditional manual work, it offers high quality, high efficiency, high coverage, and high returns. It supports long, continuous operation, significantly reduces labor demand, helps avoid environmental issues, and lowers the risks of occupational diseases and safety accidents.

## Product Parameters*

| | Intelligent Coating Robot P45 | Intelligent Coating Robot P65 | Intelligent Coating Robot M40 | Intelligent Coating Robot M60 |
|---|---|---|---|---|
| Weight | About 500 kg | About 650 kg | About 450 kg | About 600 kg |
| Dimensions (LxWxH) | 860×760×1700 mm | 1630×1150×1750 mm | 860×760×1700 mm | 1630×1150×1750 mm |
| Operating Endurance | 5h | | | |
| Capacity (Material Hopper/dust Container) | Material Hopper：60 L | Material Hopper：60 L | Dust Container: 100L | Dust Container: 100L |
| Working Height | ⩽ 4500mm | ⩽ 6500mm | ⩽ 4000mm | ⩽ 6000mm |
| Overall Productivity | Single-coat Putty: 80 $m^2$/h<br>Single-coat Emulsion Paint: 200 $m^2$/h | Single-coat Putty: 100 $m^2$/h<br>Single-coat Emulsion Paint: 250 $m^2$/h | Putty Grinding: 60 $m^2$/h | Putty Grinding: 80 $m^2$/h |
| Coverage Rate | Above 90% | | Above 85% | Above 90% |
| Moving Speed | ⩽ 0.5m/s | | | |
| Obstacle Crossing Height | ⩽ 30mm | | | |
| Trench Crossing Width | ⩽ 50mm | | | |
| Climbing Angle | ⩽ 10° | | | |
| Positioning Accuracy | ±30mm | | | |

# Exterior Wall Coating  Robot T100

### High Safety

Replaces manual high-altitude operations; reduces construction safety risks; lowers the harm of paint mist to the human body.

### Path Planing

Independently developed automatic path planning software; automatically generates robot coating paths; convenient and efficient construction applications.

### Intelligent

Fully automatic coating operations; automatically generated work paths; remote monitoring and control via an app.



### HighEfficiency

The overall efficiency of the gable wallflat-coating system reaches 180 ㎡ /h; the overall efficiency of the texturedpaint system reaches 100 ㎡ /h*

### High Coverage

With mobile coating and dynamic pressurecontrol technology, the system can coverareas such as balcony surfaces, air-condi-tioner recesses, and internal/externalcorners, achieving an overall coverage rateof over 80%*

### High Quality

Precise control of coating parameters with dynamic multi-spray adaptation to different scenarios ensures uniform coating and stable quality.

## Product Description*

The Exterior Wall Coating Robot T100 is a new-generation intelligent aerial work robot designed for coating exterior facades of mid - and high-rise buildings. It supports primer and topcoat application on irregular surfaces such as gablewalls, balcony surfaces, and internal extermnal corners.Applicable coating types include latex paint, realstone paint, multicolor paint,relief paint, and other commonly used exterior wallcoating systems. The newproduct adopts a modula, ightweight, and platform -based design concept and can be mounted on industry-standard aerialwork gondolas (2-4 m), offering high industry versatility and strong promotion potential.

The robot features intelligent functions suchas switching between semi-automatic and fully automatic operation modes, automatic feature recognition and spray path planning, automatic obstacle crossing, remote construction monitoring construction data statistics, and aerial attiude monitoring. It is user-friendly and effectively reduces safety risks associated with high- altitude operations, making it mainly suitable for new construction or renovation projects in residential and public buildings.

## Product Parameters*

| | |
|---|---|
| Weight | ⩽ 400kg |
| Construction Scenarios | Flat surfaces, balconies, internal/external corners, bay windows, curved surfaces |
| Working Height | ⩽ 100m |
| Operating Voltage | 380V |
| Material Tank Capacity | 80L |
| Overall Coverage Rate | ⩾ 80% |

| | |
|---|---|
| Construction Coatings | Latex paint, real stone paint,relief paint, multicolor paint |
| Rated Power | 4kW |
| Trajectory Planning | Manual, fully automatic |
| Obstacle Crossing Height | ⩽ 200mm |
| Effective Stroke | 2-4m |
| Module Weight | ⩽ 50kg |



# Facade Cleaning Robot MQ200

### High Safety

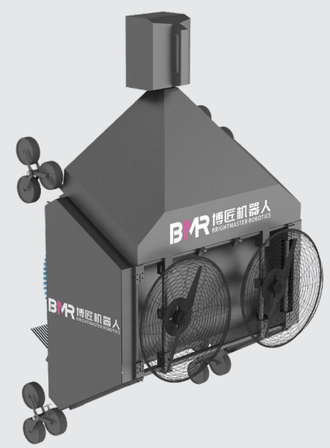
Replacing manual high-altitude operations;reducing construction safety risks.

### Path Planing

Proprietary path planning software; automatically generates robot construction paths; convenient and efficient application.

### Intelligent

Fully automatic operation; automatic generation of cleaning reports.



### High Efficiency

Comprehensive cleaning efficiency: 350 ㎡ /h*

### High Coverage

Modular obstacle-crossing solutionachieves comprehensive coverage ofover 80%*

### High Quality

Precise control of cleaning parameters,AI vision for identifying wall features,obstacles, and cleanliness levels.

## Product Description*

The Facade Cleaning Robot MQ200 is a fully automatic cleaning robot designed for high-rise and ultra-high-rise buildings. By integrating a model of " ground based manual control  autonomous high-altitude operation + AI intelligent detection," it achieves unmanned, inteligent, and standardized curtain wall cleaning. Its primary application scenarios include flat and large -curved glass and metal curtain walls, making itsuitable for commercial office buildings, hotels, urban landmarks, and more.

The robot is equipped witha redundant safety system that significantly reduces safety risks associated with high-altitude operations. Its modular obstacle -crossing mechanism enables ito navigate most architectural facade decorations.Additionally.it features an AI vision system forinteli-gent path planning and cleanliness assessment. What's more, its integrated wastewater recovery unit can prevent secondary pollution to the surrounding environment.

## Product Parameters*

| | |
|---|---|
| Total Weight | ⩽ 80kg |
| Construction Scenarios | Flat and large-curved glass,metal and stone curtain |
| Working Height | ⩽ 200m |
| Operating Voltage | 220V |
| Water Supply Method | Surface water supply |
| Overall Coverage Rate | ⩾ 80% |

| | |
|---|---|
| Operating Slope | 0-90° |
| Moving Speed | 0-0.2m/s |
| Cleaning Efficiency | ⩾ 350m²/h |
| Obstacle Crossing Height | ⩽ 400mm |
| Cleaning Width | 1000mm |
| Protection Level | IP 54 |

# Floor Grinding Robot 850M



## High Efficiency

Fully automatic grinding with multi-machine collaborative operation;construction efficiency is 1.5 times that of manual work, enabling long-dura-tion continuous operation.

## Low Cost

One person operating onemachine saves one worker.one person operating twomachines saves 1.5 workers.

## High Quality

Robot paths are uniform and continu-ous, with no over-grinding or missed areas, ensuring consistent construction quality.

## Protection Safety & Environmental

Intelligent grinding disc protection,automatic obstacle stop, automatic dustcollection, and green construction.

## Intelligent

Automatic mapping, intelligent pathplanning, autonomous navigation , and FMS cloud data management.

## Product Description*

The Floor Grinding Robot is designed to remove surface laitance from concrete. It is widely applicable in the construction of various floor types, including epoxy floors, sealed hardener floors, emery sealed hardener floors, epoxy terazo floors, inorganic terrazzo floors, and terrazzo floorsin scenarios such as underground parking garages,factory workshops, laboratories, and sports venues. By using LiDAR scanning to identiy the location information of objects such as walls and columns, the robot performs intelligent path planning enabling real-time positioning, autono-mous navigation, and fully automatic grinding operations. Additionally, it features functions such as automatic dust collection (850 M series, safe stopping upon detecting obstacles, grinding disc protection, construction data statistics, fault  alarm, and FMS cloud data management.

## Product Parameters*

| Product Name | Floor Grinding Robot 850M | Grinding Speed | 400-2000rpm |
|---|---|---|---|
| Voltage | 380 VAC | Travel Speed | 0.55m/s |
| Power Supply Type | Three-phase four-wire system | Battery | 48V&30Ah |
| Frequency | 50 HZ/60 HZ | Operating Range | 9km |
| Grinding Power | 18.5kW | Climbing | 15° |
| Dust Collection Power | 2.3kW | Positioning Accuracy | 5cm |
| Working Width | 850±50mm | Dimensions (LxWxH) | 2025X1040X1295mm |
| Grinding Disc | Planetary disc | Weight | 805kg |



# Floor Grinding Robot 850S



## High Efficiency

Fully automatic grinding with multi-machine collaborative operation;construction efficiency is 1.5 times that of manual work, enabling long-dura-tion continuous operation.

## Low Cost

One person operating onemachine saves one worker.one person operating twomachines saves 1.5 workers.

## High Quality

Robot paths are uniform and continu-ous, with no over-grinding or missed areas, ensuring consistent construction quality.

## Protection Safety & Environmental

Intelligent grinding disc protection,automatic obstacle stop, automatic dustcollection, and green construction.

## Intelligent

Automatic mapping, intelligent pathplanning, autonomous navigation , and FMS cloud data management.

## Product Description*

The Floor Grinding Robot is designed to remove surface laitance from concrete. It is widely applicable in the construction of various floor types, including epoxy floors, sealed hardener floors, emery sealed hardener floors, epoxy terazo floors, inorganic terrazzo floors, and terrazzo floorsin scenarios such as underground parking garages,factory workshops, laboratories, and sports venues. By using LiDAR scanning to identiy the location information of objects such as walls and columns, the robot performs intelligent path planning enabling real-time positioning, autono-mous navigation, and fully automatic grinding operations. Additionally, it features functions such as automatic dust collection (850 M series, safe stopping upon detecting obstacles, grinding disc protection, construction data statistics, fault  alarm, and FMS cloud data management.

## Product Parameters*

| Product Name | Floor Grinding Robot 850S | Grinding Speed | 0-2000rpm |
|---|---|---|---|
| Voltage | 380 VAC | Travel Speed | 0.55m/s |
| Power Supply Type | Three-phase four-wire system | Battery | 48V&30Ah |
| Frequency | 50 HZ/60 HZ | Operating Range | 9km |
| Grinding Power | 18.5kW | Climbing | 15° |
| Dust Collection Power | - | Positioning Accuracy | 5cm |
| Working Width | 850±50mm | Dimensions (LxWxH) | 1340X985X1170mm |
| Grinding Disc | Planetary disc | Weight | 650kg |

# Floor Coating Robot 3800S



## Zero-threshold Operation

Process parameters are presetvia the APP; the robotic arm performs automatic coatingoperations, with operators only required to control the chassisand replenish coating materials,enabling simple construction.

## High Efficiency with Long Endurance

Operating width 1.6-3.8 m, net efficiency up to 300 ㎡ /h, and continuous single-shift operation of 2,000 ㎡ without endurance concerns .

## One Machine,Multiple Uses

Compatible with scraping and roll-coating processes; suitable for solventbased and water-based coatings; covering the full process of primer/intermediate coat/topcoat.

## Adaptive Coating

End tools feature dynamicallyadaptive fitting for all floorconditions, ensuring uniformcoating and high consistency inconstruction appearance.

## Digital and Intelligent Empowerment

Multi-parameter intelligent linkage with precise coating consumption control of +15%; supports construction data statistics and FMS cloud data management.

## Product Description*

The Floor Coating Robot 3800s focuses on diverse scenariossuch as underground parking garages,factory workshops, laboratories, and sports venues. It is suitable for semi-automated coating operations covering the full process of primer-intermediate coat-topcoat for coating floors. With a modular design compatible with both scraping and rol-coating end tools, and dynamic adaptive constant control technology, the end tools remain closely fited to floors under diferent working conditions,ensuring uniform coating across the entire area. One machine supports multiple functions,flexibly adapting to various coatings and construction processes, empowering efficient construction and precise cost control with robust technology

## Product Parameters*

| | | | |
|---|---|---|---|
| Dimensions (LxWxH) | 2580x1000x1700mm | Weight | 450kg (unloaded) |
| Maximum Operating WidthBattery | 3.2 m (scraping)/3.8 m (roll coating) | Material Tank Capacity | 32L |
| Capacity | DC48V&100Ah | Rated Power | 3.0kW |
| Charging Source | AC 220V/16A | Maximum Climbing Angle | 12° |
| Operating Endurance | ⩾ 6h | Maximum Obstacle-crossing Height | 50mm |
| Maximum Moving Speed | 0.7m/s | Maximum Trench-crossing Width | 50mm |



# Intelligent Construction Hoist

## Safety

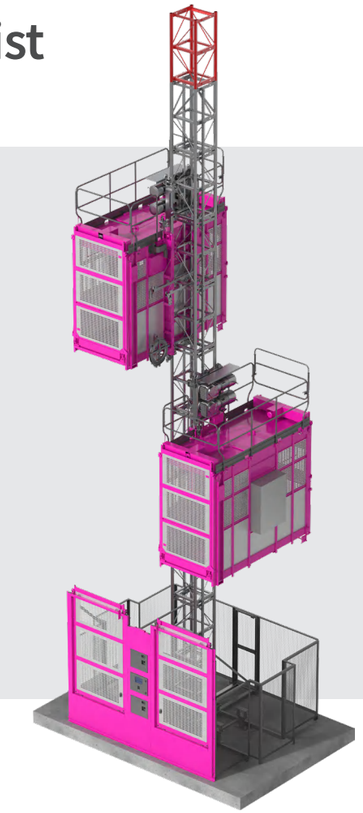
Overload alarm, real-time monitoring of abnormalities, and maintenance alerts.

## High Efficiency

Automatic operation, dual-cage interlocking control, automatic leveling.

## Intelligent

Wireless interconnection, robot dispatching, pre-queuing for hoists, one cage serving multiple robots, and intelligent parking.



## Product Description*

The Inteligent Construction Host issuitable for smart building system projects. It is equipped wth automatic landing doors and can respond to external foor call and in-cage floor selection commands. Integrated with a vertical logistics scheduling system, it supports automated interaction with construction robots, providing barier-free inter-floor transportation services for robots, improving the efficiency of vertical logistics channel, and ensuring construction progress. The safety management system configured for the intelligent construction hoist enables full life-cycle quality and safety supervision of equipment by the factory, rental/engineering service providers, and general contractors.

## Product Parameters*

| | | | |
|---|---|---|---|
| Product Model | Intelligent Construction Hoist 200/200A | Maximum Installation Height | 242m |
| Rated Load Capacity | 2×2000kg | Lifting Speed | 0-36m/min |
| Cage Dimensions (LxWxH) | 3.2×1.5×2.45m | Motor Power | 2×2×15kW |

# Representative Project Example

## The First Batch of Demonstration Projects for Intelligent Construction by the Ministry of Housing and Urban-Rural Development Foshan Fengtong Garden

In February 2021, the project was included in the first batch of demonstration projects for intelligent construction by the Ministry of Housing and Urban-Rural Development; two experiences and practices were selected into the "The List of Reproducible Experience and Practices for the Collaborative Development of Intelligent Construction and Newtype Building Industrialization by the Ministry of Housing and Urban-Rural Development (First Batch)" and "Cases of Innovative Services of New Technologies and Products for Intelligent Construction". BIM collaboration platform, intelligent design software, BIM smart construction site, BIM planning and scheduling, and construction robot applications were selected into the "Exemplary Cases for Innovative Services of New Technologies and Products in Guangdong's Intelligent Construction (First Batch)".More than 20 construction robots was introduced to explore their engineering practices in various stages such as main structure, secondary structure, interior decoration, and outdoor works, which had achieved certain results in term of improving construction efficiency, reducing labor force, and mitigating environmental pollution.


中华人民共和国住房和城乡建设部
Ministry of Housing and Urban-Rural Development of the People's Republic of China
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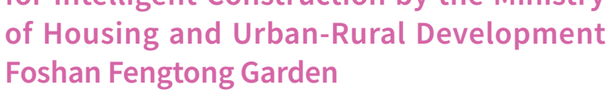
住房和城乡建设部办公厅关于印发
智能建造与新型建筑工业化协同发展
可复制经验做法清单（第一批）的通知


中华人民共和国住房和城乡建设部
Ministry of Housing and Urban-Rural Development of the People's Republic of China
www.mohurd.gov.cn

住房和城乡建设部办公厅关于
同意开展智能建造试点的函

上海市、重庆市住房和城乡建设（管）委，广东省住房和城乡建设厅：

《关于金地集团上海嘉定新城菊园社区项目申请作为住建部智能建造与建筑工业化协同发展试点项目的函》、《关于推荐佛山顺德凤桐花园等项目为国家智能建造试点项目的函》（粤建市函〔2021〕56号）、《关于推荐重庆龙湖天璞等二个项目为住房和城乡建设部智能建造试点项目的通示》（渝建函〔2021〕71号）收悉。经研究，现函复如下：


Concrete Leveling Robot


Combined Linkage Operations of Concrete Construction


Screw Hole Plugging Robot


Linkage Construction of Ceiling Grinding Measuring Robot


Ceiling Grinding Robot


Interior Wall Grinding Robot


Putty Coating Robot


Wall Tile Paving Robot


Measuring Robot


Exterior Wall Spraying Robot

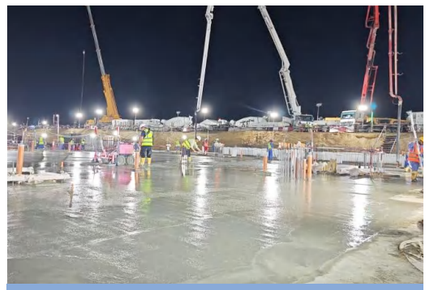
# Representative Project Example

## Construction Robots：Global Deployment, Powering Projects at Home and Abroad

Feb 2026
UAE Dual -Benchmark Project : Concrete Leveling RobotAurelle Singapore Residential Project : Putty Grinding Robot, Indoor Coating Robot NP320
Jan 2026
The Se niqu Project, Vietnam : Putty Coating Robot NP320 Pro, Putty Grinding Robot, Indoor Coating Robot NP320, and Putty Mixer The Myst & Aurelle Projects, Singapore: Putty Grinding Robot, Indoor Coating Robot NP320
Nov 2025
Samsung C&T Project, South Korea : Concrete Leveling RobotJun 2025Wynn Resort Project, UAE : Indoor Coating Robot NP320Taichung Project, Chinese Taiwan : Concrete Interior Wall Grindinging Robot , Ceiling Grindding Robot
Feb 2025
Yekaterinburg Project, Russia : Indoor Coating Robot NP320
Aug 2024
ISO Project, Singapore : Indoor Coating Robot NP320 QXY Staff Dormitory, Singapore: Putty Spraying Robot, Putty Grinding Robot, Indoor Coating Robot NP320, Surveying -Measurement Robot
Jun 2024
Long An Province Project, Vietnam : Putty Coating Robot NP320 Pro, Putty Grinding Robot, Indoor Coating Robot NP320, Concrete Le veling Robot , Basement Troweling Robot
Nov 2023
C&D Li No .1 Commercial Project & Kai Tak 6554 Residential Project, Hong Kong, China : Putty Coating Robot NP320 Pro, Putty Grinding Robot, Indoor Coating Robot NP320
Jul 2023
MCC International Kuala Lumpur Project, Malaysia : Indoor Coating Robot NP320, Floor -tile Laying Robot
Feb 2023
Hong Kong Housing Authority Public Housing Site Project, Hong Kong, China : Indoor Coating Robot NP320
Dec 2022
Lake City Phase -I Project, Kuala Lumpur, Malaysia : Floor Grinding Robot, Floor Coating Robot
Oct 2022
Ram kham hae ng University, Bangkok , Thailand : Indoor Coating Robot NP320
Mar 2022
Outlying Islands Project, Macao, China : Floor Grinding Robot, Floor Coating Robot


UAE • Data Cente Project


UAE • Cavalli Tower Project

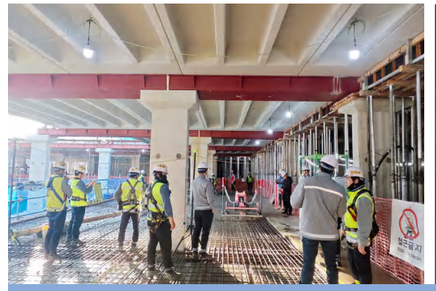

UAE • RAK Central Project


Russia • Yekaterinburg Project



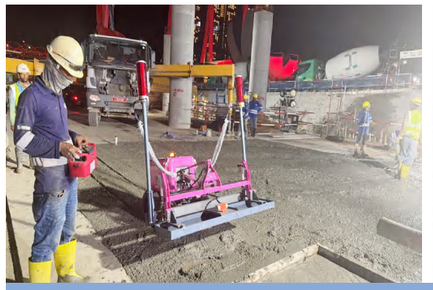
Malaysia • Lake City Phase-I

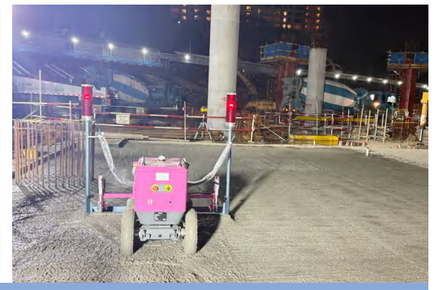

Thailand • Ramkhamhaeng University


South Korea • Samsung C&T Project




Singapore • Aurelle Project

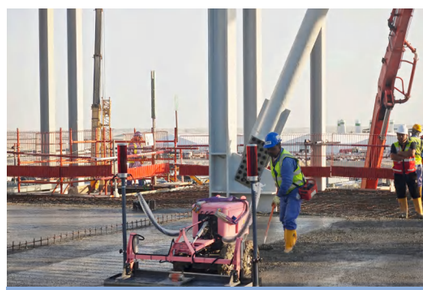

Singapore • NS Square Project


Singapore • The Myst Project


Vietnam • The Seniqu Project


Taiwan, China • Qingfeng Housing


HK, China • Public Housing


Malaysia • Affordable Housing

# Representative Project Example

## Science & Innovation Harbor Project, Yangtze River New Area, Wuhan

In May 2026, the Science & Education Integration & Innovation Park of Wuhan Yangtze River New Area Science and Innovation Port introduced putty grinding robots and indoor coating robots for fully automatic interior wall construction. The robots deliver a comprehensive grinding efficiency of 50 $m^2$/h, over 1.5 times that of conventional manual work. Their comprehensive spraying efficiency reaches 120$m^2$/h, approximately five times the speed of manual roller coating, and they are capable of long hour continuous operation.



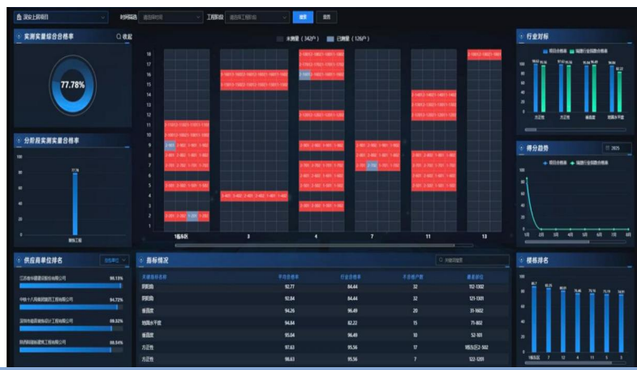



Science & Innovation Harbor Project, Yangtze River New Area, Wuhan • Putty Grinding robot、Indoor Coating Robot NP320

## Semiconductor and Advanced Manufacturing Industrial Park Project, Shenzhen

This project, constructed by China Construction Third Engineering Bureau Group, serves as a factory and material warehouse with a construction area of approximately 278,000 $m^2$. In April 2024, it began using the intelligent follow-me concrete placer and the 2 .5-meter floor leveling robot. Their collaborative work proved highly efficient, increasing application efficiency by 60% compared to the 1 .5-meter floor leveling robot.

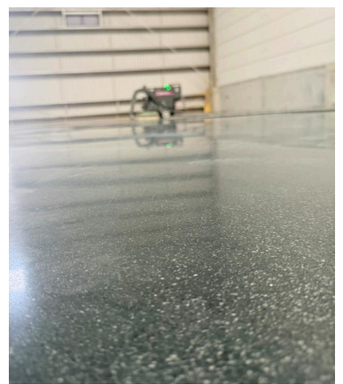
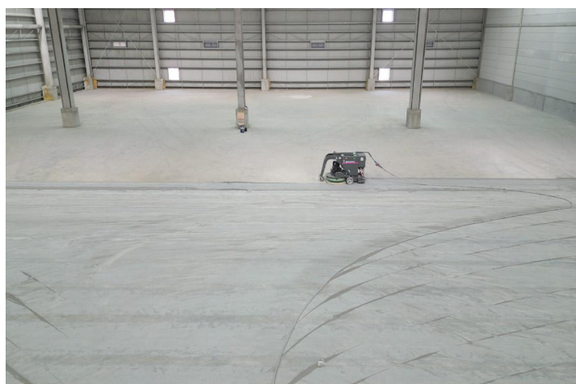




Semiconductor and Advanced Manufacturing Industrial Park Project • Measuring Robot

## Yue-Qian Fresh Food Digital Smart Eco-Port Project, Foshan

In January 2026, two floor grinding robots were deployed for simultaneous operation. The warehouse of this project adopts hardened floor technology. The 850M and 850S floor grinding robots have completed over 30,000 $m^2$ of construction on this project. Compared with conventional manual construction, robotic construction delivers higher efficiency at 1.5-2 times that of manual work, lowers labor intensity and reduces manpower requirements, cutting construction costs by approximately 40%.

Yue-Qian Fresh Food Digital Smart Eco-Port Project • Floor Grinding Robot

# Representative Project Example

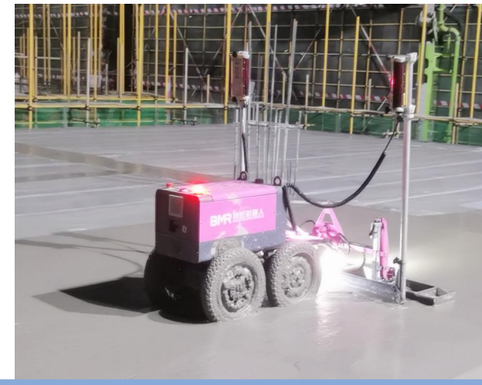
## Zhihui-gang Project, Lunjiao, Shunde

The project deployed floor leveling robots for construction in December 2025, with a cumulative constructed area exceeding 20,000 $m^2$. Adopting thehuman-machine collaboration management concept, the project eliminates the pre-setting screed dotting process, saving approximately RMB 1 per square meter . Total labor-working-hours for each single pouring are reduced by around 20%. The construction quality outperforms manual work , achieving a 100% pass rate for the 5mm/2m flatness standard, and overall construction costs are cut by about 30%.







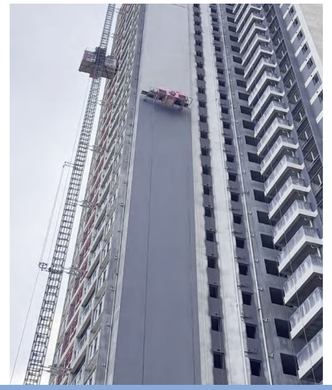



Zhihui-gang Project, Lunjiao • Concrete Leveling Robot

## Tanwei-Village Urban Renewal Project, Nansha, Guangzhou

In November 2025, the exterior wall spraying robots were applied to the Tanwei Village Renewal and Renovation Project in Nansha District, a key livelihood project of Guangzhou . Featuring innovative unmanned operation mode and advanced intelligent technologies, the robots empowered the construction of new residences for over 3,000 local villagers . The comprehensive construction efficiency reaches 180 /h for flat coating systems on gable walls and 100 /h for texture coating systems . Adopting mobile spraying and dynamic pressure control technology, a comprehensive coverage rate of over 80%.







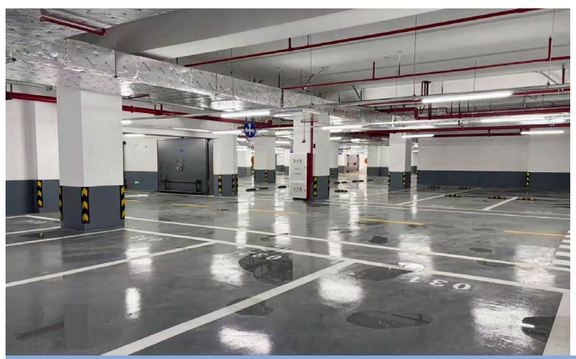


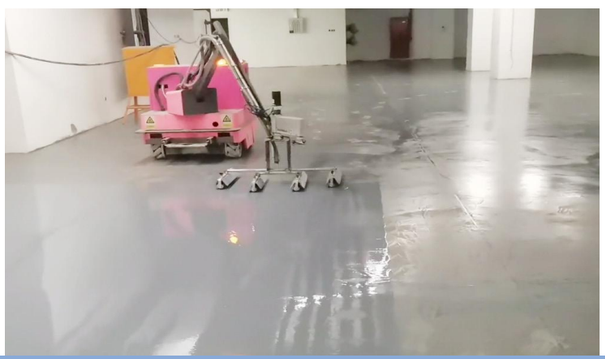


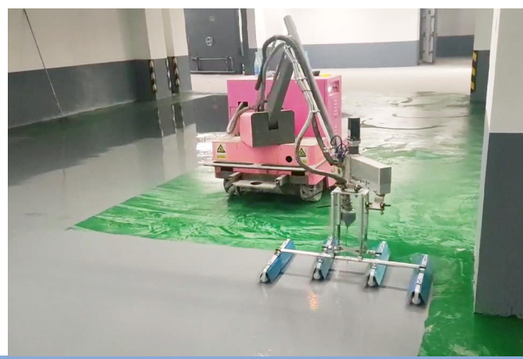

Tanwei-Village Urban Renewal Project, Nansha • Exterior Wall Coating Robot

## Project of Foshan Technician College

In March 2025, floor coating robots were deployed for intelligent epoxy floor construction, covering a cumulative area of over 15,000. The entire construction work was completed with only one robot and two workers. Compared with traditional manual blade coating, the robotic solution improves construction efficiency by more than 25% and reduces overall construction costs by over 30%. The finished floor features uniform paint film and excellent appearance, fully meeting project delivery quality requirements.







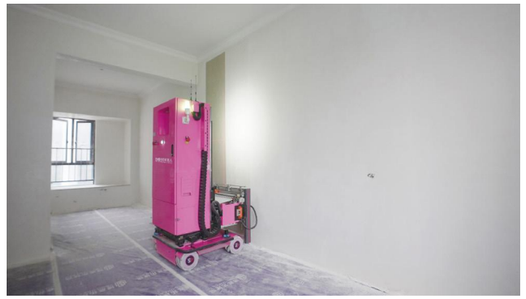
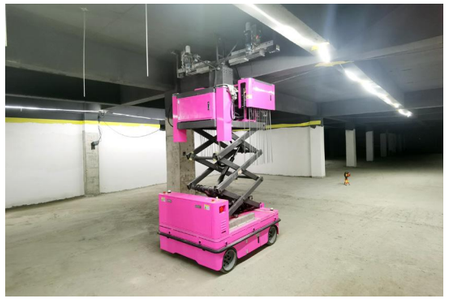
Project of Foshan Technician College • Floor Coating Robot

# Representative Project Example





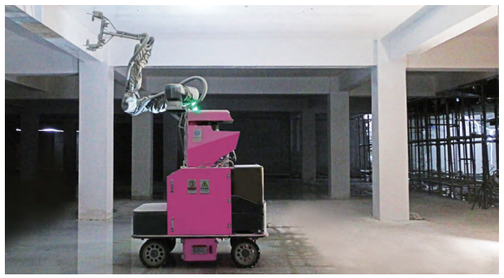












北京建工 · 中国核建 China Nuclear E&C Group · 特房集团

VINCI · 联投集团 UNITED INVESTMENT GROUP

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* The list above represents selected partner companies only, shown in no particular order.

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