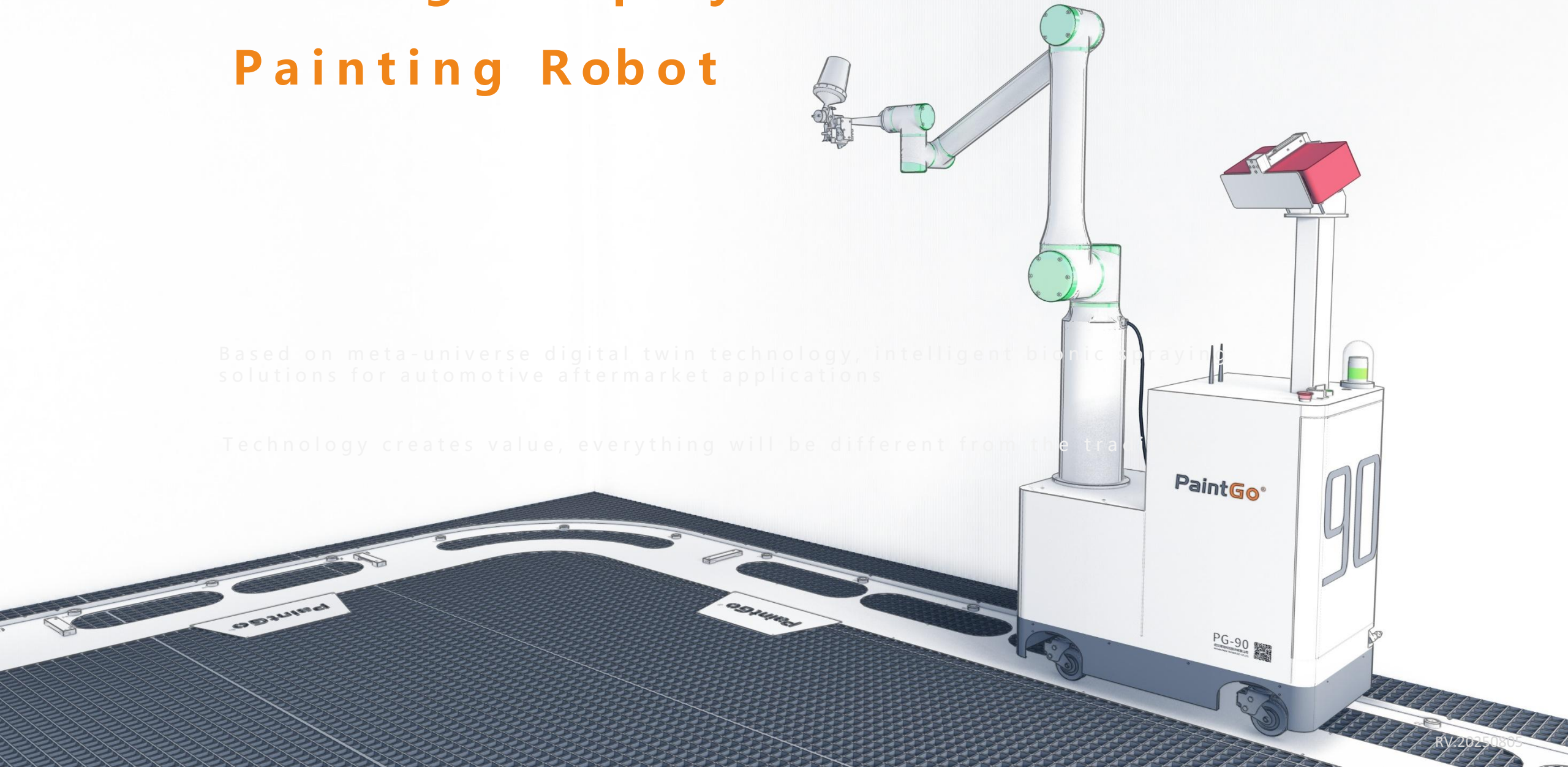


Intelligent Spray Painting Robot

Based on meta-universe digital twin technology, intelligent bionic spraying solutions for automotive aftermarket applications

Technology creates value, everything will be different from the track



PaintGO Intelligent Spray Painting Robot

PaintGO Intelligent Spray Painting Robot

**Technology creates value, everything will be different from
the tradition**

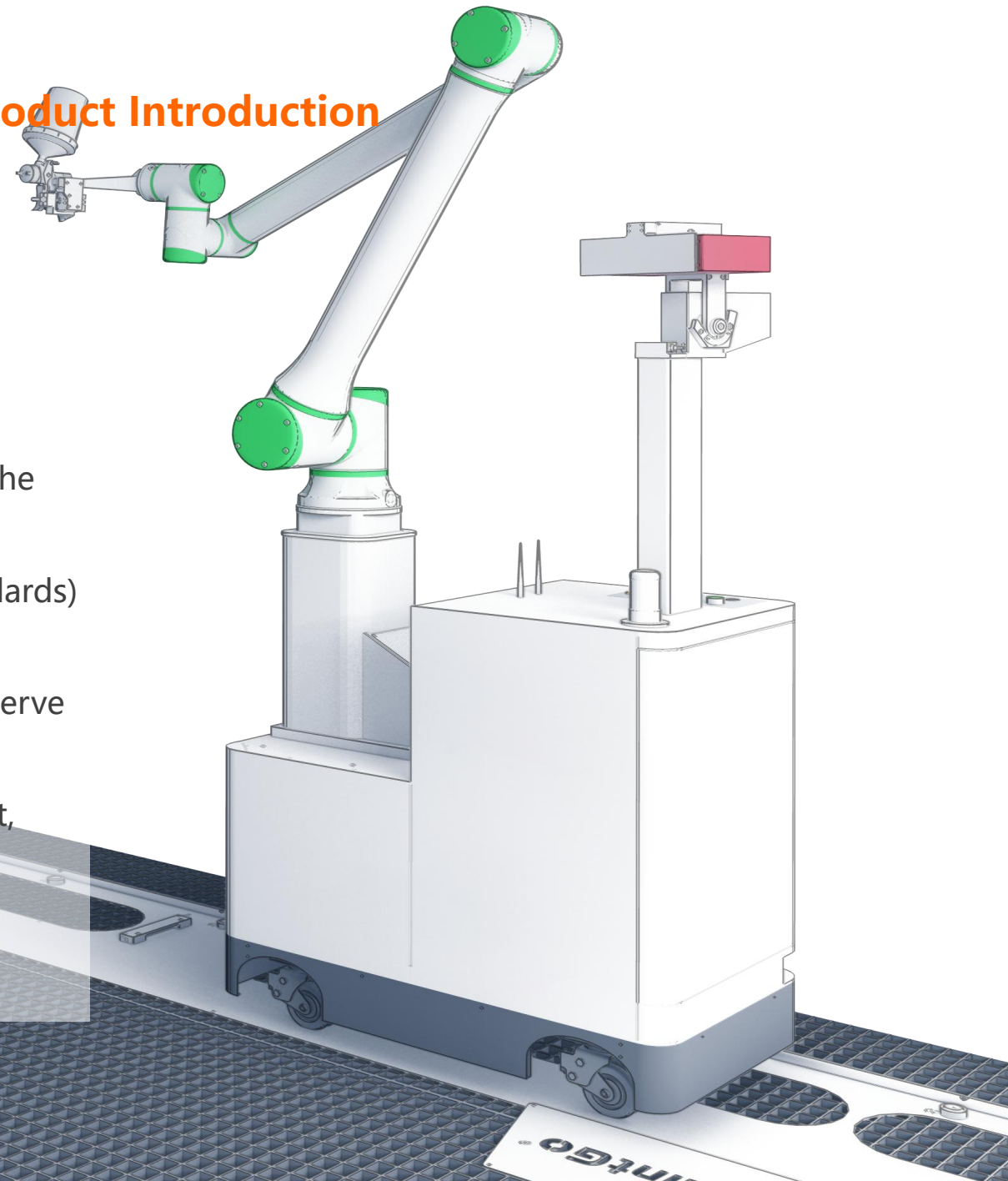
Leading intelligent spray painting robot technology and service provider. To address the pain points of the traditional maintenance and painting industry, we provide a comprehensive solution for painting that is "good, fast, easy, and cost-effective". The intelligent biomimetic spraying robot, combined with a machine vision system, simulates the actual manual painting process and techniques through the AI algorithm, achieving the full process of autonomous recognition, planning, and operation of the robot for sheet metal spraying.

PaintGO Intelligent Spray Painting Robot

Product Introduction

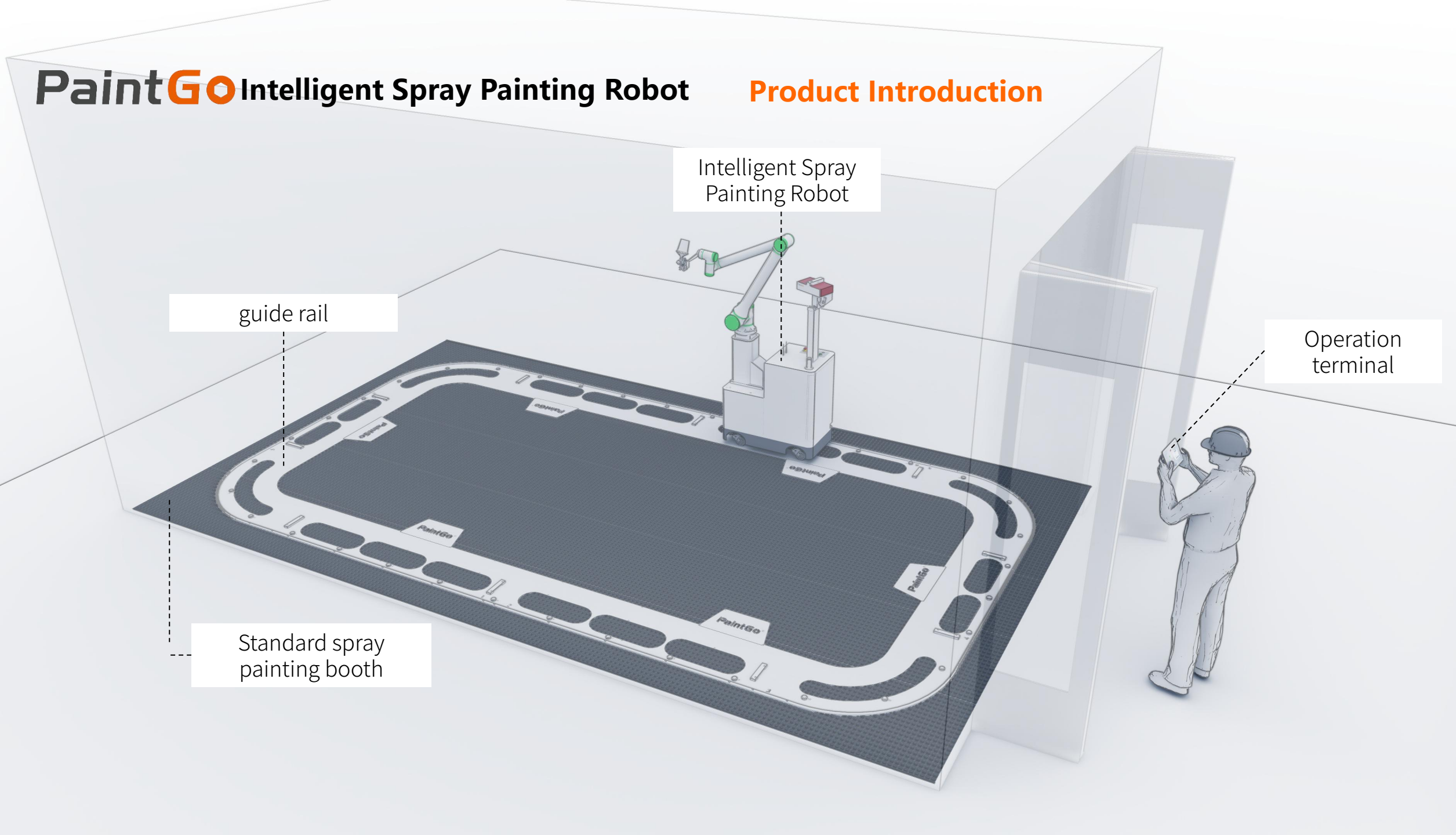
Product Model: PG-90E

- Adaptation scenarios: car disassembly, whole vehicle
- Electricity requirements: 110 V / 220V 16A air switch
- Gas requirements: Six quick release female connectors (national/European standards) are reserved in the spray room, and the gas needs to pass through an air filter;
- Reserve 3 quick release female connectors (national/European standards) around the spray booth
- Network requirements: The spray booth operation area needs to reserve one connection to the external network cable.
- Spray gun requirements: 2 SATA5500 manual spray guns (color paint, clear paint)
- Spray booth requirements: length * width * height $\geq 6.9 * 3.9 * 2.7\text{m}$



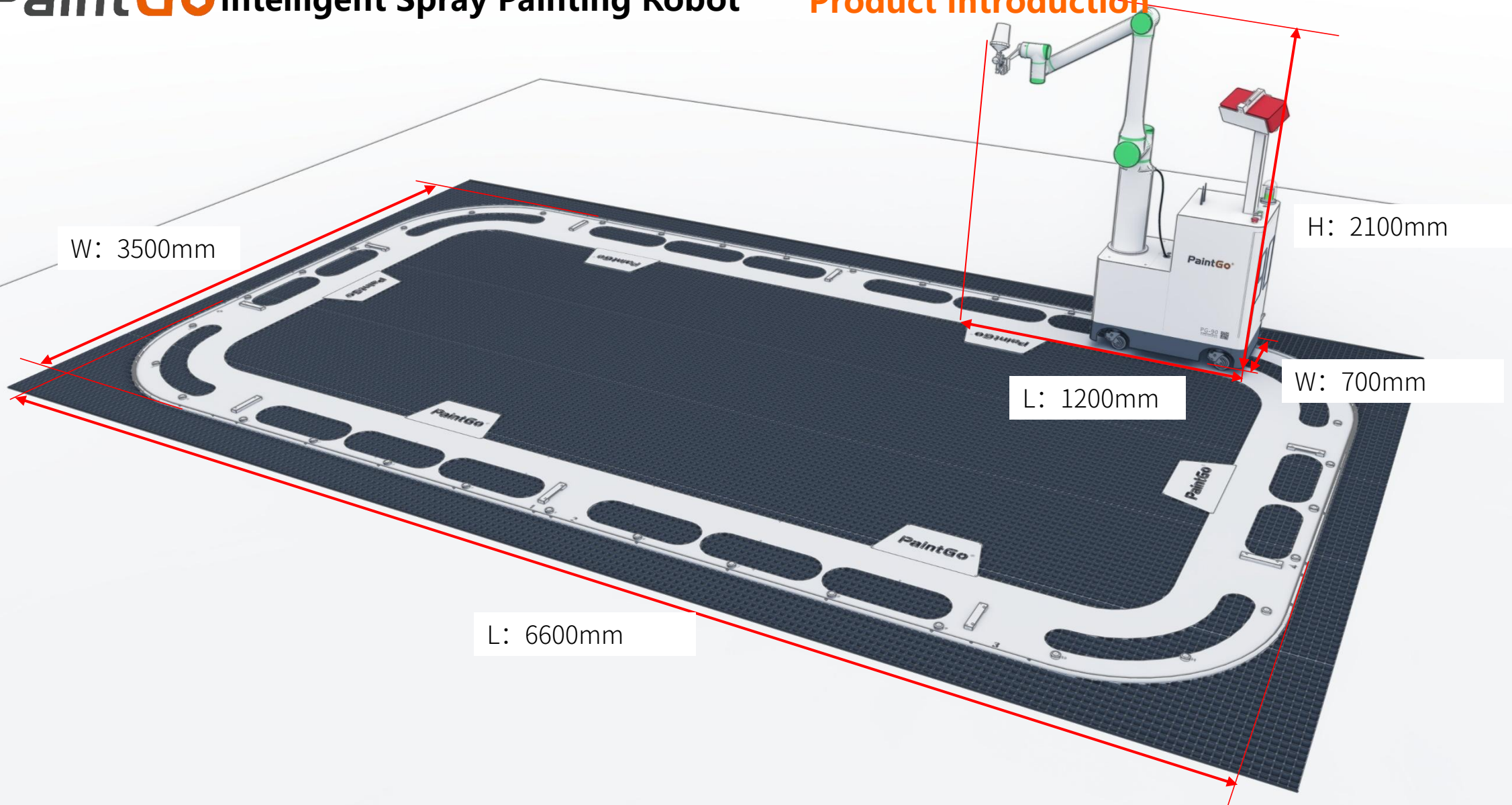
PaintGO Intelligent Spray Painting Robot

Product Introduction



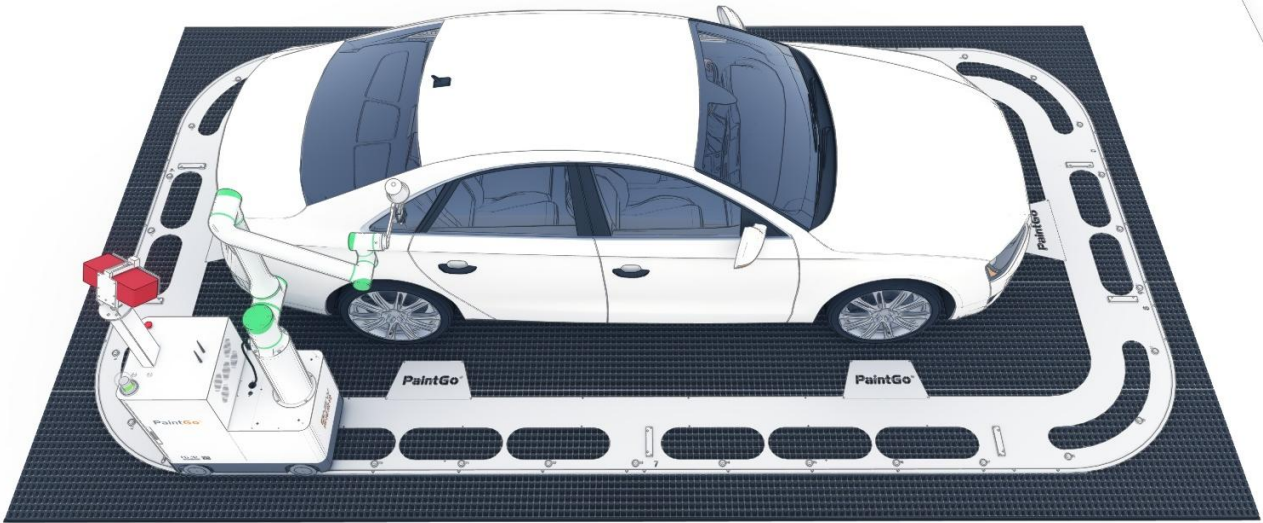
PaintGo Intelligent Spray Painting Robot

Product Introduction

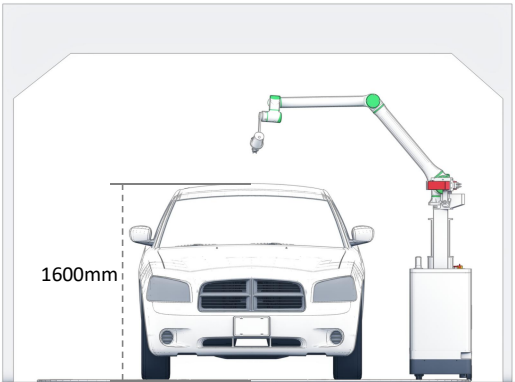


PaintGo Intelligent Spray Painting Robot

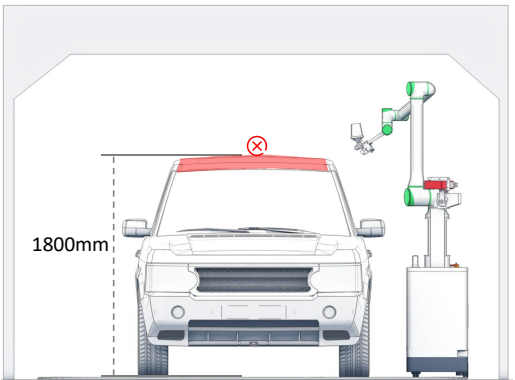
Product Introduction



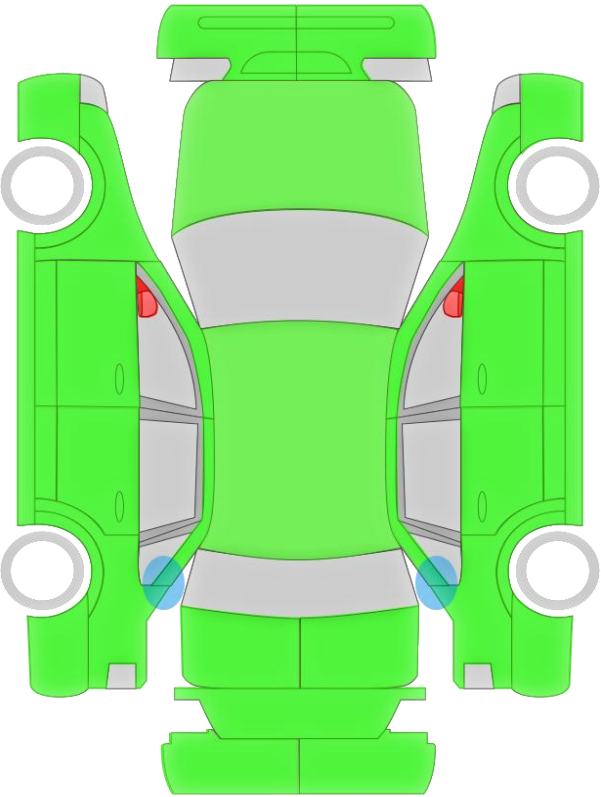
Schematic Diagram of the Operation Scenario for the Whole Vehicle



Vehicles with a height of $\leq 1.6\text{m}$ can have all their components sprayed.



Vehicles with a height ranging from 1.6m to 1.8m (inclusive) must not have their roofs sprayed.

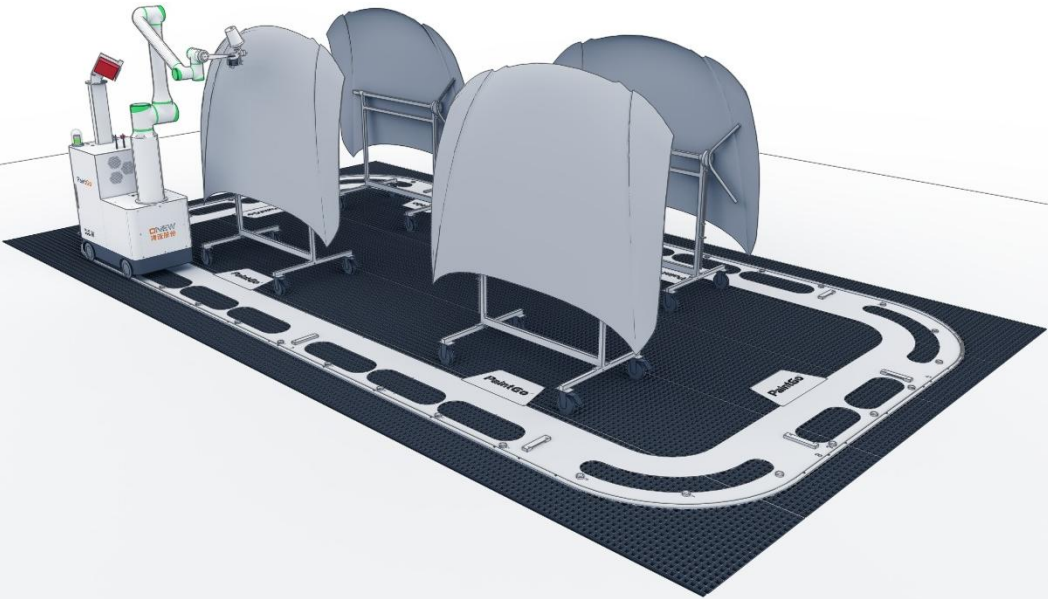


- Operation of the Intelligent Spray Painting Robot
- Manual Spray Painting

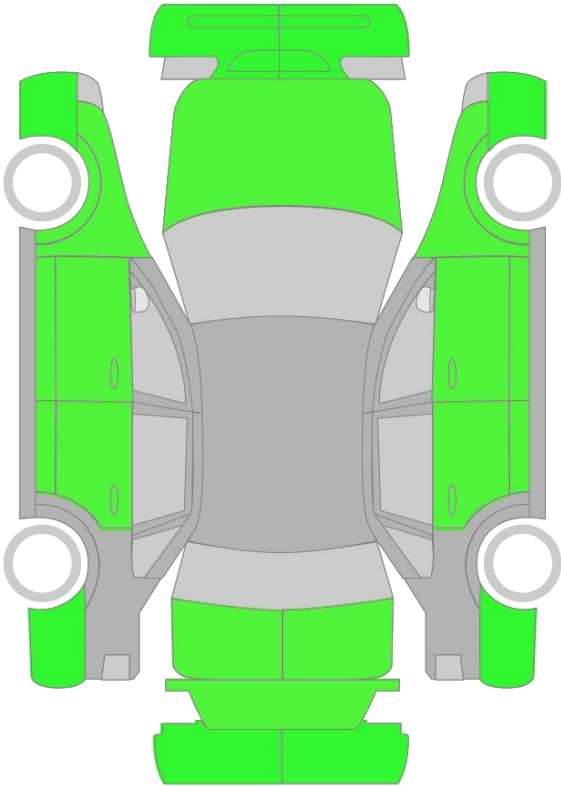
Components	Type	Whole vehicle operation	Instruction
Front engine hood		●	1.The operation range for painting the whole vehicle: - length $\leq 5.1\text{m}$; - width $\leq 2\text{m}$; $0.24\text{m} \leq \text{height} \leq 1.8\text{m}$ (Do not spray the roof) . - When spraying the roof, the vehicle height must be $\leq 1.6\text{m}$. 2. For vehicles with a length less than 4.5m, the front and rear bumpers cannot be painted simultaneously. 3. When the painting parts include the front fender, front door and A-pillar, the rearview mirror needs to be removed during the operation.
Front bumper		●	
Front fender		●	
Front door		●	
Rear door		●	
Rear fender		●	
Rear bumper		●	
Roof		●	
Skirt		●	
A-pillar		●	
C-pillar		●	

PaintGo Intelligent Spray Painting Robot

Product Introduction



Schematic Diagram of the Dismantling Parts Operation Scenario



Components	Type	Dismantling parts operation	Instruction
Front engine hood		●	The height range of the disassembly parts operation: 0.24m ≤ operation range ≤ 2m.
Front bumper		●	
Front fender		●	
Front door		●	
Rear door		●	
Rear fender		●	
Rear bumper		●	
Roof		/	
Skirt		/	
A-pillar		/	
C-pillar		/	

- Operation of the Intelligent Spray Painting Robot
- Area That Cannot Be disassembled

PaintGO Intelligent Spray Painting Robot Energy Efficiency Analysis

Work mode: integrated baking and spraying

Average beat time: 1.3 hours per batch, calculated based on 8 hours of work per day, can complete 6 batches per day.

Capacity analysis: PG-90E (Single Set)

Based on the optimal workflow calculation

Number of batch (batch/shift)	Number of pieces (pieces/batch)	Monthly working days (days)	Total amount completed (pieces/month)
6	4	22	528

PaintGo Intelligent Spray Painting Robot Actual Operation Scene



PaintGO Intelligent Spray Painting Robot Business Cases

It has been implemented and covered in more than 10 domestic and overseas automotive 4S stores and sheet metal painting centers. The served automotive brands include but are not limited to BBA, Tesla, Honda, Toyota, Volkswagen, Li Auto, etc..

Mercedes-Benz store in Beijing



BMW store in Wuhan



Mercedes-Benz store in Qingdao



Mercedes-Benz store in Wuhan



A sheet metal painting center in a store in Shanghai



Tesla store in Kaohsiung, Taiwan



Mercedes-Benz store in Guizhou



Li Auto store in Jilin



Toyota store in Kaohsiung, Taiwan

