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Company Profile



Vision To be the global leader in the era of intelligent robots

Mission

Shenzhen Han's Robot Co., Ltd., invested and established by Han's Laser Technology Group (stock name: Han's Laser, stock code: 002008), is a high-tech enterprise established on the basis of the Robot Division from Han's Motor. It was founded in August, 2017 with its headquarter and production base located in Han's Laser global intelligent manufacturing base, Bao'an District, Shenzhen, with subsidiaries in Tianjin city and Germany. Han's Robot is dedicated to the development, promotion and application of intelligent robots in industry, healthcare, logistics, services and so on, becoming the global leader in the era of intelligent robots.

Serve humanity with robot technology



Lead, fast-speed, service, sharing, passion, enthusiasm, curiosity

Global Service Network

Partners from more than 60 countries

China, South Korea, Japan, Thailand, Singapore, Australia, New Zealand, the United States, Canada, Mexico, Brazil, Colombia, Argentina, Russia, Britain, France, Germany, Spain, the Netherlands, Lithuania, Italy, etc.

Top talents from 18+ countries & regions

150+ 200+ 200+ 150+

Employees

Professional engineers

18+







Milestones

2004 Han's Laser listed 2014 Han's Robotics Research Institute established

2017 Shenzhen Han's Robot Co., Ltd. established

September 2020 165 million Series A round financing completed successfully

1996 Han's Laser established 2005 Han's Motor established 2016 First-generation collaborative robot ELFIN released

2019 German subsidiary of Han's Robot established

November 2020 Han's Robot Advanced Manufacturing Demonstration Park launched in Foshan



March 2021 Intelligent collaborative robot MAiRA released in Shanghai

> June 2021 395 million B1 round financing completed successfully

www.hansrobot.com | 03/04

Han's Robot Product Advantages



Han's Robot has been constantly exploring the breadth and depth for serving human by its self-developed leading collaborative robot technologies. The payload of the robots vary from 3kg to 18kg which can meet the requirements of various customers. Moreover, Han's Robot has developed products from the first generation 6-axis collaborative robots Elfin robot to the second-generation Elfin-P robot with higher performance, and has released 7-axis intelligent collaborative robots MAiRA in March 2021.



±360°



Self-developed dual-joint modules



EtherCAT bus communication

\oslash
\oslash
\oslash
\oslash



Self-developed of core components

High motion efficiency	\oslash
More positions can be reached	\oslash
Most flexible collaborative robot	\oslash
Low power consumption	\oslash

Self-developed dual-joint modules	
Unique arm design, optimized singularity points	Ø
Higher integration	\oslash
Higher flexibility	\oslash

Completely self-developed core components from Han' s Group	
Complete set of motors, servo drive	Ø
Grating encoder, 6-dimensional force/ torque sensor	Ø
Electromagnetic brake, high-speed inverter	\oslash



Innovative brake method

he robot will automatically rebound and hen stop when encounter any resistance.	\oslash
Output force and power controlled within he safety range to ensure personnel safety.	Ø
nnovative brake design. The robot will be ocked immediately in case of a sudden power	\odot

failure or emergency stop during operation. It will not slide, fall or move at all





IP66 protection rating

Higher waterproof and dust-proof protection	\oslash
Nhich is more suitable for harsher environments	\oslash
And can avoid external objects and dust	Ø
Moreover, it can adapt to areas with various climates and humidity levels	Ø



ISO class 5 cleanroom

he surface cleanliness of the whole robot is xcellent due to the excellent waterproof and ust-proof performance	Ø
Pptimized structure of internal parts, low nutual friction, avoiding damage	Ø
xcellent sealing of the whole robot, vithout impurities intrusion	\oslash
utomotive and aerospace industry tandards, ensuring high quality	\oslash





More than 16 years of industrial experience

Incubated from the Robotics Research Institute team of Han's Motor	Ø
More than 16 years experience in motors, servo drives and motion control	Ø
Long-term cooperation with famous universities at home and abroad	Ø
Dedicated to collaborative robot technologies and applications	Ø

More open platform

Open source ROS interface, which allows users to control the robot joints in real time through EtherCAT under the ROS environment	
ROS platform, which greatly improves the robot's scalability. The robot can be controlled without an additional control box	Ø
Used for ROS teaching in colleges and universities	\oslash

Graphical control

Graphical software design, intuitive, easy to understand, easy to operate	
User-friendly interface logic design, easy to use	\oslash
The software controls the robot with instant reactions, without delay, out of control and other symptoms	Ø
Remote control via touchscreen, excellent human-machine experience	Ø

Han's Robot Plug & Play Tools



Adhering to the ecological concept of "all are friends in the world", Han's Robot has created a more complete and open collaborative ecosystem, and designed various IO and communication interfaces. These IO interfaces greatly expand the application scope of the robot and can support "plug and play" with most accessories in the industrial ecosystem, such as grippers, vision, and sensors, which can meet the needs of multiple scenarios such as loading and unloading, assembly, testing, handling, screw driving, grinding, spraying etc.



Grippers



		Han's Robot Pa
Scan code to join us	To build an open,share	

Partner Ecosystem

ared and win -win industrial cosystem!



"POSS" Concept

The smartest body, the smartest brain:

Han's Robot believes that the characteristics of a good collaborative robot can be summarized as POSS. We are dedicated to the research and application expression of cutting-edge robotics technology, and the development of robots with the smartest body and the smartest brain.



Higher **P**erformance

More

Open

More **S**mart



V

More **S**afe

4 E05 Model E03 17kg Weight 23kg Payload 4kg 6kg Reach 590mm 800mm Power consumption 100W typical application 180W typical application Joint range J1-J4 180°/s J1-J4 180°/s Joint speed J5-J6 200°/s J5-J6 200°/s Tool speed ±0.03mm ±0.03mm Repeatability Degrees of freedom Control box size End I/O port Digital input: 3 Control box I/O port Digital input: 16, digital o I/O source Communication Programming Graphical pro IP rating Collaborative operation 10 advanced s Main material Working temperature Power input Cable to the control box: 5 m, cable to the teach pendant: 5 m Cable

Overview



E05-L	E10	E10-L	P03	P05	P05-L	P10	P10-L	MAiRA-ProS	MAiRA-ProM	MAiRA-ProL	
24kg	40kg	42.5kg	18kg	24kg	25kg	42kg	45.5kg	53 kg (7-DOF) 49.5 kg (6-DOF)	55 kg (7-DOF) 51.5 kg (6-DOF)	56 kg (7-DOF) 52.5 kg (6-DOF)	
5kg	12kg	12kg	3kg	5kg	4kg	10kg	8kg	15-18kg	12-14kg	8-11kg	
950mm	1000mm	1300mm	590mm	800mm	950mm	1000mm	1300mm	1050mm	1400mm	1600mm	
180W typical application	350W typical application	350W typical application	100W typical application	180W typical application	180W typical application	350W typical application	350W typical application	3.5kW typical application	3.5kW typical application	3.5kW typical application	
±360°					±360°				±360°		
J1-J4 180°/s J5-J6 200°/s	J1-J2 100°/s J3-J4 150°/s J5-J6 180°/s	J1-J2 100°/s J3-J4 150°/s J5-J6 180°/s	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J2 120°/s J3-J4 135°/s J5-J6 180°/s	J1-J2 100°/s J3-J4 135°/s J5-J6 180°/s		J1-J2 120°/s J3-J4 150°/s J5-J6 200°/s J7 360°/s		
2m/s					2m/s				4.5m/s		
±0.03mm	±0.05mm	±0.1mm	±0.02mm	±0.03mm	±0.03mm	±0.05mm	±0.1mm	±0.01mm	±0.01mm	±0.01mm	
6					6				7		
536*445*319mm 536*445*319mm							450*380*210mm				
3, digital output: 3, analog input: 2				Digital in	put: 3, digital output: 3, analog	g input: 2					
output: 16, analog inp	out: 2, analog output: 2	Digital input: 16, digital output: 16, analog input: 2, analog output: 2									
24V 2A		24V 2A							24V 600mA		
TCP/IP and Modbus					TCP/IP and Modbus			Ethe	rCAT/FSoE, TCP/IP, USB3.0, GPIO, CAN Bus, Moo	lbus	
ogramming, remote call interface		Graphical programming, remote call interface				Graphical programming, remote call interface					
IP54		IP66					IP65				
d security configuration functions		10 advanced security configuration functions					Multiple advanced security configuration functions				
Aluminum alloy	Aluminum alloy		Aluminum alloy					Aluminum alloy			
0-50°C					0-50°C			0-50°C			
200-240V AC, 50-60Hz				200-240V AC, 50-60Hz				100-240V AC, 50/60Hz, 3.2kW			
la su la casa de la sectión de	to a share an almost The		Cable to the central cabinet. Em. cable to the teach nendent. Em.					Cable to the control cabinet: 5 m, cable to the teach pendant: 5 m			

Cable to the control cabinet: 5 m, cable to the teach pendant: 5 m



Cable to the control cabinet: 5 m, cable to the teach pendant: 5 m













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P10-L



P10





E10-L

 \sim Han's Robot Product Details \rightarrow





Elfin collaborative robot **Elfin-P** collaborative robot



MAiRA multi-sensing intelligent robot



Star robot Han's Robot Products/First-Generation 6-Axis Collaborative Robot

Elfin Collaborative Robot

Overview

The Elfin 6-axis collaborative robot can be used in automated integrated production lines, assembly, picking, welding, grinding, spraing and other applications, and have been exported to more than 60 countries and regions. It adopts a unique double-joint module design, where one motion module contains two joints to form a unique kinematic structure, which not only differs from most collaborative robots in the market, but also provides more flexibility when working.





Why Elfin

Optimized Singularity

The unique arm design not only avoids the product homogeneity, but also reduces the singularity.

First dual-joint module design in China

The unique kinematic design enables the robot to have high flexibility. The highly integrated modular design minimizes the arm weight.







The collaborative robot with 4/6-axis coaxial structure has almost reached the flexibility of 7-DOF robots



Modularity

All-in-one module of fully self-developed reducer, motor, encoder, drive and software







• Applications





Model	E03	E05	E05-L	E10	E10-L
Weight	17kg	23kg	24kg	40kg	42.5kg
Payload	4kg	6kg	5kg	12kg	10kg
Reach	590mm	800mm	950mm	1000mm	1300mm
Power	100W typical application	180W typical application	180W typical application	350W typical application	350W typical application
Joint range			±360°		
Joint speed	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J2 100°/s J3-J4 150°/s J5-J6 180°/s	J1-J2 100°/s J3-J4 150°/s J5-J6 180°/s
Tool speed			2m/s		
Repeatability	±0.03mm	±0.03mm	±0.03mm	±0.05mm	±0.1mm
Degree of freedom			6		
Control box size			536*445*319mm		
End l/O port	Digital input: 3, digital output: 3, analog input: 2				
Control box I/O port	Digita	al input: 16, digital	output: 16, analog ir	nput: 2, analog outpu	t: 2
I/O Source			24V 2A		
Communication	TCP/IP and Modbus				
Programming		Graphical pr	ogramming, remote	call interface	
IP classification	IP54				
Collaborative operation		10 advanced	l security configurati	on functions	
Main material			Aluminum alloy		
Working temperature			0-50°C		

Cable

Power input

Cable to the control box: 5m; cable to the teach pendant: 5m

200-240V AC, 50-60Hz

Drawing

E03

E05-L



E10-L





E10





Joint motions:



Han's Robot Products/Second-Generation 6-Axis Collaborative Robot

Elfin-P Collaborative Robot

Overview

Elfin-P is a lightweight 6-axis collaborative robot developed based on Elfin that can be used in automated integrated production lines, assembly, picking, welding, grinding, spraying, dispensing, inspecting and other applications. The high repeatability and protection rating ensures it can be used freely in complex working environments.



Why Elfin-P

Higher protection rating

IP66 protection rating is designed to be dust-proof and waterproof, ensuring that it can be used freely in harsh environments such as oil and moisture



Faster response

The EtherCAT communication between the controller and each joint enables real-time control of the refresh frequency of 1000Hz for industry-leading trajectory accuracy control



Stronger anti-interference ability

Stronger electromagnetic compatibility, which ensures that the robot can still operate properly in a strong electromagnetic interference environment



<image>

High accuracy

The repeatability can reach \pm 0.02 mm and it will not decrease with the wear of the reducer.







• Applications



Drawing

P03

<u>92.5</u> 0 <u>← h</u> Ø156 203

P05-L

82 105 128 H Ø156 194



Туре	P03	P05	P05-L	P10	P10-L
Weight	18kg	24kg	25kg	42kg	45.5kg
Payload	3kg	5kg	4kg	10kg	8kg
Reach	590mm	800mm	950mm	1000mm	1300mm
Power	100W typical application	180W typical application	180W typical application	350W typical application	350W typical application
Joint range			±360°		
Joint speed	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J4 180°/s J5-J6 200°/s	J1-J2 120°/s J3-J4 135°/s J5-J6 180°/s	J1-J2 100°/s J3-J4 135°/s J5-J6 180°/s
Tool speed			2m/s		
Repeatability	±0.02mm	±0.03mm	±0.03mm	±0.05mm	±0.1mm
Degree of freedom			6		
Control box size			536*445*319mm		
End I/O port		Digital input: 3	3, digital output: 3, a	nalog input: 2	
Control box l/O port	Digita	al input: 16, digital	output: 16, analog ir	iput: 2, analog outpu	t: 2
I/O source	24V 2A				
Communication	TCP/IP and Modbus				
Programming		Graphical pro	ogramming, remote	call interface	
IP classification			IP66		
Collaborative operation		10 advanced	security configurati	on functions	
Main material			Aluminum alloy		
Working temperature			0-50°C		
Power input 200-240V AC, 50-60Hz					

Cable

Cable to the control cabinet: 5m; cable to the teach pendant: 5m











Joint motions:



Han's Robot Products/7-axis Collaborative Robot

MAiRA Multi-Sensing Intelligent Robot

Overview

With fully integrated novel sensors and an unprecedented integration of artificial intelligence in control systems and applications MAiRA is leading a new era of robots. The robust and rigid design combines the performance of a high-end machine with easy programming and infinite possibilities for interaction–both for beginners and experts. MAiRA tears down the boundaries between humans and machines and brings them closer together.



Why MAiRA

3D visual sensing

With a novel 3D vision and a point cloud imaging processor, MAiRA can scan and generate 3D images of objects, spaces, and scenes sensitively and independently.



Voice recognition

You can collaborate with MAiRA by voice commands and conversations. It can keep your voice automatically so that you can be recognized at any time, which greatly improve the efficiency.



Top intelligent integration

Headend collection: HDM touchscreen buttons, 3D acoustic recognition technology of 360° panoramic microphone matrix, accurately response of 6-DOF electronic skin to gesture touch, 3D vision sensor, 6-DOF force-torque sensor...



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reddot winner 2021

Exquisite user experience

The touchscreen remote control is easy to use. The operation interface is intuitive and easy to understand, with zero learning effort and direct image visualization without programming.





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• Applications



Technical Specifications



Model	MAiRA-ProS	MAiRA-ProM	MAiRA-ProL
Weight	53 kg (7-DOF) 49.5 kg (6-DOF)	55 kg (7-DOF) 51.5 kg (6-DOF)	56 kg (7-DOF) 52.5 kg (6-DOF)
Payload	15-18kg	12-14kg	8-11kg
Reach	1050mm	1400mm	1600mm
Power	3.5kW typical application	3.5kW typical application	3.5kW typical application
Joint range		±360°	
Jointspeed		J1-J2 120°/s J3-J4 150°/s J5-J6 200°/s J7 360°/s	
Tool speed		4.5m/s	
Repeatability		±0.01mm	
Degree of freedom		7	
Robot Mounting		Any angle	
IP classification		IP65	
Data, Media & Power	Com	plete internal wiring harness and air	r tube
Status illumination		Seven colorful LED indicators	
Safety level		PId Cat.3 / SIL3	

Sensor		TCP Connect
Vision	3D RGB-D camera	Hole pattern
Torque/Force sensor	6-DOF F/T-Sensor in Flange	Compressed
Guidance by Touch	Smart Sensitive 6-DOF Sensor Skin	EtherCAT
Safety	Touchless Safe Human Detection(optional)	GPIO
Sound	3D voice recognition sensor	I/O power sup

TCP Connector Flange	TCP Connector Flange		
Hole pattern	DIN ISO 9409-1-50-7-M6		
Compressed Air	3 x Push-Pull-Plug – 3mm OD		
EtherCAT	M8 4-pin-A-F IEC 61076-2-104		
GPIO	M8 8-pin-A-M IEC 61076-2-104		
I/O power supply	24V 600mA		

Movement		
	Working Range	Maximum speed
Al	±360°	120 °/Sec.
A2	± 120°	120 °/Sec.
A3	± 270°	150 °/Sec.
A4	± 150°	150 °/Sec.
A5	± 270°	200 °/Sec.
A6	± 160 °	200 °/Sec.
A7	\pm 360 °/ Infinite rotation	360 °/Sec.

Software & Controller			
Motion Controller	Real-time NR-Motion master		
Machine Learning (ML) Kernel	ISmart application: voice control learning, action optimization		
Open Architecture	3rd party Apps, Acess to low level controllers & sensor data		
Software Interface	Robots, sensors and Al SDKs		
Safety Architecture	Safe Master & FSoE Communication		
Safety Features	Safe position, speed, torque, limits		





Programming features				
Smart GUI	NR easy programming interface			
Fast programming	Shortcut buttons, voice control, gesture control, dynamic path and real-time recording			
Human-computer interaction	Visual, voice and force feedback, facial recognition, motion tracking			
Environment Visualization	3D CAD Data & Sensor Data			



Teach pendant	J
Dimensions	285 mm x 228 mm x 95 mm
Resolution	1280 × 800
Display	10.5" touchscreen
Cable length	5 m
Usability	PAD is Detachable

Han's Robot Products/Compound Robots

Star Robot

Overview

Star robot is a movable manipulator that can pick and transport materials in work positions, which reduces the number of robots to be used and improves the flexibility of the production line. With Han's AGV, Han's six-axis collaborative robot, vision system, and force control gripping in robot system, start robot can confirm the location of the workpieces. It is mainly used in industries (such as electronics, metal products, auto parts, electricity, new energy, ships, aerospace), healthcare, family services, file management and other applications.



Intelligent scheduling

Schedule robots on a large scale based on self-developed architecture and intelligent planning algorithms, which ensures efficient system operation



Dynamic stability

The power and load are positively auto-correlated within a safe range by using the proprietary core patent

Applications



Fast deployment

The environment map can be automatically generated based on natural trackless navigation technology, no need to do scene modification, so as to rapidly deploy the scheduling and planning services



Self-check

It can obtain the robot hardware and operating status in real time, which realizes self-check and fast fault diagnosis



Automatic charging

Star can automatically go back to charging pile for recharging, which ensures the robot to achieve 7x24 operation and high-frequency fast response





Intelligent automatic distribution in motor workshops



High expansibility

It can efficiently connect to the enterprises' MES/WMS and information system, and can quickly carry application and function modules as required

Intelligent obstacle avoidance

Intelligently detect and identify obstacles, and actively stop and bypass obstacles, via the equipped sensors such as lidar and vision cameras



Automatic loading and unloading on the dicing and splitting machine



Loading and unloading in intelligent workshops

	Model	STAR-I	STAR-II			
Main	Robot E5 (6-axis collaborative robot, 5kg payload)	E10 (6-axis collaborative robot, 10kg payload)			
body	Vehicle	AGV (300kg load capacity)	AGV (600kg payload)			
	Dimensions (length x width x	height) 1,100 x 650 x 745mm	(size tolerance \pm 2mm)			
Basic	Weight	460kg (including	cluding the vehicle weight)			
	Payload	5	i0kg			
	Speed 1.5m/s					
	Operating speed Forward: 1m/s; backward 0.3m/s					
	Radius of gyration	56	568mm			
	Gradeability 5°					
Running	Obstacle clearance height	10	Omm			
erformance	Over seam width 30mm					
	Ground clearance	25	ōmm			
	Walking channel width	890mm				
	Revolving channel width	Min 1	300mm			
	Site positioning precision	±1	L0mm			
	Battery capacity	Battery capacity51.2V4OAh lithium iron phosphate battery				
	Battery life	DOD ≥ 80% 1,500 times, 0.5C char	ge 1C discharge (normal temperature)			
Indurance	Endurance time	8 hours, 1m	n/s, load 600kg			
erformance	Charging method 🛈	Automa	tic/Manual			
	Charging time	Charge to 95	% in 1.3 hours			
	Power outlet	2CH DC51.2V 32 DC24V20W (reg	1000W(40~57.6) ulated power supply) 🔞			
External Interface	Standard communication inte	erface One	e RS232 ne CAN			
	I/O interface	CAN communicatio	n extension supported			

↔ Han's Robot Applications







↑ Industry applications:

Han's Robot collaborative robots have been widely used in electronics, automotives, semiconductors, metal processing, new energy, pipeline inspection and other fields. Han's Robot uses robot technologies for collaboration in global intelligent manufacturing, which promotes productivity in all walks of life.



Pipeline inspection

Process applications: Loading and unloading, welding, marking, assembling, polishing, handling, inspecting, gluing, picking, screwing, etc.

Electronics manufacturing industry

Laser cutting

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One robot is used for loading and unloading for four laser cutting machines at the same time. The four cutting machines are placed in pairs, and a 7-axis guide rail is used in the middle to realize the motion of the collaborative robot between the machines. A vision camera is integrated to the robot to realize the positioning for loading and unloading as the required unloading precision of the laser cutting machine is about 0.1 mm.

Space-Saving

Easy to operate

The overall layout is compact which occupies a small area, and there is no need to do

It is easy to operate the collaborative robots. Customers can switch products or debug new products by themselves great changes to the original after simple training, which greatly plant. Moreover, the equipment reduces the cost of product replacement.

More scenarios: loading and unloading, inspecting, grinding, spraying, assembling, marking, etc.

Automotive manufacturing industry

Gluing for car lights

By adopting one-to-two structure integration, one cold glue device supplies can glue for two collaborative robots. The double-station free gluing improves the gluing efficiency and quality and avoids the impact on the personnel health, which greatly reduces labor and equipment costs.

Safe and flexible

High-precision linear gluing, improved yield rate.

The cold glue does not require heating, which greatly reduces energy consumption.

Energy saving and low consumption

More scenarios: loading and unloading, spraying, assembling, inspecting, picking, marking, etc.



Healthcare industry

Remote ultrasound diagnosis and treatment

The remote ultrasonic diagnosis and treatment robot realizes remote consultation of experts in different places by using teleoperation technologies, which meets the increasingly demand for diagnosis resources in the grassroots hospitals.

Precision: The robot accurately reproduces the doctor's operating position and strength, which ensures the quality of ultrasound imaging;

Friendly:Gentle motion control, real-time pressure tracking control, to achieve a friendly patient experience comparable to professional examination methods;

Safe: Ensure the safety of human-computer interaction through high-level safety functions such as robot motion area limitation, inspection pressure protection, and collision protection;

Efficient: High-speed remote communication realizes high-definition ultrasound image transmission, and remote real-time control of robotic arms, which ensures the efficiency and precision of doctors' diagnosis;

Hybrid robot

Distribution+ Loading and unloading

In this application, the robot moves intelligently in the same workshop to support multiple productions: Intelligent automatic distribution in the motor workshop project

Case features

Han's 6-axis collaborative robot integrated with an intelligent AGV can avoid obstacles, which is more suitable for narrow space environment, and can help customers to realize automated production without changes to the original equipment.

More scenarios: warehousing, packaging, assembling, testing, pickup, etc.





More scenarios: drug packaging, test tube pickup and placing, sterilization, testing, surgical assistance, etc.



Metal processing Laser Marking industry

Han's marking robots can realize multi-directional automatic marking, from loading and unloading to marking, which meets the unmanned, automated, and flexible use requirements, improves the delivery efficiency, and reduces production costs.

Flexible and efficient Easy to operate

Realize flexible, efficient, multi-angle, multi-material free marking.

Graphical programming and robot program editing are simple and easy.

More scenarios: marking, rust removal, grinding, screwing, welding, etc.



Spin welding Sanitary industry

Solve the pain points of ultrasonic welding with high noise and inconsistent manual feeding pace Less labor and higher efficiency, easy to operate, stable robot production

More scenarios: visual grasping, gate polishing, assembling, picking and placing, hot plate welding, loading and unloading, etc.

Semiconductor Industry

Wafer handling

Han's hybrid robots interwork with wafer processing equipment to provide MES whole-factory automated wafer handling solutions, and fully independent IPR upper-computer scheduling system and planning.

Fast and robust

One robot is connected to five wafer processing devices for loading and unloading, and the efficiency is 68% higher than manual operation. The fully automated black light factory works automatically in a controllable manner. Multiple devices can be independently scheduled in 24-hour operation.

More scenarios: lithography, cleaning, etching, precipitation, equipment care, grinding, etc.



Pipeline inspection industry

Pipeline equipment inspection

In this application, Han's Robot is integrated with various sensors to realize 24-hour visual automatic inspection in the pipeline. The 6-DOF joint design allows the robot to be better planned for complex motion paths, increases the monitoring scope and precision, and achieves no-blind-angle monitoring.

Diverse applications Less risks

Used in power, energy, petroleum, transportation, smart buildings, etc.

Less safety risks and labor costs compared with traditional manual inspections

More scenarios: electricity, energy, construction, transportation, minerals, marine





Education industry

VR training

1. VR industrial robot task training system based on virtual reality. It realizes multi-brand, multi-robot, multi-scene robot task operation training, including robot welding training, robot spraying training, robot casting training, robot palletizing training, robot loading and unloading training, and robot mobile phone assembly training. 2. Learn and master the operations of industrial robots through the VR robot system, and practical training of physical collaborative robots, which further deepens and consolidates the basic knowledge and skill training results of industrial robots, and greatly improves the teaching and training effects.



More scenarios: teaching platform, cyclic assembly line, mobile robot application, SCARA application, laser marking robot loading and unloading workstation, disassembly and installation of collaborative robot, robot integrated standard workstation

New retail industry Milk tea robot

In this application, a new tea flagship store uses Han's robots in the beverage production area to collaborate in tea making, blending, and delivery, which adds value (such as freshness, attractiveness, and customer experience) to its service and image and greatly speeds up beverage production.

Fresh experience

One-click self-service, widely used in airports, hotels, restaurants, stations, shopping malls, and other places



Less labor and higher efficiency, easy operation, convenient maintenance, short time period of cost recovery



More scenarios: massage, coffee latte, unmanned sales, etc.

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