



WeChat Official Account

Official Website: www.hsrobotics.cn
Service Hotline: 400-9655-321



Foshan Huashu Robotics Co.,Ltd.

Address: No. 19 Taoyuan East Road, Nanhai District,
Foshan, Guangdong
Postcode: 528234
Phone: 0757-81991729
Fax: 0757-81991726
Email: huashu@hznc.com

Shenzhen Huashu Robotics Co.,Ltd.

Address: Shenzhen Nanshan District of Science and
Technology production and research base
Postcode: 518000
Phone: 0755-26733753
Fax: 0755-26723082
Email: sz-adm@hznc.com

Quanzhou Huashu Robotics Co.,Ltd.

Address: No. 518 Beiqing East Road, Feng Ze District,
Quanzhou, Fujian
Postcode: 362000
Phone: 0595-28857066
Fax: 0595-28857066
Email: quanzhou@hznc.com

Ningbo Huashu Robotics Co.,Ltd.

Address: No. 128 xingyong Road, Jiangbei District,
Ningbo, Zhejiang
Postcode: 315031
Phone: 0574-87286790
Fax: 0574-87280970
Email: market@huazhongcnc.com

Shandong Huashu Intelligent Technology Co.,Ltd

Address: Workshop A3 in Mozi Science and
Technology Park of Tengzhou, Xizhong Road,
Jinghe Street, Tengzhou County, Zaozhuang
City, Shandong Province.
Postcode: 277599
Phone: 15665292180
Email: sdhs@hznc.com

Chongqing Huashu Robotics Co.,Ltd.

Address: No.5-69, TianShui Yunhan avenue, Beipei
District, Chongqing City,China
Postcode: 400714
Phone: 023-88026882
Fax: 023-88537332
Email: huashu@hznc.com

Dongguan Huashu Robotics Co.,Ltd.

Address: Industrial Road, Dongguan Songshan Lake
high tech Industrial Development Zone No. 6
Postcode: 523843
Phone: 0769-82986658
Fax: 0769-22242945
Email: dghuashu@hznc.com

Suzhou Huashu Robotics Co.,Ltd.

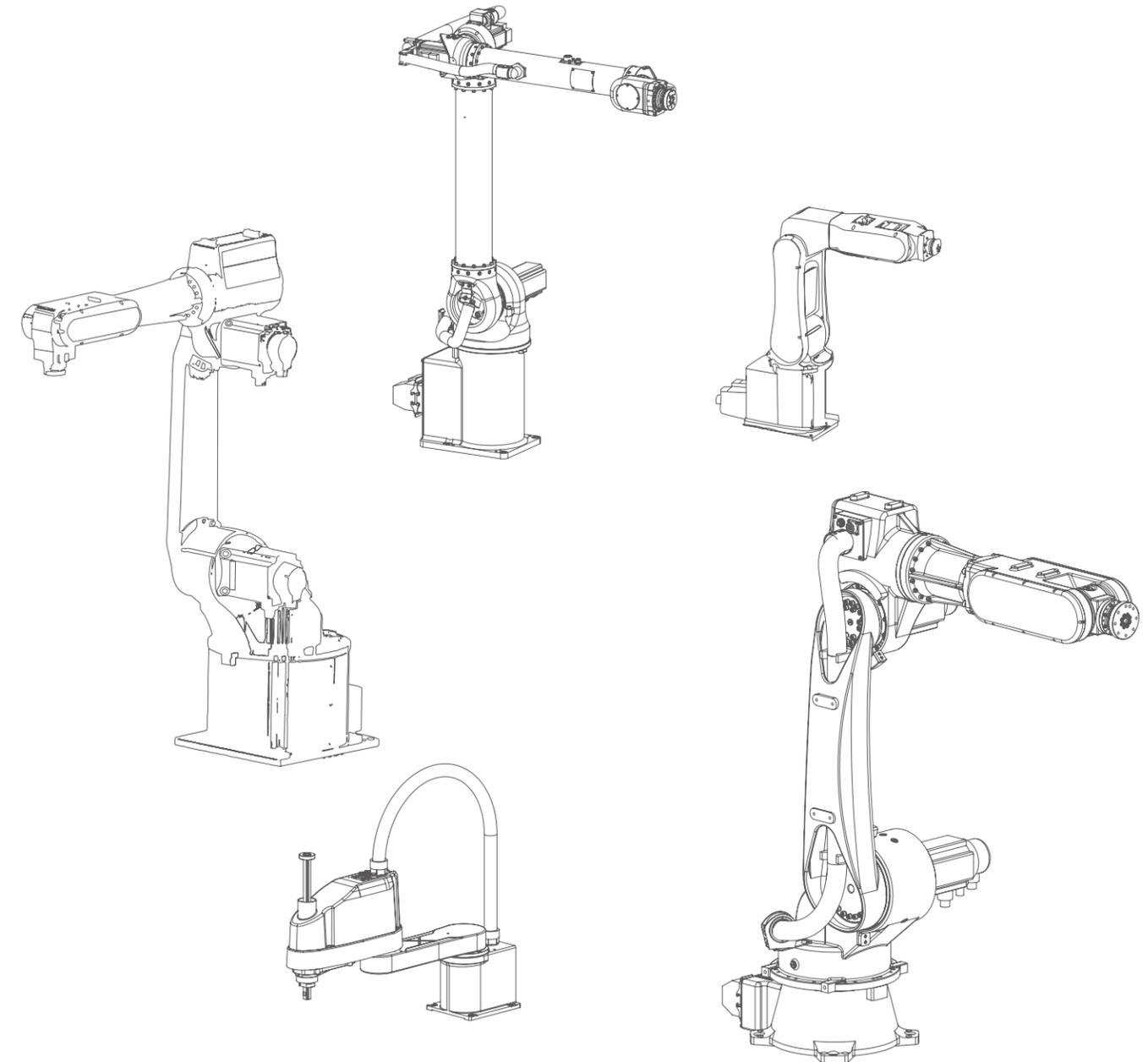
Address: No. 16, science and Technology City, Suzhou
hi tech Zone 116
Postcode: 215000
Phone: 0512-68078056
Fax: 0512-68078056
Email: suzhou@hznc.com

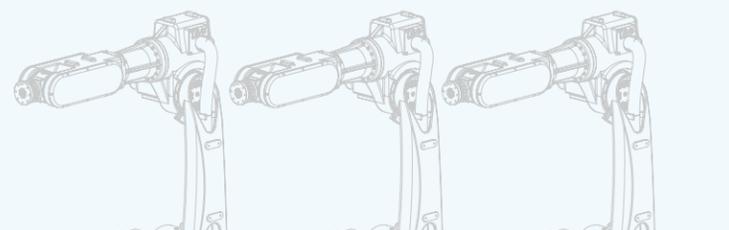
Hunan Huashu Intelligent Technology Co.,Ltd

Address: Building C12, Chuangye Innovation Park, No.
88 Changtang Road, Yunlong Demonstration
Zone, Zhuzhou, Hunan Province.
Postcode: 412000
Phone: 0731-28239199
Fax: 0731-28239199
Email: 13886185106@163.com

Wuhan Huazhong Numerical Control Co.,Ltd.

Address: Wuhan science and Technology Park, Huazhong
University of Science and Technology
Postcode: 430223
Phone: 027-87180025
Fax: 027-87180306
Email: market@huazhongcnc.com





HUASHU ROBOT

Equip 'Advance Industrial Robots' with 'Chinese Intelligence Manufacture'.

Our Strategies

Aligned to the market's need

Bind innovation to our soul

Take quality as matter of life

Values the talents





OUR GOAL IS TO RESEARCH
AND DEVELOP DOMESTIC
INDUSTRIAL ROBOTS.



Production base



Production base

Huashu Robot, as a subsidiary of Wuhan Huazhong Numerical Control Co., Ltd. (stock code: 300161), has companies in Foshan, Chongqing, Shenzhen, Dongguan, Ningbo, Suzhou, Quanzhou, and Nanning, covering South China, East China, Central China, and Southwest China, at the same time, exploring actively the international market. It is a national high-tech enterprise integrating product research and development, manufacturing and application, a leading brand in industrial robots in China, and an expert in intelligent manufacturing and smart factory overall solutions. The annual production capacity of industrial robots is 10,000 sets.

Huashu Robot takes independent innovation and the build of national brand of industrial robots as its mission, and fully implements the "PCLC" industrial robot development strategy: that is, to focus on general multi-joint industrial robot products (P) and take the development and industrialization of domestic robot core basic components (C) as the breakthrough, take the application of industrial robot automation line (L) as the goal, take the intelligent cloud platform (C) as the weapon of surprise for the industry's success, focusing on the research and development of the robot body and the performance and reliability of the whole machine, explore actively on the automation, intelligence, application such

as smart factories. At present, it has mastered six series of more than 40 kinds of complete robot products, realized independently safety and controllability in industrial robot controller, servo drive, servo motor and robot body, and formed more than 300 independent intellectual property rights. Our products are widely used in 3C, home appliances, hardware, automobiles, CNC, food, shoemaking, logistics and other fields.

Huashu Robot is deeply integrated into the construction of the National Robot Integration Innovation Center, forming a coordinated development pattern of the entire industry chain, integrating independent core technologies, core components, and industry 4.0 overall solutions. In the face of new round of scientific and technological revolution and industrial transformation opportunities, Huashu Robot assists the transformation of intelligent manufacturing with innovative technologies of "higher, faster, and smarter", and realizes its large-scale promotion and application with the robot technology as the core, injects strong power for the high-quality development of the equipment industry, and continues to create value for global customers with leading products and services. Huashu Robot, let the intelligent equipment technology company with the world!

Development History

Quality is the unshakable foundation.
It is also our dedication to perfection.

To inherit and promote the legacy of national brand, Huashu has been persisting in the philosophy of revolution and innovation. As the unforgettable glory brought by, it has been firmly marked and remember in our history.

80s

Huazhong University of Science
And Technology started research
on robotic control technology

2006

★ Shenzhen Huazhong CNC Co.,
Ltd was established and later
renamed as Shenzhen Huashu
Robot Co., Ltd in 2013.

2013

★ Huazhong CNC entered the
field of industrial robots and
registered the "Huashu Robot"
brand. Chongqing Huashu Robot
Co., Ltd. was established. In April
of the same year, Dongguan
huashu Robot Co., Ltd. was
established.

2009

Huazhong CNC industrial
robots began to be used in
processing automotive parts,
precision machining and
other fields.

2013 October

★ Suzhou Huashang Robot
Co., Ltd. was established.

2015

The self-developed 3 series of
11 robots have been mass-
produced and sold, and the
localization rate has reached
more than 80%, making it the
largest robot manufacturing
enterprise in the Midwest.

2014 June

★ The first Huashu robot
successfully launched.
At the same time, the
first Huashu product
testing production line
started running.

2015 May

★ Quanzhou Huashu
Robot Co., Ltd. and
Quanzhou Intelligent
Research Institute
were established.

2015 August

★ Foshan Huashu Robot
Co., Ltd established.
It started production
promptly in the same
year October base on
the existing Huashu
technology.

2015 September

The Huashu control system
mark II was released. This is
the great leap forward as the
development of indigenous
controller.

2015 October

★ Huazhong CNC acquired
Jiangsu Jinming Industrial
Robot Automation Co.,
Ltd., which specializes in
robot system integration,
to further expand the
application industry.

2016年

★ Ningbo Huashang Robot Co.,
Ltd. was established.
Changzhou Huashang Robot
Co., Ltd. was established.

2016 March

Huashu independently
developed 5 series of
more than 30 complete
robot products and
realized mass production
and application.

2018 June

A new generation of
intelligent robots released.

2017

Huashu Robot completed the
national layout in those areas in
North China, East China, South
China and West China. In the same
year, our BR series robot, the
unique innovation in China, firstly
provided the bi-rotation model
and structure and won the "Oscar"
in the field of Chinese design-2017
China Good Design Silver Award

2020年

Huashu granted two
international patents to
invention based on the
structural and algorithmic
innovation on BR bi-rotation
series robot. Which is another
great leap forward of the
indigenous design brand.

2019

The release of new
generation highly protected
bi-rotation six-axis robot
and small four axis robot.



Intellectual Property

Through independent design, Huashu now has more than 300 proprietary technology covering control, drives, design, application, automation etc. Fills multiple technological blanks in our country.



High technology / Innovation products awards.



- ◇ Bi-rotation robot won the 'Canton High-tech Product' award.
- ◇ Won 'The Canon High-tech Product' award.
- ◇ SCARA robot won the 'Canton High-tech Product' award.
- ◇ 30kg 6 axis robot won the 'Canton High-tech Product' award.
- ◇ 5kg 6 axis robot won the 'Canton High-tech Product' award.
- ◇ HSR-JR620 robot won the 'Canton High-tech Product' award.
- ◇ HSR-JR612 robot won the 'Canton High-tech Product' award.
- ◇ HSR-HC410 robot won the 'Canton High-tech Product' award.
- ◇ HSR-BR Bi-rotation robot won 'The most innovative product' award.
- ◇ Theory and practice integrated robot won the 'Canton Innovative Product' award.
- ◇ Multi-purpose training robot won the 'Canton innovative Product' award.
- ◇ Modelized robotic design won the 'Canton High-tech Product' award.
- ◇ Modelized powerbox design won the 'Canton High-tech Product' award.
- ◇

Robot technology patent



- ◇ Numerical method for obtaining the inverse kinematics of six-degree-of-freedom serial robot with offset wrist
- ◇ Mobile phone shell grinding workstation based on industrial robot
- ◇ Machining fixture of stator
- ◇ A method for storing double-buffer robot software logs
- ◇ Flexible positioning system
- ◇ Six axis robot capable of flexible wiring
- ◇ Coping fixture for anti-shedding and anti-deformation in negative pressure groove
- ◇ Control cabinet of industrial robots
- ◇ About the grinding table with constant output pressure controlled by servo drive device
- ◇ Auxiliary arm of the punching robot on the press line
- ◇ Automatically polishing system based on robot
- ◇ Stamping system of the edge conveying equipment is used for metal stamping
- ◇ A transport device that can be automatically loaded and unloaded on a pier
- ◇ Robot application teaching platform and its control system
- ◇ Multi-joint industrial robot bispir
- ◇ The invention of the general SCARA robot
- ◇ TCP calibration method of industrial robots
- ◇ Control method of front and rear axle drive electric vehicle in regenerative braking process
- ◇ Robotic control system for spraying
- ◇ A joint robot
- ◇ Robotic multi-functional fixture
- ◇ The conveying drum line of the carton
- ◇ Robotic paper card suction cup fixture
- ◇ Multi-joint industrial robot bispir with high protection
- ◇ Automated assembly and packaging line
- ◇ Intelligent spraying workstation of industrial robots
- ◇

Served Huazhong CNC DIWY CNC machine control software



- ◇ A motor electric field phase zero correction system and calibration method
- ◇ A Test system and method for servo driver frequency response
- ◇ Circuit for suppressing surge current by PTC resistor
- ◇ Utility model of inverter based on single-tube IGBT inverter
- ◇ Multi-channel data transmission and method based on single-chip asynchronous serial port
- ◇ (New type) Isolated DC power supply 20162117025.1 the patent certificate
- ◇ A high-power multi-purpose three-phase voltage supply system
- ◇ Stator of motor
- ◇ Mixed iron core motor
- ◇ Rotor of AC permanent magnet servo motor
- ◇ Rotor of permanent magnet synchronous motor
- ◇ Servo driver auxiliary debugging Software copyright
- ◇ Hardware monitoring platform software
- ◇ Huashu Robotic control system V1.0 for small appliance assembly line
- ◇ Huashu Robotic automation master control software system v2.0.503
- ◇ Servo drive control system of industrial robot
- ◇ Debugging platform of Control Assistant system for Huashu III Controller
- ◇ Huashu Robotic control system V1.0 for stamping line
- ◇ Huashu Robotic control system V1.0 for applying to the teaching platform
- ◇

Service Network

No matter when and where the service is always consistent.



Business Distribution

As Huashu's service network gradually cover the nation, we also established a highly efficient service system. This system allows our engineer around the country provide solid operation training and on-time sales services to our customers.

Aftersales service

We value our clients' experience. It is considered as the essential quality for Huashu's promotion and development. We want every product user to enjoy the same high-quality service all the time.

HSR-BR/JR Series

6 axis joints robot performance parameters



Product model	HSR-BR610	HSR-BR616	HSR-BR625	HSR-BR5110	HSR-JR603	HSR-JR605	HSR-JR607	HSR-JH605	HSR-JM612	HSR-JR612	HSR-JR620	HSR-JR630	HSR-JR650 680	HSR-JR6150		
Degree of freedom	6	6	6	5	6	6	6	6	6	6	6	6	6	6		
Payload	10kg	16kg	25kg	110kg	3kg	5kg	7kg	5kg	12kg	12kg	20kg	30kg	50kg 80kg	150kg		
Maximum operate radius	1310mm	1600mm	1849.5mm	2400mm	571.5mm	746mm	910mm	1441mm	1555mm	1555mm	1848mm	1701mm	2400mm 2200.4mm	2765.8mm		
Repeat positioning accuracy	±0.05mm	±0.05mm	±0.05mm	±0.2mm	±0.02mm	±0.02mm	±0.02mm	±0.06mm	±0.06mm	±0.06mm	±0.06mm	±0.05mm	±0.08mm ±0.07mm	±0.1mm		
Range of motion	J1	±155°	±154°	±160°	±180°	±180°	±200°	±155°	±150°	±168°	±168°	±160°	±160°	±180°	±180°	
	J2	-178°~-2°	-178°~-2°	-178°~-2°	-180°~0°	-155°~+5°	-180°~0°	-145°~+60°	-170°~+75°	-170°~+75°	-175°~+75°	-175°~+75°	-160°~+70°	-5°~-150°		
	J3	+120°~+420°	+103°~+437°	+128°~+412°	+20°~+330°	-20°~+240°	+80°~+240°	+80°~+340°	+30°~+270°	+40°~+265°	+40°~+265°	+40°~+265°	+40°~+265°	+10°~+265°	+10°~+265°	
	J4	±190°	±360°	±360°	±120°	±180°	±180°	±360°	±120°	±180°	±180°	±180°	±180°	±360°	±180°	
	J5	±150°	±161°	±131°	±360°	±95°	±115°	±120°	-110°~+140°	±118°	±108°	±125°	±125°	±110°	±110°	
	J6	±360°	±360°	±360°	-	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	±360°	
Rated speed	J1	180°/s, 3.14rad/s	157°/s, 2.73rad/s	140°/s, 2.44rad/s	85°/s, 1.48rad/s	262.5°/s, 4.58rad/s	222°/s, 3.87rad/s	225°/s, 3.92rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	88°/s, 1.53rad/s	88°/s, 1.53rad/s	85°/s, 1.48rad/s	65°/s, 1.14rad/s
	J2	250°/s, 4.36rad/s	145°/s, 2.52rad/s	141°/s, 2.46rad/s	78°/s, 1.35rad/s	262.5°/s, 4.58rad/s	180°/s, 3.14rad/s	180°/s, 3.14rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	66°/s, 1.15rad/s	66°/s, 1.15rad/s	85°/s, 1.48rad/s	69°/s, 1.22rad/s
	J3	180°/s, 3.14rad/s	178°/s, 3.10rad/s	171°/s, 2.98rad/s	70°/s, 1.22rad/s	262.5°/s, 4.58rad/s	225°/s, 3.93rad/s	180°/s, 3.14rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	148°/s, 2.58rad/s	120°/s, 2.09rad/s	120°/s, 2.09rad/s	104°/s, 1.81rad/s	93°/s, 1.22rad/s
	J4	235°/s, 4.11rad/s	221°/s, 3.85rad/s	225°/s, 3.92rad/s	187°/s, 3.27rad/s	262.5°/s, 4.58rad/s	235°/s, 4.10rad/s	225°/s, 3.92rad/s	225°/s, 3.93rad/s	360°/s, 6.28rad/s	360°/s, 6.28rad/s	178°/s, 3.11rad/s	178°/s, 3.11rad/s	177°/s, 3.08rad/s	116°/s, 2.03rad/s	
	J5	180°/s, 3.14rad/s	180°/s, 3.14rad/s	225°/s, 3.92rad/s	225°/s, 3.93rad/s	262.5°/s, 4.58rad/s	222°/s, 3.87rad/s	225°/s, 3.92rad/s	225°/s, 3.93rad/s	225°/s, 3.93rad/s	225°/s, 3.93rad/s	178°/s, 3.11rad/s	178°/s, 3.11rad/s	155°/s, 2.70rad/s	148°/s, 2.40rad/s	
	J6	360°/s, 6.28rad/s	225°/s, 3.92rad/s	225°/s, 3.92rad/s	-	420°/s, 7.33rad/s	360°/s, 6.28rad/s	225°/s, 3.92rad/s	225°/s, 3.93rad/s	225°/s, 3.93rad/s	360°/s, 6.28rad/s	225°/s, 3.93rad/s	225°/s, 3.93rad/s	187°/s, 3.26rad/s	222°/s, 3.88rad/s	
Maximum speed	J1	240°/s, 4.19rad/s	236°/s, 4.12rad/s	233°/s, 4.06rad/s	128°/s, 2.23rad/s	375°/s, 6.54rad/s	370°/s, 6.46rad/s	450°/s, 7.85rad/s	222°/s, 3.87rad/s	197°/s, 3.44rad/s	197°/s, 3.44rad/s	96°/s, 1.68rad/s	96°/s, 1.68rad/s	127°/s, 2.21rad/s	97°/s, 1.70rad/s	
	J2	250°/s, 4.36rad/s	217°/s, 3.78rad/s	235°/s, 4.10rad/s	116°/s, 2.03rad/s	375°/s, 6.54rad/s	300°/s, 5.24rad/s	360°/s, 6.28rad/s	222°/s, 3.87rad/s	197°/s, 3.44rad/s	197°/s, 3.44rad/s	88°/s, 1.53rad/s	88°/s, 1.53rad/s	127°/s, 2.21rad/s	105°/s, 1.84rad/s	
	J3	300°/s, 5.24rad/s	357°/s, 6.23rad/s	285°/s, 4.97rad/s	105°/s, 1.84rad/s	375°/s, 6.54rad/s	375°/s, 6.54rad/s	390°/s, 6.81rad/s	222°/s, 3.87rad/s	197°/s, 3.44rad/s	197°/s, 3.44rad/s	192°/s, 3.35rad/s	192°/s, 3.35rad/s	104°/s, 1.81rad/s	105°/s, 1.84rad/s	
	J4	392°/s, 6.84rad/s	443°/s, 7.72rad/s	487°/s, 8.49rad/s	225°/s, 3.93rad/s	375°/s, 6.54rad/s	392°/s, 6.84rad/s	487.5°/s, 8.51rad/s	337.5°/s, 5.89rad/s	600°/s, 10.47rad/s	600°/s, 10.47rad/s	297°/s, 5.18rad/s	297°/s, 5.18rad/s	177°/s, 3.08rad/s	174°/s, 3.09rad/s	
	J5	300°/s, 5.24rad/s	360°/s, 6.28rad/s	487°/s, 8.49rad/s	300°/s, 5.23rad/s	375°/s, 6.54rad/s	370°/s, 6.46rad/s	487.5°/s, 8.51rad/s	337.5°/s, 5.89rad/s	375°/s, 6.54rad/s	375°/s, 6.54rad/s	297°/s, 5.18rad/s	297°/s, 5.18rad/s	155°/s, 2.70rad/s	173°/s, 3.03rad/s	
	J6	600°/s, 10.46rad/s	450°/s, 7.85rad/s	487°/s, 8.49rad/s	-	600°/s, 10.46rad/s	600°/s, 10.47rad/s	487.5°/s, 8.51rad/s	337.5°/s, 5.89rad/s	375°/s, 6.54rad/s	600°/s, 10.47rad/s	375°/s, 6.54rad/s	375°/s, 6.54rad/s	187°/s, 3.26rad/s	296°/s, 5.17rad/s	
Allowable moment of inertia	J4	0.42kgm ²	0.99kgm ²	3.7kgm ²	26.4kgm ²	0.05kgm ²	0.5kgm ²	0.87kgm ²	0.3kgm ²	1.2kgm ²	1.2kgm ²	8.7kgm ²	8.7kgm ²	32.7kgm ²	55kgm ²	
	J5	0.42kgm ²	0.85kgm ²	3.7kgm ²	5.3kgm ²	0.05kgm ²	0.36kgm ²	0.52kgm ²	0.3kgm ²	1.2kgm ²	1.2kgm ²	3.3kgm ²	3.3kgm ²	32.7kgm ²	55kgm ²	
	J6	0.15kgm ²	0.52kgm ²	2.0kgm ²	-	0.04kgm ²	0.1kgm ²	0.17kgm ²	0.035kgm ²	0.17kgm ²	0.17kgm ²	0.8kgm ²	0.8kgm ²	25kgm ²	25kgm ²	
Allowable torque	J4	20.4Nm	34.0Nm	76.5Nm	707Nm	12.7Nm	18Nm	21.5Nm	35Nm	35Nm	35Nm	140.4Nm	140.4Nm	400Nm	600Nm	
	J5	20.4Nm	28.0Nm	79.8Nm	327Nm	6.4Nm	16Nm	18.1Nm	35Nm	35Nm	35Nm	73.4Nm	73.4Nm	340Nm	600Nm	
	J6	12.7Nm	20.3Nm	40.9Nm	-	6.4Nm	8Nm	13.4Nm	15Nm	15Nm	15Nm	30.7Nm	30.7Nm	330Nm	320Nm	
Applicable environment	Temperature	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	
	Humidity	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	20%-80%	
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)		
Teach pendant cable length	8m	8m	8m	8m	8m	8m	8m	8m	8m	8m	8m	8m	8m	8m		
Machine- Power box connect cable length	3m	6m	6m	8m	3m	3m	3m	5m	6m	6m	6m	6m	8m	8m		
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			
Body Reserved Signal Line	12 pins (aviation plug)	24pins (aviation plug)	24pins (aviation plug)	26pin (solder connected aviation plug)	12pin(aviation plug, prefabricated cable length 0.55m)	12pins (aviation plug)	12pins (aviation plug)	-	26pin (solder connected aviation plug)	12pin (solder connected aviation plug)	24pins (aviation plug)	24pins (aviation plug)	26pin (solder connected aviation plug)	-		
Pneumatic tube	1*Φ6	2*Φ8	2*Φ8	2*Φ8	1*Φ6	1*Φ6	2*Φ6	-	-	1*Φ8	2*Φ8	2*Φ8	3*Φ10	-		
Battery capacity	2.55kVA	3.68kVA	5.6kVA	17kVA	0.8kVA	1.56kVA	1.56kVA	2.5kVA	3.8kVA	3.8kVA	5.62kVA	5.62kVA	7.5kVA	18.5kVA		
Rated power /Voltage/ Current	2.04kW/Single Phase AC220V 50HZ/9.3A	2.95kW/Single Phase AC220V 50HZ/13.4A	4.3kW/3Phases 380V/8.1A	14kW/3Phases 5lines AC380V 50HZ/23A	0.6kW/Single Phase AC220V 50HZ/3.2A	1.25kW/Single Phase AC220V 50HZ/5.7A	1.25kW/Single Phase AC220V 50HZ/6.5A	2kW/Single Phase AC220V 50HZ/10.8A	3kW/3Phases AC380V 50HZ/5.4A	3kW/3Phases AC380V 50HZ/5.4A	4.5kW/33Phases AC380V/9A	4.5kW/33Phases AC380V/9A	5.5kW/3Phases AC380V 50HZ/10.8A	15kW/3Phases AC380V/25A		
Body/Electric Cabinet Protection Level	IP54 (robot arm IP67) /IP53	IP67/IP54	IP54/IP53	IP50/IP53	IP54/IP53	IP54/IP53	IP67/IP54	IP50/IP50	IP54 (robot arm IP65) /IP53		IP54/IP53	IP54/IP53	IP54 (robot arm IP65) /IP53	IP54/IP53		
Installation method	Ground/Upside down/Side mount/Install in any direction	Ground	Ground/Upside down/Side mount/Install in any direction	Ground	Ground/Upside down/Side mount/Install in any direction		Ground/Upside down/Side mount/Install in any direction		Ground	Ground/Upside down/Side mount	Ground/Upside down	Ground/Upside down	Ground	Ground		
Machine/power box weight	61kg/38kg	124.5kg/47kg	210kg/91kg	980kg/180kg	27kg/20kg	55.5kg/38kg	40kg/38kg	196kg/50kg	215kg/130kg	196kg/130kg	303.5kg/91kg	302kg/91kg	750kg/180kg 720kg/180kg	1320kg/about 160kg		

HSR-HC/SR/DT Series

4 axis joints robot performance parameters



Product model	HSR-HC403	HSR-SR3400	HSR-SR6600	HSR-SR5700	HSR-DT401	HSR-DT803	HSR-DT1208	HSR-HC410	HSR-HC415	HSR-HC420		
Degree of freedom	4	4	4	4	4	3+1	3+1	4	4	4		
Payload	3kg	3kg	6kg	5kg	1kg	3kg	8kg	10kg	15kg	20kg		
Maximum operate radius	585mm	400mm	600mm	700mm	200mm	400mm	600mm	1402mm	1402mm	2000mm		
Repeat positioning accuracy	±0.02mm	±0.01mm	±0.02mm	±0.02mm	±0.1mm	±0.1mm	±0.1mm	±0.05mm	±0.05mm	±0.08mm		
Range of motion	J1	±140°	±132°	±132°	±132°	Travel Range			±145°	±145°	±145°	
	J2	±180°	±135°	±150°	±150°	Maximum movement radius: 200mm	Maximum movement radius: 400mm	Maximum movement radius: 600mm	±135°	±135°	±135°	
	J3	0mm~145mm	0~150mm	0~200mm	0~200mm	Maximum pickup and place height: 135mm	Maximum pickup and place height: 300mm	Maximum pickup and place height: 335mm	±250mm	±250mm	0mm~480mm	
	J4	±360°	±360°	±360°	±360°	The fourth axis rotation angle	The fourth axis rotation angle	The fourth axis rotation angle	±180°	±180°	±360°	
	J5	-	-	-	-	±360°	±360°	±360°	-	-	-	
	J6	-	-	-	-	Operation beats per minute (25mm-305mm-25mm), 0.1KG			-	-	-	
Rated speed	J1	225°/s, 3.95rad/s	360°/s, 6.28rad/s	225°/s, 3.92rad/s	225°/s, 3.92rad/s	200	180	180	225°/s, 3.93rad/s	225°/s, 3.93rad/s	108°/s, 1.88rad/s	
	J2	225°/s, 3.95rad/s	470°/s, 8.19rad/s	360°/s, 6.28rad/s	420°/s, 7.32rad/s	-	-	-	225°/s, 3.93rad/s	225°/s, 3.93rad/s	148.76°/s, 2.60rad/s	
	J3	500mm/s	710mm/s	666mm/s	666mm/s	-	-	-	500mm/s	500mm/s	500mm/s	
	J4	360°/s, 6.28rad/s	1500°/s, 26.16rad/s	1200°/s, 20.93rad/s	1400°/s, 24.42rad/s	-	-	-	180°/s, 3.14rad/s	180°/s, 3.14rad/s	225°/s, 3.93rad/s	
	J5	-	-	-	-	-	-	-	-	-	-	
	J6	-	-	-	-	-	-	-	-	-	-	
Maximum speed	J1	375°/s, 6.54rad/s	530°/s, 9.24rad/s	375°/s, 6.54rad/s	335°/s, 5.84rad/s	-	-	-	300°/s, 5.23rad/s	300°/s, 5.23rad/s	216°/s, 3.77rad/s	
	J2	375°/s, 6.54rad/s	700°/s, 12.21rad/s	600°/s, 10.46rad/s	600°/s, 10.46rad/s	-	-	-	375°/s, 6.54rad/s	375°/s, 6.54rad/s	198°/s, 3.54rad/s	
	J3	1000mm/s	1065mm/s	1111mm/s	1111mm/s	-	-	-	830mm/s	830mm/s	667mm/s	
	J4	588°/s, 10.26rad/s	2600°/s, 43.35rad/s	2000°/s, 34.88rad/s	2000°/s, 34.88rad/s	-	-	-	360°/s, 6.28rad/s	360°/s, 6.28rad/s	375°/s, 6.54rad/s	
	J5	-	-	-	-	-	-	-	-	-	-	
	J6	-	-	-	-	-	-	-	-	-	-	
Allowable moment of inertia	J4	0.03kgm ²	0.05/0.005kgm ²	0.12/0.01kgm ²	0.12/0.01kgm ²	-	-	-	2kgm ²	3kgm ²	6.5kgm ²	
	J5	-	-	-	-	-	-	-	-	-	-	
	J6	-	-	-	-	-	-	-	-	-	-	
Allowable torque	J4	6.4Nm	3.29Nm	4.23Nm	4.23Nm	-	-	-	40Nm	50Nm	90Nm	
	J5	-	-	-	-	-	-	-	-	-	-	
	J6	-	-	-	-	-	-	-	-	-	-	
Applicable environment	Temperature	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	0~45°C	
	Humidity	20%~80%	20%~80%	20%~80%	20%~80%	20%~85%	20%~85%	20%~85%	20%~80%	20%~80%	20%~80%	
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)			Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)	
Teach pendant cable length	8m	8m	8m	8m	No Handheld	No Handheld	No Handheld	8m	8m	8m		
Machine- Power box connect cable length	5m	3m	3m	3m	5m	5m	5m	6m	6m	6m		
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)			Pins: 24 pins input 16 pins output	Pins: 24 pins input 16 pins output	Pins: 24 pins input 16 pins output	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)		
Body Reserved Signal Line	-	12 pins (aviation plug)	12 pins (aviation plug)	12 pins (aviation plug)	10pins (Terminals connection)	10pins (Terminals connection)	10pins (Terminals connection)	12 cores default cable length: 0.5m	12 cores default cable length: 0.5m	12 cores default cable length: 0.5m		
Pneumatic tube	-	3*Φ6	3*Φ6	3*Φ6	-	-	-	1*Φ8	1*Φ8	1*Φ6		
Battery capacity	0.6kVA	0.75kVA	0.8kVA	0.8kVA	-	-	-	2.3kVA	2.8kVA	5.6kVA		
Rated power /Voltage/ Current	0.5kW/Single Phase AC220V 50HZ/2.5A	0.55kW/Single Phase AC220V 50HZ/3A	0.62kW/Single Phase AC220V 50HZ/3.2A	0.62kW/Single Phase AC220V 50HZ/3.2A	1.8kW/3Phases AC380V	3.3kW/380V	6.3kW/380V	1.8kW/3Phases AC380V 50HZ/3.2A	2.2kW/3Phases AC380V 50HZ/4A	4.5kW/3Phases AC380V 50HZ/8.1A		
Body/Electric Cabinet Protection Level	IP64 (Optional IP67) /IP53	IP54/IP20	IP54/IP20	IP54/IP20	IP54/IP53	IP54/IP53	IP54/IP53	IP54/IP53	IP54/IP53	IP54/IP53		
Installation method	Ground/Upside down/Side mount	Ground/Desktop	Ground/Desktop	Ground/Desktop	Desktop	Upside down	Upside down	Ground	Ground	Ground		
Machine/power box weight	25kg/38kg	17.5kg/10.65kg	21.5kg/10.65kg	22.5kg/10.65kg	85kg/30kg	124kg/40kg	145kg/45kg	230kg/50kg	250kg/50kg	280kg/50kg		

HSR-BR610

Six-axis bi-rotation Robot series

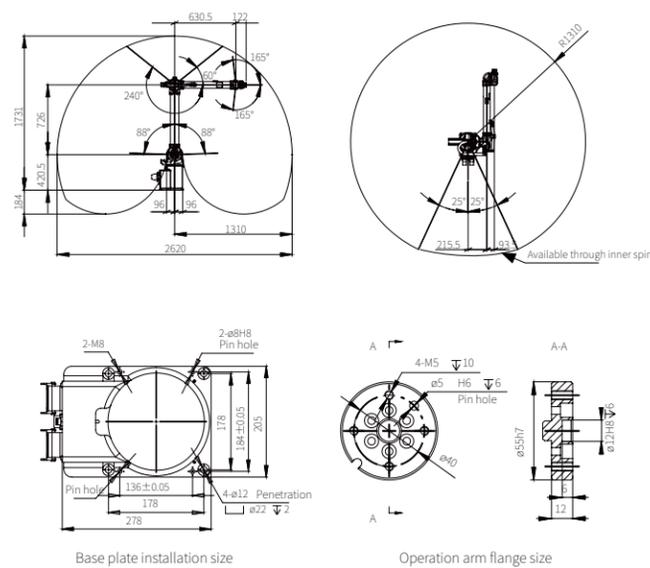
Introduction

Based on the BR series, the brand-new generation of HSR-BR610 that was designed for glass grinding, flat grinding, engraving and milling and other machines now has upgraded the protection level of its leading arm(tooling arm). This upgrade now allows the leading arm to be spraiod or even immerse in water with IP 67 waterproof rating. Ultimately, it works faster, loads heavier, and the protection gets better.



Product model		HSR-BR610
Degree of freedom		6
Payload		10kg
Maximum moving radius		1310mm
Repeat positioning accuracy		±0.05mm
Range of motion	J1	±155°
	J2	-178°~2°
	J3	+120°~+420°
	J4	±190°
	J5	±150°
	J6	±360°
Rated speed	J1	180°/s, 3.14 rad/s
	J2	250°/s, 4.36 rad/s
	J3	180°/s, 3.14 rad/s
	J4	235°/s, 4.11 rad/s
	J5	180°/s, 3.14 rad/s
	J6	360°/s, 6.28rad/s
Rated speed	J1	240°/s, 4.19 rad/s
	J2	250°/s, 4.36rad/s
	J3	300°/s, 5.24rad/s
	J4	392°/s, 6.84 rad/s
	J5	300°/s, 5.24 rad/s
	J6	600°/s, 10.46rad/s
Allowable moment of inertia	J4	0.42kgm ²
	J5	0.42kgm ²
	J6	0.15kgm ²
Allowable torque	J4	20.4Nm
	J5	20.4Nm
	J6	12.7Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length		8m
Machine- Power box connect cable length.		3m
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)
Body Reserved Signal Line		12 pins (aviation plug)
Pneumatic tube		1"φ6
Battery capacity		2.55kVA
Rated power / voltage / current		2.04kW/Single Phase AC220V 50HZ/9.3A
Body/Electric Cabinet Protection Level		IP54 (robot arm IP67) /IP53
Installation method		Ground/Upside down/Side mount/Install in any direction
Machine/power box weight		61kg/38kg

Operation Parameter



HSR-BR616

Six-axis bi-rotation Robot series

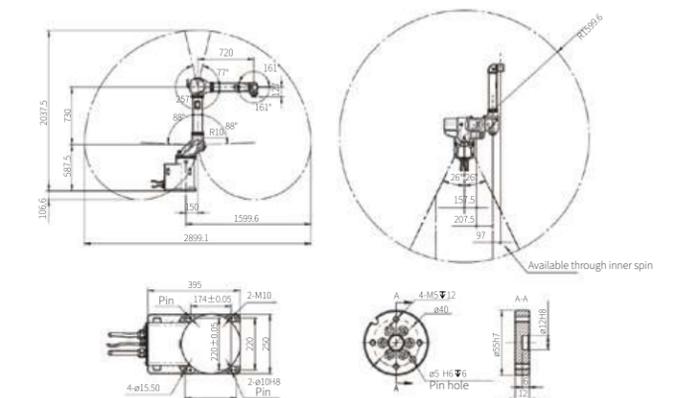
Introduction

Bases on the BR series, the brand-new generation of HSR-BR616 now has further upgraded. This machine now can undertake heavier load, higher protection rating, faster working pace. The whole designs now comply with IP 67 rating, which makes particularly suitable for: painting, dusting, loading and unloading on machine tools, assembly, palletizing and mold injection.



Product model		HSR-BR616
Degree of freedom		6
Payload		16kg
Maximum moving radius		1600mm
Repeat positioning accuracy		±0.05mm
Range of motion	J1	±154°
	J2	-178°~2°
	J3	+103°~+437°
	J4	±360°
	J5	±161°
	J6	±360°
Rated speed	J1	157°/s, 2.73 rad/s
	J2	145°/s, 2.52 rad/s
	J3	178°/s, 3.10 rad/s
	J4	221°/s, 3.85 rad/s
	J5	180°/s, 3.14 rad/s
	J6	225°/s, 3.92rad/s
Rated speed	J1	236°/s, 4.12 rad/s
	J2	217°/s, 3.78rad/s
	J3	357°/s, 6.23rad/s
	J4	443°/s, 7.72rad/s
	J5	360°/s, 6.28 rad/s
	J6	450°/s, 7.85rad/s
Allowable moment of inertia	J4	0.99kgm ²
	J5	0.85kgm ²
	J6	0.52kgm ²
Allowable torque	J4	34.0Nm
	J5	28.0Nm
	J6	20.3Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length		8m
Machine- Power box connect cable length.		6m
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)
Body Reserved Signal Line		24 pins (aviation plug)
Pneumatic tube		2"φ8
Battery capacity		3.68kVA
Rated power / voltage / current		2.95kW/Single Phase AC220V 50HZ/13.4A
Body/Electric Cabinet Protection Level		IP67/IP54
Installation method		Ground
Machine/power box weight		124.5kg/47kg

Operation Parameter



HSR-BR625

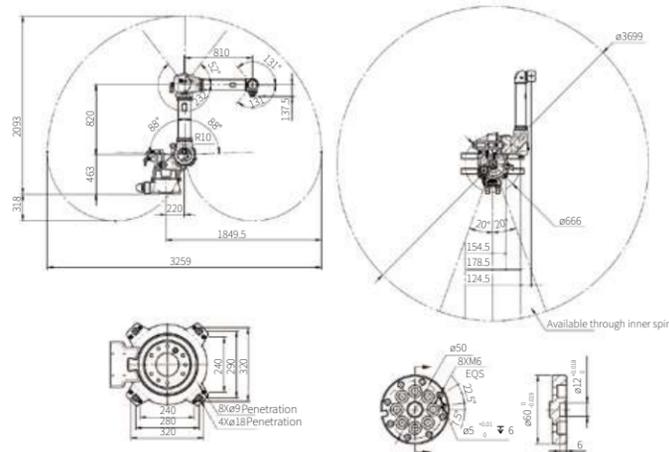
Six-axis bi-rotation Robot series

Introduction

Based on the BR series robots, after optimization and upgrade, HSR-BR625 was born with strong power, fast speed and load of 25KG. This robot with bi-spin structure occupies very small installation space. The 4th, 5th, and 6th axes are hollow arms with built-in cables. It is high cost-effective which can meet different needs of customers, especially suitable for assembly, loading and unloading, handling, stamping, densely arranged drill centers etc.



Operation Parameter



Product model		HSR-BR625
Degree of freedom		6
Payload		25kg
Maximum moving radius		1849.5mm
Repeat positioning accuracy		±0.05mm
Range of motion	J1	±160°
	J2	-178°~2°
	J3	+128°~+412°
	J4	±360°
	J5	±131°
	J6	±360°
Rated speed	J1	140°/s, 2.44rad/s
	J2	141°/s, 2.46rad/s
	J3	171°/s, 2.98rad/s
	J4	225°/s, 3.92rad/s
	J5	225°/s, 3.92rad/s
	J6	225°/s, 3.92rad/s
Rated speed	J1	233°/s, 4.06rad/s
	J2	235°/s, 4.10rad/s
	J3	285°/s, 4.97rad/s
	J4	487°/s, 8.49rad/s
	J5	487°/s, 8.49rad/s
	J6	487°/s, 8.49rad/s
Allowable moment of inertia	J4	3.7kgm ²
	J5	3.7kgm ²
	J6	2.0kgm ²
Allowable torque	J4	76.5Nm
	J5	79.8Nm
	J6	40.9Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%-80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length		8m
Machine- Power box connect cable length.		6m
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)
Body Reserved Signal Line		24 pins (aviation plug)
Pneumatic tube		2"Φ8
Battery capacity		5.6kVA
Rated power / voltage / current		4.3kW/3Phases 380V/8.1A
Body/Electric Cabinet Protection Level		IP54/IP53
Installation method		Ground/Upside down/Side mount/Install in any direction
Machine/power box weight		210kg/91kg

HSR-BR5110

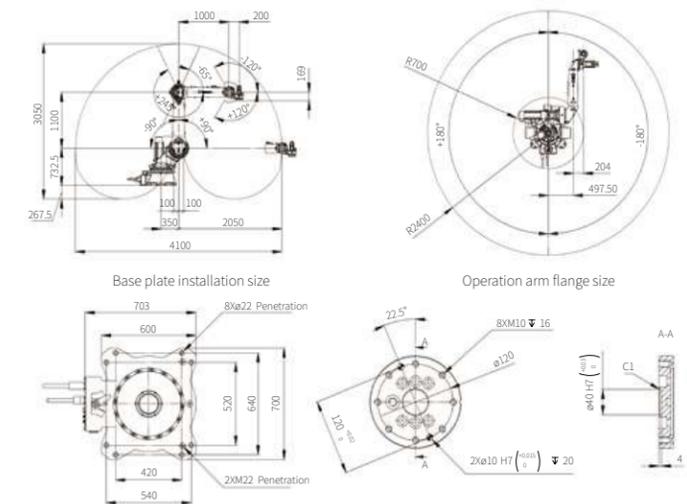
Five-axis pelletizing robot series

Introduction

This palletizing series are developed for the clients who has specific demand in working in narrow space under fast pace, especially the palletizing work that needs wide range of joint movement. As a domestic product, its maximum joints' speed has reached the same level of KUKA's counterpart product (KR120 R32200PA), which has high cost performance and competitiveness in the market.



Operation Parameter



Product model		HSR-BR5110	
Degree of freedom		5	
Payload		110kg	
Maximum moving radius		2400mm	
Repeat positioning accuracy		±0.2mm	
Range of motion	J1	±180°	
	J2	-180°~0°	
	J3	+20°~+330°	
	J4	±120°	
	J5	±360°	
	Rated speed	J1	85°/s, 1.48rad/s
J2		78°/s, 1.35rad/s	
J3		70°/s, 1.22rad/s	
J4		187°/s, 3.27rad/s	
J5		225°/s, 3.93rad/s	
Rated speed		J1	128°/s, 2.23rad/s
	J2	116°/s, 2.03rad/s	
	J3	105°/s, 1.84rad/s	
	J4	225°/s, 3.93rad/s	
	J5	300°/s, 5.23rad/s	
	Allowable moment of inertia	J5	26.4kgm ²
J4		5.3kgm ²	
J5		707Nm	
Allowable torque	J4	327Nm	
	Temperature		0~45°C
	Humidity		20%-80%
Other		Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)	
Teach pendant cable length		8m	
Machine- Power box connect cable length.		8m	
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line		26pin (solder connected avation plug)	
Pneumatic tube		2"Φ8	
Battery capacity		17kVA	
Rated power / voltage / current		14kW/3Phases 5lines AC380V 50HZ/23A	
Body/Electric Cabinet Protection Level		IP50/IP53	
Installation method		Ground	
Machine/power box weight		980kg/180kg	

HSR-JR603/JR605

Six axis joint Robot series

Introduction

HSR-JR603/JR605 is a small multi-purpose robot of Huashu, which meets the high requirements of "high precision, light weight, and high speed" of 3C production. The whole machine adopts lightweight design, small size, flexible installation method, and adopts independent research and development of core components. It has high performance and big cost advantages. It is widely used in fields such as glue coating, handling, sorting, and assembly.

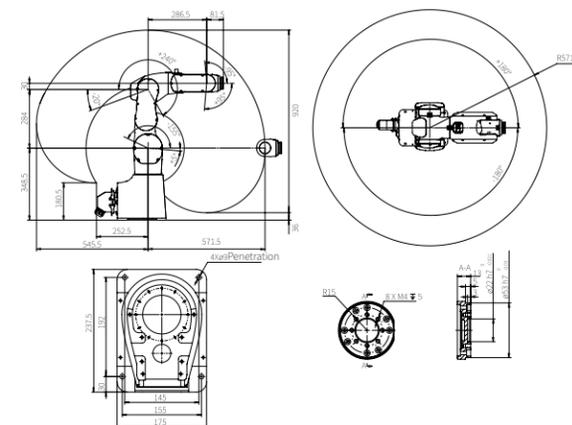


HSR-JR603

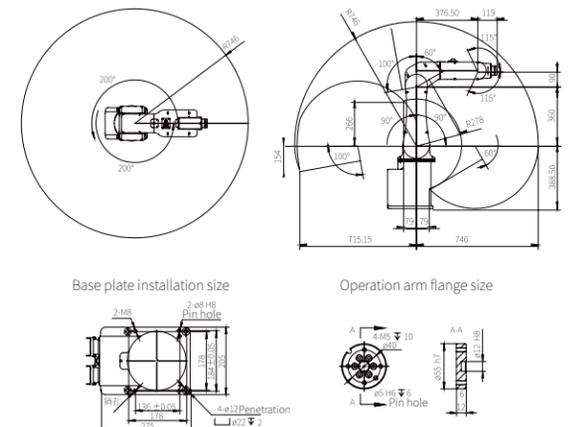
HSR-JR605

Product model	HSR-JR603	HSR-JR605
Degree of freedom	6	6
Payload	3kg	5kg
Maximum moving radius	571.5mm	746mm
Repeat positioning accuracy	±0.02mm	±0.02mm
Range of motion	J1	±180°
	J2	-155°~+5°
	J3	-20°~+240°
	J4	±180°
	J5	±95°
	J6	±360°
Rated speed	J1	262.5°/s, 4.58rad/s
	J2	262.5°/s, 4.58rad/s
	J3	262.5°/s, 4.58rad/s
	J4	262.5°/s, 4.58rad/s
	J5	262.5°/s, 4.58rad/s
	J6	420°/s, 7.33rad/s
Rated speed	J1	375°/s, 6.54rad/s
	J2	375°/s, 6.54rad/s
	J3	375°/s, 6.54rad/s
	J4	375°/s, 6.54rad/s
	J5	375°/s, 6.54rad/s
	J6	600°/s, 10.47rad/s
Allowable moment of inertia	J4	0.05kgm ²
	J5	0.05kgm ²
	J6	0.04kgm ²
Allowable torque	J4	12.7Nm
	J5	6.4Nm
	J6	6.4Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	8m
Machine- Power box connect cable length.	3m	3m
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	12pins (aviation plug, 0.5m default cable length)	12 pins (aviation plug)
Pneumatic tube	1"Φ6	1"Φ6
Battery capacity	0.8kVA	1.56kVA
Rated power / voltage / current	0.6kW/Single Phase AC220V 50HZ/3.2A	1.25kW/Single Phase AC220V 50HZ/5.7A
Body/Electric Cabinet Protection Level	IP54/IP53	IP54/IP53
Installation method	Ground/Upside down/Side mount	Ground/Upside down/Side mount
Machine/power box weight	27kg/20kg	55.5kg/38kg

HSR-JR603 Operation Parameter



HSR-JR605 Operation Parameter



HSR-JR607

Six axis joint Robot series

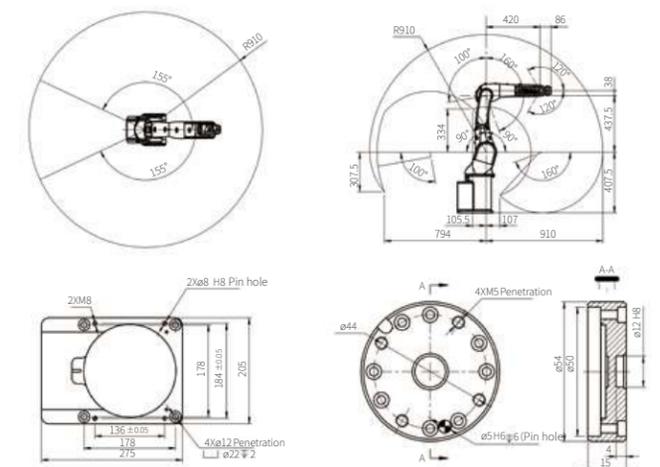
Introduction

HSR-JR607 will be designed as another small multi-purpose six-joint robot of Huashu Robot. It has compact structure, small size, light weight, high joint speed, fast dynamic response, higher protection level, and can easily deal with various environments with water. This six-axis robot is mainly aimed at the assembly of new energy and consumer electronic components, and is positioned as a high-speed and high-precision assembly robot in the 3C industry.



Product model	HSR-JR607	
Degree of freedom	6	
Payload	7kg	
Maximum moving radius	910mm	
Repeat positioning accuracy	±0.02mm	
Range of motion	J1	±155°
	J2	-180°~0°
	J3	+80°~+340°
	J4	±360°
	J5	±120°
	J6	±360°
Rated speed	J1	225°/s, 3.92rad/s
	J2	180°/s, 3.14rad/s
	J3	180°/s, 3.14rad/s
	J4	225°/s, 3.92rad/s
	J5	225°/s, 3.92rad/s
	J6	225°/s, 3.92rad/s
Rated speed	J1	450°/s, 7.85rad/s
	J2	360°/s, 6.28rad/s
	J3	390°/s, 6.81rad/s
	J4	487.5°/s, 8.51rad/s
	J5	487.5°/s, 8.51rad/s
	J6	487.5°/s, 8.51rad/s
Allowable moment of inertia	J4	0.87kgm ²
	J5	0.52kgm ²
	J6	0.17kgm ²
Allowable torque	J4	21.5Nm
	J5	18.1Nm
	J6	13.4Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	
Machine- Power box connect cable length.	3m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	12 pins (aviation plug)	
Pneumatic tube	2"Φ6	
Battery capacity	1.56kVA	
Rated power / voltage / current	1.25kW/Single Phase AC220V 50HZ/6.5A	
Body/Electric Cabinet Protection Level	IP67/IP54	
Installation method	Ground/Upside down/Side mount	
Machine/power box weight	40kg/38kg	

Operation Parameter



HSR-JH605

Six axis joint Robot series

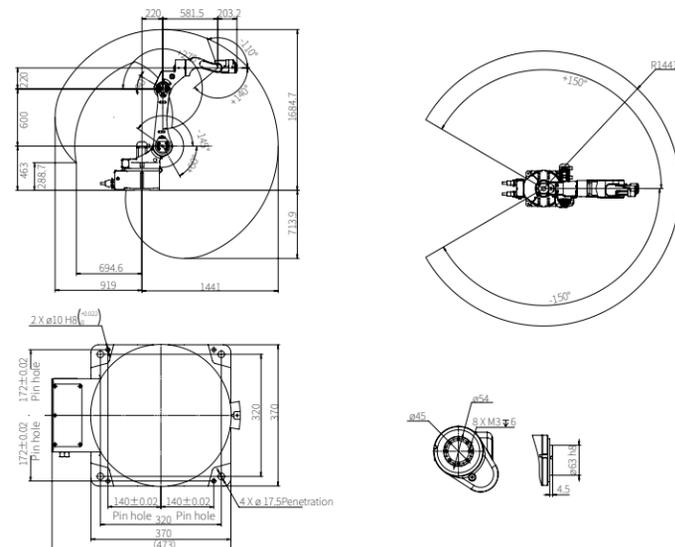
Introduction

Based on years of design experience, the brand-new HSR-JH605E is made for multiple types of welding situation. After scientifically rearranging the internal structure, all cables and components now are well protected from all sorts of external device interference, which makes it stable and reliable when it works in narrow space. It has also integrated rapid welding process deployment, welding after current interruption, intelligent weaving welding, positioner linkage and collision prevention and other functions.



Product model	HSR-JH605	
Degree of freedom	6	
Payload	5kg	
Maximum moving radius	1441mm	
Repeat positioning accuracy	±0.06mm	
Range of motion	J1	±150°
	J2	-145°~+60°
	J3	+30°~+270°
	J4	±120°
	J5	-110°~+140°
	J6	±360°
Rated speed	J1	148°/s, 2.58rad/s
	J2	148°/s, 2.58rad/s
	J3	148°/s, 2.58rad/s
	J4	225°/s, 3.93rad/s
	J5	225°/s, 3.93rad/s
	J6	225°/s, 3.93rad/s
Rated speed	J1	222°/s, 3.87rad/s
	J2	222°/s, 3.87rad/s
	J3	222°/s, 3.87rad/s
	J4	337.5°/s, 5.89rad/s
	J5	337.5°/s, 5.89rad/s
	J6	337.5°/s, 5.89rad/s
Allowable moment of inertia	J4	0.3kgm ²
	J5	0.3kgm ²
	J6	0.035kgm ²
Allowable torque	J4	35Nm
	J5	35Nm
	J6	15Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	
Machine- Power box connect cable length.	5m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	-	
Pneumatic tube	-	
Battery capacity	2.5kVA	
Rated power / voltage / current	2kW/Single Phase AC220V 50HZ/11A	
Body/Electric Cabinet Protection Level	IP50/IP50	
Installation method	Ground/Upside down/Side mount	
Machine/power box weight	196kg/50kg	

Operation Parameter



HSR-JM612

Six axis joint Robot series

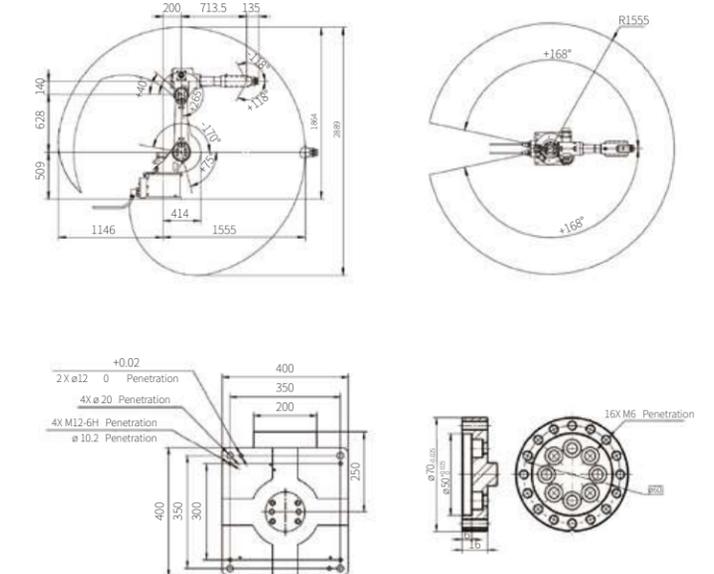
Introduction

In order to solve the problem in 3C device (electronic device) polishing that the conventional robots can't adapt to the repeated impact with big load, dusty (dry grinding) and humid (water grinding) environment, and create continuous and stable production capacity for customers, Huashu HSR-JM612 was born. This model is specifically optimized for the grinding process, bringing the perfect 3C grinding solution for you.



Product model	HSR-JM612	
Degree of freedom	6	
Payload	12kg	
Maximum moving radius	1555mm	
Repeat positioning accuracy	±0.06mm	
Range of motion	J1	±168°
	J2	-170°~+75°
	J3	+40°~+265°
	J4	±180°
	J5	±118°
	J6	±360°
Rated speed	J1	148°/s, 2.58rad/s
	J2	148°/s, 2.58rad/s
	J3	148°/s, 2.58rad/s
	J4	360°/s, 6.28rad/s
	J5	225°/s, 3.93rad/s
	J6	225°/s, 3.93rad/s
Rated speed	J1	197°/s, 3.44rad/s
	J2	197°/s, 3.44rad/s
	J3	197°/s, 3.44rad/s
	J4	600°/s, 10.47rad/s
	J5	375°/s, 6.54rad/s
	J6	375°/s, 6.54rad/s
Allowable moment of inertia	J4	1.2kgm ²
	J5	1.2 kgm ²
	J6	0.17kgm ²
Allowable torque	J4	35Nm
	J5	35Nm
	J6	15Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	
Machine- Power box connect cable length.	6m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	26pin (solder connected aviation plug.)	
Pneumatic tube	-	
Battery capacity	3.8kVA	
Rated power / voltage / current	3kW/3phases AC380V 50HZ/5.4A	
Body/Electric Cabinet Protection Level	IP54 (robot arm IP65) /IP53	
Installation method	Ground	
Machine/power box weight	215kg/130kg	

Operation Parameter



HSR-JR630

Six axis joint Robot series

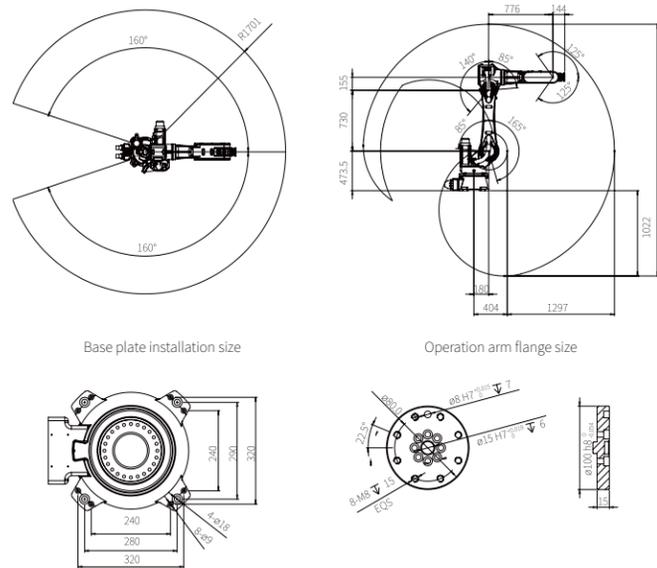
Introduction

As the tip of the spear in Huashu's product line up. The HSR-JR630 has further structural optimization and advance interpolation algorithm for the control system. Featuring with the highest precision, strong acceleration, outstandingly robust among Huashu's models, which makes it easily handle the palletizing, assembly, polishing and welding etc.



Product model	HSR-JR630	
Degree of freedom	6	
Payload	30kg	
Maximum moving radius	1701mm	
Repeat positioning accuracy	±0.05mm	
Range of motion	J1	±160°
	J2	-175°~+75°
	J3	+40°~+265°
	J4	±180°
	J5	±125°
	J6	±360°
Rated speed	J1	88°/s, 1.53 rad/s
	J2	66°/s, 1.15 rad/s
	J3	120°/s, 2.09 rad/s
	J4	178°/s, 3.11 rad/s
	J5	178°/s, 3.11 rad/s
	J6	225°/s, 3.93 rad/s
Rated speed	J1	96°/s, 1.68 rad/s
	J2	88°/s, 1.53 rad/s
	J3	192°/s, 3.35 rad/s
	J4	297°/s, 5.18 rad/s
	J5	297°/s, 5.18 rad/s
	J6	375°/s, 6.54 rad/s
Allowable moment of inertia	J4	8.7kgm ²
	J5	3.3kgm ²
	J6	0.8kgm ²
Allowable torque	J4	140.4Nm
	J5	73.4Nm
	J6	30.7Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	
Machine- Power box connect cable length.	6m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	24 pins (aviation plug)	
Pneumatic tube	2"φ8	
Battery capacity	5.62kVA	
Rated power / voltage / current	4.5kW/3phases AC380V/9A	
Body/Electric Cabinet Protection Level	IP54/IP53	
Installation method	Ground/Upside down	
Machine/power box weight	302kg/91kg	

Operation Parameter



HSR-JR650/JR680

Six axis joint Robot series

Introduction

The HSR-JR650/JR680 are designed to match against the same type of product internationally. Its performance is in the lead comparing with the counterparts. At the meantime it also considered the process requirement in handling, welding etc, which is particularly suitable for crucial working environment.

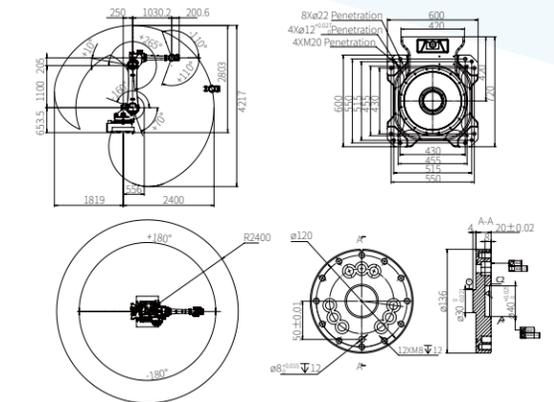


HSR-JR650

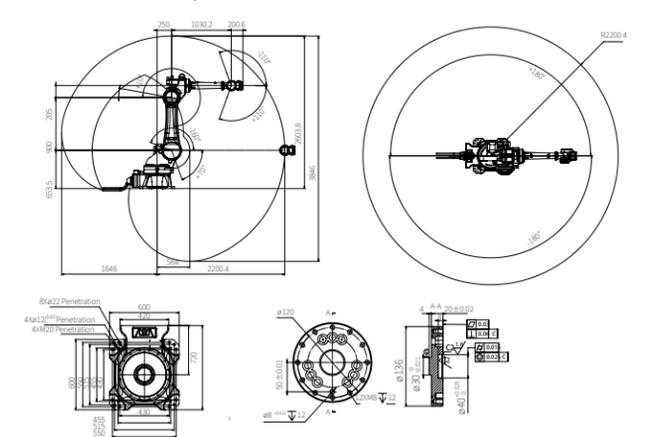
HSR-JR680

Product model	HSR-JR650	HSR-JR680	
Degree of freedom	6	6	
Payload	50kg	80kg	
Maximum moving radius	2400mm	2200.4mm	
Repeat positioning accuracy	±0.08mm	±0.07mm	
Range of motion	J1	±180°	±180°
	J2	-160°~+70°	-160°~+70°
	J3	+10°~+265°	+10°~+265°
	J4	±360°	±360°
	J5	±110°	±110°
	J6	±360°	±360°
Rated speed	J1	85°/s, 1.48rad/s	85°/s, 1.48rad/s
	J2	85°/s, 1.48rad/s	85°/s, 1.48rad/s
	J3	104°/s, 1.81rad/s	104°/s, 1.81rad/s
	J4	177°/s, 3.08rad/s	177°/s, 3.08rad/s
	J5	155°/s, 2.70rad/s	155°/s, 2.70rad/s
	J6	187°/s, 3.26rad/s	187°/s, 3.26rad/s
Rated speed	J1	127°/s, 2.21rad/s	127°/s, 2.21rad/s
	J2	127°/s, 2.21rad/s	127°/s, 2.21rad/s
	J3	104°/s, 1.81rad/s	104°/s, 1.81rad/s
	J4	177°/s, 3.08rad/s	177°/s, 3.08rad/s
	J5	155°/s, 2.70rad/s	155°/s, 2.70rad/s
	J6	187°/s, 3.26rad/s	187°/s, 3.26rad/s
Allowable moment of inertia	J4	32.7kgm ²	32.7kgm ²
	J5	32.7kgm ²	32.7kgm ²
	J6	25kgm ²	25kgm ²
Allowable torque	J4	400Nm	400Nm
	J5	340Nm	340Nm
	J6	330Nm	330Nm
Applicable environment	Temperature	0~45°C	0~45°C
	Humidity	20%~80%	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	8m	
Machine- Power box connect cable length.	8m	8m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	26pin (solder connected aviation plug)	26pin (solder connected aviation plug)	
Pneumatic tube	3"φ10	3"φ10	
Battery capacity	7.5kVA	7.5kVA	
Rated power / voltage / current	5.5kW/3phases AC380V 50HZ/10.8A	5.5kW/3phases AC380V 50HZ/10.8A	
Body/Electric Cabinet Protection Level	IP54 (robot arm IP65) /IP53	IP54 (robot arm IP65) /IP53	
Installation method	Ground	Ground	
Machine/power box weight	750kg/180kg	720kg/180kg	

HSR-JR650 Operation Parameter



HSR-JR680 Operation Parameter

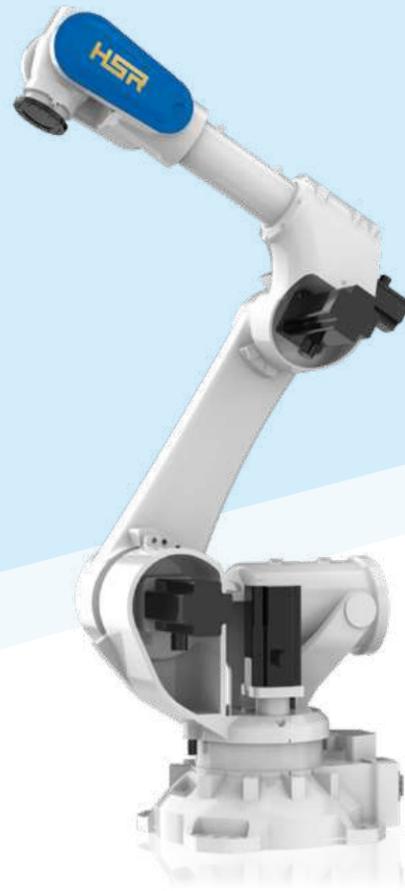


HSR-JR6150

Six axis joint Robot series

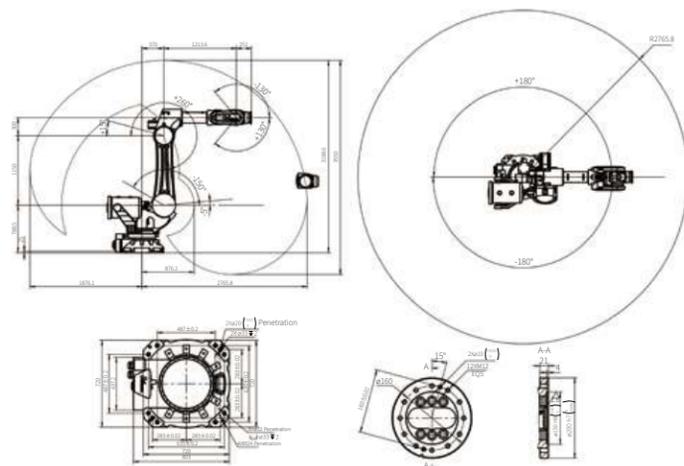
Introduction

Excellent stability, strict control of parts and components, the ultimate pursuit for every step of the assembly process, more stable performance and higher reliability, at the same time, with simple design which makes maintenance easier. with a load of 150kg and a working range of up to 2.7m, it can grasp objects in a larger range, standing close and grasping far. Excellent control, using Huashu's third-generation controller, excellent motion control makes the operation more stable and faster.



Product model		HSR-JR6150
Degree of freedom		6
Payload		150kg
Maximum moving radius		2765.8mm
Repeat positioning accuracy		±0.1mm
Range of motion	J1	±180°
	J2	-5°~150°
	J3	+10°~+265°
	J4	±180°
	J5	±110°
	J6	±360°
Rated speed	J1	65°/s, 1.14rad/s
	J2	69°/s, 1.22rad/s
	J3	93°/s, 1.22rad/s
	J4	116°/s, 2.03rad/s
	J5	148°/s, 2.40rad/s
	J6	222°/s, 3.88rad/s
Rated speed	J1	97°/s, 1.70rad/s
	J2	105°/s, 1.84rad/s
	J3	105°/s, 1.84rad/s
	J4	174°/s, 3.09rad/s
	J5	173°/s, 3.03rad/s
	J6	296°/s, 5.17rad/s
Allowable moment of inertia	J4	55kgm ²
	J5	55kgm ²
	J6	25kgm ²
Allowable torque	J4	600Nm
	J5	600Nm
	J6	320Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length		8m
Machine- Power box connect cable length.		8m
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)
Body Reserved Signal Line		18.5kVA
Pneumatic tube		15kW/3phases AC380V/25A
Battery capacity		IP54/IP53
Rated power / voltage / current		Ground
Body/Electric Cabinet Protection Level		1320kg
Installation method		747X515X1280mm
Machine/power box weight		about 160kg

Operation Parameter



HSR-HC410/HC415

Four axis joint Robot series

Introduction

The HSR-HC410/HC415 is a new generation of high rigidity 4 axis robot. It has a relatively lower price and higher performance, becoming the best choice for stamping and handling industry. With the independently developed control system and the optimized teach pendant, it delivers high reliability, fast movement, high relocate accuracy and high cost performance. Totally satisfies the high requirement in pressing and handling situation.

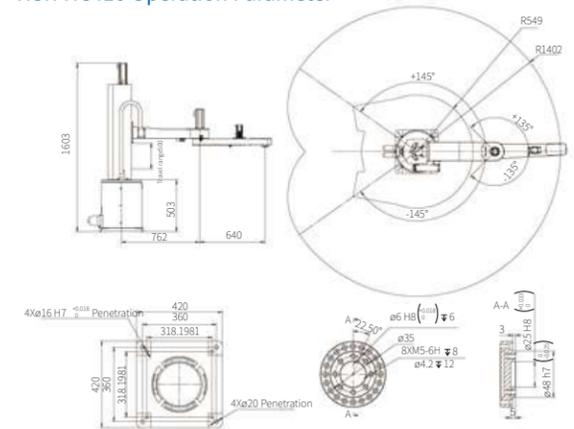


HSR-HC410

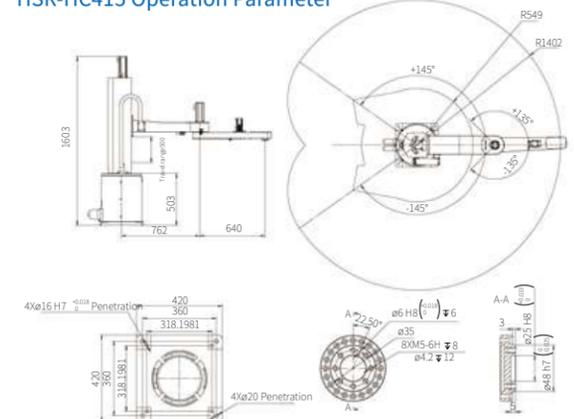
HSR-HC415

Product model		HSR-HC410	HSR-HC415
Degree of freedom		4	4
Payload		10kg	15kg
Maximum moving radius		1402mm	1402mm
Repeat positioning accuracy		±0.05mm	±0.05mm
Range of motion	J1	±145°	±145°
	J2	±135°	±135°
	J3	±250mm	±250mm
	J4	±180°	±180°
Rated speed	J1	225°/s, 3.93rad/s	225°/s, 3.93rad/s
	J2	225°/s, 3.93rad/s	225°/s, 3.93rad/s
	J3	500mm/s	500mm/s
	J4	180°/s, 3.14rad/s	180°/s, 3.14rad/s
Rated speed	J1	300°/s, 5.23rad/s	300°/s, 5.23rad/s
	J2	375°/s, 6.54rad/s	375°/s, 6.54rad/s
	J3	830mm/s	830mm/s
	J4	360°/s, 6.28rad/s	360°/s, 6.28rad/s
Allowable moment of inertia		J4 2kgm ²	J4 3kgm ²
Allowable torque		J4 40Nm	J4 50Nm
Applicable environment	Temperature	0~45°C	0~45°C
	Humidity	20%~80%	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)	
Teach pendant cable length		8m	8m
Machine- Power box connect cable length.		6m	6m
I/O parameters		Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line		12 cores default cable length: 0.5m	
Pneumatic tube		1"φ8	1"φ8
Battery capacity		2.3kVA	2.8kVA
Rated power / voltage / current		1.8kW/3Phases AC380V 50HZ/3.2A	2.2kW/3Phases AC380V 50HZ/4A
Body/Electric Cabinet Protection Level		IP54/IP53	IP54/IP53
Installation method		Ground	Ground
Machine/power box weight		230kg/50kg	250kg/50kg

HSR-HC410 Operation Parameter



HSR-HC415 Operation Parameter



HSR-SR3400/SR6600

Four axis joint Robot series

Introduction

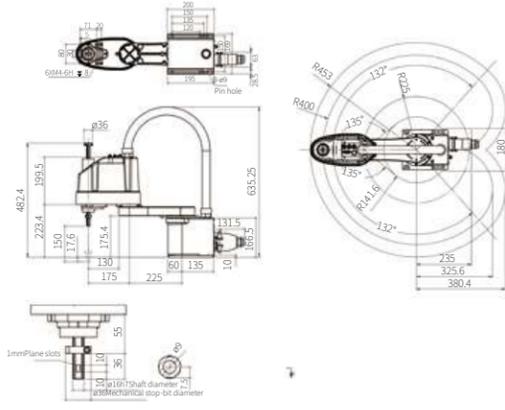
The HSR-SR3400/SR6600 is specifically designed for desktop class pickup and install situation. Featuring high speed, high accuracy, different work load setting with range between 1-6kg, it can be widely applied in electronic, medication and food industry.



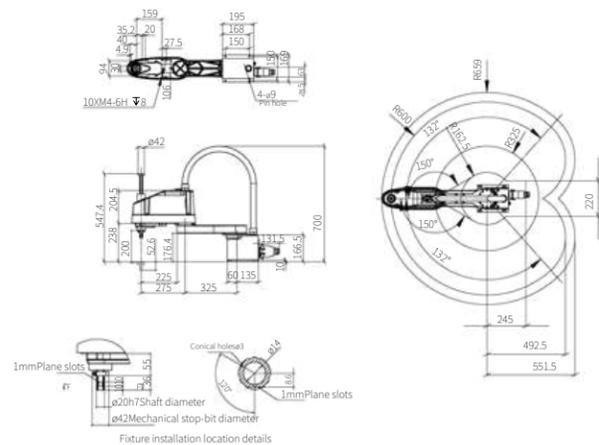
HSR-SR3400

HSR-SR6600

HSR-SR3400 Operation Parameter



HSR-SR6600 Operation Parameter



Product model	HSR-SR3400	HSR-SR6600
Degree of freedom	4	4
Payload	3kg	6kg
Maximum moving radius	400mm	600mm
Repeat positioning accuracy	±0.01mm	±0.02mm
Range of motion	J1	±132°
	J2	±135°
	J3	0~150mm
	J4	±360°
Rated speed	J1	360°/s, 6.28rad/s
	J2	470°/s, 8.19rad/s
	J3	710mm/s
	J4	1500°/s, 26.16rad/s
Rated speed	J1	530°/s, 9.24rad/s
	J2	700°/s, 12.21rad/s
Allowable moment of inertia	J1	0.05/0.005kgm ²
	J2	0.05/0.005kgm ²
	J3	1065mm/s
	J4	2600°/s, 43.35rad/s
Allowable torque	J1	0.12/0.01kgm ²
	J4	4.23Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	8m
Machine- Power box connect cable length.	3m	3m
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	12 pins (aviation plug)	12 pins (aviation plug)
Pneumatic tube	3*Φ6	3*Φ6
Battery capacity	0.75kVA	0.8kVA
Rated power / voltage / current	0.55kW/Single Phase AC220V 50HZ/3A 0.62kW/Single Phase AC220V 50HZ/3.2A	
Body/Electric Cabinet Protection Level	IP54/IP20	IP54/IP20
Installation method	Ground/Desktop	Ground/Desktop
Machine/power box weight	17.5kg/10.65kg	21.5kg/10.65kg

HSR-SR5700

Four axis joint Robot series

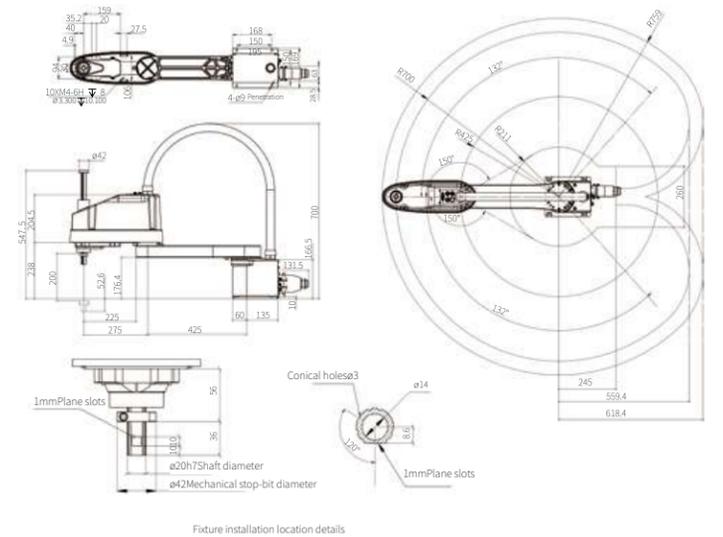
Introduction

Thanks to years of experience of accumulation on servo control, the HSR-SR5700 adopts independently developed control technology, cleverly uses the performance of servo motor performance, featuring with large travelling range, high accuracy, high performance, multiple levels of load from 2kg to 5kg. It can be widely used in the field of electronic, medication and food industry etc.



Product model	HSR-SR5700	
Degree of freedom	4	
Payload	5kg	
Maximum moving radius	700mm	
Repeat positioning accuracy	±0.02mm	
Range of motion	J1	±132°
	J2	±150°
	J3	0~200mm
	J4	±360°
Rated speed	J1	225°/s, 3.92 rad/s
	J2	420°/s, 7.32 rad/s
	J3	666mm/s
	J4	1400°/s, 24.42 rad/s
Rated speed	J1	335°/s, 5.84rad/s
	J2	600°/s, 10.46rad/s
Allowable moment of inertia	J1	1111mm/s
	J2	2000°/s, 34.88 rad/s
	J3	1111mm/s
	J4	2000°/s, 34.88 rad/s
Allowable torque	J1	0.12/0.01kgm ²
	J4	4.23Nm
Applicable environment	Temperature	0~45°C
	Humidity	20%~80%
	Other	Avoid contact with inflammable or corrosive gas and liquid, Stay away from electronic noise(plasma)
Teach pendant cable length	8m	
Machine- Power box connect cable length.	3m	
I/O parameters	Pins: 32 pins input(NPN, PNP available), 31 pins output(NPN)	
Body Reserved Signal Line	12 pins (aviation plug)	
Pneumatic tube	3*Φ6	
Battery capacity	0.8kVA	
Rated power / voltage / current	0.62kW/Single Phase AC220V 50HZ/3.2A	
Body/Electric Cabinet Protection Level	IP54/IP20	
Installation method	Ground/Desktop	
Machine/power box weight	22.5kg/10.65kg	

Operation Parameter



HSR-DT401 / DT803

Delta robot series

Introduction

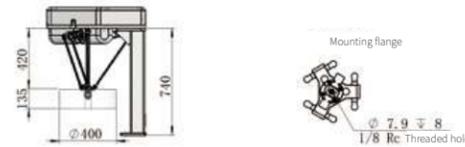
HSR-DT series robots are suitable for rapid sorting and packing in various industries. They integrate intelligent visual recognition functions and have good dynamic tracking functions, which can meet most of the scenes that require rapid sorting. DT_Catch software integrates vision setting, tool setting, trajectory setting, palletizing module, and calibration module into one module, which is easy for operation. Relying on the mature motion control technology of Huazhong CNC for many years, it ensures the precise positioning and stable operation of the robot. The key moving parts adopt imported mature brands to ensure service life.



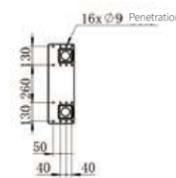
HSR-DT401

HSR-DT803

HSR-DT401 Operation Parameter



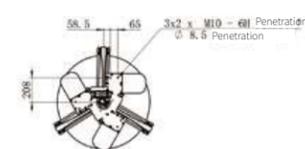
DT401 Robot installation hole



HSR-DT803 Operation Parameter



DT803 Robot installation hole



Product model	HSR-DT401	HSR-DT803	
Degree of freedom	3+1 (Connecting rod type)	3	3+1 (Motor direct connection type)
Payload	1kg	3kg	3kg
Maximum moving radius	200mm	400mm	400mm
Maximum pickup and place height	135mm	300mm	300mm
The fourth axis rotation angle	±360°	/	±360°
Repeat positioning accuracy	±0.1mm	±0.1mm	±0.1mm
Operation beats per minute (25mm-305mm-25mm), 0.1KG	200	180	180
Voltage	380V	380V	380V
Rated power	1800W	3200W	3300W
I/O parameters	Pins:24pins input, 24pins output		
Communication interface	Network port:1 Ethercat Interface:1个		
Telecommunications	TCP/IP, MODBUS TCP		
Body Reserved Signal Line	10pins (Terminals connection)		
Pneumatic tube	None	None	None
Machine weight	85kg	114kg	124kg
Installation method	Desktop	Upside down	Upside down
Power box weight	30kg	38kg	40kg
Power box size	500 (Wide) × 322 (Thickness) × 530 (High)	575 (Wide) × 352 (Thickness) × 530 (High)	575 (Wide) × 352 (Thickness) × 530 (High)
Machine-Power box connect cable length	5m	5m	5m
Teach pendant cable length	No Handheld	No Handheld	No Handheld
Humidity	20%-85%	20%-85%	20%-85%
Temperature	0-45°C	0-45°C	0-45°C
Body Protection Level	IP54	IP54	IP54
Electric Cabinet Protection Level	IP53	IP53	IP53

HSR-DT1208

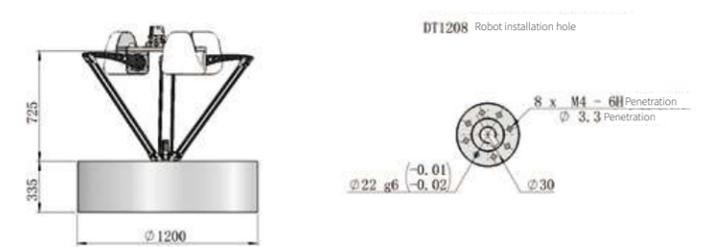
Delta robot series

Introduction

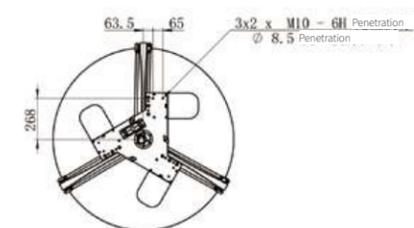
HSR-DT series robots are suitable for rapid sorting and packing in various industries. They integrate intelligent visual recognition functions and have good dynamic tracking functions, which can meet most of the scenes that require rapid sorting. DT_Catch software integrates vision setting, tool setting, trajectory setting, palletizing module, and calibration module into one module, which is easy for operation. Relying on the mature motion control technology of Huazhong CNC for many years, it ensures the precise positioning and stable operation of the robot. The key moving parts adopt imported mature brands to ensure service life.



Operation Parameter



DT1208 Robot installation hole



Product model	HSR-DT1208	
Degree of freedom	3	3+1 (Motor direct connection type)
Payload	8kg	8kg
Maximum moving radius	600mm	600mm
Maximum pickup and place height	335mm	335mm
The fourth axis rotation angle	/	±360°
Repeat positioning accuracy	±0.1mm	±0.1mm
Operation beats per minute (25mm-305mm-25mm), 0.1KG	180	180
Voltage	380V	380V
Rated power	6200W	6300W
I/O parameters	Pins:24pins input, 24pins output	
Communication interface	Network port:1 Ethercat Interface:1个	
Telecommunications	TCP/IP, MODBUS TCP	
Body Reserved Signal Line	10pins (Terminals connection)	
Pneumatic tube	None	None
Machine weight	135kg	145kg
Installation method	Upside down	Upside down
Power box weight	43kg	45kg
Power box size	575 (Wide) × 352 (Thickness) × 530 (High)	575 (Wide) × 352 (Thickness) × 530 (High)
Machine-Power box connect cable length	5m	5m
Teach pendant cable length	No Handheld	No Handheld
Humidity	20%-85%	20%-85%
Temperature	0-45°C	0-45°C
Body Protection Level	IP54	IP54
Electric Cabinet Protection Level	IP53	IP53

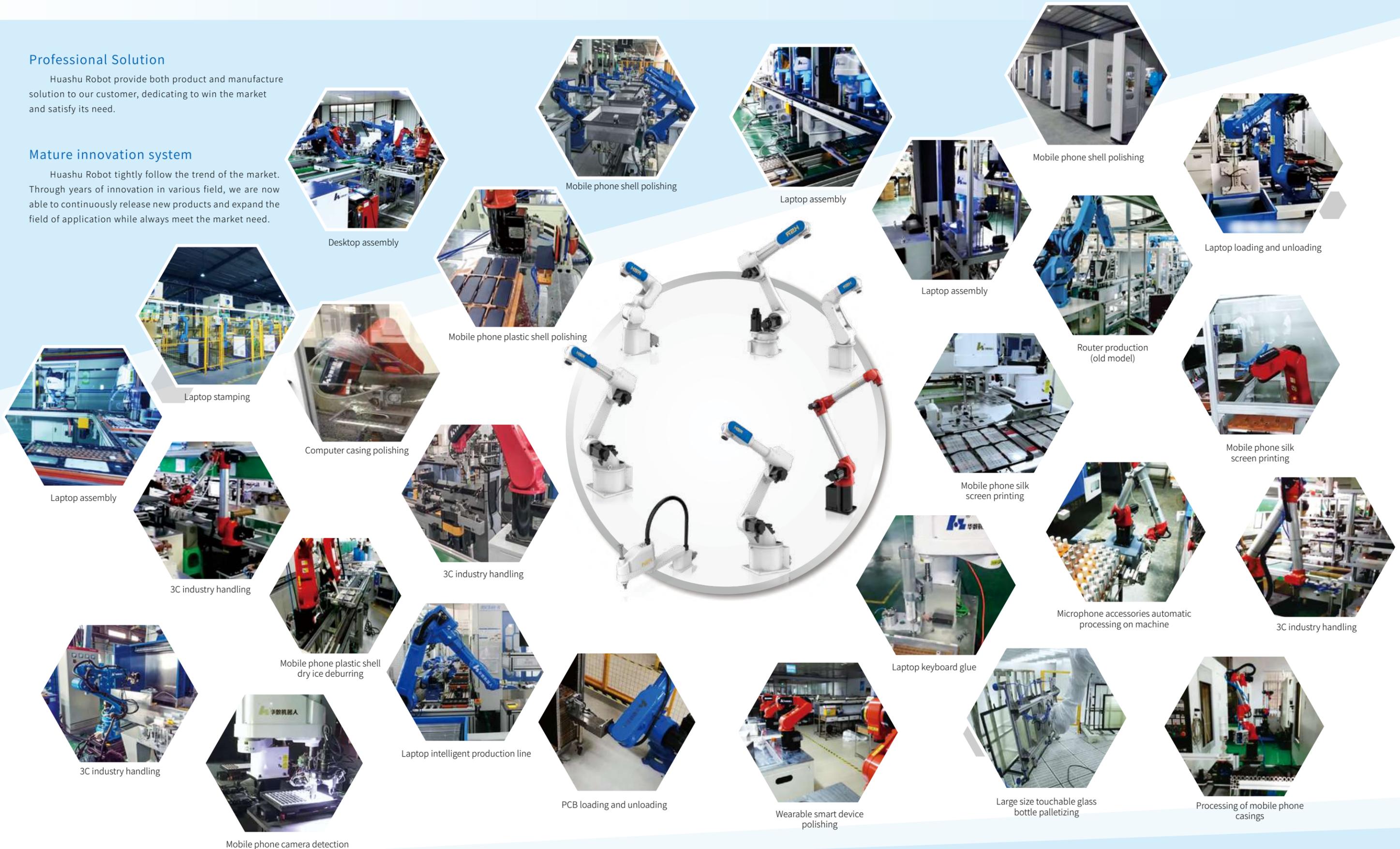
Quality is the unshakable foundation.
It is also our dedication to perfection.

Professional Solution

Huashu Robot provide both product and manufacture solution to our customer, dedicating to win the market and satisfy its need.

Mature innovation system

Huashu Robot tightly follow the trend of the market. Through years of innovation in various field, we are now able to continuously release new products and expand the field of application while always meet the market need.



Home appliance industry application case

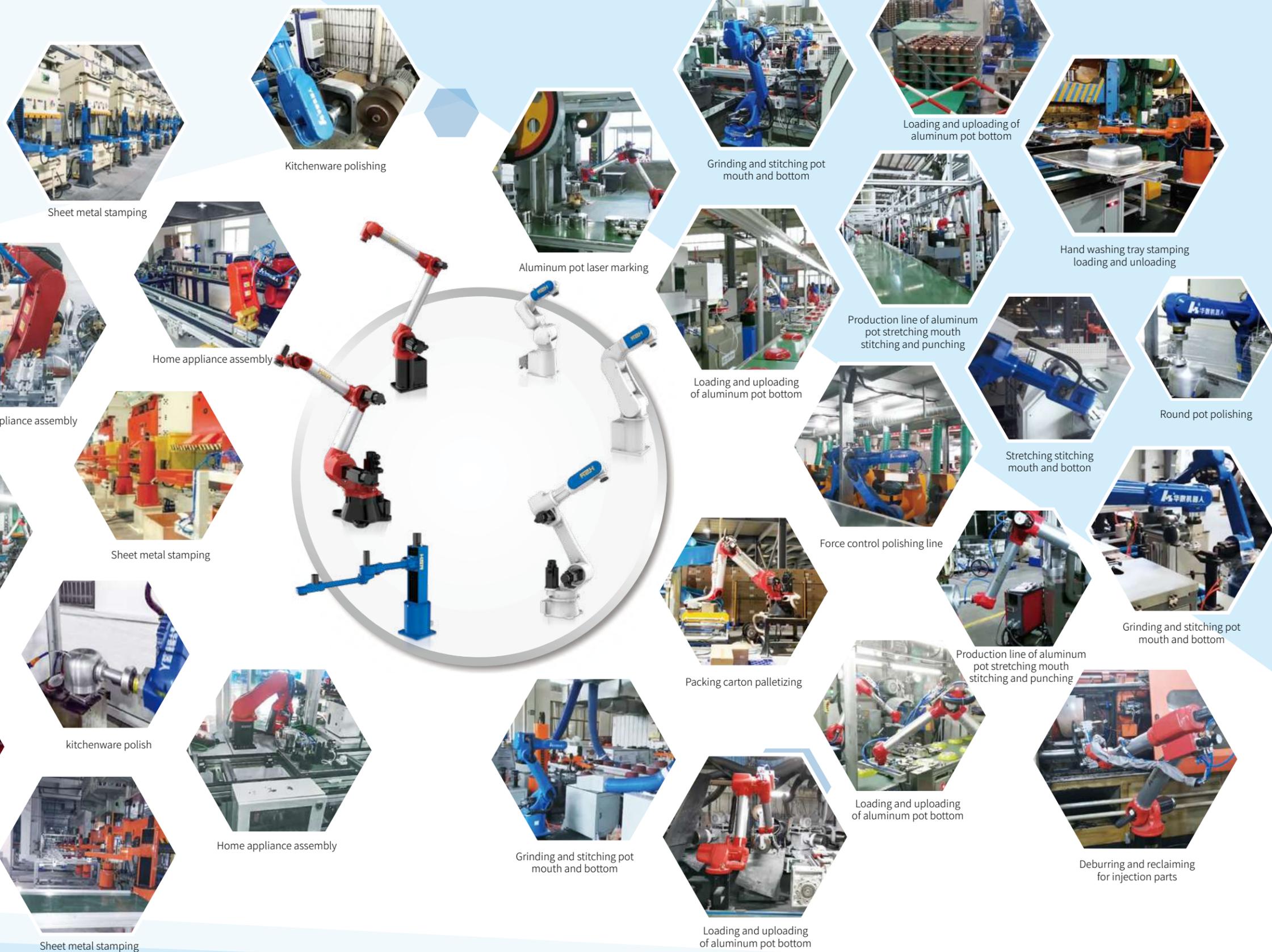
Quality is the unshakable foundation.
It is also our dedication to perfection.

Professional Solution

Huashu Robot provide both product and manufacture solution to our customer, dedicating to win the market and satisfy its need.

Mature innovation system

Huashu Robot tightly follow the trend of the market. Through years of innovation in various field, we are now able to continuously release new products and expand the field of application while always meet the market need.



Application Cases in Kitchenware Industry

Quality is the unshakable foundation.
It is also our dedication to perfection.

Application Cases in Car Industry

Quality is the unshakable foundation.
It is also our dedication to perfection.

Professional Solution

Huashu Robot provide both product and manufacture solution to our customer, dedicating to win the market and satisfy its need.

Mature innovation system

Huashu Robot tightly follow the trend of the market. Through years of innovation in various field, we are now able to continuously release new products and expand the field of application while always meet the market need.

Other industries application case

Quality is the unshakable foundation.
It is also our dedication to perfection.



Car door and window welding

Hot forging loading and unloading of parts

Palletizing cement bag packaging box in building materials industry

Gravity pouring and unloading in metal products industry

Unloading cooling fin in hardware industry

Injection molding machine loading and unloading

Wheel spraying

Hot forging loading and unloading of parts

Optoelectronics industry handling and assembly

Sanitary industry spray glaze application

Welding steel structure parts of motorcycle

Rearview mirror glass loading and unloading

Food industry application

Pharmaceutica preparation industry application

Steel structure parts welding

Car wheel painting

Automotive parts welding application

Robot Upside Down Sorting

Copilot glove box spraying

Engine glue application

Automatic loading and unloading system for water grinder in tool industry

Ice cream scoop sorting in the food industry

Automotive parts welding application

Door frame stamping

High-speed rail communication signal room wiring

Packing peanuts

Parts loading and unloading

Injection molding machine loading and unloading

Loading and unloading of parts flange

Garbage palletizing in environmental protection industry

Champagne box loading and unloading in the beverage industry

Loading and unloading hydraulic valve for machine

Grouting loading and unloading of ceramic flowerpots

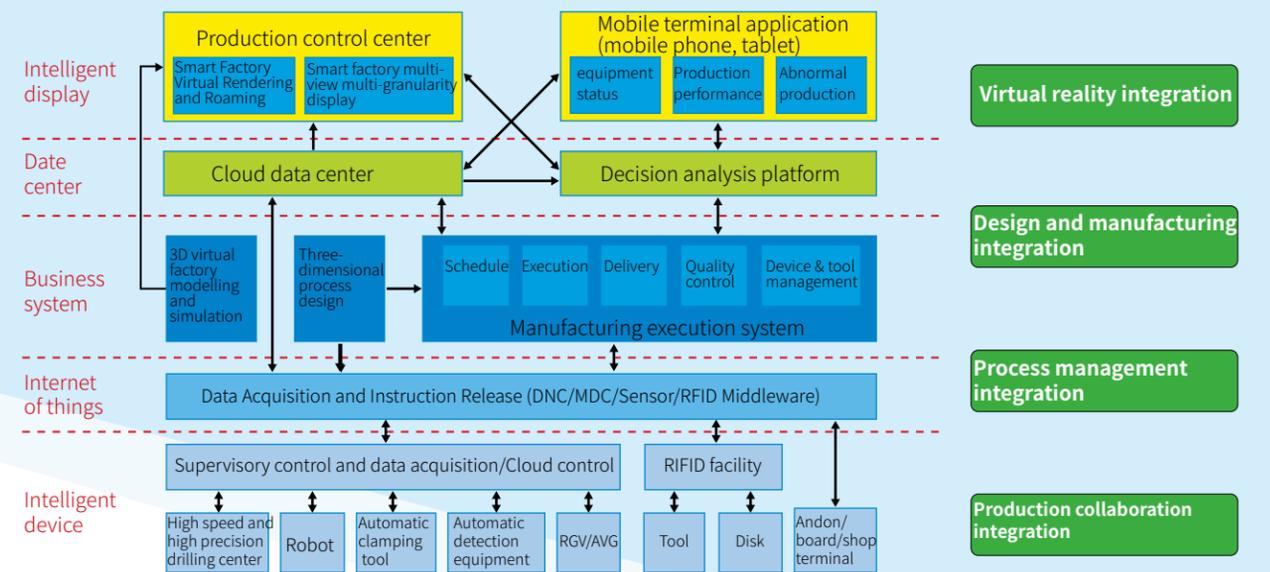
Fully automatic factory manufacture solution

Quality is the unshakable foundation.
It is also our dedication to perfection.

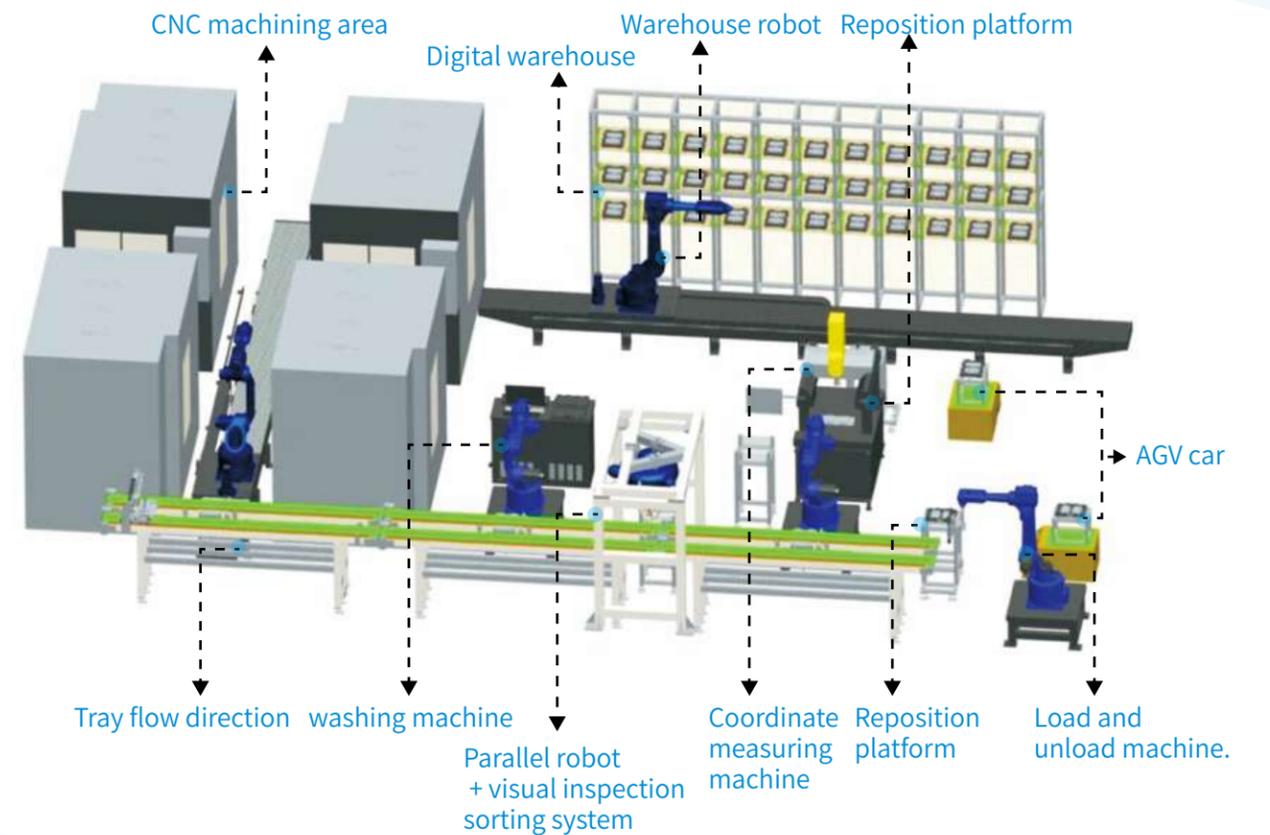
◆ The pictures below shows one of our client's smart factory which has 10 automatic drilling and tapping production line. This factory now has 180 Huashu HNC-818AM high speed drilling and tapping machines, 120 Huashu robots, 30 RGV and 10 AGV transport vehicles, one automatic raw material examine system. At the meantime, all these devices are also equipped with fully domestic developed industrial software, including Huazhong Numerical Control new generation cloud control platform, CAP, APS advance planning system, MES manufacture management system, 3D analogue system etc. As a result, this factory became the demonstration site of Chinese Intelligent Manufacture chosen the Ministry of Industry and Information Technology and the Chinese Academy of Engineering.



1. One core



2. Floor plan



“Domestication” “Tech-integration” “One core”



3. Overview

As the integrated automation solution for the unmanned automatic processing production line, Huashu combines the 612, 620 series robot and the AGV vehicle to realize the transportation between each processing step. The whole production line controlled by a Huashu developed terminal control system. At the meantime, the manufacture data can connect to the ERP management system, helping the factory to achieve the goal of digital management.



Project background

The application of intelligent manufacture for modern factory has become a trend worldwide. The 'Industry 4.0' integrates the technology of Internet, computational technology, communication technology, software and automation technology to transform traditional production technology and processes, in order to improve the intelligence of manufacture and establish the digital, Internet and smart unmanned (few workers) factory.



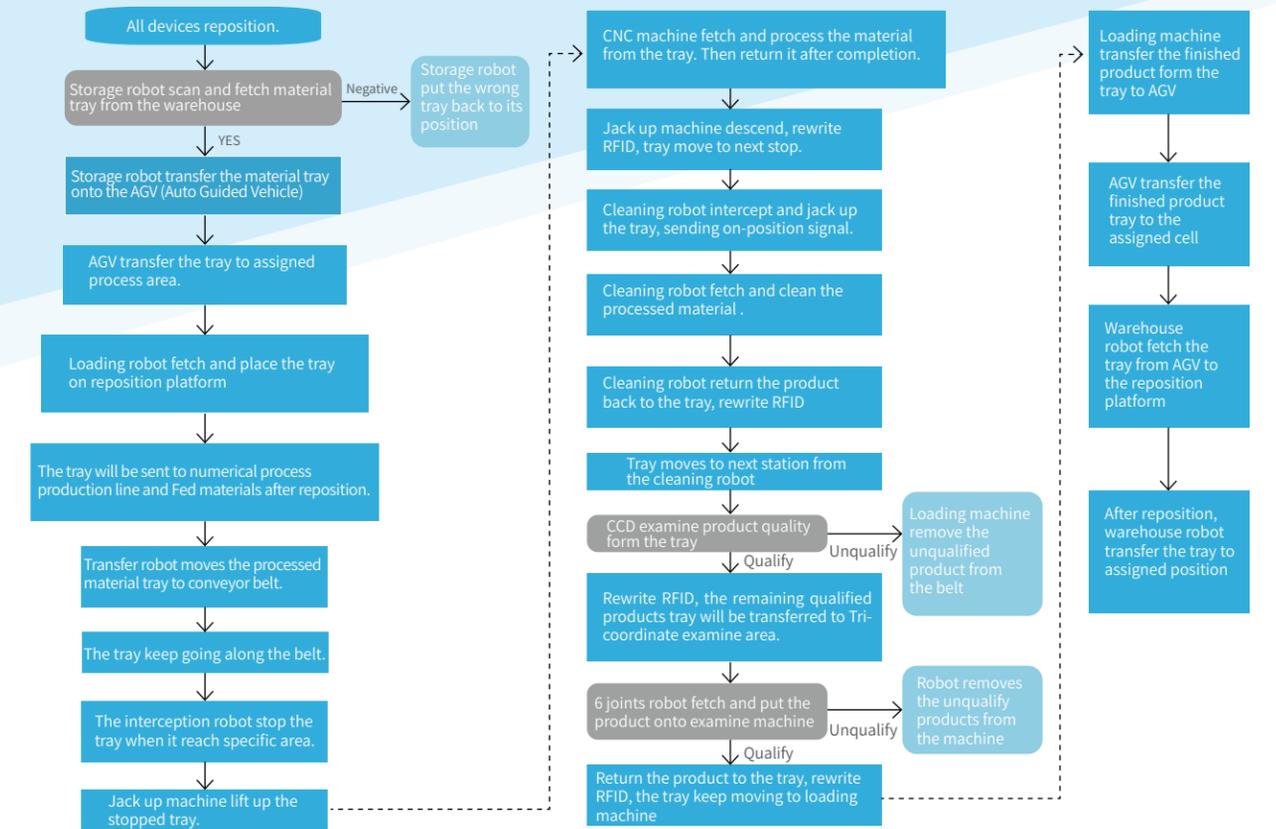
Project value

- ◆ Reduce management cost: Smart factory tightly follows the directive of 'Made in China 2025', carrying distinctive feature and advancedness. Smart factory can significantly reduce the management cost, making the corporation more flexible and competitive.
- ◆ Reduce manufacture cost: Smart factory can reduce 70% of need in labor force with more than 99% of pass, 20% lower cost on material. It also helps shorten the development period, resulting higher manufacture efficiency.
- ◆ Improve product quality: Smart factory has significant advantages in terms of productivity, quality stabilities and improving product competitive compared to the traditional factory.
- ◆ Improve factory competitiveness: Smart factory covers various fields including: CNC process, Robotic control, Electric, Statistic, Management etc. With the open source platform feature, scholars and professionals can conduct more deep-in research independently.

Project significance

- 70%** Automated production can save more than 70% labor for manufacture process.
- 30%** Reduce product defect rate by more than 30%: online detection, product information tracking in real time, avoiding defective product circulation; intelligently optimize processing technology and procedures to improve product quality.
- 30%** The use of digital designed software, such as PLM and CAPP, and the integrated application of intelligent design and 3D process library can effectively shorten the product development cycle by more than 30%.
- 25%** Improve device usage: APS smart planning, Application of MES system, utilize digital information system to help to improve the flexibility during manufacture.
- 15%** Workshop energy utilization increased by more than 15%, with energy consumption unchanged.
- Enterprise human resources quality improvement: school to business Go, customize and train talents;
- Promote enterprise upgrade and transformation: traditional manufacturing, service-oriented manufacturing, the company turned gorgeous.

4. Flow chart



5. Other projects

◆ This project is one of the 2016 demonstration project of 'Intelligence Manufacture' for the Ministry of Industry and Information Technology. This project integrates the use of big data, cloud platform, ERP, MES, WMS, PLM, 3D modelling, augmented reality simulation and indigenous CNC software. It tremendously improves the production quality of servo motor digitalized factory, and promotes the informatization, intelligence and collaboration of the company.



◆ This is the 2016 demonstration project of new manufacture standardization shown by the Ministry of industry and information technology. This project includes 200 sets of Huashu high speed drilling and tapping equipments, 106 Huashu robots, 10 AGV carts, 20 automatic conveyor belts and a series of smart industrial software application. Comparing with the traditional factory, this project can reduce 60% labor force and lower 20% of product reject ratio.

