

Expanding
Possibility



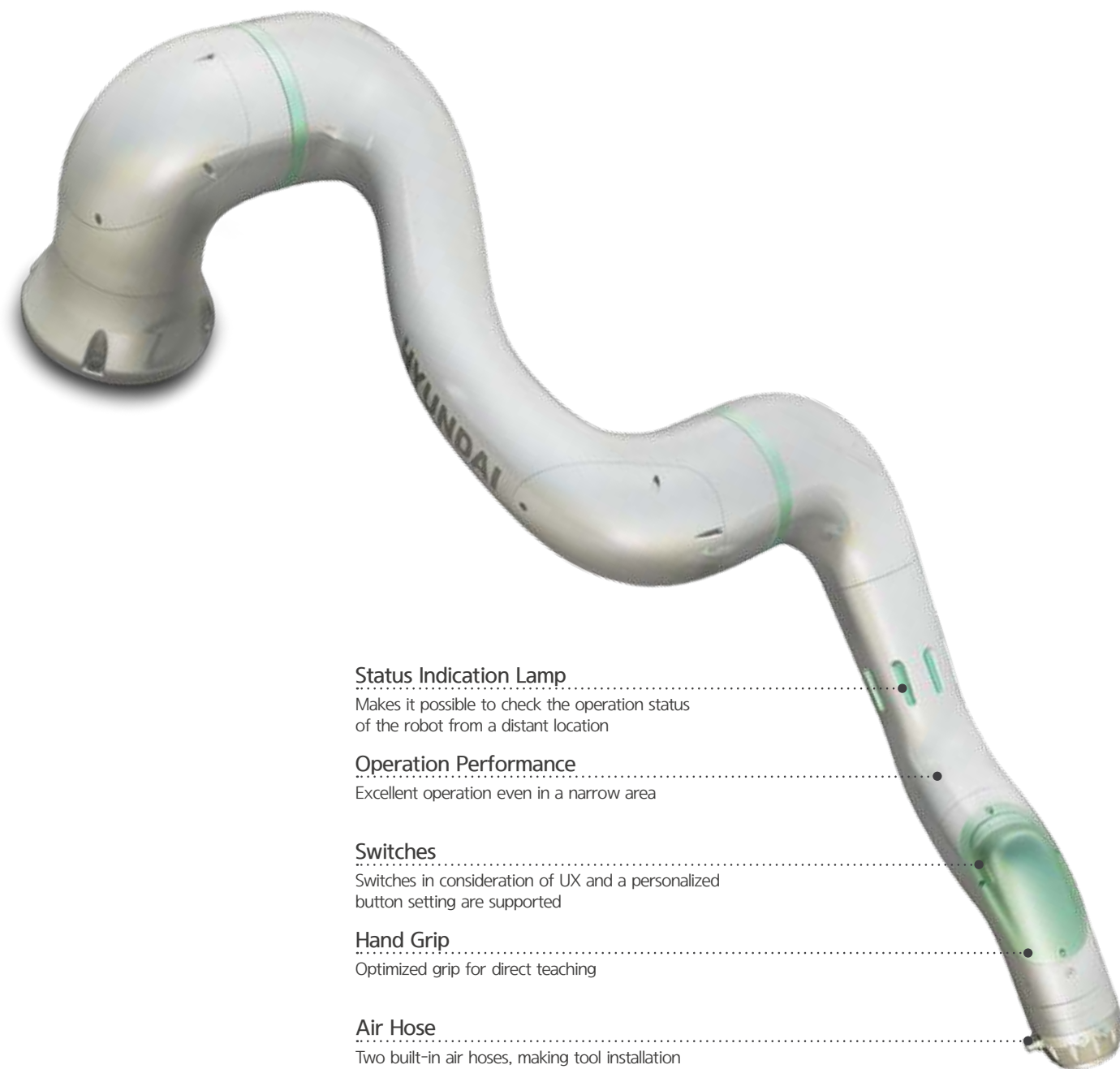
reddot award 2019
best of the best

Collaborative Robot

Human-Friendly
Collaborative Robot



 **HYUNDAI**
ROBOTICS



Status Indication Lamp

Makes it possible to check the operation status of the robot from a distant location

Operation Performance

Excellent operation even in a narrow area

Switches

Switches in consideration of UX and a personalized button setting are supported

Hand Grip

Optimized grip for direct teaching

Air Hose

Two built-in air hoses, making tool installation more convenient

12 / kg
Payload

1,305 / mm
Max. Reach

43 / kg
Weight

Specifications of the Collaborative Robot



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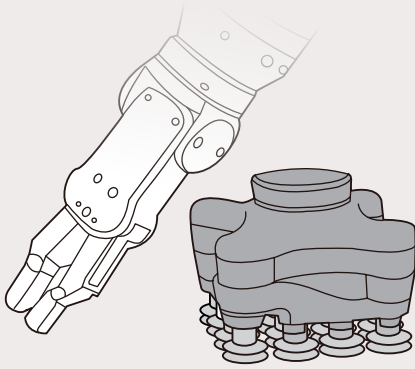


Model			YL005	YL012	YL015
Payload	kg		5	12	15
Operation Radius	mm		916	1,305	963
Degree of Freedom	Axes		6	6	6
Installation Method			Anywhere(Floor, Ceiling, Wall)	Anywhere(Floor, Ceiling, Wall)	Anywhere(Floor, Ceiling, Wall)
Max. Operation Range	S	°	±180	±180	±180
	H		+270 ~ -90	+270 ~ -90	+270 ~ -90
	V		±180	±180	±180
	R2		±180	±180	±180
	B		±180	±180	±180
	R1		±180	±180	±180
Maximum Speed	S	° /s	180	180	180
	H		180	125	125
	V		180	180	180
	R2		180	180	180
	B		180	180	180
	R1		180	180	180
Allowable Torque for the Wrist Axis	R2	kgf·m	4.9	5.0	5.0
	B		2.7	5.6	5.6
	R1		2.8	2.8	2.8
Degree of Repeatability	mm		±0.1	±0.1	±0.1
Operating Temperature	°C		0~45	0~45	0~45
Weight	kg		27	43	42
IP Grade			IP54	IP54	IP54

Controller

Size	WxHxD	mm	260 x 490 x 510
Weight		kg	27
IP Grade			IP20
I/O - flange	Digital		8 In / 8 Out
	Analog		2 In / 2 Out
I/O Power Supply			24 V Max. 2A
Input Power		VAC	100~240 (50~60Hz)
Fieldbus/UI			PROFINET IO, EtherNet/IP, EtherNet(TCP/IP), PROFIBUS, DeviceNet, CANOpen, CC-Link, CC-Link IE Field, EtherCAT, MODBUS/TCP

Cooperative Robot Eco System



End Effector

- Provides tools of various payloads that can be applied to various applications
- Simple programming and easy installation
- Data for modification will be provided to improve compatibility

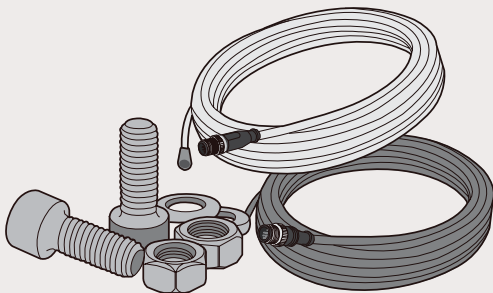
※ Optional item that needs to be purchased additionally



Mobile Cart

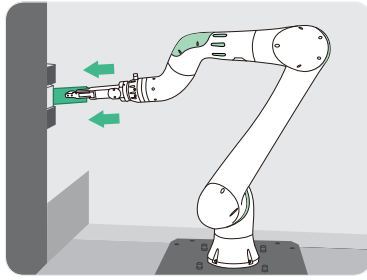
- Makes it unnecessary to perform the base work prior to the installation of the robot and helps secure an operation platform
- Makes it convenient to install and store the controller, T/P, and various peripheral devices
- Makes it simple to rearrange the layout and adjust the height
- Makes it possible to set the T/P position according to the customer's viewing angle, freeing both hands of the operator

※ Optional item that needs to be purchased additionally

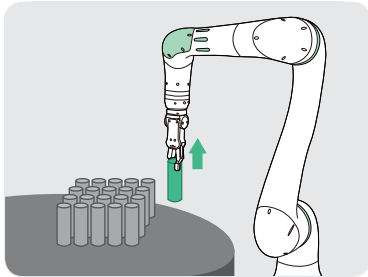


Starter Kit

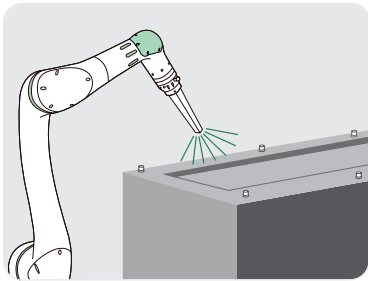
- Basic subsidiary materials necessary for installation will be provided.
- Basic cables (for I/O and EtherCAT) will be provided for interface with the end effector.



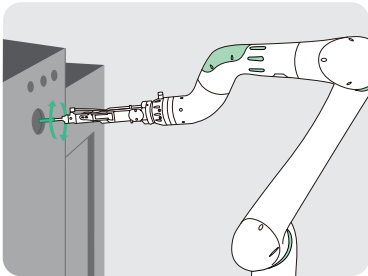
CNC Machine Tending



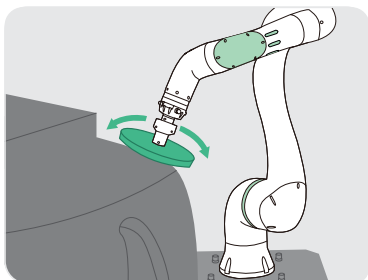
Pick & Place



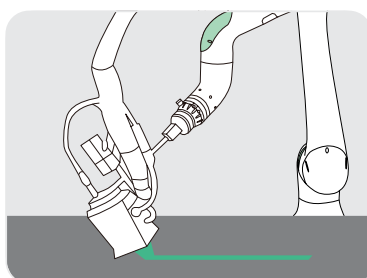
Air Blowing



Assembly (Screw, Gear)

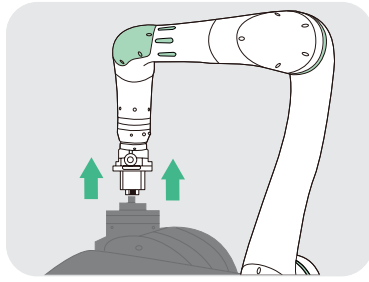


Polishing & Deburring

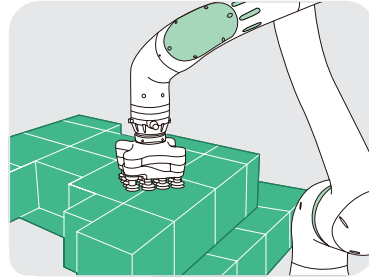


Gluing/Bonding

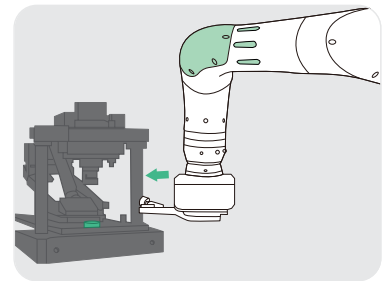




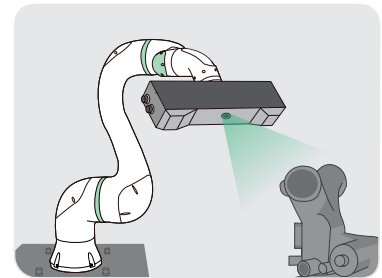
Plastic Injection Assistance



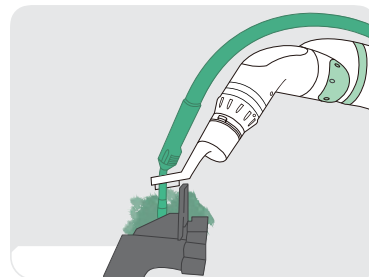
Packaging & Palletizing



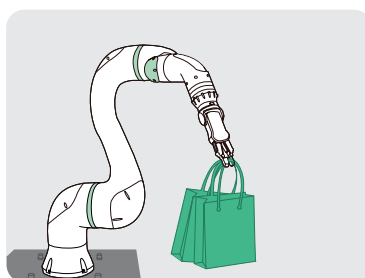
Press Forming Assistance



Inspection

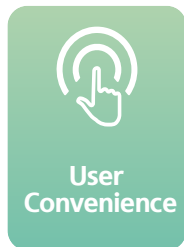


Welding

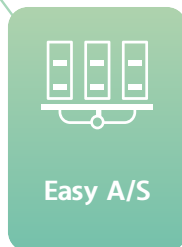


Service

Features of the Robot



- Touch-type T/P and simple interface
- Two basic air units are provided, making additional wiring unnecessary
- The hand grip switches make it possible to perform direct teaching



- An integrated drive module that can be replaced easily is applied
- A door-type case is applied, making it easy to perform maintenance of the controller



- A buffer for the prevention of data loss because of temporary power instability is embedded
- A high-capacity power module that can be applied to high-payload collaborative robot is applied



- A safety CPU approved by an international certification institute (TÜV SÜD) is applied.
- Optimized response to the “industrial robot safety inspection” and the “collaborative robot workplace safety certification”



- A streamlined design that provides psychological tranquility for the operator
- Outright prevention of the accident of being caught through the application of a curved design


HYUNDAI ROBOTICS

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