

# Take-out Robot Drying & Feeding



**YUDO**

# Consilience Technology

Injection molding process needs a lot of different element. ABIMAN Engineering, YUDO is only company to respond directly on customer's requests which are related to various problems of injection molding. We provide a "Turn-key system" according to customer's demands.

## ① Take-out Robot



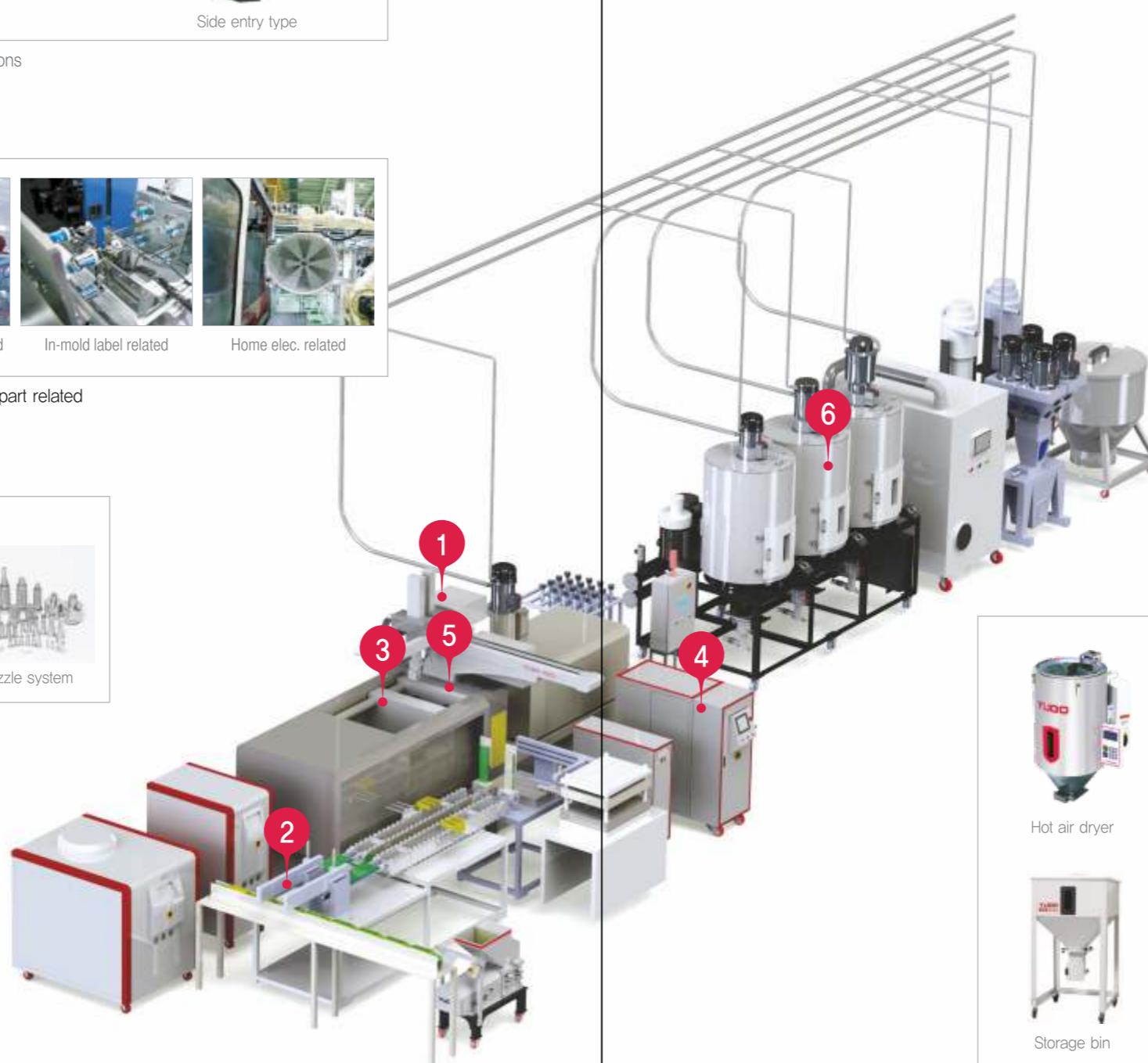
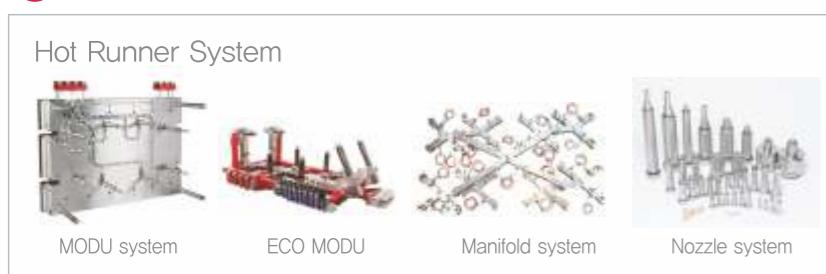
► Applied to the I.M.M machine from less than 30 tons to more than 3,000 tons

## ② Factory Automation



► In mold label, Automotive part automation, Mobile automation, Optical part related

## ③ Hot Runner Solutions



## Heating & Cooling ④



## PET Preform Total Solution ⑤



## Drying & Feeding ⑥



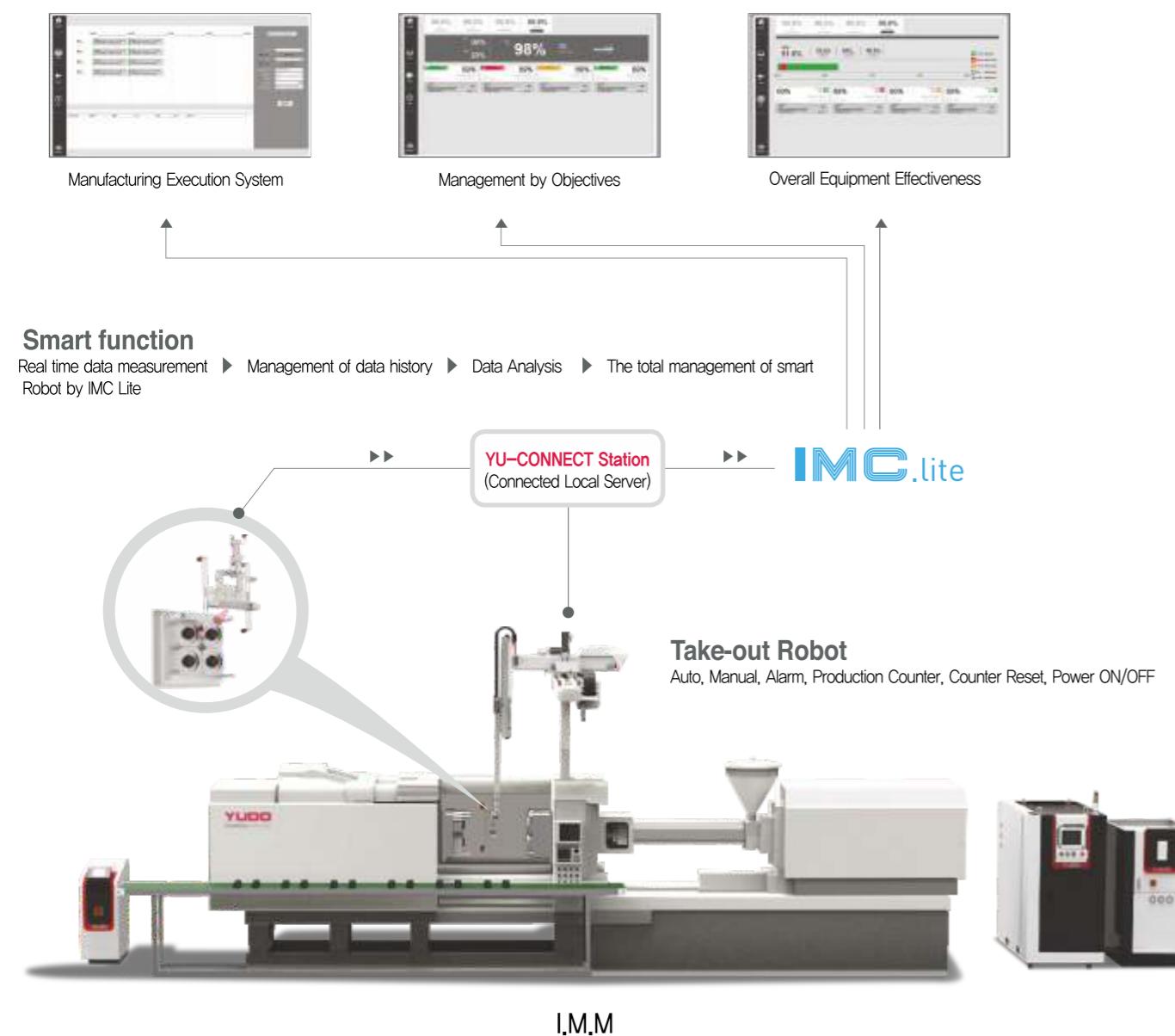
# Smart Solution

## (IMC lite, YU-CONNECT, Smart function)

The Smart Solution of ABIMAN Engineering, YUDO for the effective production plan and processing optimization in the injection molding. IMC Lite provides with the Management By Objective (MBO), Overall Equipment Effectiveness (OEE) and Manufacturing Execution System (MES) based on collected data from the Take-out Robot. It also supplies the weight measurement, static-electricity removal and smart function based on real-time monitoring. YUDO Smart Solution contributes to customer's revenue by improving productivity in injecting molding process.

### IMC.lite

The IMC Lite is the Monitoring System which enables you to easily check about the real time productivity, achievement rate comparing to plan, equipment conditions and production efficiency in one monitor. The collected data from the Take-out Robot is analyzed by day, week and month for realizing effective production plan.



## Smart Function

The cause of the low quality & productivity is removed in advance by Smart Function in injection molding process. YUDO-SUNS realize a ideal Quality management through the IMC controls real-time monitoring, data analysis, quality control and management ideal of the major factors.

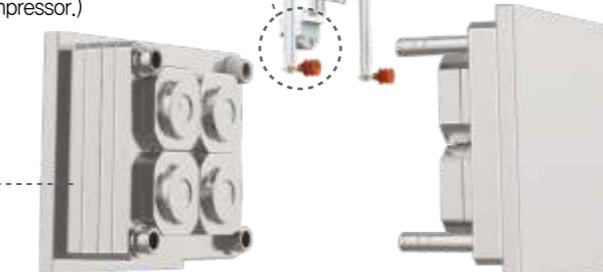


### Removing static-electricity (Ionizer)

The static electricity on the mold and product surface is removed through ionization for preventing the faulty factors caused by micro dust and foreign substance in advance.

- Ion creation method : Soft X-Ray  
(Decay time :  $\pm 1,000V$  to  $\pm 100V$  in 1 sec at 150mm)  
(The ionizer technology is used for the air ionization method without the electromagnetic waves & ozone and it is a static-electricity equipment for the next generation without additional air compressor.)

Monitoring  
Management of data history



### Product weight measurement (Load cell)

The weighing the product by load cell is automatically measured for sorting & removal of defective product and the systematic data analysis & management.

Payload	Load cell	Tolerance
5Kg ~ 10Kg	30Kg	$\pm 1\%$
15Kg ~ 35Kg	30Kg (x2)	$\pm 1\%$
50Kg ~ 80Kg	50Kg (x2)	$\pm 2\%$

Monitoring  
Management of data history

### Mold surface temperature measurement (Infrared sensor)

The mold surface temperature is measured by infrared sensor. In case of exceeding predetermined setting point, it detects the defective product by alarm system

- Maximum 4 points ( $\pm 1^\circ C$ )

Monitoring  
Management of data history

### Shot balance

Shot balance check by product weight in each cavity

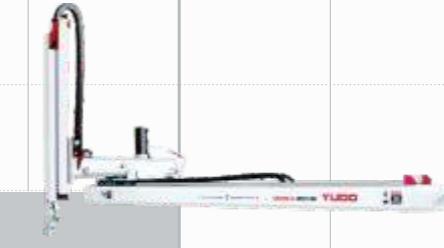
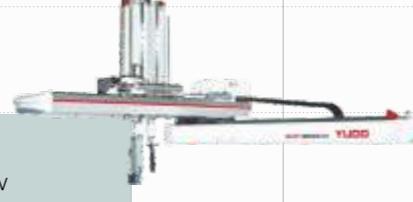
- Defective product information (weight & mold temperature)  
(Possible to check the information related to the mold flow status through IMC Lite.)

## YUCONNECT, Integrated control of Take-out Robot with Auxiliary equipment.

The Auxiliary Equipment such as Mold temperature controller, chiller, etc. and the Take-out Robot are unified using the Connected Local Server, and the operation setup/operation information is monitored and analyzed using the UI of the Take-out Robot.

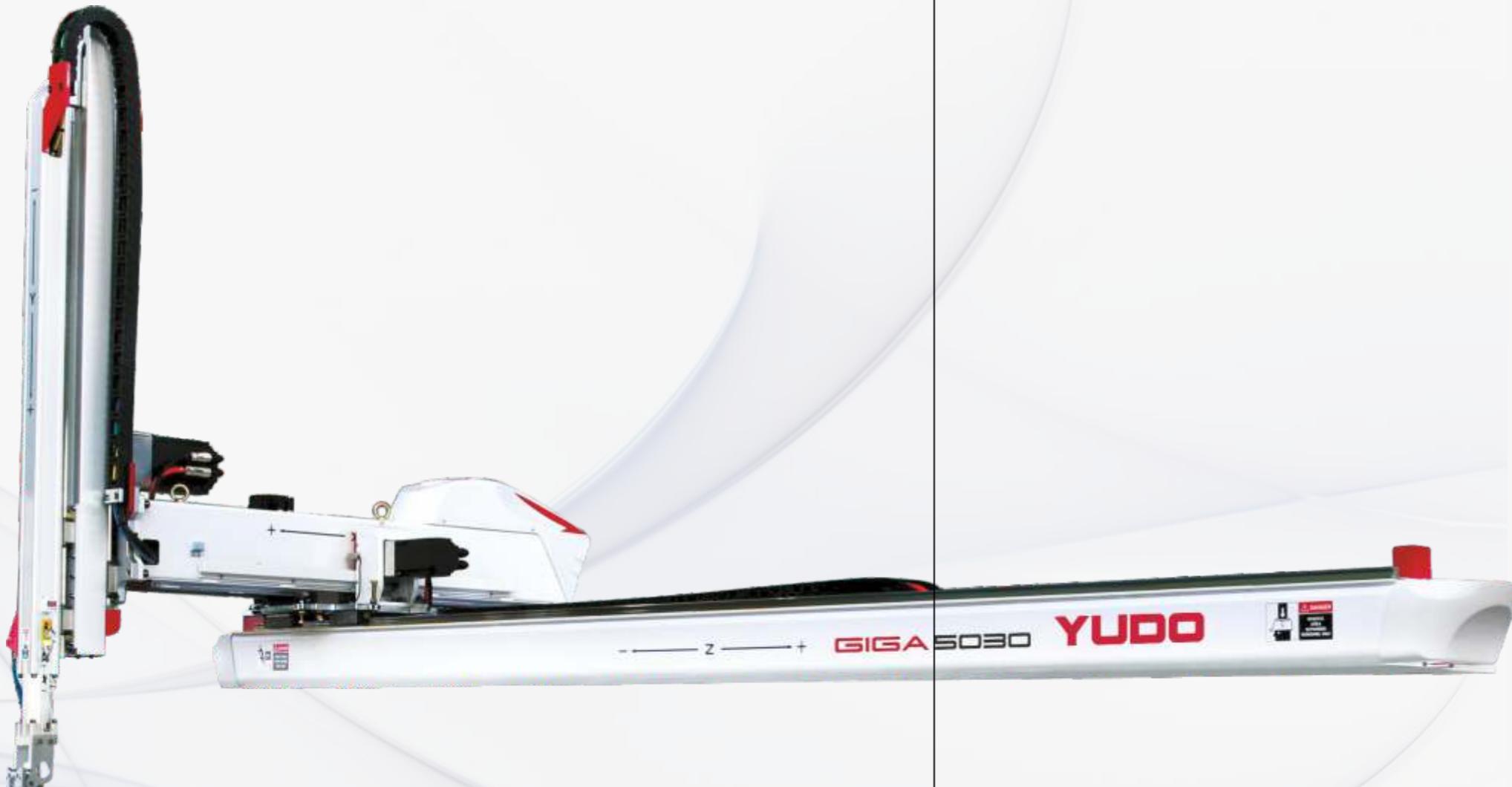


# Take-out Robot Line-up

Category	Controller	Mold Clamping force (ton)								Mold Clamping force (ton)								
		Small-sized I.M.M							Middle-sized I.M.M				Large-sized I.M.M					
		~ 30	30 ~ 80	80 ~ 100	100 ~ 150	150 ~ 180	180 ~ 220	220 ~ 350		350 ~ 450	450 ~ 550	550 ~ 850	850 ~ 1000	1000 ~ 1300	1300 ~ 1600	1600 ~ 2000	2000 ~ 3000	3000 ~ 4500
Premium	 YUCON-700															GIGA-3520	GIGA-5025 GIGA-3525	
																		
																		
Advanced	 YUCON-800								FRANCIA-510 FRANCIA-510s FRANCIA-510i FRANCIA-510is									
									FRANCIA-809i FRANCIA-809is									
General	 WICON-700																	
									FRANCIA-510i-E FRANCIA-510is-E									
Basic	 YUCON-260																	
	 YUCON-K5 STEC-K4	SMUS-300	SMUS-450	SMUS-600	SMUS-800													

# GIGA

High speed and high precision take-out robot (Movable X-axis)



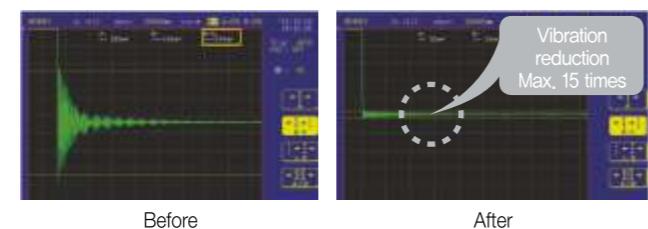
## Mold Protection

- Without protective device, it immediately detects collision caused by incorrect operation and set-up, and makes Servo motor come to a sudden stop minimizing mold and robot damage



## Vibration Control

Classification	No vibration control applied	Vibration control applied
Overall vibration	5.95mm	0.40mm
(+) Direction vibration	2.90mm	0.175mm
(-) Direction vibration	3.05mm	0.225mm



## Energy Saving

- Servo sleep function operates on stand-by status  
→ Energy saving effect

## Model Series

G I G A - 1 0 1 2

10kg (Payload) 1200 (Vertical stroke)

► I.M.M (ton)	1,600 ~ 4,500 (Horizontal I.M.M)
► Traverse (mm)	3,500 ~ 4,000
► Vertical (mm)	2,000 ~ 3,000 (Telescopic structure)
► Driving method	All axes AC Servo
► Payload (Kg)	35 / 50 (Including weight of chuck unit)
► Power source	AC 380V, 50/60 Hz

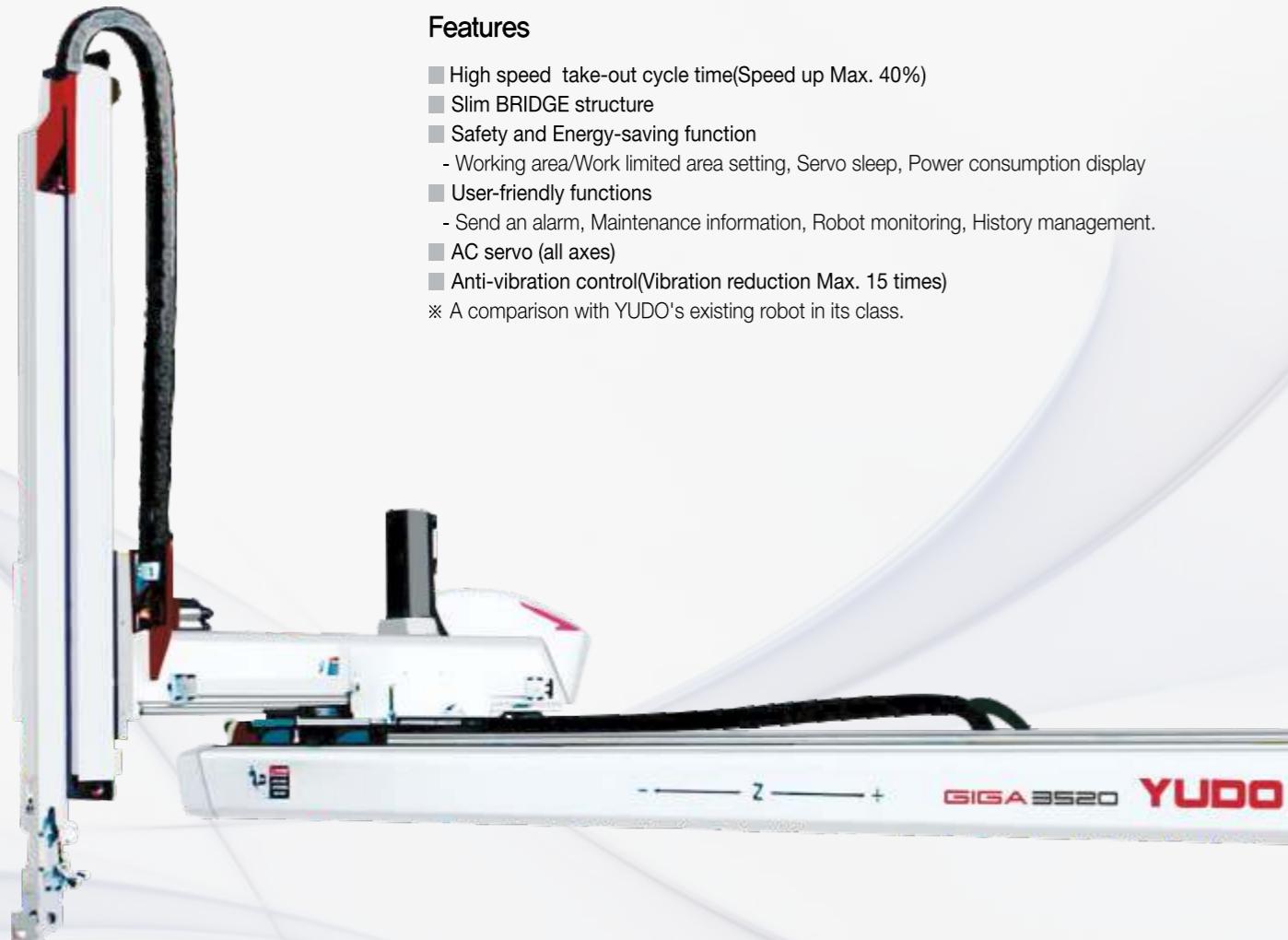
### YUCON-700 Controller

- TFT Touch Screen (65536 Color)
- Preferred languages :  
Korean / English / Portuguese / Spanish / Vietnamese /  
Russian / Czech / Polish



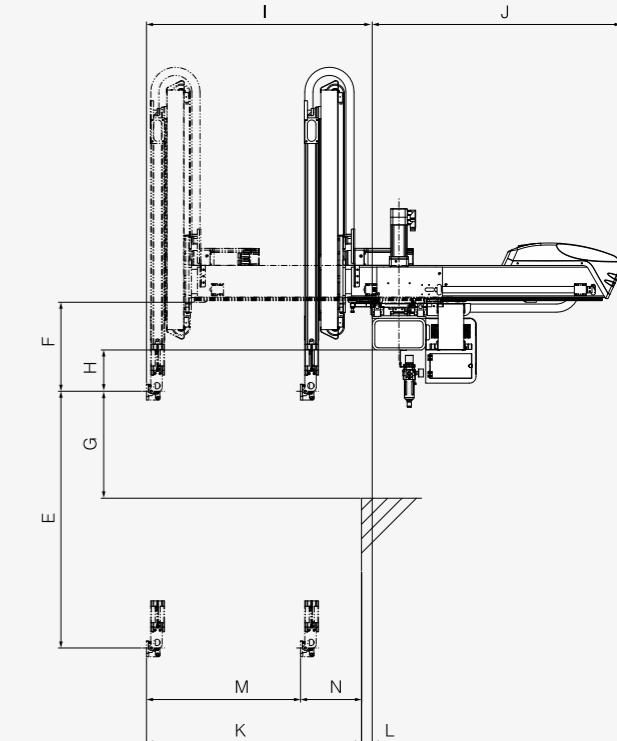
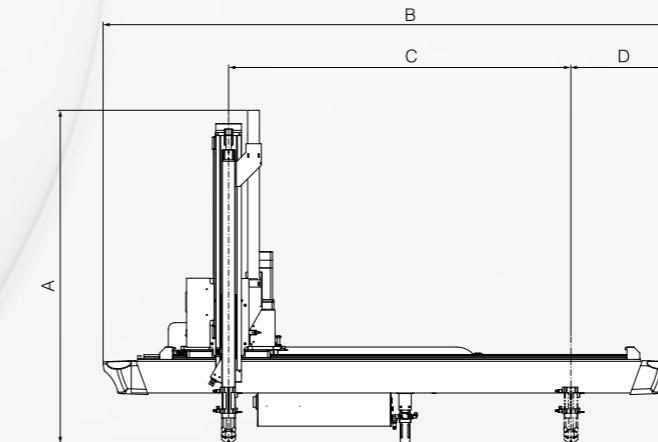
# GIGA

High speed and high precision take-out robot (Movable X-axis)



## Features

- High speed take-out cycle time(Speed up Max. 40%)
  - Slim BRIDGE structure
  - Safety and Energy-saving function
    - Working area/Work limited area setting, Servo sleep, Power consumption display
  - User-friendly functions
    - Send an alarm, Maintenance information, Robot monitoring, History management.
  - AC servo (all axes)
  - Anti-vibration control(Vibration reduction Max. 15 times)
- ※ A comparison with YUDO's existing robot in its class.



Model	Crosswise (X-axis)		Vertical (Y-axis)		Traverse (Z-axis)		Air consumption (l/Cycle(ANR))	Power consumption (kVA)	Payload (Kg)
	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)			
GIGA-3520	1,200	1.5	2,000	2.5	3,500	2.0	32	22	35
GIGA-3525	1,200	1.5	2,500	2.5	4,000	2.0	32	22	35
GIGA-5025	1,500	1.0	2,500	2.8	4,000	2.0	41	22	50

\* ( ) are option specifications.

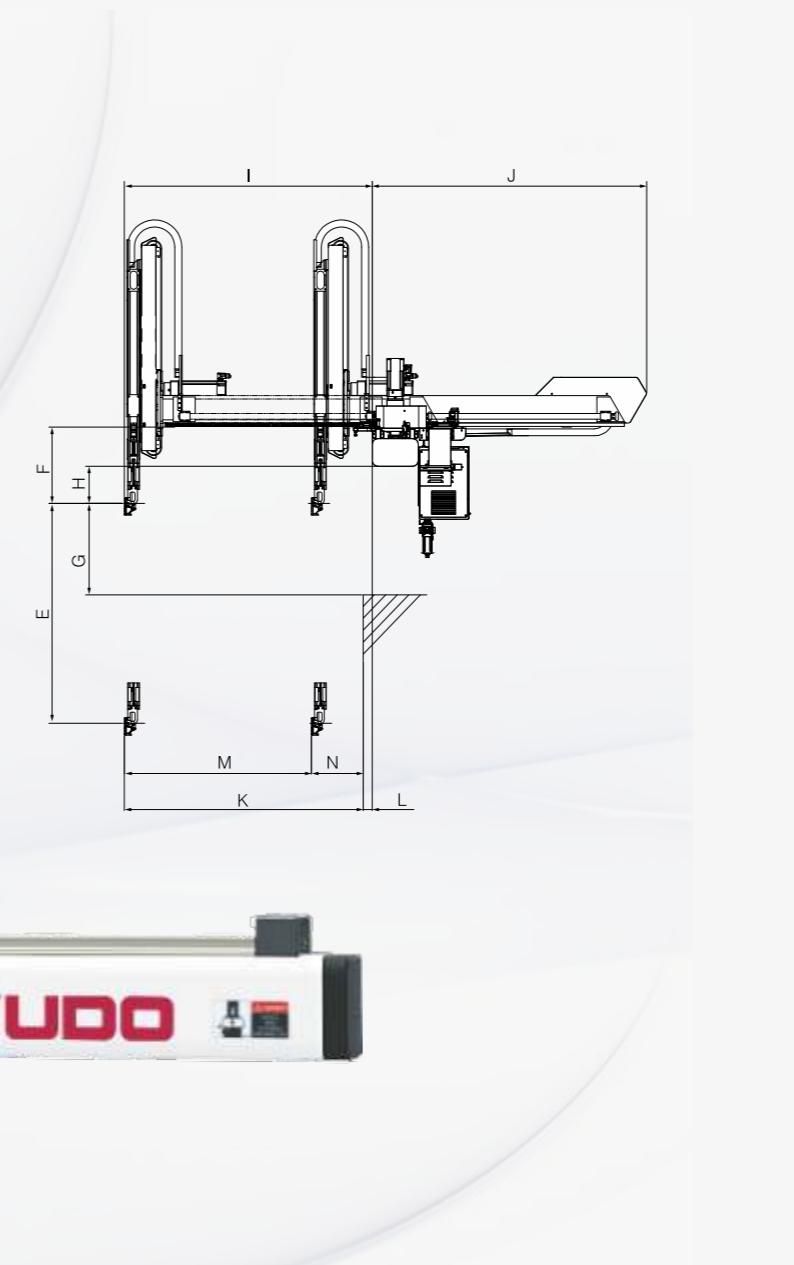
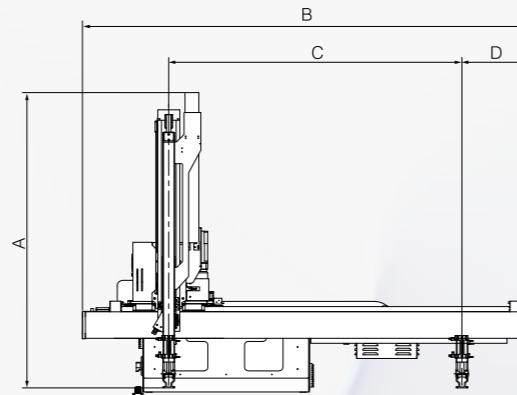
Model	Outer dimension (mm)													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GIGA-3520	2,151	4,784 (5,484)	3,500 (4,000)	642	2,000	612	420	336	1,715	1,782	1,615	100	1,200	415
GIGA-3525	2,401	4,784 (5,484)	3,500 (4,000)	642	2,500	612	420	336	1,715	1,782	1,615	100	1,200	415
GIGA-5025	2,519	5,643 (6,143)	4,000 (4,500)	822	2,500	629	700	246	2,086	2,507	1,986	100	1,500	486

\* ( ) are extended option specifications.

\* The size "G, L, N" is a standard, so it might be changed according to specification.

# GIGA II

High speed and high precision take-out robot (Movable X-axis)



Model	Crosswise (X-axis)		Vertical (Y-axis)		Traverse (Z-axis)		Air consumption (l/Cycle(ANR))	Power consumption (kVA)	Payload (Kg)
	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)			
GIGA II-1012			1,200		1,600				
GIGA II-1015	1,020	0.7	1,500	4.0	2,000	1.6	6	5.6	10
GIGA II-1018			1,800		2,500				
GIGA II-2015			1,500		2,000				
GIGA II-2018	1,200	1.3	1,800	3.1	2,500	1.6	9	7.5	20
GIGA II-2020			2,000		2,500				

Model	Outer dimension (mm)													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GIGA II-1012	1,612	2,443	1,600	372	1,200	416	500	203	1,353	1,497	1,303	50	1,020	283
GIGA II-1015	1,762	2,843	2,000	372	1,500	416	500	203	1,353	1,497	1,303	50	1,020	283
GIGA II-1018	1,912	3,343	2,500	372	1,800	416	500	203	1,353	1,497	1,303	50	1,020	283
GIGA II-2015	1,848	2,823	2,000	357	1,500	525	650	303	1,658	1,742	1,608	50	1,200	408
GIGA II-2018	1,998	3,323	2,500	357	1,800	525	650	303	1,658	1,742	1,608	50	1,200	408
GIGA II-2020	2,098	3,323	2,500	357	2,000	525	650	303	1,658	1,742	1,608	50	1,200	408

- I.M.M (ton) 350 ~ 1,600 (Horizontal I.M.M)
- Traverse (mm) 1,600 ~ 2,500
- Vertical (mm) 1,200 ~ 2,000 (Telescopic structure)
- Driving method All axes AC Servo
- Payload (Kg) 10 ~ 20 (Including weight of chuck unit)
- Power source AC 380V, 50/60 Hz

## YUCON-700 Controller

- TFT Touch Screen (65536 Color)
- Preferred languages : Korean / English / Portuguese / Spanish / Vietnamese / Russian / Czech / Polish



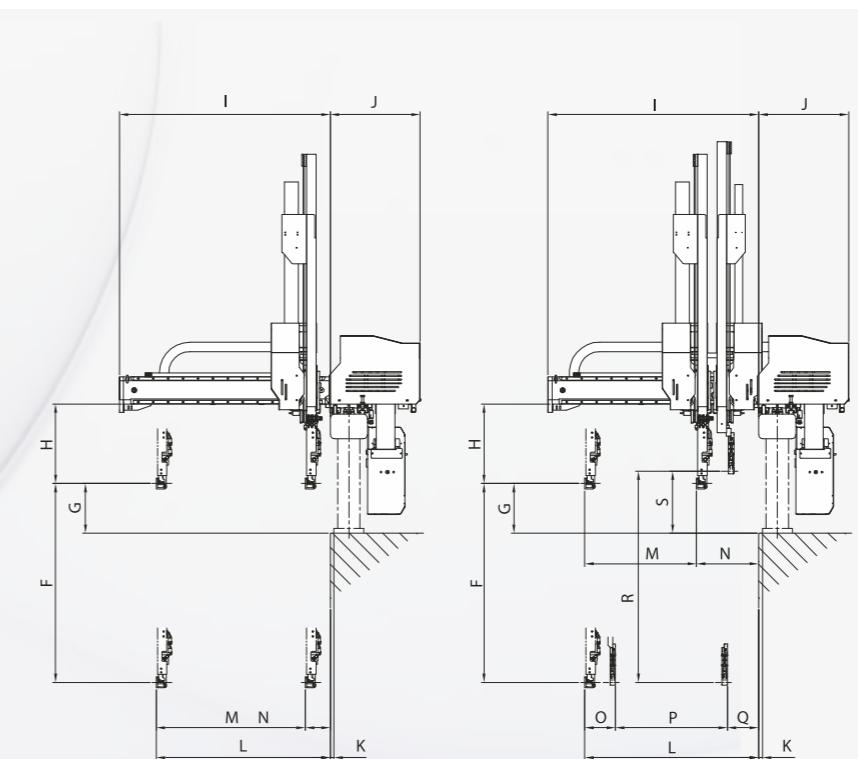
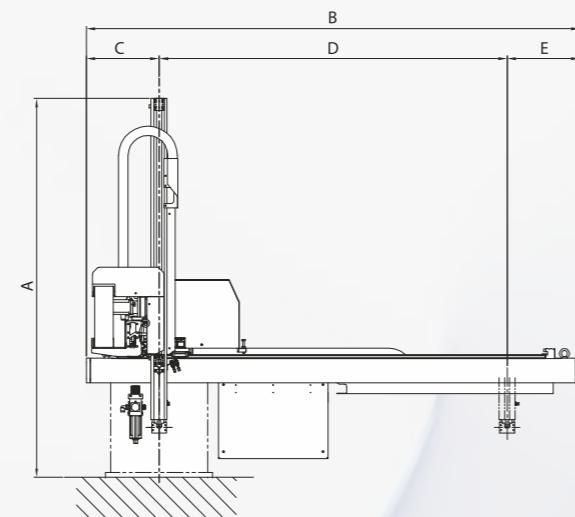
# FRANCIA

Excellent Performance take-out robot for any sized machines



GOOD DESIGN

K-DESIGN



► I.M.M (ton) 80 ~ 3,000 (Horizontal I.M.M)

► Traverse (mm) 1,400 / 1,600 / 2,000 / 2,300 / 2,500 / 3,500 / 4,000

► Vertical (mm) 800 / 900 / 1,000 / 1,300 / 1,600 / 1,800 / 2,000 / 2,500 (Non-Telescopic arm, Telescopic arm)

► Driving method All axes AC Servo

► Payload (Kg) 3 / 5 / 10 / 15 / 25 / 35 / 50 (Including weight of chuck unit)

► Power source AC 220V, 50/60 Hz

## YUCON-800 Controller

• 8 inch TFT Touch Screen (16,70million color)

• Preferred languages :

Basic supporting 5 languages (Responding to all languages in the world as an option)



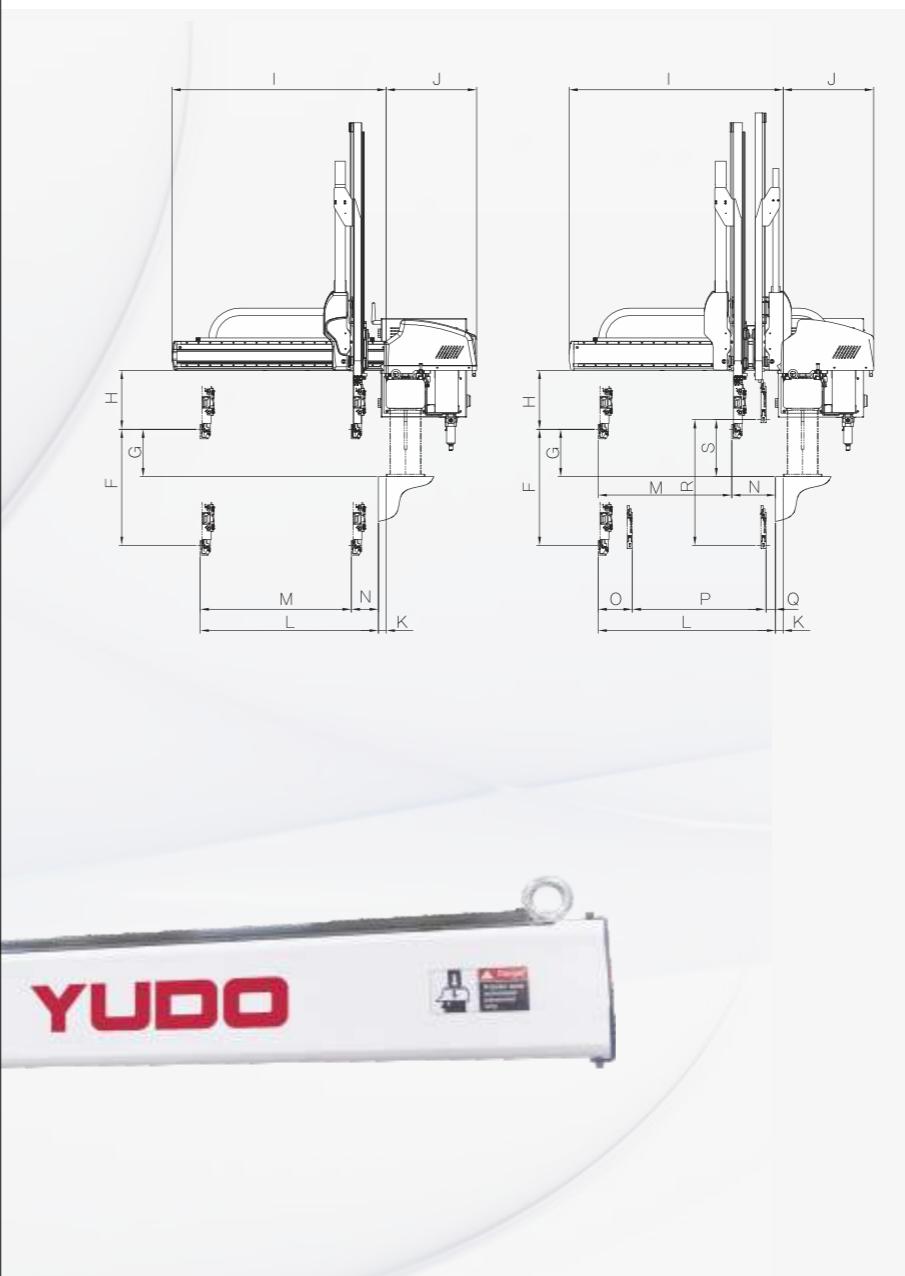
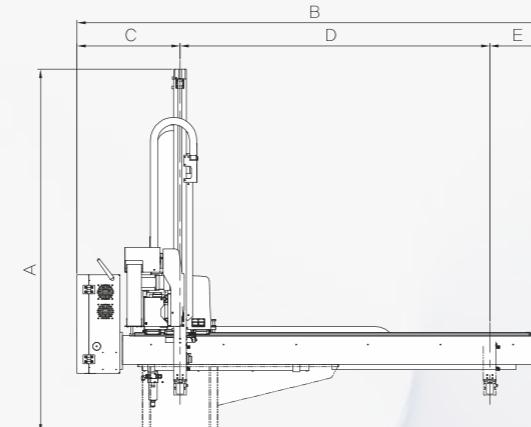
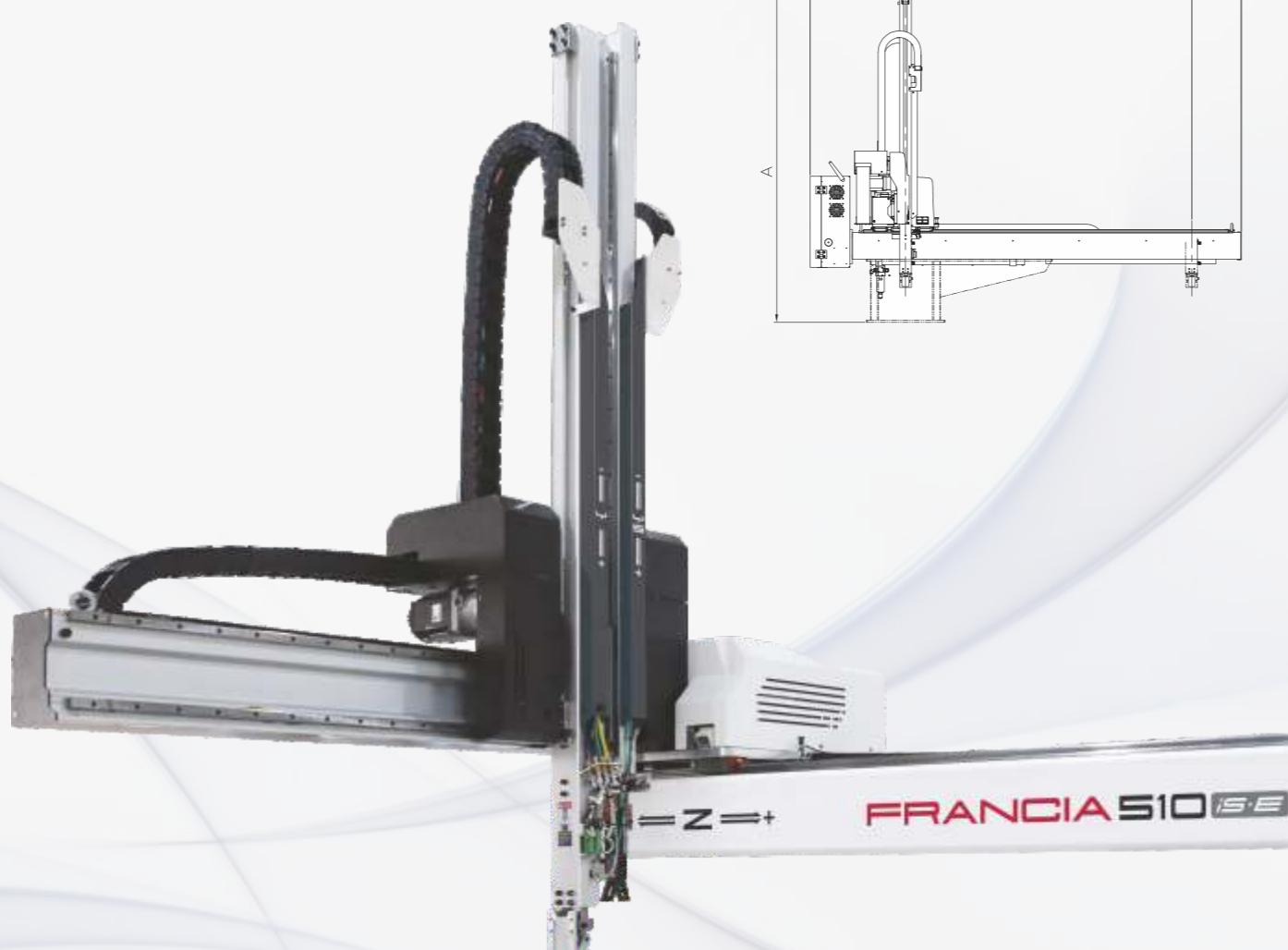
Model	Crosswise (X-axis)		Vertical (Y-axis)		Traverse (Z-axis)		Air consumption (L/Cycle(ANR))	Power consumption (kVA)	Payload (Kg)
	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)			
FRANCIA-308i	600	1.0	800	3.0	1,400	1.5	4.6	1.5 (1Φ220V)	3
FRANCIA-308is	④450 ④450	④450	④800 ④850	④3.0	④1,400	④1.5	④4.7	④2.2 (1Φ220V)	④
FRANCIA-509	630		900		1,600	1.5	4.8	1.5 (1Φ220V)	
FRANCIA-509s	④520 ④520	④1.0	④900 ④950	④3.0	④1,600	④1.5	④4.9	④2.2 (1Φ220V)	④5
FRANCIA-509i	650		900		1,600	1.5	4.8	1.5 (1Φ220V)	
FRANCIA-509is	④580 ④580	④1.0	④900 ④950	④3.0	④1,600	④1.5	④4.9	④2.2 (1Φ220V)	④5
FRANCIA-510	730		1,000		1,600	1.5	4.8	1.5 (1Φ220V)	
FRANCIA-510s	④620 ④620	④1.0	④1,000 ④1,050	④3.0	④1,600	④1.5	④4.9	④2.2 (1Φ220V)	④5
FRANCIA-510i	750		1,000		1,600	1.5	4.8	1.5 (1Φ220V)	
FRANCIA-510is	④680 ④680	④1.0	④1,000 ④1,050	④3.0	④1,600	④1.5	④4.9	④2.2 (1Φ220V)	④5
FRANCIA-809i	830		900		1,600	1.4	4.6	1.9 (1Φ220V)	
FRANCIA-809is	④670 ④670	④1.0	④900 ④950	④3.0	④1,600	④1.4	④4.7	④2.5 (1Φ220V)	④8
FRANCIA-1013	980		1,300		2,000	1.4	4.9	1.9 (1Φ220V)	
FRANCIA-1013s	④810 ④810	④1.0	④1,300 ④1,350	④3.0	④2,000	④1.4	④5.0	④2.5 (1Φ220V)	④10
FRANCIA-1013i	980		1,300		2,000	1.4	4.9	1.9 (1Φ220V)	
FRANCIA-1013is	④810 ④810	④1.0	④1,300 ④1,350	④3.0	④2,000	④1.4	④5.0	④2.5 (1Φ220V)	④10
FRANCIA-1516	1,240		1,600		2,300	1.2	16.5	2.4 (1Φ220V)	
FRANCIA-1516s	④960 ④960	④1.0	④1,600 ④1,650	④2.4	④2,300	④1.2	④17.2	④3.0 (1Φ220V)	④15
FRANCIA-1516i	1,260		1,600		2,300	1.2	4.9	2.4 (1Φ220V)	
FRANCIA-1516is	④1,040 ④1,040	④1.0	④1,600 ④1,650	④2.4	④2,300	④1.2	④5.0	④3.0 (1Φ220V)	④15
FRANCIA-2518	1,700		1,800		2,500	1.1	48.1	3.4 (3Φ220V)	
FRANCIA-2518s	④1,430 ④1,430	④1.0	④1,800 ④1,850	④2.4	④2,500	④1.1	④55.2	④4.8 (3Φ220V)	④25
FRANCIA-3520	1,700		2,000		3,500	1.2	65.5	4.5 (3Φ220V)	④35
FRANCIA-5025	1,700	1.0	2,500	2.4	4,000	1.0	80	5.8 (3Φ220V)	50

\* ④ Product side ④ Runner side

Model	Outer dimension (mm)																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
FRANCIA-308i	1,524	1,986	293	1,400	293	800	200	320	858	364	50	650	600	50	-	-	-	-	
FRANCIA-308is	1,574	1,986	293	1,400	293	800	200	320	858	364	50	650	450	200	150	450	50	850	250
FRANCIA-509	1,273	2,504	490	1,600	414	900	200	304	1,008	482	50	770	630	140	-	-	-	-	
FRANCIA-509s	1,273	2,504	407	1,600	497	900	200	304	1,008	482	50	790	520	250	165	520	85	950	250
FRANCIA-509i	1,683	2,504	407	1,600	497	900	200	304	1,008	482	50	790	650	140	-	-	-	-	
FRANCIA-509is	1,733	2,504	428	1,600	476	900	200	328	1,233	504	50	956	580	210	156	580	54	950	250
FRANCIA-510	1,323	2,504	490	1,600	414	1,000	200	304	1,108	482	50	870	730	140	-	-	-	-	
FRANCIA-510s	1,323	2,504	490	1,600	414	1,000	200	304	1,108	482	50	870	620	250	165	620	85	1,050	250
FRANCIA-510i	1,783	2,504	407	1,600	497	1,000	200	304	1,108	482	50	890	750	140	-	-	-	-	
FRANCIA-510is	1,833	2,504	428	1,600	476	900	200	328	1,233	504	50	956	680	210	152	680	58	1,050	250
FRANCIA-809i	1,779	2,504	428	1,600	476	900	200	328	1,233	504	50	956	830	126	-	-	-	-	
FRANCIA-809is	1,829	2,504	428	1,600	476	900	200	328	1,233	504	50	956	670	286	176	670	110	950	250
FRANCIA-1013	1,598	2,785	431	2,000	353	1,300	193	400	1,341	619	50	1,091	980	111	-	-	-	-	
FRANCIA-1013s	1,618	2,785	377	2,000	408	1,300	200	400	1,341	615	50	1,100	810	281	188	810	93	1,350	250
FRANCIA-1013i	2,240	2,785	377	2,000	408	1,300	200	400	1,341	615	50	1,100	980	120	-	-	-	-	
FRANCIA-1013is	2,290	2,785	377	2,000	408	1,300	200	400	1,341	615	50	1,100	810	291	221	810	70	1,350	250
FRANCIA-1516	1,962	3,340	462	2,300	578	1,600	300	477	1,680</td										

# FRANCIA E

Small size Standard Class



Model	Crosswise (X-axis)		Vertical (Y-axis)		Traverse (Z-axis)		Air consumption (l/Cycle(ANR))	Power consumption (kVA)	Payload (kg)
	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)			
FRANCIA-308i-E	∅600	1.0	∅800	3.0	1,400	1.5	4.6	2.2	3
FRANCIA-308is-E	∅450 ∅450		∅800 ∅850				4.7	3.0	
FRANCIA-510i-E	∅780	1.0	∅1,000	3.0	1,600	1.5	4.8	2.2	5
FRANCIA-510is-E	∅690 ∅690		∅1,000 ∅1,050				4.9	3.0	
FRANCIA-1012-E	∅1,000	0.7	∅1,200	2.7	1,800	1.3	4.9	2.2	10
FRANCIA-1012s-E	∅930 ∅930		∅1,200 ∅1,250				5.0	3.0	

\* ∅ Product side      ® Runner side

Model	Outer dimension (mm)																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
FRANCIA-308i-E	1,590	2,280	530	1,400	350	800	200	300	880	455	50	680	600	80	-	-	-	-	
FRANCIA-308is-E	1,640	2,280	530	1,400	350	800	200	300	880	455	50	680	450	230	155	450	75	850	250
FRANCIA-510i-E	1,790	2,480	530	1,600	350	1,000	200	300	1,050	525	50	920	780	140	-	-	-	-	
FRANCIA-510is-E	1,840	2,480	530	1,600	350	1,000	200	300	1,050	525	50	920	690	230	155	690	75	1,050	250
FRANCIA-1012-E	2,000	2,710	540	1,800	370	1,200	200	300	1,270	525	50	1,190	1,000	190	-	-	-	-	
FRANCIA-1012s-E	2,040	2,710	540	1,800	370	1,200	200	300	1,270	525	50	1,190	930	260	160	930	100	1,250	250



### WICON-700 Controller

- TFT Touch Screen (65536 Color)
- Preferred languages :
  - Korean / English / Chinese
  - (Responding to all languages in the world as an option)

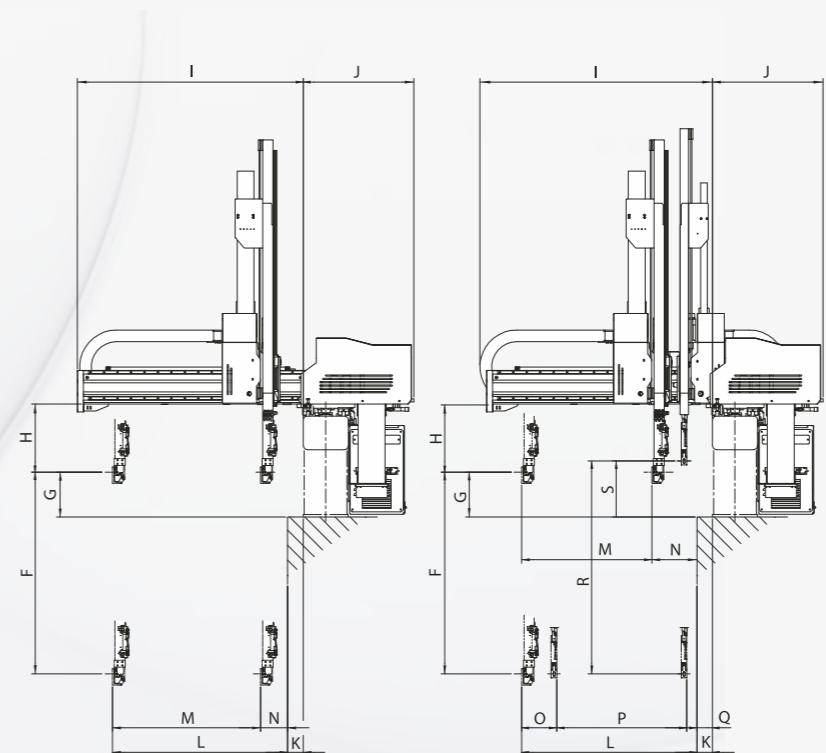
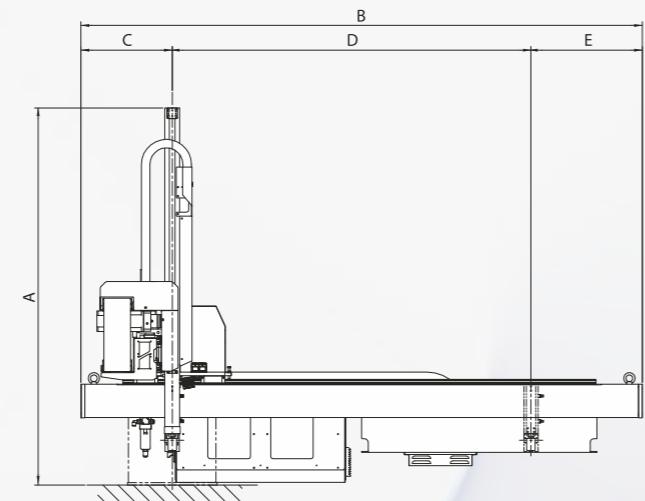
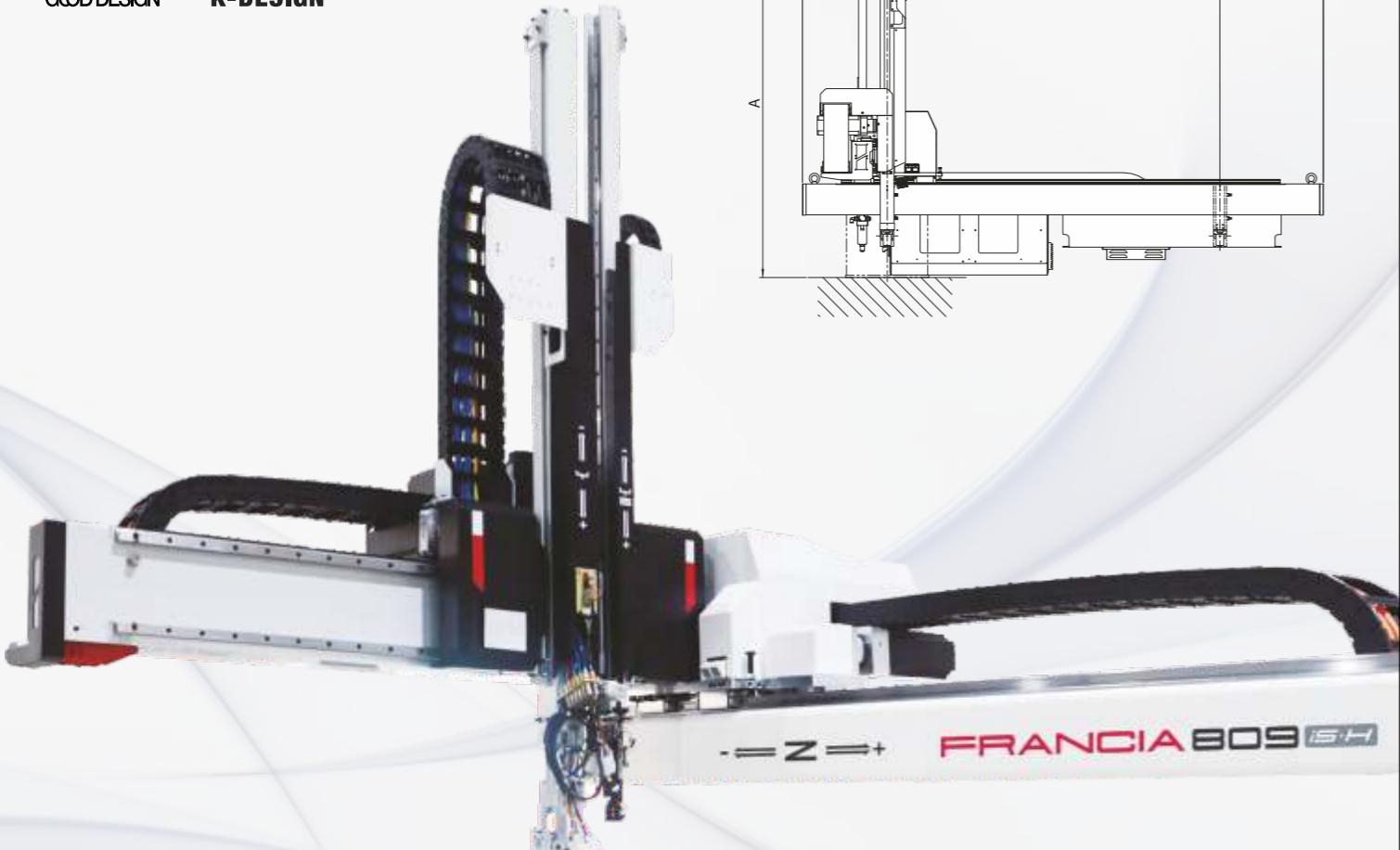
# FRANCIA H

Middle size High-End Performance Class



GOOD DESIGN

K-DESIGN



- ▶ I.M.M (ton) 100 ~ 850 (Horizontal I.M.M)
- ▶ Traverse (mm) 1,600 / 2,300
- ▶ Vertical (mm) 900 / 1,600 (Non-Telescopic arm, Telescopic arm)
- ▶ Driving method All axes AC servo
- ▶ Payload (Kg) 5 / 8 / 15 (Including weight of chuck unit)
- ▶ Power source AC 380V, 50/60 Hz

## YUCON-700 Controller

- TFT Touch Screen (65536 Color)
- Preferred languages : Korean / English / Portuguese / Spanish / Vietnamese / Russian / Czech / Polish



Model	Crosswise (X-axis)		Vertical (Y-axis)		Traverse (Z-axis)		Air consumption (ℓ/Cycle(ANR))	Power consumption (kVA)	Payload (Kg)
	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)	Stroke (mm)	Speed (m/s)			
FRANCIA-509i-H	∅650		∅900		1,600	2.5	4.8	3.7	5
FRANCIA-509is-H	∅580	1.5	∅900 ∅950	3.3			4.9	4.9	
FRANCIA-809i-H	∅830		∅900		1,600	2.5	4.8	4.2	8
FRANCIA-809is-H	∅670	1.5	∅900 ∅950	3.3			4.9	5.4	
FRANCIA-1516-H	∅1,240		∅1,600		2,300	1.6	4.8	5.7	15
FRANCIA-1516s-H	∅1,040	1.2	∅1,600 ∅1,650	3.0			4.9	7.3	

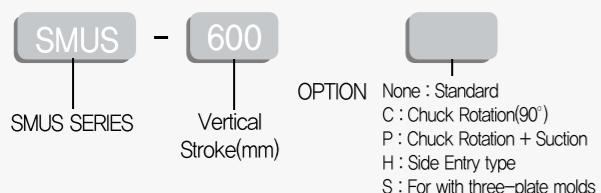
\* ∅ Product side    ® Runner side

Model	Outer dimension (mm)																		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
FRANCIA-509i-H	1,683	2,504	407	1,600	497	900	200	304	1,008	482	50	790	650	140	-	-	-	-	
FRANCIA-509is-H	1,733	2,504	407	1,600	497	900	200	304	1,008	482	50	790	580	210	156	580	54	950	250
FRANCIA-809i-H	1,779	2,504	428	1,600	476	900	200	328	1,233	504	50	956	830	126	-	-	-	-	
FRANCIA-809is-H	1,829	2,504	428	1,600	476	900	200	328	1,233	504	50	956	670	286	176	670	110	950	250
FRANCIA-1516-H	2,067	3,340	462	2,300	578	1,600	300	483	1,782	586	50	1,430	1,230	192	-	-	-	-	
FRANCIA-1516s-H	2,080	3,340	462	2,300	578	1,600	300	483	1,782	586	50	1,430	1,030	392	249	1,030	143	1,650	350

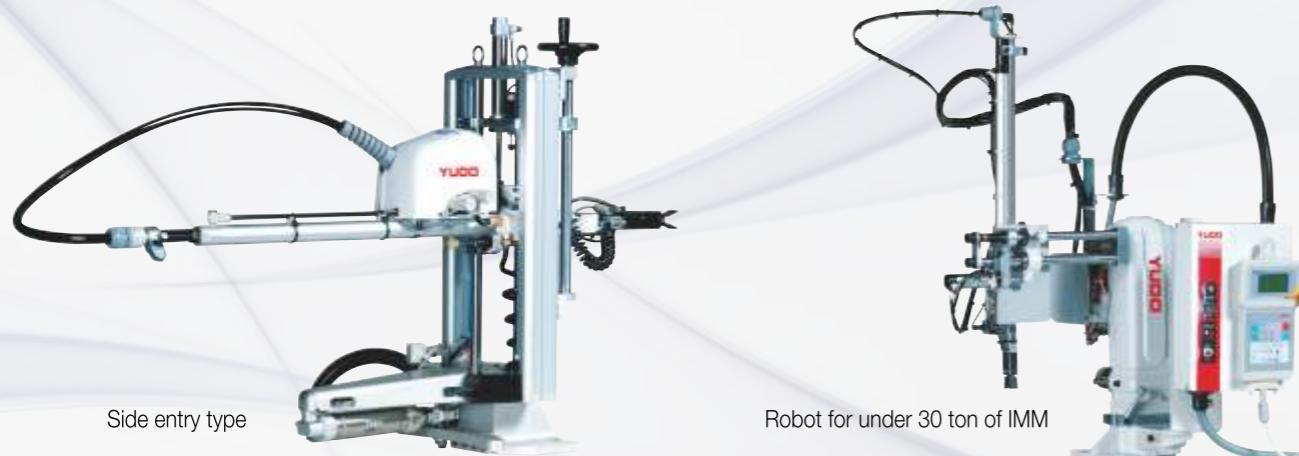
# SMUS

Pneumatic swing type small take-out robot

## Model Series



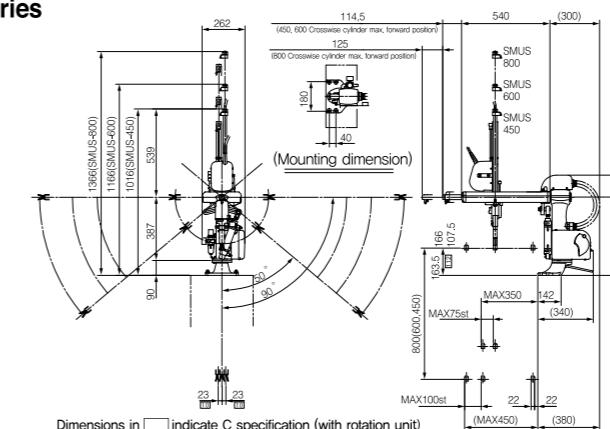
Model	Injection pressure range (ton)
SMUS-300	~ 30
SMUS-450	30 ~ 80
SMUS-600	80 ~ 160
SMUS-800	150 ~ 220



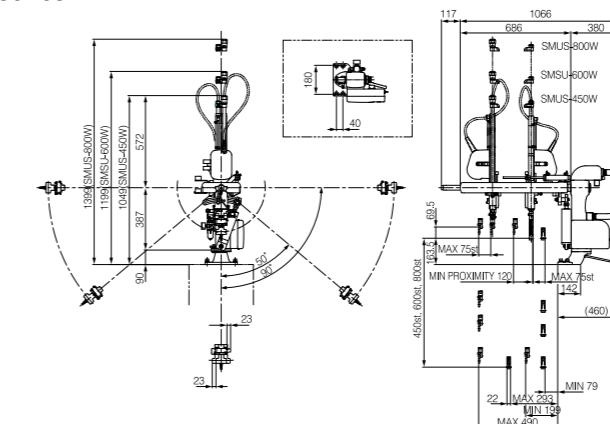
Model	Crosswise (X-axis)		Vertical (Y-axis)		Swing (°)	Air consumption (l/Cycle(ANR))	Power consumption (kVA)	Payload (Kg)
	Stroke (mm)	Stroke (mm)	Stroke (mm)	Stroke (mm)				
SMUS-300	25		300		50 ~ 90	-	0.05	2
SMUS-450(C)(P)(S)(H)	75		450		50 ~ 90	7.4	0.05	2
SMUS-600(C)(P)(S)(H)	75		600		50 ~ 90	9.0	0.05	2
SMUS-800(C)(P)(S)(H)	100		800		50 ~ 90	10.8	0.05	2

\* Please contact us for further details

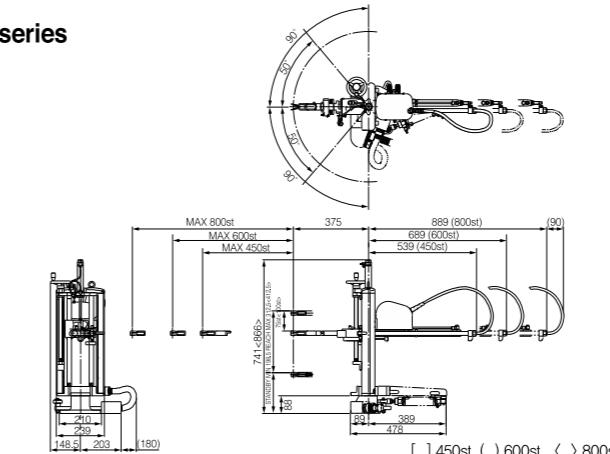
## \* SMUS series



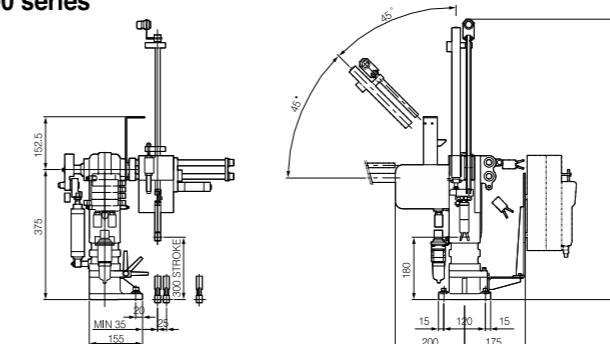
## \* SMUS-S series



## \* SMUS-H series



## \* SMUS-300 series



► I.M.M (ton) ~ 220 (Horizontal I.M.M)

► Vertical (mm) 300 / 450 / 600 / 800

► Crosswise (mm) 25 / 75 / 100

► Swing (°) 50 ~ 90

► Driving method Air Cylinder

► Air pressure 0.5MPa (5kgf/cm<sup>2</sup>)

► Payload (Kg) 2 (Including weight of chuck unit)

► Power source AC 220V, 50/60 Hz

### STEC-K4 Controller

- Preferred languages : 3 languages support (Standard-Korean, English)



### YUCON-K5 Controller

- 320 x 240 high-resolution Color TFT LCD (65,536 Color)
- Preferred languages : 4 languages support (standard : Korean/English, Option : 2 languages)
  - \* Among 20 Unicode support languages
- Compatible with EUROMAP 12 and 67



# YUCON 800

High performance multi-axis motion controller



## Features

### 1. Convenience

- TFT Touch Screen (65536 Color)
- Multi-national language support : Basically supporting five languages  
(Responding to all languages in the world as an option)

### 2. User Friendly

- User-friendly UI design
- Easy understanding through manuals and animations
- User configures motion pattern
- Providing the sample, initial, bad emissions and statistics as well

### 3. Controller Reliability

- Optimizing design improves system reliability
- Energy saving by recycling of regenerative energy
- Reliable heating control

### 4. Program Flexibility

- Easy operation with YUDO's unique mode setting
- Easily add various actions by users program
- Respond to various market needs

## Option

- Integrated control and monitoring of injection process optimization machine (MTC, Chiller, etc.)
- Productivity and equipment error report (E-mail, SMS)



# YUCON 700

Premium class multi-axis motion controller



## Features

### 1. Convenience

- TFT Touch Screen (65536 Color)
- Multi-national language support : Basically supporting five languages  
(Responding to all languages in the world as an option)

### 2. User Friendly

- 1) USER PROGRAM
  - Easy user programming with 12 command sets
  - Users can create their own motions
- 2) Easy program management
  - Easy program change and download by USB memory
  - Users abroad are able to deal with problems easily
- 3) Alarm history, operation history
- 4) Take-out robot monitoring in the office through Ethernet(10/100) (Option)

### 3. Stabilit

- 1) Emergency stop to avoid collision during robot's operation
- 2) Mold protection
- 3) Avoid interferential space by setting work limited area
- 4) Anti-vibration control
  - Anti-vibration control algorithm installed
  - Minimize vibration by controlling telescopic part of the robot automatically

### 4. Performance(Energy Saving)

- 1) Servo sleep
  - Servo sleep function during stand by
  - Energy-saving effect
- 2) Power consumption display
  - Electric energy check
  - Estimated electrical bills check



# Belt conveyor

Standard type belt conveyor system.



Flat Type



Slope Type

## Features

- Compact and lightweight with Reinforced aluminum frame.
- Easy interface with Robot and other equipment
- Suitable for Small and medium-sized injection molding machine.
- The flat belt surface can be used as a table for a simple finishing job.

# Take-out Robot Specification

Type	I.M.M (ton)	Series	Payload (Kg)	Vertical unit			Controller	Driving method		
				Product	Runner	Vertical structure		Traverse	Crosswise	Vertical
Traverse Type	2000 ~ 3000	GIGA-5025	50	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		GIGA-3525	35	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		FRANCIA-5025	50	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
	1600 ~ 2000	GIGA-3520	35	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		FRANCIA-3520	35	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
	1000 ~ 1600	FRANCIA-2518	25	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-2518s	25	O	O	2x	YUCON-800	AC servo	AC servo	AC servo
	450 ~ 1600	GIGA II-2015	20	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		GIGA II-2018	20	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		GIGA II-2020	20	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
Side Entry Type	450 ~ 850	FRANCIA-1516	15	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1516s	15	O	O	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1516i	15	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1516is	15	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1516-H	15	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		FRANCIA-1516s-H	15	O	O	2x	YUCON-700	AC servo	AC servo	AC servo
	350 ~ 1000	GIGA II-1012	10	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		GIGA II-1015	10	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
		GIGA II-1018	10	O	X	2x	YUCON-700	AC servo	AC servo	AC servo
	350 ~ 550	FRANCIA-1012i-E	10	O	X	1x	WICON-700	AC servo	AC servo	AC servo
		FRANCIA-1012is-E	10	O	O	1x	WICON-700	AC servo	AC servo	AC servo
		FRANCIA-1013	10	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1013s	10	O	O	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-1013i	10	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
Swing Type	350 ~ 550	FRANCIA-1013is	10	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
		Ezi-1200v	10	O	X	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
		Ezi-1200sv	10	O	O	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
	220 ~ 450	FRANCIA-809i	8	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-809is	8	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-809i-H	8	O	X	1x	YUCON-700	AC servo	AC servo	AC servo
		FRANCIA-809is-H	8	O	O	1x	YUCON-700	AC servo	AC servo	AC servo
	220 ~ 350	SEKO-510	5	O	X	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
		SEKO-510s	5	O	O	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
		FRANCIA-510	5	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-510s	5	O	O	2x	YUCON-800	AC servo	AC servo	AC servo
80 ~ 220	220 ~ 300	FRANCIA-510i	5	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-510is	5	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-510i-E	5	O	X	1x	WICON-700	AC servo	AC servo	AC servo
		FRANCIA-510is-E	5	O	O	1x	WICON-700	AC servo	AC servo	AC servo
	180 ~ 300	FRANCIA-509	5	O	X	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-509s	5	O	O	2x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-509i	5	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-509is	5	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
	80 ~ 220	FRANCIA-509i-H	5	O	X	1x	YUCON-700	AC servo	AC servo	AC servo
		FRANCIA-509is-H	5	O	O	1x	YUCON-700	AC servo	AC servo	AC servo
		SEKO-509	5	O	X	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
		SEKO-509s	5	O	O	2x	YUCON-260	AC servo	Air cylinder	Air cylinder
80 ~ 220	80 ~ 180	FRANCIA-308i	3	O	X	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-308is	3	O	O	1x	YUCON-800	AC servo	AC servo	AC servo
		FRANCIA-308i-E	3	O	X	1x	WICON-700	AC servo	AC servo	AC servo
		FRANCIA-308is-E	3	O	O	1x	WICON-700	AC servo	AC servo	AC servo
	80 ~ 220	SEKO-208i	2	O	X	1x	YUCON-260	AC servo	Air cylinder	Air cylinder
		SEKO-208is	2	O	O	1x	YUCON-260	AC servo	Air cylinder	Air cylinder
		ZEBA-312X-H	3	O	X	1x	YUCON-700	AC servo (Entry)	AC servo	AC servo
		ZEBA-315X-H	3	O	X	1x				
80 ~ 220	150 ~ 350	SMUS-800	2	O	X	1x	-	Air cylinder	Air cylinder	Air cylinder
		SMUS-600	2	O	X	1x				
	80 ~ 160	SMUS-450	2	O	X	1x	STEC-K4 / YUCON-K5	-	Air cylinder	Air cylinder
		SMUS-300	2	O	X	1x				

\* The table above is displayed for user's better understanding of selecting robot. Additional discussion must be made for suitable selection of robot size.

# CAD SERIES

Compressed Air Dehumidifier

Optimized for high precise plastic injection molding such as mobile phones, optical lenses, light guide plates.

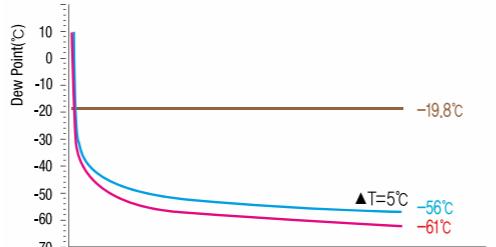


## Features

- Angle adjustment function in controller part at the user's eye level
- Stainless steel cover applied
- Automatic air flow and temperature control by setting type and the amount of material.
- Daily-weekly timer(Run / Stop timer → reserve function), 486 communication port support
- Various alarm and alarm history (Max / Min Temperature Alarm, No Heat, high-pressure, low-pressure and so on)
- Drying temperature Max. 160°C
- Speedy and precise temperature control by PID control(within ±0.5°C)

## Performance

(CAD series vs other same performance products)



\* Dew point can be different depending on quality of compressed air.

## General specifications

Model	CAD-6A	CAD-15A	CAD-30A	CAD-50A
Power supply		AC200V/230V ±10 50/60Hz, Single phase		
Process temperature	°C		40 °C ~ 160°C	
Capacity	l	6	15	30
Air flow	m³/h	4 ~ 12		6 ~ 16
Dew point	°C		-25°C ~ -50°C	
Heating power	kW	0.65		0.95
Installed power total	kW	0.7		1.0
Compressed air pressure	bar		6 ~ 8	
Display		LCD Display		
Dimension (W x D x H)	430 x 330 x 450	470 x 390 x 605	500 x 450 x 680	510 x 490 x 910
Safety device		Over heat (TRIP)		

# HED SERIES

Hot Air Dryer

## Hot Air Recycling

Innovative Energy-saving effect with Hot Air Recycling function



## Features

- Front Maintenance door applied to all models
- Consistent drying and first-in-first-out by Diffuser method
- High-drying efficiency and energy-saving by lower part and Heating unit warming
- P control : precise proportional control, Minimized temperature departure
- Weekly timer
- RS485 communication

## Options

- Hot Air Recycling → 30% Energy-saving  
(The result of comparison with a previous model of YUDO-SUNS)
- High-temperature, two-tiered warming structure
- Controllers only for HED series Controller (P.I.D Control)
- Dehumidifier connection
- All-in-one material loading unit

## General specifications

Model	Capacity (l)	Heater (kW)	Blower (kW)	Power consumption (kVA)	Size (W x L x H)(mm)	Option	
						Frame	Dehumidifier connection
HED-25	42	2.8 (2.8)	0.135	2.8 (2.8)	550 x 760 x 990 (610 x 840 x 1,030)		
HED-50	84	3 (4)	0.17	3.2 (4.2)	620 x 860 x 1,150 (690 x 920 x 1,200)		
HED-75	125		4.5 (6)	4.8 (6.3)	680 x 970 x 1,230 (750 x 7,060 x 1,270)		
HED-100	167		0.185		680 x 970 x 1,510 (750 x 1,060 x 1,570)		
HED-200	334	8.5 (11)	0.46	9 (11.5)	830 x 1,090 x 2,280 (930 x 1,090 x 2,250)		
HED-300	500	12.5 (16.5)	0.5	13 (17)	1,080 x 1,310 x 2,410 (1,200 x 1,350 x 2,380)	Standard	
HED-500	834	18.5 (22)	0.88	19.6 (23.1)	1,350 x 1,460 x 2,790 (1,370 x 1,560 x 2,750)		

\* Figures in parenthesis refer to Insulated Hopper's specification.

# HELA SERIES

Hopper Loader

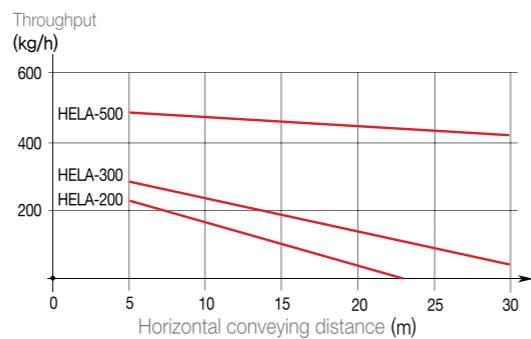


## Features

- Smooth material supply by using various receivers
- A separate dust collecting cyclone collects the dusts from pulverized materials first, and a carter strains the dusts again
- Run/Stop timer is operated by LED Controller
- Transfer failure alarm

## Options

- 2 receivers are able to be operated by 1 Loader



### 1. Conveyance condition

- ① Resin : General-purpose virgin pallets
- ② Bulk density : 0.6 kg/m³
- ③ Vertical distance : 3m

2. Conveying capacities vary depending on Bulk density, Pipe material, the number of Bend, Suction valve type and other factors

## General specifications

Model	Blower (kW)	Air flow (m³/min)	Air flow pressure (mbar)	Hose (mm)		Cyclon	Weight (kg)	Max. power consumption (kVA)
				Material	Vacuum			
HELA-200	1.5	4.25	-150	Φ38.1	Φ38.1	HECA-5	20	1.6
HELA-300	2.55	4.25	-260	Φ38.1	Φ50.8	HECA-10	25	2.8
HELA-500	3.45	5.25	-280	Φ50.8	Φ60.5	HECA-15	32	3.7

## General specifications

Model	Limit sensor		Sensor		Motor Sensor	
	Limit sensor connector	Standard	Sensor	Proximity sensor connector	Motor sensor connector	Standard
HELA-200	L	LD	A	AD	M	MD
HELA-300	L	LD	A	AD	M	MD
HELA-500	L	LD	A	AD	M	MD

\* Power : AC220/380V, 60Hz 3Phase

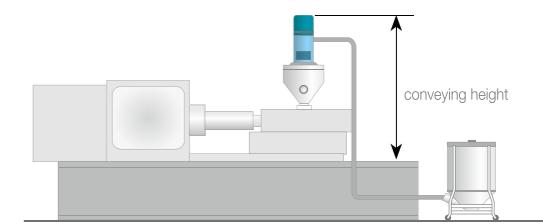
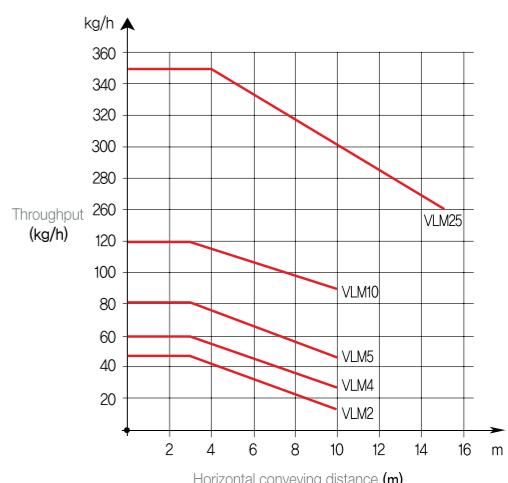
# VLM SERIES

Single Phase Loader

Single loader VLM series consist of second stage blower, big filter, auto filter cleaning and removable tissue filter and gasket.



Throughput by conveying distance



## General specifications

Model	VLM2	VLM4	VLM5	VLM10	VLM25
Max. capacity	kg/h	40	60	80	120
Motor power	kW	0.85	0.85	0.9	0.9
Vacuum	mbar	180	180	210	210
Noise level	dB(A)	< 80	< 80	< 80	< 80
Power supply	—	AC 220V ± 10%, 50/60Hz Single phase			
Capacity	l	2	4	5	10
Pipes Φ	mm	40	40	40	50/60



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