

Robots

Swing-arm Robot



SS-550

Coding Principle



Features

- **Arm Mechanism**
The arm mechanism is integrated with branded pneumatic cylinder, efficient shock absorber, drop proof locking mechanism, compact and adjustable gripper, self clean plastic bearing, 90° wrist rotation mechanism and gripper sensor.
- **Swing Mechanism**
Employs rack and pinion system which converts linear motion to rotation with least damage to the cylinders. The shock absorber and angle tuning system provides a smooth and precise swing motion.
- **Crosswise Stroke Mechanism**
Employs heavy duty linear rail and ball bearing, pneumatic cylinder with adjustable speed and displacement and shock absorber.
- **Base Mechanism**
Fast mold changing design provides simple method for changing molds. The base is rotatable for 90° by releasing the handle.



Gripper



Close Look

SS Series

- Pneumatic Circuit

Branded pneumatic accessories provide extensive use life. Removable electric circuit stands allows easy maintenance.

- Control System

Dialogic hand controller provides English, Japanese, Traditional Chinese and Simplified Chinese. Other languages are applicable; up to 8 different languages can be stored. There are 8 standard programs and memory for up to 80 customized programs with self fault detection. Swing directions are adjustable simply by flipping the switch on the control board. Position limit sensors are applied to all moving directions in order to provide safety mechanically and electrically. Extra 4 sets of I/O pins are available for other applications. Designed to EUROMAP 12, EUROMAP 67 and SPI to provide plug and use.



Control Panel

■ Applications

The SS Series robot is designed for rapid and precise removal of sprue and runner from injection molding machine, and place them into granulator for recycling. Simple product removal is applicable with optional vacuum generator and EOAT. Suitable for injection molding machine under 250T clamp force.

■ Options



Middle Mold Detector

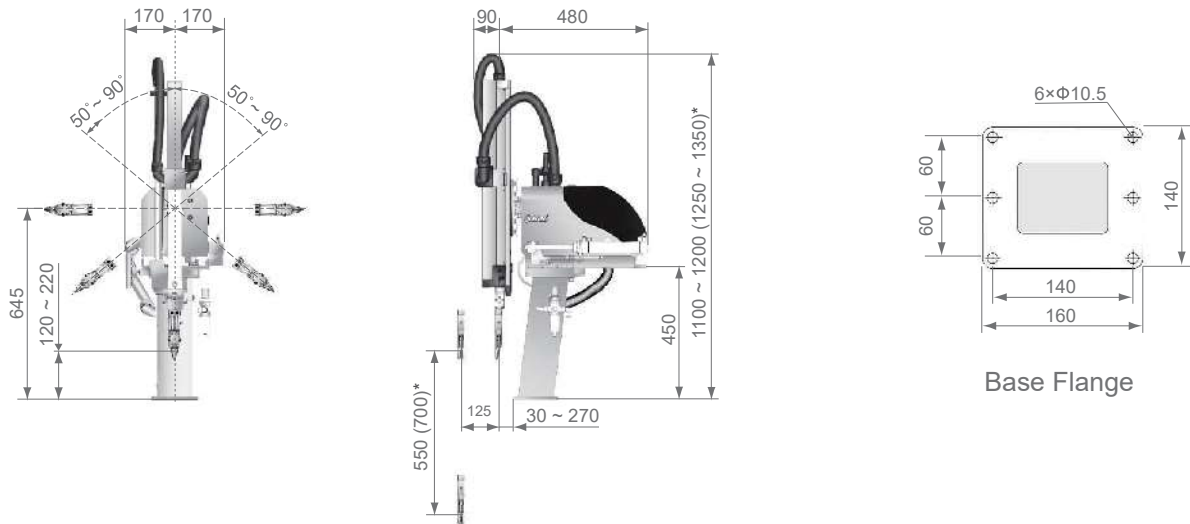


Vacuum Device



Claw rotating group

Outline Drawings



Notes: “*” denotes that the dimension is only suitable for SS-700.

Specifications

Model	SS-550	SS-700
IMM (ton)	50 ~ 150	100 ~ 250
Crosswise Stroke (mm)	0 ~ 125	0 ~ 125
Vertical Stroke (mm)	0 ~ 550	0 ~ 700
Swing Angle (deg)	50 ~ 90	50 ~ 90
Claw rotating Angle (deg)	90	90
Max Load (with tool) (kg)	0.5	0.5
Power Rating (W)	30	30
Rated Current (A)	0.5	0.5
Min Pick-out Time (sec)	0.8	0.9
Min Cycle Time (sec)	3.0	3.2
Air Pressure (bar)	4 ~ 6	4 ~ 6
Max Air Consumption (NI/cycle) *	9	10
Weight (kg)	62	64
Dimensions (W x D x H) (mm)	340 x 570 x 1100	340 x 570 x 1250

- Notes: 1) “V” stands for vacuum device.
 “M” stands for middle mold detector. (Suitable for three-plate mold.)
 “R” stands for claw rotating group
 “EM12” stands for EUROMAP 12 communication interface.
 “EM67” stands for EUROMAP 67 communication interface.
 “N” stands for non-operation side, operation side without “N”
 2) Power supply requirement: 1Φ, 100~240V, 50/60Hz.
 3) “*” Extra 30NI/min for vacuum application.

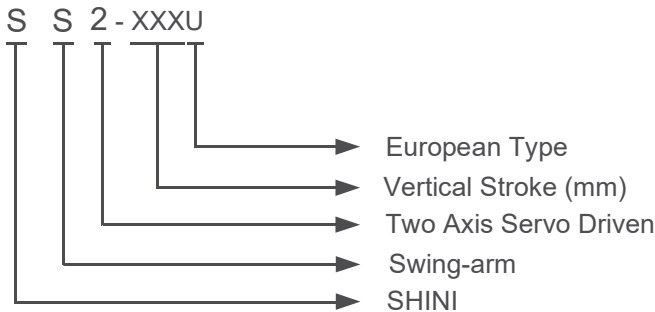
We reserve the right to change specifications without prior notice.

Servo Driven Swing-arm Robot



SS2-550U

Coding Principle



Features

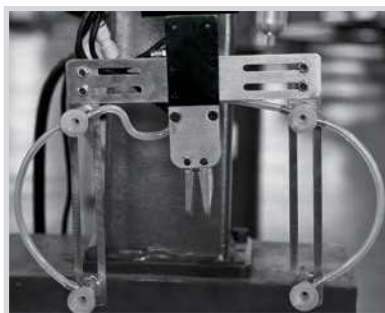
- Appearance
Designed with elegant appearance; Aluminium profiles are largely used to provide compact and streamlined appearance.
- Base Mechanism
Fast mold changing design provides simple method for changing molds. The base is rotatable for 90° by releasing the handle.
- Convenience
SS2-U robot crosswise axis is driven by servo motor, which is very convenient and flexible. Customer can reset the crosswise stroke on the hand controller instead of adjusting the cylinder stroke on the robot.
- Intelligence
3.2 inch true color LCD, each output signal control with intelligent detection, short circuit, overload, thermal protection. Real-time monitoring the status of robot. Display error messages, easy to operate and keep safe use. Depend on the configuration, flexible to set the extend input and output, provide plug and use without modify control system. Easy to use but powerful teach program with verify modes of servo positioning, can use conditions judgment, loop control, waiting and so on signals. The servo positioning support 10 cycles location area, each matrix size up to 99×99, capable of arranging and stacking functions.



Options



Middle Mold Detector



Vacuum Device



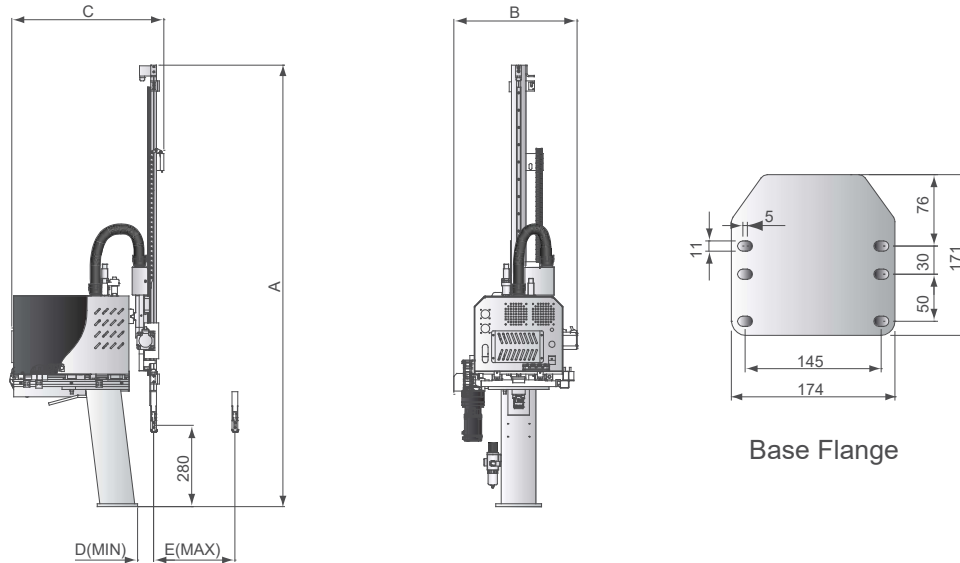
Rotate Wrist

SS2-U Series

Application

The SS2-U series robot is designed for rapid and precise removal of sprue and runner from injection molding machine, and place them into granulator for recycling. Simple product removal is applicable with optional vacuum generator and EOAT. Suitable for injection molding machine under 250T clamp force.

Outline Drawings



Specifications

Model		SS2-550-U	SS2-700-U
IMM (ton)		50~100	100~200
Crosswise Stroke (mm)		180	180
Vertical Stroke (mm)		550	700
Max.load (kg)		0.5	0.5
Min Pick-out Time (sec)		0.7	0.8
Min Cycle Time (sec)		3.1	3.2
Air Pressure (bar)		4~6	4~6
Max Air Consumption (NI/cycle)*		6	6
Weight (kg)		60	65
Dimensions (mm)	A	1400	1550
	B	417	417
	C	511	511
	D	56	56
	E	236	236

Notes: 1). "V" stands for vacuum device.

"M" stands for middle mold detector. (Suitable for three-plate mold.)

"R" stands for claw rotating group

"EM12" stands for EUROMAP 12 communication interface.

"EM67" stands for EUROMAP 67 communication interface.

"N" stands for non-operation side, operation side without "N"

2). Power supply requirement: 1Φ, 100~240V, 50/60Hz.

3). " * " Max air consumption for vacuum device 30NI/min.

We reserve the right to change specifications without prior notice.

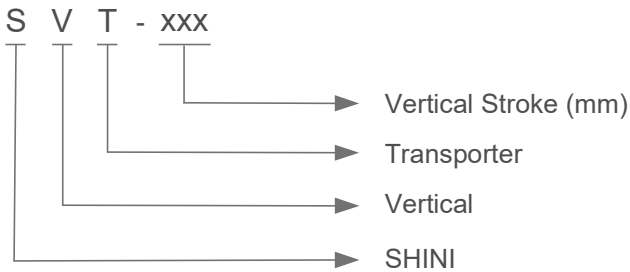
SVT Series Vertical Transporter



SVT-700

SVT Series

■ Coding Principle



■ Features

- Connect with robot signal, catch products accurately and protect the products.
- Auto up, down and tilt, transport products to workbench.
- The trays of vertical transporter nice looking and wearable avoid scratching products.
- Two-point composition and quick-connectors for conveniently usage.
- The up and down stroke can be adjusted.

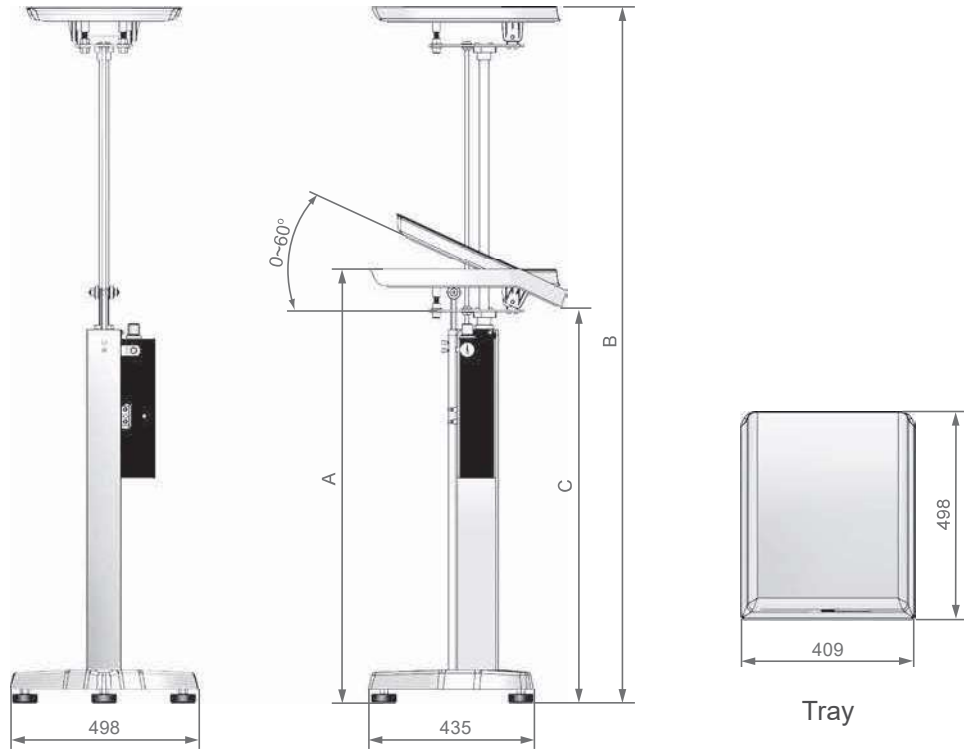
■ Application

The SVT Series vertical transporter is designed for catching products after robot picks them out from injection molding machine. The signals connect with robot, catch products accurately and safety, with two-point composition and quick-connectors, the up and down stroke can be adjusted, conveniently and rapidly, improve the production efficiency and protect operator's safety.



SVT-700 (Lateral)

Outline Drawings



Specifications

Model	SVT-500	SVT-600	SVT-700	SVT-800
A (mm)	930	1030	1130	1230
B (mm)	1450	1650	1850	2050
C (mm)	804	904	1040	1140
Net Weight (kg)	36	38	40	42
Dimensions (mm) D×W×H	498 × 498 × 930	498 × 498 × 1030	498 × 498 × 1130	498 × 498 × 1230
Power Source (V)	DC 24V			
Air Pressure (bar)	5			
IMM (ton)	50 ~ 250			
Max Load (with tool) (kg)	2			
Air Consumption(Nl/cycle)	0.5			

We reserve the right to change specifications without prior notice.

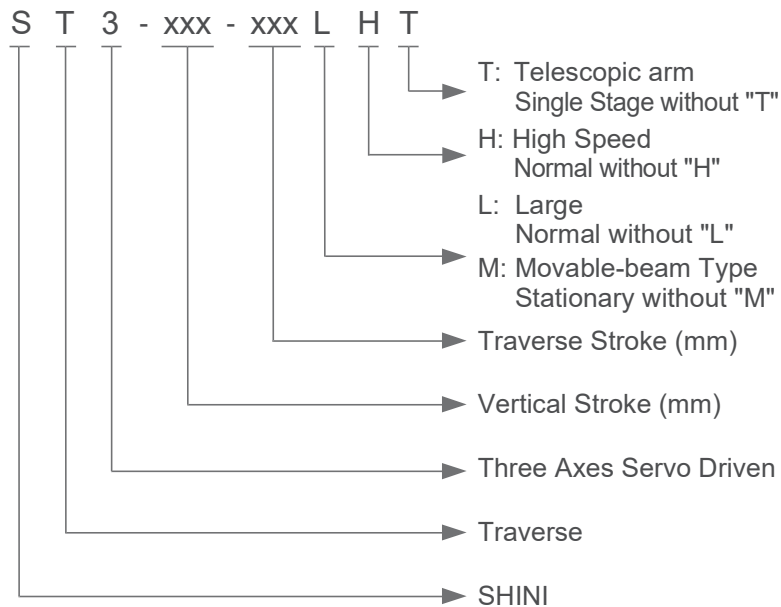
Three Axes Servo Driven Robot



ST3-900-1600

ST3 Series

Coding Principle



Control Panel



ST3-700-1400HT



ST3-700-1400T



ST3-1400-2200MT

Features

● Appearance

Designed with elegant appearance; Aluminium profiles are largely used to provide compact and streamlined appearance.

● Precision

All linear movements are driven by heavy duty servo motors with cooperation of precise linear guide rails and high power V belts; Fast, silent, and precise. Wrist mechanism employs pneumatic driven rack and pinion system, which accomplishes smooth, stable and precise flipping motion. Vertical arm with telescopic design efficiently minimizes the cycle time and height of the robot.

● Safety

Position limit sensors and blocks effectively prevent mechanical and electrical malfunctions. Control board is designed to CE EMC test with short circuit and noise proof functions.

● Convenience

Control hardware fixtures are designed with flyer structure which provides benefit to maintenance. Cable drag chains help with cable management and ease for maintenance.

ST3 Series

- Standardization

All pneumatic accessories, electric accessories, and communication Protocols meet the global standards. Interface between injection molding machine and robot is designed to EUROMAP 12, EUROMAP 67 and SPI.

- Intelligence

Base on VARAN BUS technology with world class 8.4 inch true color touch screen and object oriented program editor, complex and continuous projection can be easily programmed within minimum time. Closed circuit control system cooperating with plug and use hardware modules provides reliable movement that is capable of arranging, stacking, quality checking, in mold inserting etc. Real time remote monitoring and tediagnosis assist better equipment management. USB port allows fast data updating, saving and loading.

- User Friendly

Plug and use industrial connectors achieve simple mount and demount. Servo driven axis provides the possibility of multi points for positioning products and sprues. Multi languages displays and spaces communication connections with surrounds machines offer more flexibilities to global customers.



ST3-1200-1800MT

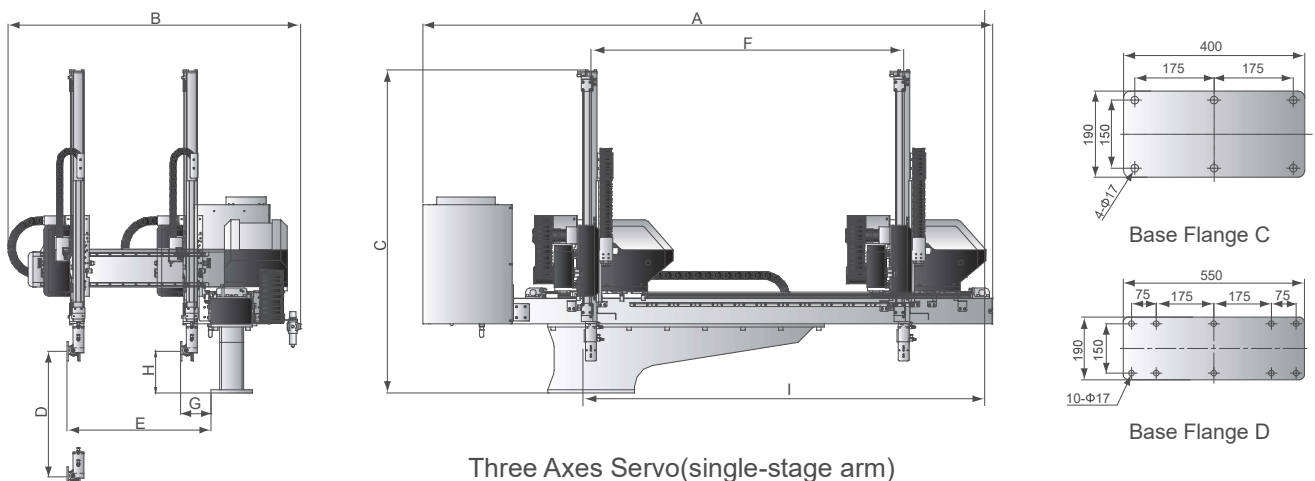


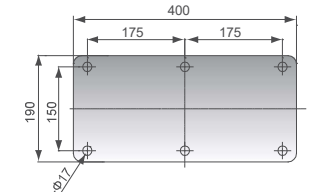
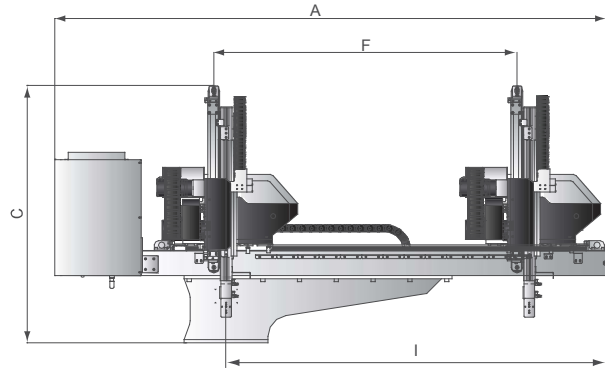
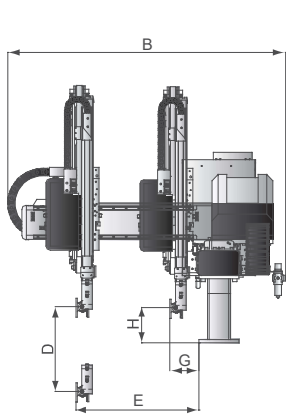
Flip Cylinder

Applications

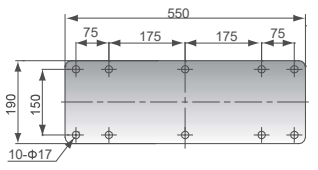
The ST3 series robot is designed for rapid and precise removal of products from injection molding machine, and place them at desired locations. Standard and telescopic arm are selectable to cooperate with 2-plate mold or hot runner system. Capable of arranging, stacking, quality checking and in mold placement. Suitable for injection molding machine under 3600T clamp force. ST3-MT particularly for refrigerator and air conditioner casing and automobile accessories.

Outline Drawings



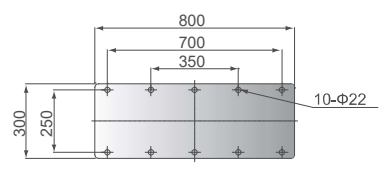
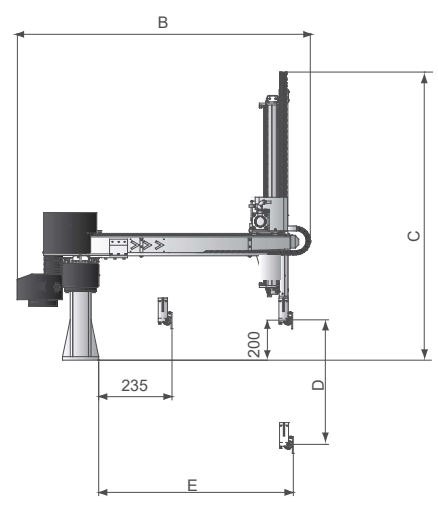
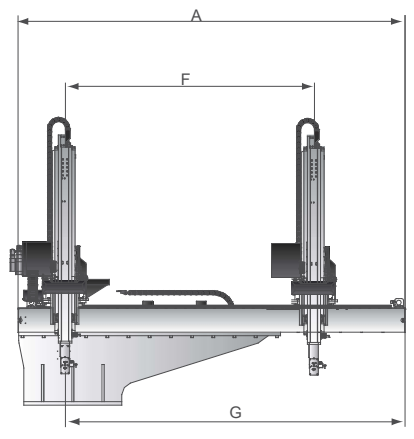


Base Flange C

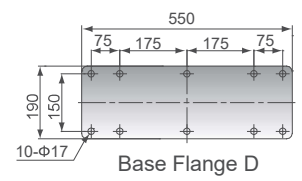


Base Flange D

Three Axes Servo Telescopic

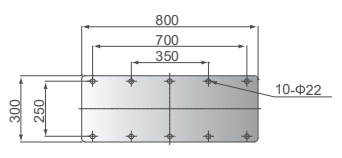
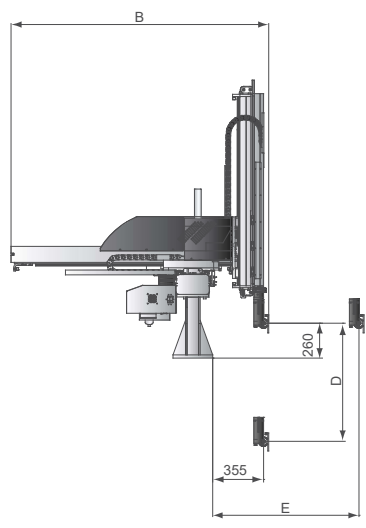
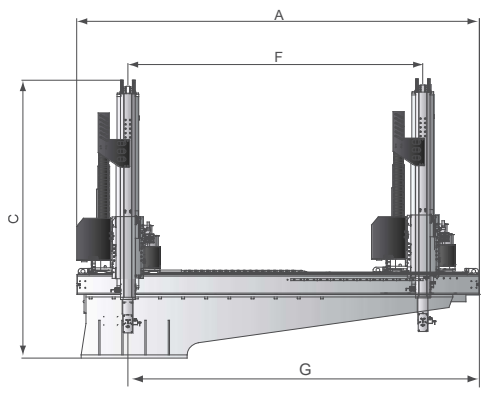


Base Flange B

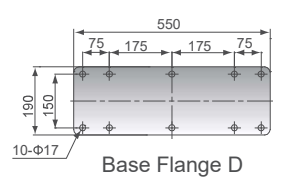


Base Flange D

Three Axes Servo Medium Telescopic (Stationary-beam type)



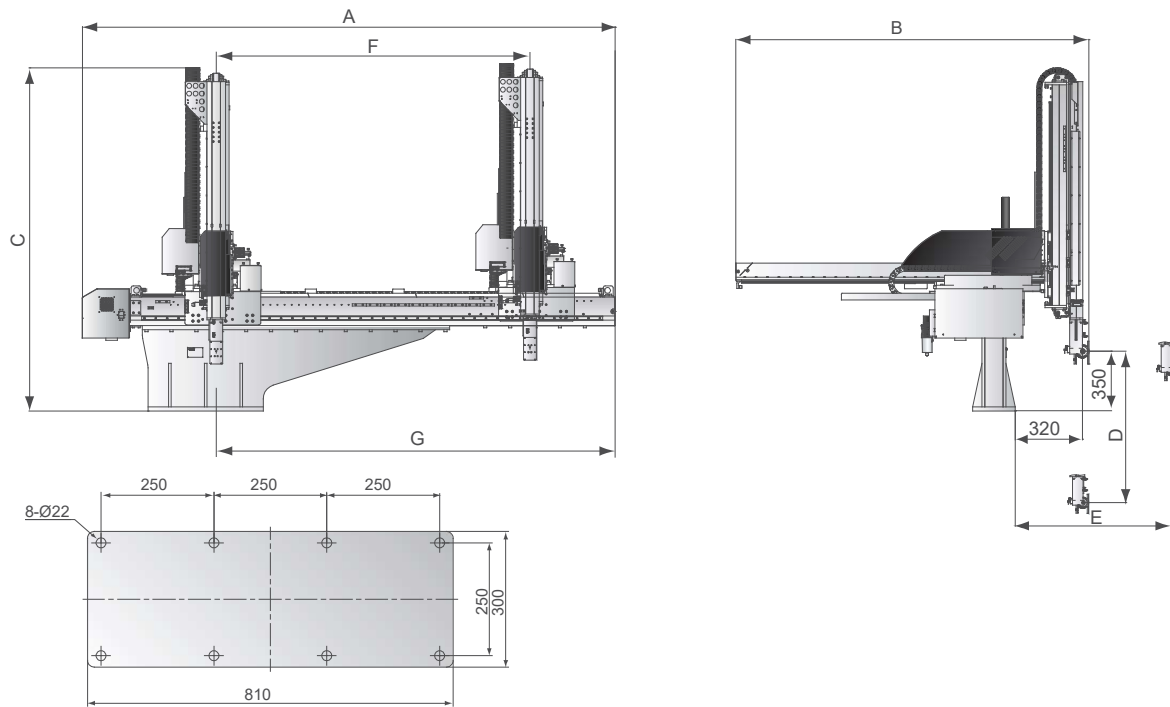
Base Flange B



Base Flange D

ST3-MT Three Axes Servo Medium Telescopic (Movable-beam Type)

ST3 Series



Base Flange

ST3-LT Three Axes Servo Large Telescopic

Specifications

Model(Single stage)	ST3-700-1200	ST3-700-1400	ST3-800-1400	ST3-900-1600	ST3-1000-1600	ST3-1100-1800	ST3-1200-1800	
IMM (ton)	50~80	80~160	160~220	220~280	280~320	320~400	400~450	
Traverse Stroke (mm)	1200	1400	1400	1600	1600	1800	1800	
Crosswise Stroke (mm)	470	470	470	560	610	690	690	
Vertical Stroke (mm)	700	700	800	900	1000	1100	1200	
Max Load (with tool) (kg)	3	3	3	5	5	5	5	
Min Pick-out Time (sec)	1.3	1.3	1.3	1.4	1.4	1.6	1.6	
Min Cycle Time (sec)	5.2	5.2	5.2	5.8	6.2	6.5	6.8	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	4~6	
Max Air Consumption (Nl/cycle)*	4	4	4	4	4	4	4	
Weight (kg)	240	240	250	270	280	300	310	
Base Type	Base C	Base C	Base C	Base C	Base C	Base D	Base D	
Dimensions (mm)	A	2480	2680	2680	2880	2880	3120	3120
	B	1350	1350	1350	1450	1490	1570	1570
	C	1490	1490	1590	1690	1800	1900	2000
	D(max)	700	700	800	900	1000	1100	1200
	E(max)	610	610	610	710	775	855	855
	F(max)	1200	1400	1400	1600	1600	1800	1800
	G	155	155	155	155	165	165	165
	H	200	200	200	200	180	180	180
	I	1660	1860	1860	2060	2060	2260	2260

Notes: 1). "M" stands for middle mold detector. (Suitable for three-plate mold.)

"EM12" stands for EUROMAP 12 communication interface.

"EM67" stands for EUROMAP 67 communication interface.

"N" stands for non-operation side, operation side without "N"

2). Power supply requirement: 1Φ, 200~240V, 50/60Hz.

3). " * " Extra 60Nl/min for vacuum application.

We reserve the right to change specifications without prior notice.

Model (Telescopic)	ST3-700-1200T	ST3-700-1400T	ST3-700-1400HT	ST3-800-1400T	ST3-900-1600T	ST3-900-1600HT	ST3-1000-1600T	ST3-1100-1800T	ST3-1100-1800HT	ST3-1200-1800T	
IMM (ton)	50~80	80-160	80-180	160-220	220-280	220-280	280~320	320~400	320~400	400~450	
Traverse Stroke (mm)	1200	1400	1400	1400	1600	1600	1600	1800	1800	1800	
Crosswise Stroke (mm)	425	425	425	425	525	525	650	680	680	680	
Vertical Stroke (mm)	700	700	700	800	900	900	1000	1100	1100	1200	
Max Load (with tool) (kg)	3	3	3	3	5	5	5	5	5	5	
Min Pick-out Time (sec)	1.2	1.2	0.8	1.2	1.3	1	1.3	1.5	1.2	1.5	
Min Cycle Time (sec)	5	5	4.5	5	5.5	4.8	6	6.2	5	6.5	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	4~6	4~6	4~6	4~6	
Max Air Consumption (Nl/cycle)*	4	4	4	4	4	4	4	4	4	4	
Weight (kg)	240	240	245	250	270	275	280	300	300	310	
Base Type	Base C	Base C	Base C	Base C	Base C	Base C	Base C	Base D	Base D	Base D	
Dimensions (mm)	A	2480	2680	2680	2680	2880	2880	2940	3120	3120	3120
	B	1365	1365	1365	1365	1465	1465	1550	1610	1610	1610
	C	1220	1220	1220	1270	1330	1330	1380	1440	1440	1490
	D	700	700	700	800	900	900	1000	1100	1100	1200
	E	630	630	630	630	720	720	805	865	865	865
	F	1200	1400	1400	1400	1600	1600	1600	1800	1800	1800
	G	155	155	155	155	155	155	155	155	155	155
	H	170	170	170	170	180	180	200	200	200	200
	I	1660	1860	1860	2060	2060	2260	2260	2460	2460	2460

- Notes: 1). "M" stands for middle mold detector. (Suitable for three-plate mold.)
 "EM12" stands for EUROMAP 12 communication interface.
 "EM67" stands for EUROMAP 67 communication interface.
 "N" stands for non-operation side, operation side without "N"
 2). Power supply requirement: 1Φ, 200~240V, 50/60Hz.
 3). " * " Extra 60NI/min for vacuum application.

We reserve the right to change specifications without prior notice.

Model (Stationary-beam)	ST3-1300-2000T	ST3-1400-2000T	ST3-1500-2200T	ST3-1600-2200T	ST3-1700-2200T	
IMM (ton)	450-600T	450-600T	600~700T	700~850T	700~850T	
Traverse Stroke (mm)	2000	2000	2200	2200	2200	
Crosswise Stroke (mm)	800	900	900	1000	1100	
Vertical Stroke (mm)	1300	1400	1500	1600	1700	
Max Load (with tool) (kg)	10	10	12	12	12	
Min Pick-out Time (sec)	3	3	3.2	3.3	3.4	
Min Cycle Time (sec)	12.5	13	13.5	14	15	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	
Max Air Consumption (Nl/cycle)*	6	6	6	6	6	
Weight (kg)	500	530	550	580	600	
Base Type	Base D	Base D	Base D	Base B	Base B	
Dimensions (mm)	A	2800	2800	3000	3000	3000
	B	2000	2100	2100	2250	2350
	C	1700	1750	1800	2050	2150
	D(max)	1300	1400	1500	1600	1700
	E(max)	1050	1150	1150	1250	1250
	F(max)	2000	2000	2200	2200	2200
	G	2700	2700	2900	2900	2900

- Notes: 1). "M" stands for middle mold detector. (Suitable for three-plate mold.)
 "EM12" stands for EUROMAP 12 communication interface.
 "EM67" stands for EUROMAP 67 communication interface.
 "N" stands for non-operation side, operation side without "N"
 2). Power supply requirement: 1Φ, 200~240V, 50/60Hz.
 3). " * " Extra 60NI/min for vacuum application.

We reserve the right to change specifications without prior notice.

ST3 Series

Specifications

ST3-MT (Movable-beam type)	ST3-1200- 1800MT	ST3-1300- 2000MT	ST3-1400- 2000MT	ST3-1500- 2200MT	ST3-1600- 2200MT	ST3-1700- 2200MT	
IMM (ton)	300~450T	450~600T	450~600T	600~700T	700~850T	700~850T	
Traverse Stroke (mm)	1800	2000	2000	2200	2200	2200	
Crosswise Stroke (mm)	800	800	900	900	1000	1000	
Vertical Stroke (mm)	1200	1300	1400	1500	1600	1700	
Rated(Max)Load (with tool)(kg)	10(15)	10(15)	10(15)	10(15)	20(30)	20(30)	
Min. Pickout Time (sec)	2.8	3	3	3.2	3.3	3.4	
Min. Cycle Time (sec)	12	12.5	13	13.5	14	15	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	
Max.Air Consumption (Nl/cycle) *	6	6	6	6	6	6	
Weight (kg)	480	500	530	550	580	600	
Base Type	Base D	Base D	Base D	Base B	Base B	Base B	
Dimension (mm)	A	2847	3047	3047	3247	3247	3247
	B	1617	1617	1717	1717	1817	1817
	C	1790	1840	1890	1940	2020	2070
	D(max)	1200	1300	1400	1500	1600	1700
	E(max)	1155	1155	1255	1255	1355	1355
	F(max)	1800	2000	2000	2200	2200	2200
	G	2250	2450	2450	2650	2650	2650

ST3-MT (Medium Open Telescopic)	ST3-1800-2400MT	ST3-1900-2400MT	ST3-2000-2800MT	ST3-2100-2800MT	ST3-2200-3000MT	
IMM (ton)	850~1400T	850~1400T	1400~1800T	1400~1800T	1800~2400T	
Traverse Stroke (mm)	2400	2400	2800	2800	3000	
Crosswise Stroke (mm)	1200	1200	1200	1400	1400	
Vertical Stroke (mm)	1800	1900	2000	2100	2200	
Rated(Max)Load (with tool)(kg)	20(30)	20(30)	20(30)	20(30)	20(30)	
Min. Pickout Time (sec)	3.6	3.6	3.8	3.8	4	
Min. Cycle Time (sec)	16	17	17.5	18	19	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	
Max.Air Consumption (Nl/cycle) *	6	6	6	6	6	
Weight (kg)	650	670	690	720	750	
Base Type	Base B	Base B	Base B	Base B	Base B	
Dimension (mm)	A	3447	3447	3847	3847	4047
	B	2017	2017	2017	2270	2270
	C	2120	2170	2220	2270	2320
	D(max)	1800	1900	2000	2100	2200
	E(max)	1555	1555	1555	1755	1755
	F(max)	2400	2400	2800	2800	3000
	G	2850	2850	3250	3250	3450

Notes: 1). "M" stands for middle mold detector (suitable for three-plate mold).

"EM12" stands for EUROMAP 12 communication interface.

"EM67" stands for EUROMAP 67 communication interface.

"N" stands for non-operation side, operation side without "N"

2) " * " Extra 60Nl/min for vacuum application.

3) Power supply: 1Φ, 200~240V, 50/60Hz.

We reserve the right to change specifications without prior notice.

ST3-LT (Large Telescopic)		ST3-1800-2400LT	ST3-2000-2800LT
IMM (ton)		850 ~ 1400T	1400 ~ 1800T
Traverse Stroke (mm)		2400	2800
Crosswise Stroke (mm)		1340	1500
Vertical Stroke (mm)		1800	2000
Rated(Max)Load (with tool)(kg)		40(60)	40(60)
Min. Pickout Time (sec)		3.8	4.0
Min. Cycle Time (sec)		20	22
Air Pressure (bar)		4 ~ 6	4 ~ 6
Max. Air Consumption (Nl/cycle)*		8	8
Weight (kg)		920	950
Dimension (mm)	A	3800	4200
	B	2500	2650
	C	2400	2500
	D (max)	1800	2000
	E (max)	1750	1900
	F (max)	2400	2800
	G	2900	3300

ST3-LT (Large Telescopic)		ST3-2200-3000LT	ST3-2600-3200LT	ST3-3000-3400LT
IMM (ton)		1800 ~ 2400T	2400 ~ 3000T	3000 ~ 3600T
Traverse Stroke (mm)		3000	3200	3400
Crosswise Stroke (mm)		1500	1660	1820
Vertical Stroke (mm)		2200	2600	3000
Rated(Max)Load (with tool)(kg)		40(60)	40(60)	40(60)
Min. Pickout Time (sec)		4.2	4.5	5.0
Min. Cycle Time (sec)		24	26	28
Air Pressure (bar)		4 ~ 6	4 ~ 6	4 ~ 6
Max. Air Consumption (Nl/cycle)*		8	8	8
Weight (kg)		990	1010	1080
Dimension (mm)	A	4400	4600	4800
	B	2650	2820	2980
	C	2600	2800	3000
	D (max)	2200	2600	3000
	E (max)	1900	2050	2250
	F (max)	3000	3200	3400
	G	3500	3700	3900

- Notes: 1). "M" stands for middle mold detector (suitable for three-plate mold).
 "EM12" stands for EUROMAP 12 communication interface.
 "EM67" stands for EUROMAP 67 communication interface.
 "N" stands for non-operation side, operation side without "N"
- 2) " * " Max. air consumption for vacuum device 60Nl/min.
 3) Power supply: 1Φ, 200~240V, 50/60Hz.

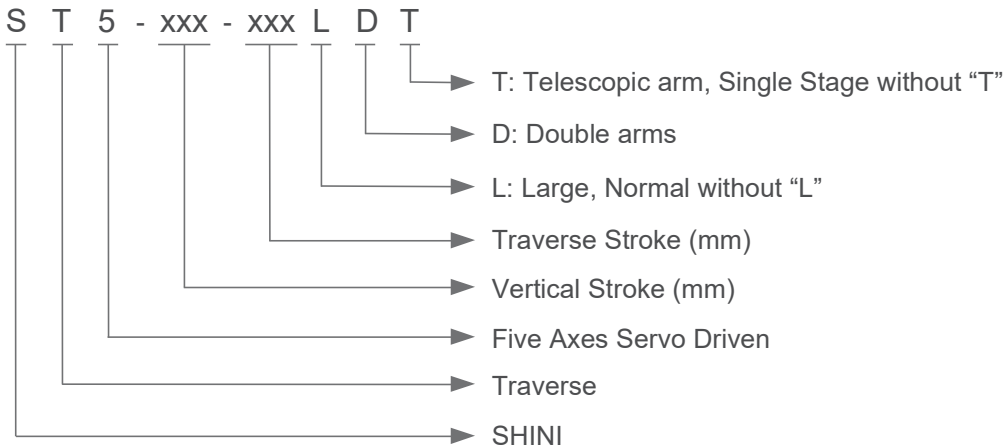
We reserve the right to change specifications without prior notice.

Five Axes Servo Driven Robot



ST5-900-1600DT

Coding Principle



Features

● Appearance

Designed with elegant appearance; Aluminium profiles are largely used to provide compact and streamlined appearance.

● Precision

All linear movements are driven by heavy duty servo motors with cooperation of precise linear guide rails and high power V belts; Fast, silent, and precise. Wrist mechanism employs pneumatic driven rack and pinion system, which accomplishes smooth, stable and precise flipping motion. Vertical arms with telescopic design efficiently minimizes the cycle time and height of the robot.

● Safety

Position limit sensors and blocks effectively prevent mechanical and electrical malfunctions. Control board is designed to CE EMC test with short circuit and noise proof functions.

● Convenience

Control hardware fixtures are designed with flyer structure which provides benefit to maintenance. Cable drag chains help with cable management and ease for maintenance.

● Standardization

All pneumatic accessories, electric accessories, and communication Protocols meet the global standards. Interface between injection molding machine and robot is designed to EUROMAP 12, EUROMAP 67 and SPI.

● Intelligence

Base on VARAN BUS technology with world class 8.4 inch true color touch screen and object oriented program editor, complex and continuous projection can be easily programmed within minimum time. Closed circuit control system cooperating with plug and use hardware modules provides reliable movement that is capable of arranging, stacking, quality checking, in mold inserting etc. Real time remote monitoring and tediagnosis assist better equipment management. USB port allows fast data updating, saving and loading.



Control Panel

ST5 Series

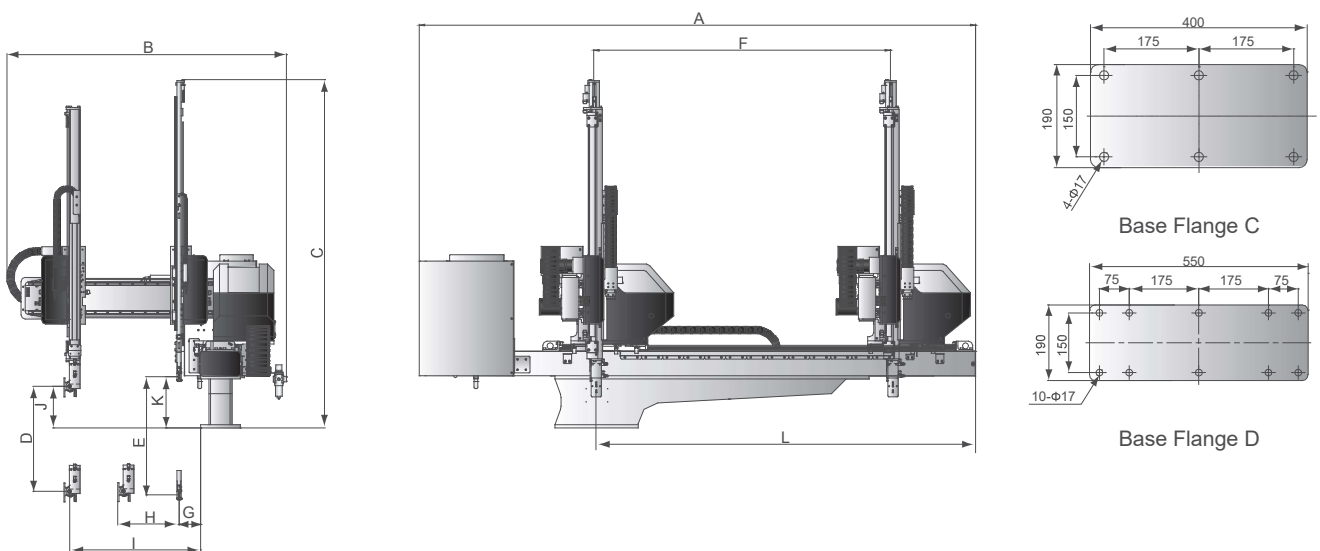
- User Friendly

Plug and use industrial connectors achieve simple installation and uninstallation. Servo driven axis provides the possibility of multi points for positioning products and sprues. Multi languages displays and spares communication connections with surrounds machines offer more flexibilities to global customers.

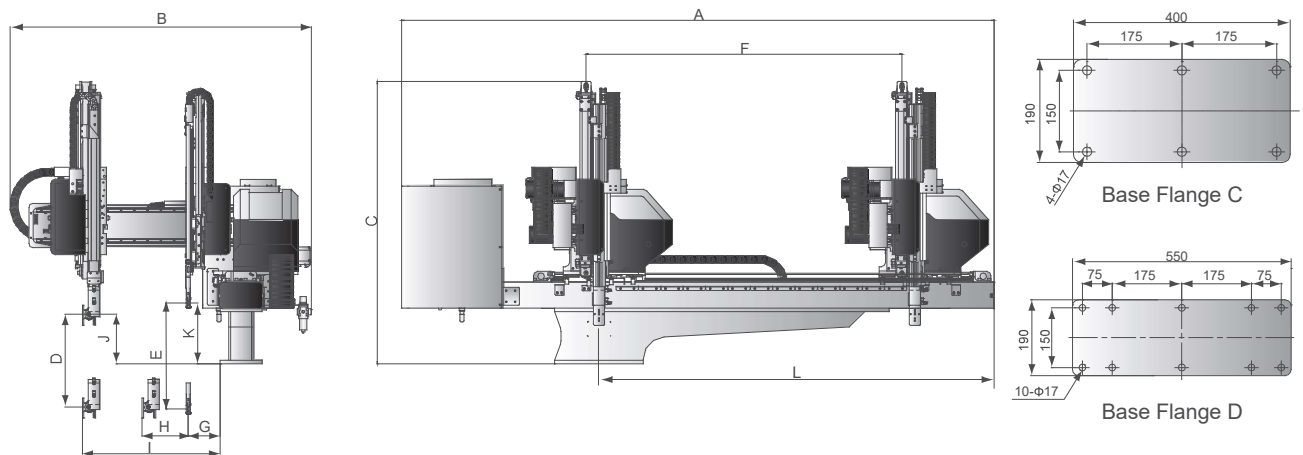
Applications

The ST5 series robot is designed for rapid and precise removal of sprue and products from injection molding machine, and place them at desired locations. Standard and telescopic arms are selectable to cooperate with 2-plate mold, 3-plate mold or hot runner system. Capable of arranging, stacking, quality checking and in mold placement. Suitable for injection molding machine under 3600T clamp force.

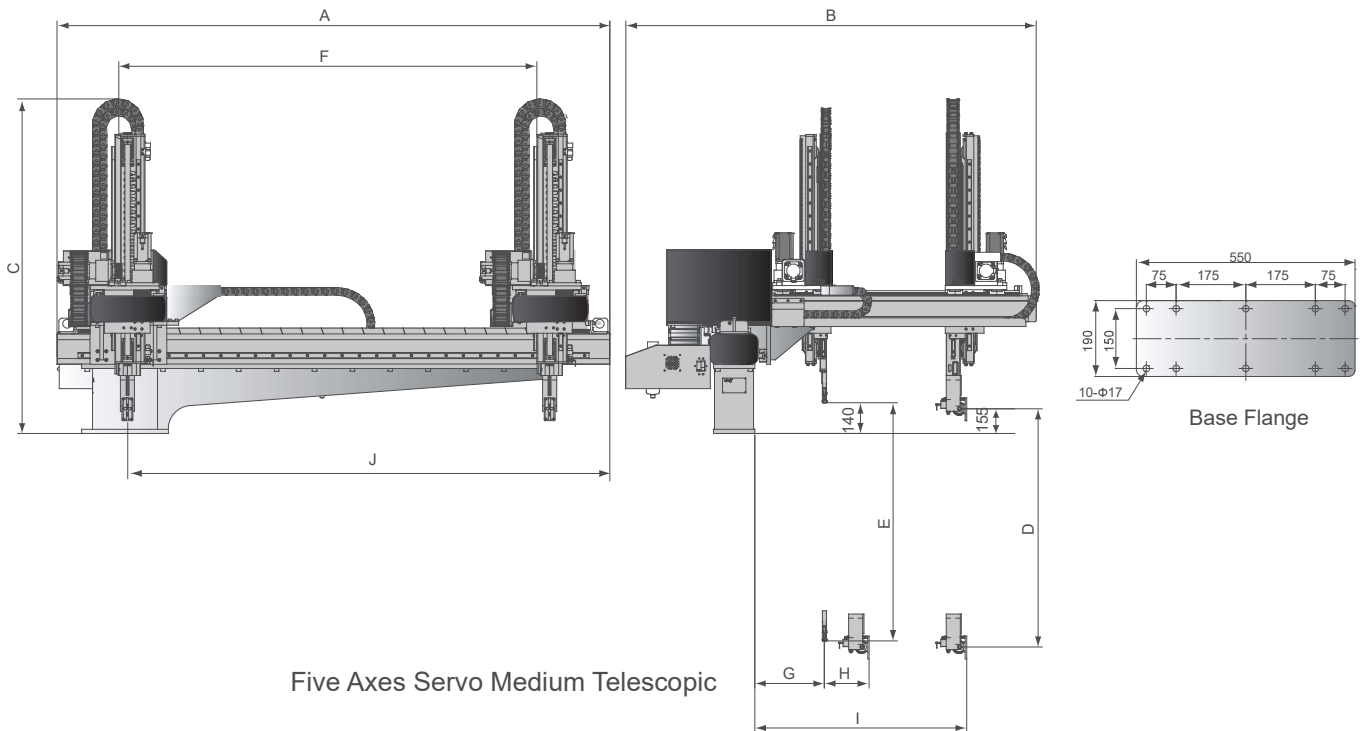
Outline Drawings



Five Axes Servo(single stage arm)



Five Axes Servo Telescopic



Five Axes Servo Medium Telescopic

Specifications

Model(Single stage)	ST5-700-1200D	ST5-700-1400D	ST5-800-1400D	ST5-900-1600D	ST5-1000-1600D	ST5-1100-1800D	ST5-1200-1800D	
IMM (ton)	50-80	80-160	160-220	220-280	280-320	320-400	400-450	
Traverse Stroke (mm)	1200	1400	1400	1600	1600	1800	1800	
Crosswise Stroke (mm)	Main arm	370	370	420	530	590	590	
	Sub arm	370	370	370	420	530	590	
Vertical Stroke (mm)	Main arm	700	700	800	900	1000	1200	
	Sub arm	750	750	850	950	1050	1250	
Max Load (with tool) (kg)	3	3	3	5	5	5	5	
Min Pick-out Time (sec)	1.3	1.3	1.3	1.4	1.4	1.6	1.6	
Min Cycle Time (sec)	5.2	5.2	5.2	5.8	6.2	6.5	6.8	
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	4~6	
Max Air Consumption (NI/cycle)*	4	4	4	4	4	4	4	
Weight (kg)	260	280	290	310	320	340	350	
Base Type	Base C	Base C	Base C	Base C	Base C	Base D	Base D	
Dimensions (mm)	A	2540	2740	2740	2960	2960	3160	3160
	B	1390	1390	1390	1410	1600	1660	1660
	C	1630	1630	1730	1830	1930	2030	2130
	D (max)	700	700	800	900	1000	1100	1200
	E (max)	750	750	850	950	1050	1150	1250
	F (max)	1200	1400	1400	1600	1600	1800	1800
	G (min)	145	145	145	135	135	135	135
	H (min)	160	160	160	160	180	180	175
	I (max)	650	650	650	690	835	895	895
	J	150	150	150	150	180	180	180
	K	190	190	190	190	190	190	190
	L	1660	1860	1860	2060	2060	2260	2260

Notes: 1). "M" stands for middle mold detector. (Suitable for three-plate mold.)

"EM12" stands for EUROMAP 12 communication interface.

"EM67" stands for EUROMAP 67 communication interface.

"N" stands for non-operation side, operation side without "N"

2). Power supply requirement: 1Φ, 200~240V, 50/60Hz.

3). " * " Extra 60NI/min for vacuum application.

We reserve the right to change specifications without prior notice.

ST5 Series

Model(Small Telescopic)	ST5-700-1200DT	ST5-700-1400DT	ST5-800-1400DT	ST5-900-1600DT	ST5-1000-1600DT	ST5-1100-1800DT	ST5-1200-1800DT
IMM (ton)	50-80	80-160	160-220	220-280	280~320	320~400	400~450
Traverse Stroke (mm)	1200	1400	1400	1600	1600	1800	1800
Crosswise Stroke (mm)	Main arm	320	320	320	370	475	535
	Sub arm	320	320	320	370	475	535
Vertical Stroke (mm)	Main arm	700	700	800	900	1000	1100
	Sub arm	750	750	850	950	1050	1150
Max Load (with tool) (kg)	3	3	3	5	5	5	5
Min Pick-out Time (sec)	1.2	1.2	1.2	1.3	1.3	1.5	1.5
Min Cycle Time (sec)	5	5	5	5.5	6	6.2	6.5
Air Pressure (bar)	4~6	4~6	4~6	4~6	4~6	4~6	4~6
Max Air Consumption (NI/cycle) *	4	4	4	4	4	4	4
Weight (kg)	280	280	290	310	320	340	350
Base Type	Base C	Base C	Base C	Base C	Base C	Base D	Base D
Dimensions (mm)	A	2535	2735	2735	2955	2955	3155
	B	1430	1430	1430	1490	1610	1670
	C	1220	1220	1270	1340	1400	1460
	D	700	700	800	900	1000	1100
	E	750	750	850	950	1050	1150
	F	1200	1400	1400	1600	1600	1800
	G	185	185	185	185	185	185
	H	140	140	140	140	135	145
	I	645	645	645	700	805	865
	J	175	175	175	185	205	205
	K	220	220	220	245	245	245
	L	1660	1860	1860	2060	2060	2260

Model(Medium telescopic)	ST5-1300-2000DT	ST5-1500-2200DT
IMM (ton)	450 ~ 650	650 ~ 850
Traverse Stroke (mm)	2000	2200
Crosswise Stroke (mm)	Main arm	630
	Sub arm	630
Vertical Stroke (mm)	Main arm	1300
	Sub arm	1350
Max Load (with tool) (kg)	10	12
Min Pick-out Time (sec)	3.2	3.5
Min Cycle Time (sec)	9	9.5
Air Pressure (bar)	4 ~ 6	4 ~ 6
Max Air Consumption (NI/cycle) *	5	5
Weight (kg)	810	930
Dimensions (mm)	A	2800
	B	2020
	C	1650
	D (max)	1300
	E (max)	1350
	F (max)	2000
	G (min)	245
	H (min)	170
	I (max)	1100
	J	2700

- Notes: 1). "M" stands for middle mold detector. (Suitable for three-plate mold.)
 "EM12" stands for EUROMAP 12 communication interface.
 "EM67" stands for EUROMAP 67 communication interface.
 "N" stands for non-operation side, operation side without "N"
 2). Power supply requirement: 1Φ, 200~240V, 50/60Hz.
 3). " * " Extra 60NI/min for vacuum application.

We reserve the right to change specifications without prior notice.

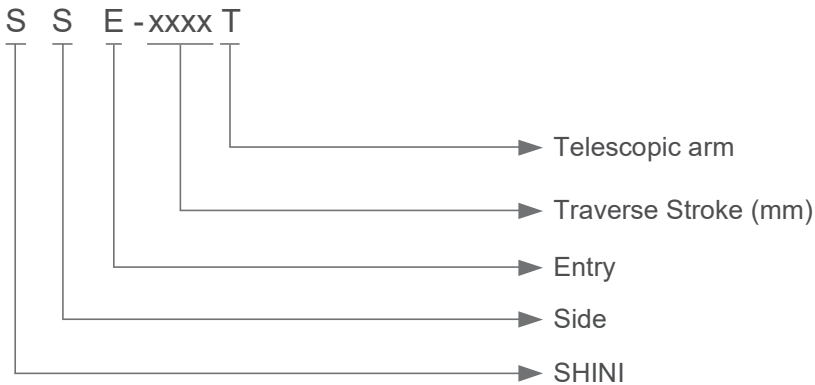
Side Entry Robot



SSE-1400T

SSE Series

■ Coding Principle



Home page

■ Features

- Employs floor standing, separate from injection molding machine without mechanical vibration frequency interfere.
- Adopt the design of telescopic arm spindle, having achieved double speed and running fast and smooth
- Main-axis is driven by servo motor, high-precision positioning and rapid response
- Servo motors driven stacking units.
- Conveyor and safety guarding included.

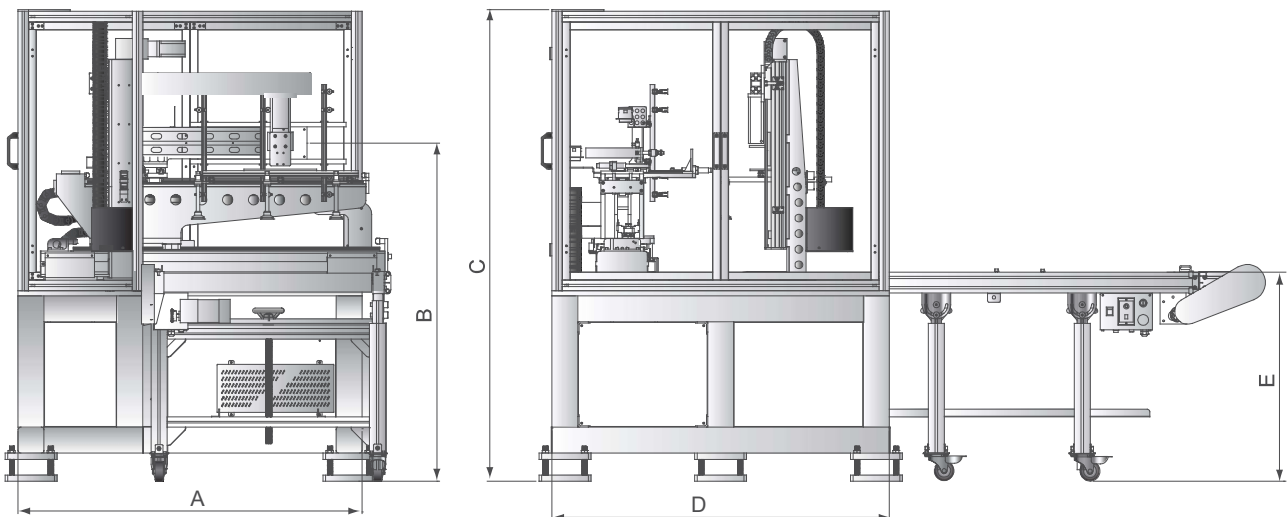


Program page

■ Application

SSE robot is designed for thin-walled products which cycle time below 6sec. With its high speed features can improve the production efficiency. Suitable for injection molding machine with clamping force under 450 tons.

■ Outline Drawings



Specifications

Model		SSE-1000T	SSE-1200T	SSE-1400T	SSE-1600T	SSE-1800T
IMM (Ton)		50~160	160~220	220~300	300~400	400~450
Main Axis	Traverse Stroke (mm)	1000	1200	1400	1600	1800
	Crosswise Stroke (mm)	125	125	125	125	125
Stacking	Traverse Stroke (mm)	500	500	500	500	600
	Crosswise Stroke (mm)	100	100	100	100	100
	Gripper angle (deg)	90	90	90	90	90
Conveyor	Belt length (mm)	400	600	800	800	1000
	Belt width (mm)	2000	2000	2000	2000	2000
	Adjustable height (mm)	700~1000	700~1000	700~1000	700~1000	700~1000
Max. Load(with tool)(kg)		6	6	6	6	6
Min Cycle Time (sec)		4	4.1	4.2	4.6	5
Air Pressure (Bar)		4~6	4~6	4~6	4~6	4~6
Dimensions (mm)	A	1150	1250	1325	1425	1525
	B	Design according to the IMM parameters				
	C	1800	1800	1800	1800	1800
	D	1300	1300	1300	1300	1300
	E	700~1000	700~1000	700~1000	700~1000	700~1000
Power		1Φ, 200~240V, 50/60Hz			3Φ, 380~440V, 50/60Hz	

Note: 1) "EM12" stands for EUROMAP 12 communication interface
 "EM67" stands for EUROMAP 67 communication interface
 2) " * " Extra 60NI/min air consumption for vacuum device

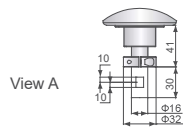
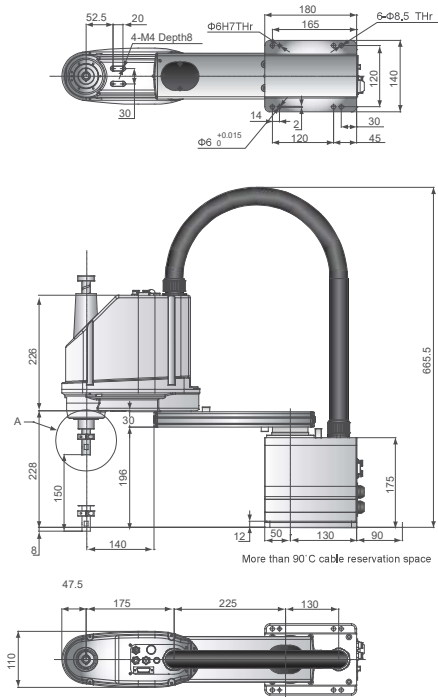
SCARA Selective Compliance Assembly Robot Arm



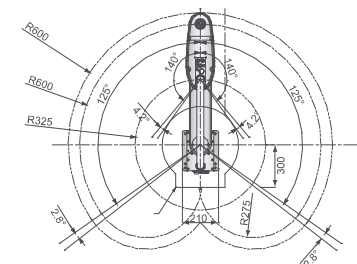
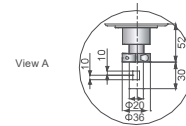
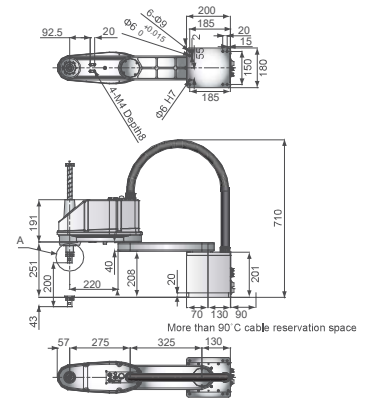
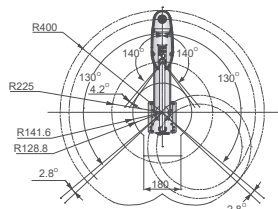
SCARA

SCARA Series

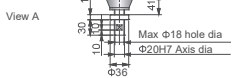
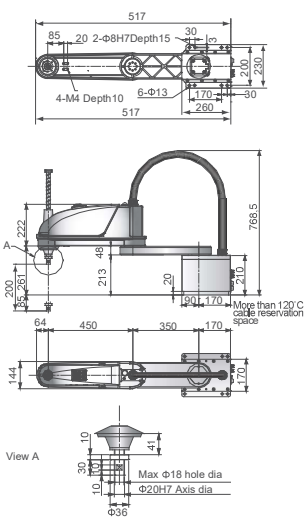
Outline Drawings



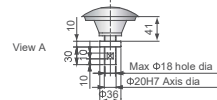
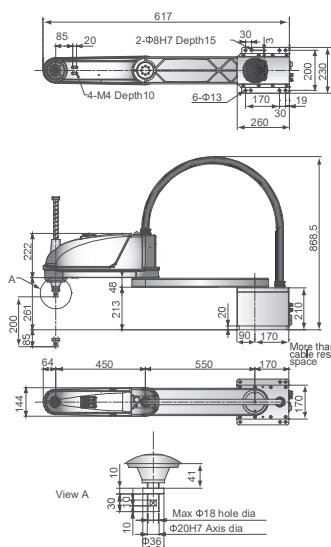
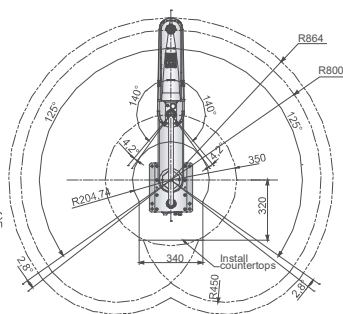
S4-SR400



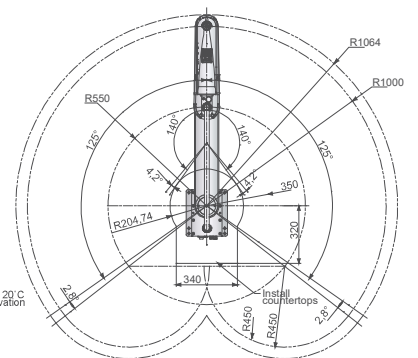
S4-SR600



S4-SR800



S4-SR1000



SCARA Series

Selective compliance assembly robot arm is driven by 4 servo motors with fast and lightweight structure. It is most suitable for vertical assembly on the platform. For example, insert parts into products for vertical IMM.

SCARA robot is widely used in welding, palletizing, handling, processing and manufacturing, and injection molding. For example, pick-out car bumper, in robot idle time cutting sprues as well as deflashing, edge processing, product assembly and handling work.

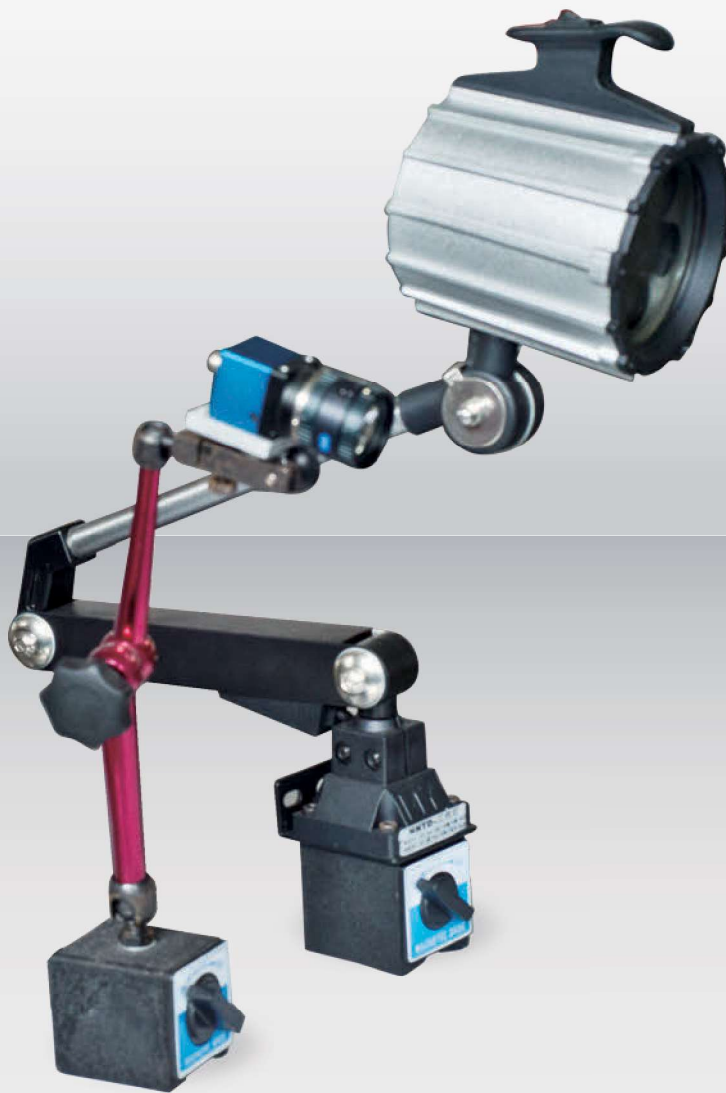
Specifications

Model		S4-SR400	S4-SR600	S4-SR800	S4-SR1000
Type		HorizontalArticulated	HorizontalArticulated	HorizontalArticulated	HorizontalArticulated
Axis Qty		4	4	4	4
Arm Length(mm)		400	600	800	1000
Axis work speed	1 st ~2 nd joint	6000mm/s	6500mm/s	9000mm/s	9000mm/s
	3 rd joint	900mm/s	1100mm/s	1000mm/s	1000mm/s
	4 th joint	1500°/s	1500°/s	1500°/s	1500°/s
Repeatability	1 st ~2 nd joint	±0.02mm	±0.03mm	±0.03mm	±0.03mm
	3 rd joint	±0.01mm	±0.02mm	±0.02mm	±0.02mm
	4 th joint	±0.02°	±0.02°	±0.02°	±0.02°
Max work envelope	1 st joint	±130°	±125°	±125°	±125°
	2 nd joint	±140°	±140°	±140°	±140°
	3 rd joint	0~150mm	0~200mm	0~200mm	0~200mm
	4 th joint	±360°	±360°	±360°	±360°
Load	Rated load	1kg	3kg	5kg	10kg
	Max load	3kg	5kg	10kg	20kg
Servo power	1 st joint	400W	400W	750W	750W
	2 nd joint	100W	200W	400W	400W
	3 rd joint	100W	100W	200W	200W
	4 th joint	100W	100W	200W	200W
Cycle time		0.55s	0.50s	0.55s	0.50s
Tension of 3 rd joint		100N	100N	100N	100N
Allow moment of inertia (kgm ²)		0.05	0.12	0.12	0.12
Reset		No need reset	No need reset	No need reset	No need reset
Robot weight (kg)		13	23	23	23
User wiring diagram		DB-15 pin	DB-15 pin	DB-15 pin	DB-15 pin
User Air diagram		Ø4×2	Ø4×2	Ø4×2,Ø6×2	Ø4×2,Ø6×2

Notes: 1). Power supply requirement: 1Φ,100~240V, 50/60Hz.

We reserve the right to change specifications without prior notice.

Mold Visual Monitoring System

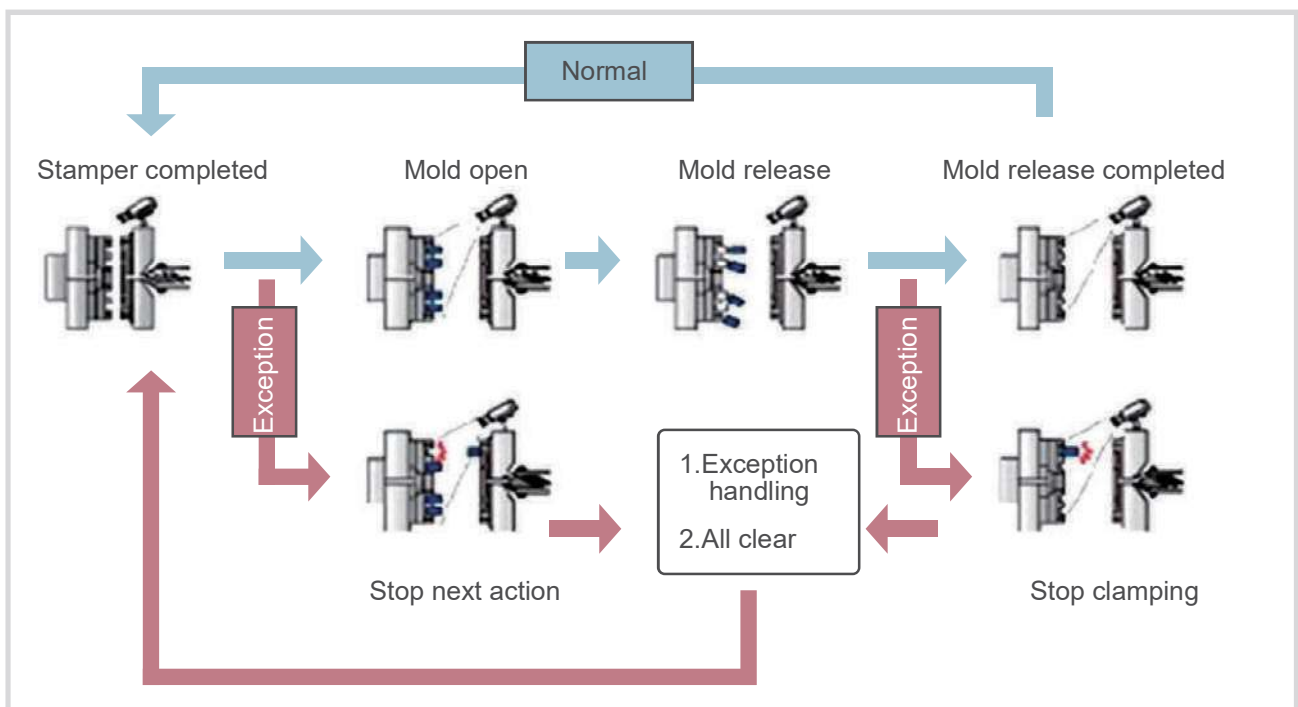


SMV

Summary

Mold is one of the most important part for manufacturing industry. Its quality, precision and life-time are directly affecting the product quality and production cost. Therefore, the issue to extend the life-time of the mold is very significant. In actual production, most of the mold are non-monitoring, it's a problem to ensure the ejector back in position and no product residues in the mold for causing damage to the mold.

Mold monitor is based on image processing principle. It can replace worker to monitor the mold in real time and protect the mold, avoiding non-productive time and ensuring production persistency.



Function

- Check the inserted-part location after inserting the part into the mold;
- Check product ejection after mold open;
- Check any short-shot part or reject product after mold open;
- Check product ejection after taking out the product;
- Check any abnormal thing on the mold after taking out the product;
- Check the core puller and ejector is back to position after taking out the product;
- Reduce unnecessary ejection and mold-closing shorten the production cycle.



Main controller



Camera and light source



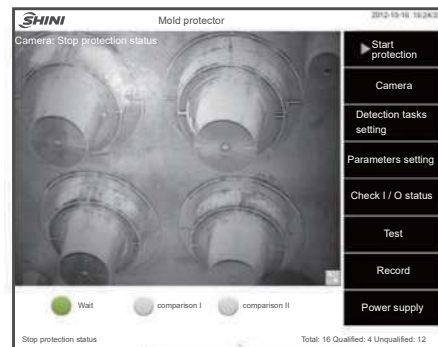
Bracket



Wiring

Features

- Rapid:**
Min. processing time under 0.02sec
- Accurate:**
Good inspection efficiency and high precision
- Simple:**
Easy to learn
- Data:**
Real-time recording alarm screen, easy to look back
Support ethernet to connect with production management system and present production data accordance to setting
- Intelligence:**
Adaptive to external light changes
Adaptive to different mold displacement



Specification

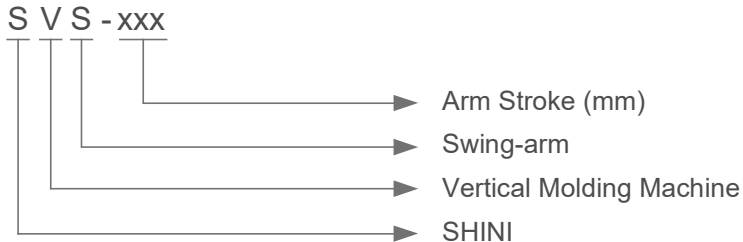
Model	SMV-A1	SMV-A2	SMV-A3	SMV-A4	SMV-A5	SMV-A6	
Main controller	Working temperature		0~60°C				
	Power supply		220VAC/12VDC				
	Dimensions		258×148×60 (W×D×H)	325×260×70 (W×D×H)	310×232×68 (W×D×H)		
	Fastest processing time		≤0.02s				
	Power		65W			100W	
	Screen Size		10"-TFT-LCD		12"-TFT-LCD		
	Resolution		1280×800		1024×768		
	Weight		≤2.2kg		≤4kg		
Camera	Quantity	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
	Resolution	2592×1944					
	Voltage	5VDC					
	Lens number	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
	Lens quantity	Standard: 12-36mm, Optional: 6-50mm					
I/O signal line	I/O model	3DI/4DO					
	I/O operating voltage	12~24VDC					
Magnetic frame	Quantity	2pcs	4pcs	5pcs	6pcs	7pcs	8pcs
Light source	Quantity	1pcs	2pcs				

Vertical Molding Machine Swing-arm Robot



SVS-550

■ Coding Principle



■ Features

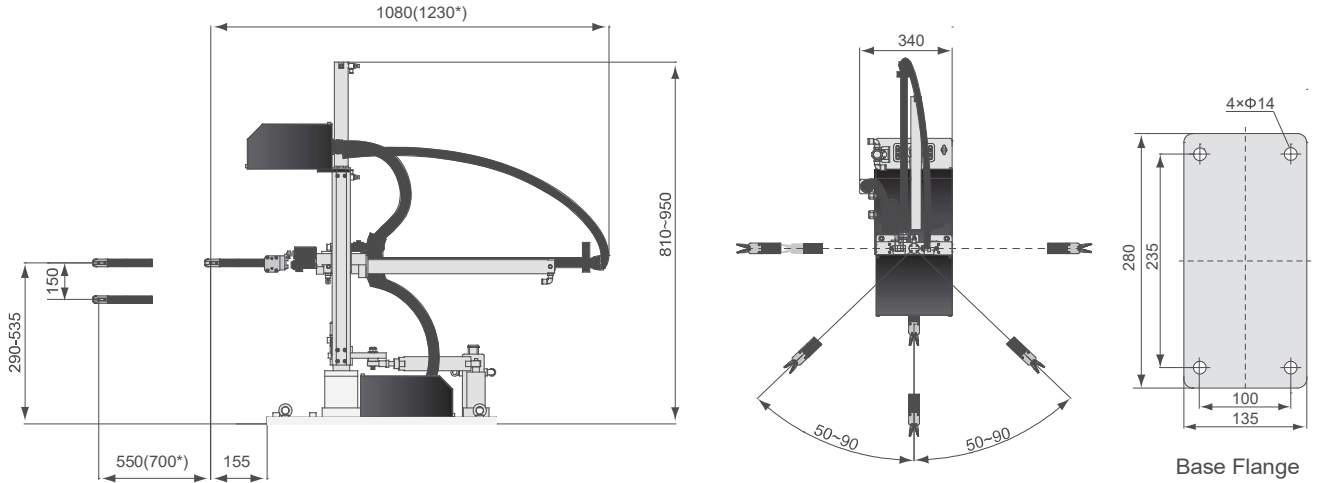
- Appearance
Designed with frame-type style, compact and streamlined appearance.
- Safety
Proximity sensors and anti-collision devices are applied to all moving directions in order to provide safety mechanically and electrically.
- Convenience
All limitation device are fixed by sliders, users can adjust them by need, easy to use. Cylinder air flow can be adjusted by filter regulating valve.
- Standardization
All pneumatic accessories, electric accessories, and communication protocols meet the global standards. Interface between injection molding machine and robot is compliance with EUROMAP 12, EUROMAP 67 and SPI.
- User Friendly
Signals can be connected by EUROMAP push-pull connector, easy to plug-in and plug-out. Reserved 4 extra I/O pins for other applications.
- Intelligence
Dialogic hand controller supports 3 languages, including Traditional Chinese, Simplified Chinese and English. System includes 8 standards programs and 50 sets teach programs which can store mold processing conditions and data. The controller also have self-diagnosis function.

■ Application

The SVS series robot is designed for rapid and precise removal of sprue and runner from vertical molding machine, and place them into granulator for recycling.

SVS Series

Outline Drawings



Notes: “*” stands for size, only refer to SVS-700.

Specifications

Model	SVS-550	SVS-700
IMM(ton)	50~150	100~200
Vertical Stroke(mm)	0~150	0~150
Arm Stroke(mm)	0~550	0~700
Swing Angle(deg)	50~90	50~90
Wrist Angle(deg)	180	180
Max Load (with tool)(kg)	0.5	0.5
Min Pick-out Time(sec)	0.8	0.9
Min Cycle Time(sec)	3	3.2
Max Air Consumption(L)	12	14.5
Power Rating(W)	30	30
Rated Current(A)	0.5	0.5
Air Pressure(bar)	4~6	4~6
Weight(kg)	55	57
Dimensions (W×H×D) (mm)	340×810×1080	340×810×1230

Notes: 1) “EM12” stands for EUROMAP 12 communication interface.
 “EM67” stands for EUROMAP 67 communication interface.
 2) Power supply requirement: 1Φ, 200~240V, 50/60Hz.

We reserve the right to change the specifications without prior notice.