



Five Axes Servo Driven Robot



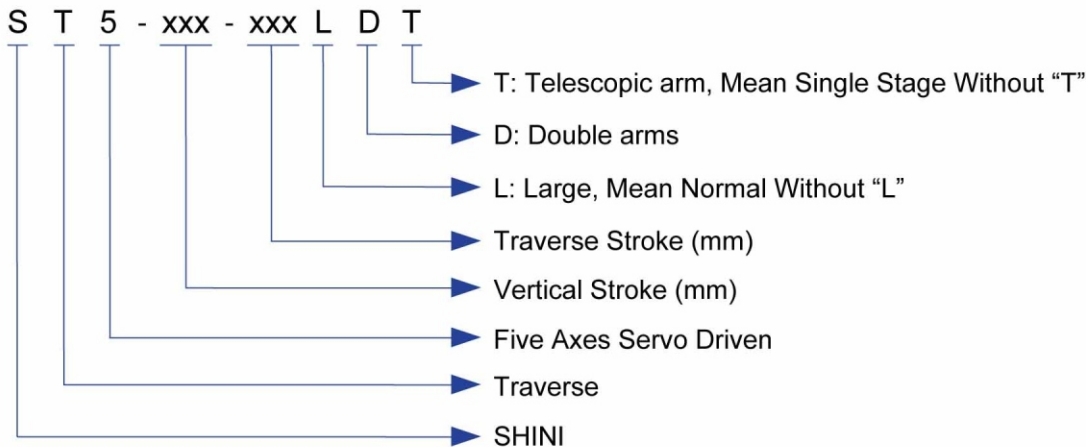
ST5-700-1400D



Refer carefully to the Manual before using products.



■ 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 telediagnosis assist better equipment management. USB port allows fast data updating, saving and loading.



Control Panel

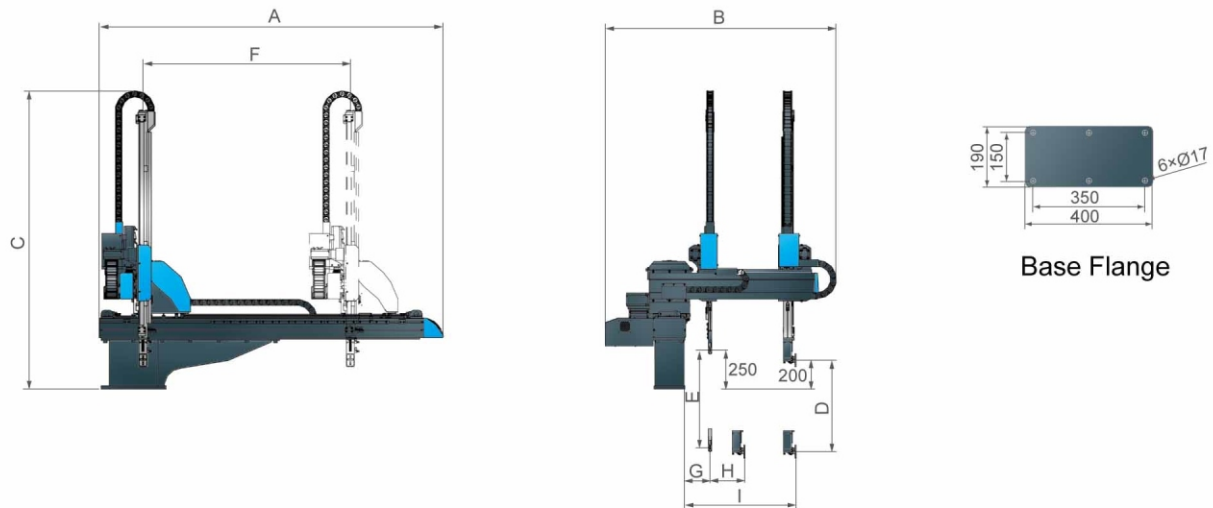
- User Friendly

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 spared communication connections with surrounds machines offer more flexibilities to global customers.

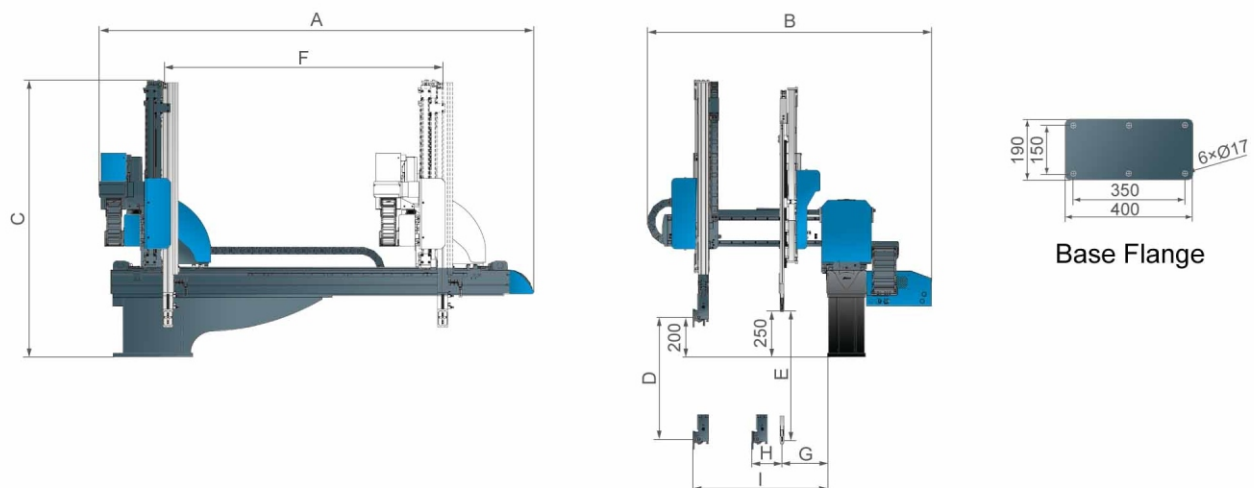
■ Application

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

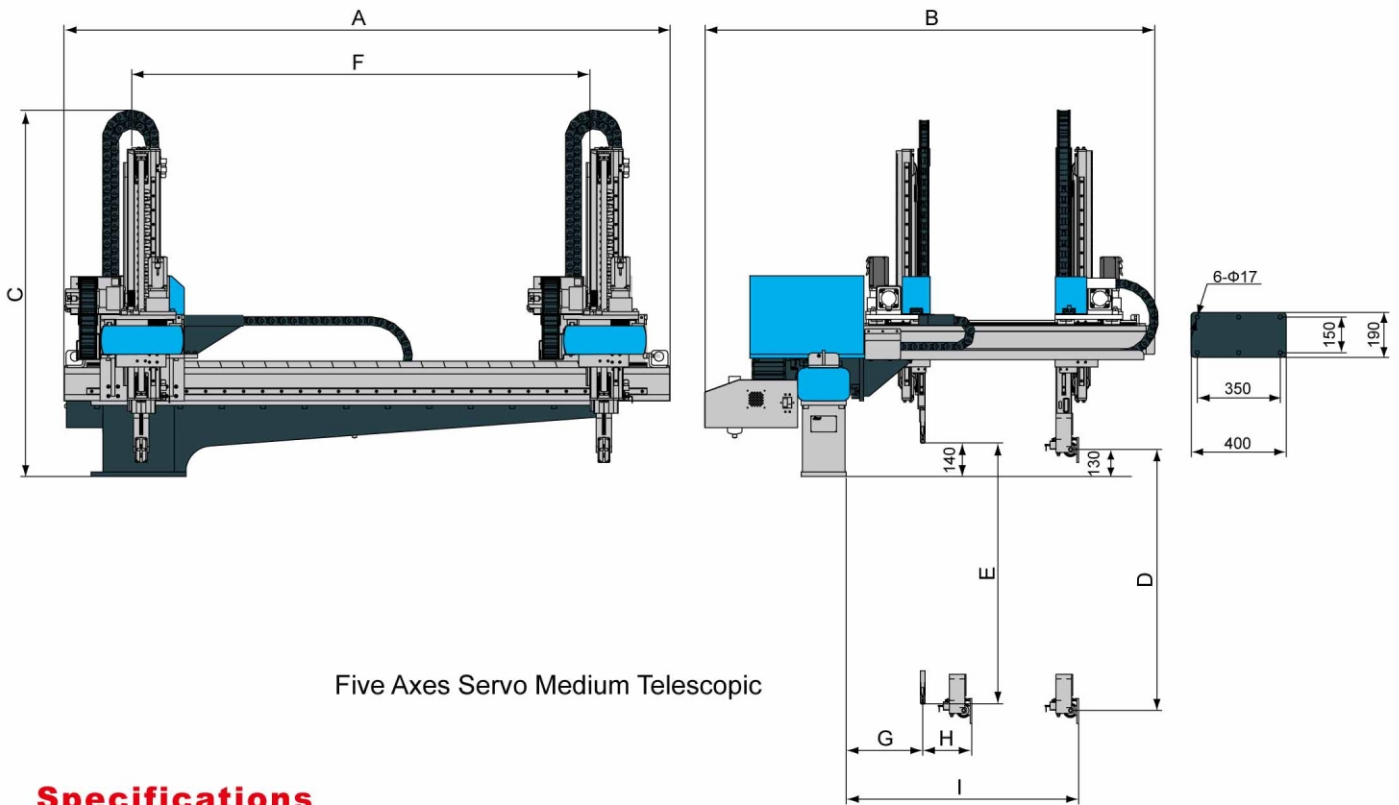


Five Axes Servo



Five Axes Servo Telescopic

ST5 Series



■ Specifications

Model		ST5-700-1400D	ST5-900-1600D	ST5-1100-1800D
IMM (ton)		100 ~ 200	200 ~ 300	300 ~ 450
Traverse Stroke (mm)		1400	1600	1800
Crosswise	Main arm	400	600	800
	Stroke (mm)	400	600	800
Vertical	Main arm	700	900	1100
	Stroke (mm)	750	950	1150
Max Load (with tool) (kg)		3	5	5
Min Pick-out Time (sec)		2.5	2.7	3
Min Cycle Time (sec)		7	8	8.5
Air Pressure (bar)		4 ~ 6	4 ~ 6	4 ~ 6
Max Air Consumption (Nl/cycle) *		5	5	5
Weight (kg)		280	300	310
Dimensions (mm)	A	2440	2350	2550
	B	1360	1620	1820
	C	1850	2050	2250
	D (max)	700	900	1100
	E (max)	750	950	1150
	F (max)	1400	1600	1800
	G (min)	150	150	150
	H (min)	180	180	180
I (max)		700	900	1100

Note: 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.

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

3. " * " Max air consumption for suction device 60Nl/min.

We reserve the right to change specifications without prior notice.

Model		ST5-700-1400DT	ST5-900-1600DT
IMM (ton)		100 ~ 200	200 ~ 300
Traverse Stroke (mm)		1400	1600
Crosswise	Main arm	300	500
	Stroke (mm) Sub arm	300	500
Vertical	Main arm	700	900
	Stroke (mm) Sub arm	750	950
Max Load (with tool) (kg)		3	5
Min Pick-out Time (sec)		2.1	2.3
Min Cycle Time (sec)		6	6.2
Air Pressure (bar)		4 ~ 6	4 ~ 6
Max Air Consumption (NI/cycle) *		5	5
Weight (kg)		260	280
Dimensions (mm)	A	2450	2400
	B	1360	1650
	C	1380	1600
	D (max)	700	900
	E (max)	750	950
	F (max)	1400	1500
	G (min)	225	225
	H (min)	160	160
	I (max)	680	880

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 "EM12" stands for EUROMAP 12 communication interface.
 "EM67" stands for EUROMAP 67 communication interface.
 2. Power supply requirement: 1Φ, 200~240V, 50/60Hz.
 3. "*" Max air consumption for suction device 60NI/min.

Model		ST5-1100-1800DT	ST5-1300-2000DT	ST5-1500-2200DT
IMM (ton)		300T ~ 450T	450T ~ 650T	650T ~ 850T
Traverse Stroke (mm)		1800	2000	2200
Crosswise	Main arm	450	570	690
	Stroke (mm) Sub arm	450	570	690
Vertical	Main arm	1100	1300	1500
	Stroke (mm) Sub arm	1150	1350	1550
Max Load (with tool) (kg)		8	10	12
Min Pick-out Time (sec)		3	3.2	3.5
Min Cycle Time (sec)		8.5	9	9.5
Air Pressure (bar)		4 ~ 6	4 ~ 6	4 ~ 6
Max Air Consumption (NI/cycle) *		5	5	5
Weight (kg)		690	810	930
Dimensions (mm)	A	2600	2800	3000
	B	1900	2020	2140
	C	1550	1650	1750
	D (max)	1100	1300	1500
	E (max)	1150	1350	1550
	F (max)	1800	2000	2200
	G (min)	350	350	350
	H (min)	170	170	170
	I (max)	980	1100	1220

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 2. Power supply requirement: 1Φ, 200~240V, 50/60Hz.
 3. "*" Max air consumption for suction device 60NI/min.



SHINI PLASTICS TECHNOLOGIES, INC.

Headquarters:

Shini Plastics Technologies, Inc.

No.23 Minhe St, Shulin Dist.,
New Taipei City 23852, Taiwan

tel: +886 2 2680 9119

fax: +886 2 2680 9229

email: shini@shini.com

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