



APEX DYNAMICS, INC.

SC SERIES

CNC ROBOT

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APEX



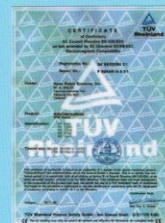
CE

SC SERIES

3 AXIS SERVO DRIVEN CNC ROBOT WITH TELESCOPIC ARM.

- 3 Axis synchronised movement CNC servo drive robot with telescopic vertical arm.
- Free tracking control programming with pulse generator.
- Rigid structure built for steady movement and precise positioning with heavy payloads.
- Multi-Function program built in as standard.

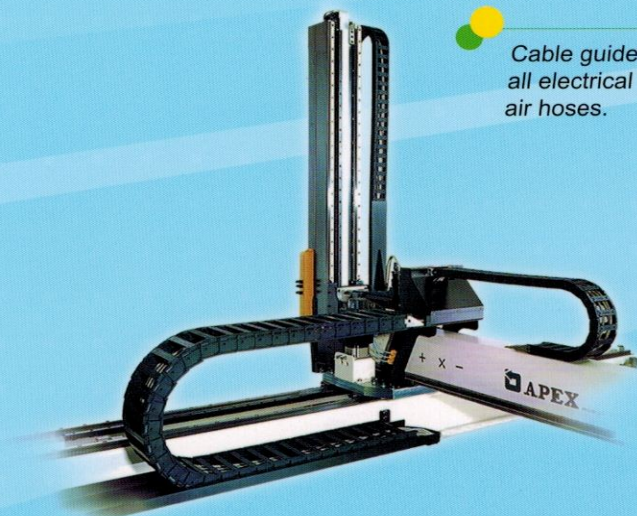
NEW



Telescopic



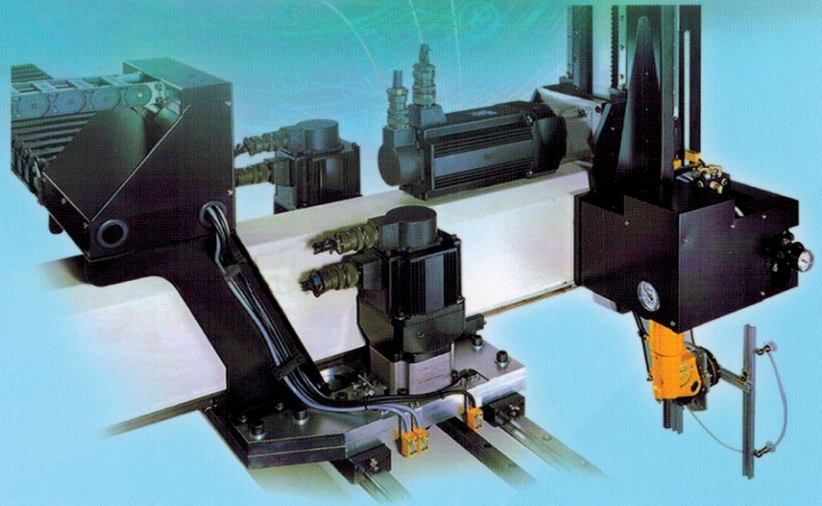
Cable guide protection on all electrical wires and air hoses.



Positive servomotor drives with rack and pinion gear on 3 axis.

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Rapid acceleration and deceleration reduces the cycle time, maintains positional precision, accuracy and repeatability.



Single stage

Optional Touch Screen Pendant

- 8" Touch screen. AMD 500MHz CPU with DDR 512M Memory. Compatible with Window CE system and 512M CF memory card.
- Easy to operate with graphic symbol.
- Multiple languages can be select.



Application

Standard 14 spare inputs and 12 spare outputs for interfacing with other ancillary equipment. Extension up to 30 I/O also available.

1. Parts removal:

- a) 3 Axis synchronised movements reduce complexity and cost to build end-arm-tooling.
- b) Able to reach parts with hooks and undercuts using unconventional paths such as curves, etc.

2. Stack and array:

Each cycle can handle up to 9 stack areas with individual stack formats. Can also place parts onto 100 points on the same surface.

3. Insert and grid:

Each cycle can place 9 different insertion materials into the mould, fed from a single point, grid pallet, or multi-station.

4. Inspection:

- Reject program: Detects signal from the moulding machine and places part in different area.
- Inspection program: Places part in different area for QC inspection, for example every 100 cycles.
- Test-mould program: Allows checking of parts at the beginning of each automatic moulding cycle before cycle counter starts.
- Weight program: Checks part quality from electronic weigh scale and separates defect parts.
- Cycle counter: Counts the total number of moulding cycles. Inspection cycle and defect parts are not included in count total.



Hand-Held Pendant

One key per function design is easy to use. Pulse generator manually moves the robot to designated location for safe and easy programming. Multi-language support and conversation programming are user-friendly and guide the operator easily throughout all operations. Each teachable program can store up to 500 steps and each step can hold 10 parallel motion sequences. All speeds can be adjusted on a percentage scale.



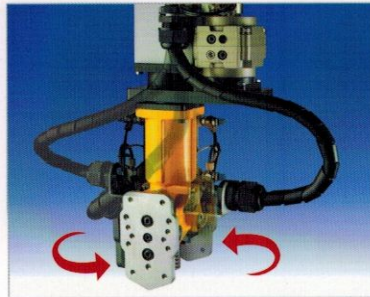
Optional Accessories

End-of-arm tooling accessories.



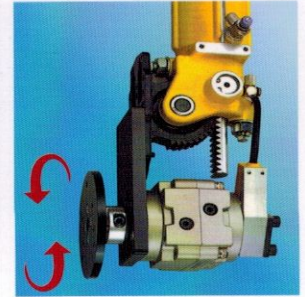
Optional Accessories

SPI / Euromap 67 or 12 plug.



Optional Accessories

Pneumatic C axis rotation device on arm.

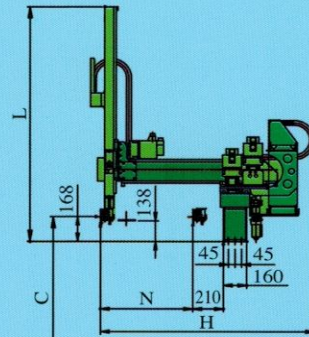
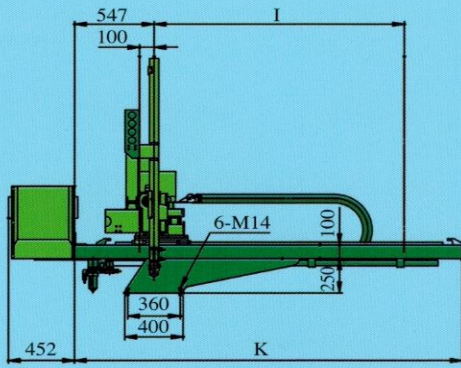


Optional Accessories

Pneumatic C axis rotation device on EOAT.

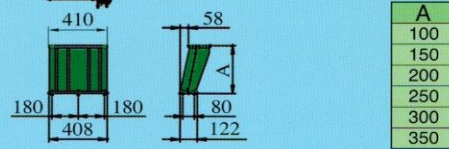
Mechanical Drawings

SC900~SC1300

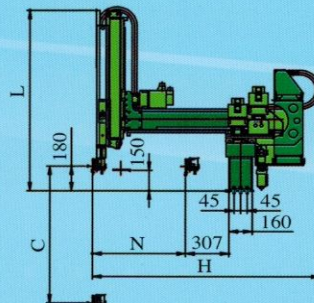
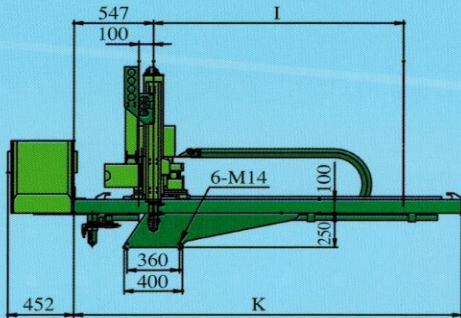


| Model No. | C | H | I | K | L | N |
|-----------|------|------|------|------|------|-----|
| SC900 | 900 | 1472 | 1710 | 2746 | 1739 | 600 |
| SC1100 | 1100 | 1652 | 1950 | 2986 | 1939 | 780 |
| SC1300 | 1300 | 1772 | 2130 | 3166 | 2139 | 900 |

Extension traverse available: 2600mm and 3000mm

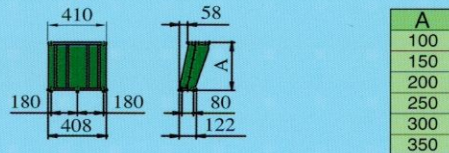


SC900D~SC1300D

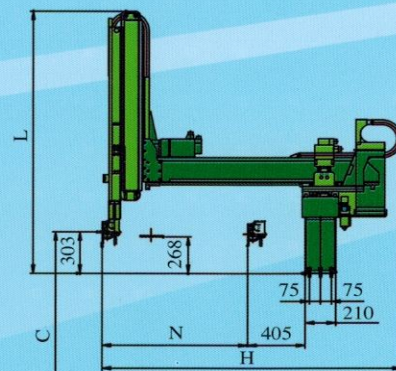
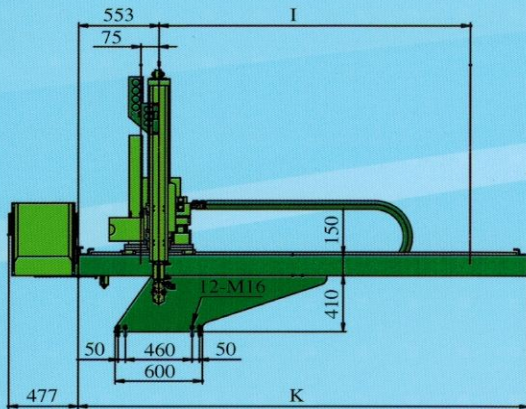


| Model No. | C | H | I | K | L | N |
|-----------|------|------|------|------|------|-----|
| SC900D | 900 | 1569 | 1710 | 2746 | 1325 | 600 |
| SC1100D | 1100 | 1749 | 1950 | 2986 | 1405 | 780 |
| SC1300D | 1300 | 1869 | 2130 | 3166 | 1505 | 900 |

Extension traverse available: 2600mm and 3000mm

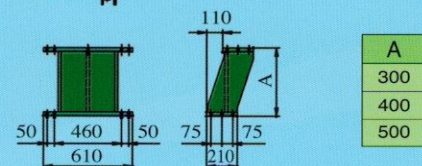


SC1500D~SC2000D



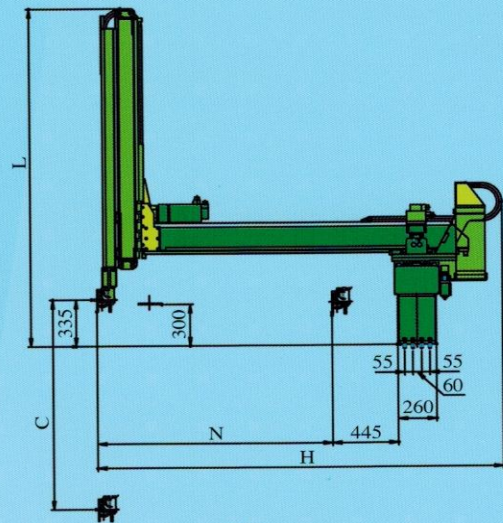
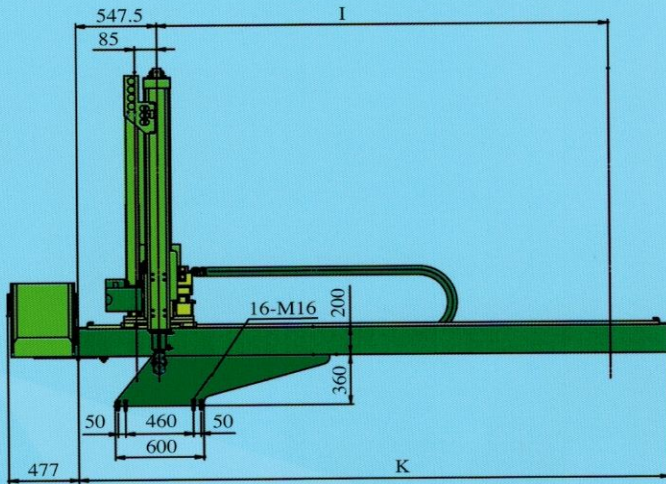
| Model No. | C | H | I | K | L | N |
|-----------|------|------|------|------|------|------|
| SC1500D | 1500 | 2058 | 2190 | 3156 | 1920 | 950 |
| SC1700D | 1700 | 2298 | 2310 | 3276 | 2040 | 1190 |
| SC2000D | 2000 | 2538 | 2490 | 3456 | 2160 | 1430 |

Extension traverse available: 3000mm and 3500mm



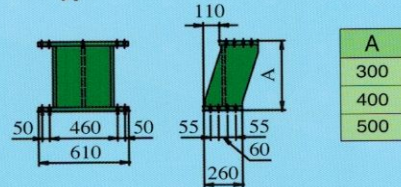
Mechanical Drawings

SC2500D~SC3000D



| Model No. | C | H | I | K | L | N |
|-----------|------|------|------|------|------|------|
| SC2500D | 2500 | 2750 | 3010 | 4005 | 2442 | 1550 |
| SC3000D | 3000 | 3170 | 3010 | 4005 | 2682 | 1970 |

Extension traverse available: 4000mm and 5000mm



Technical Specifications

| Model No. | | Stroke (mm) | | | Max. Payload (Kgs) | Net Weight (Kgs) | Operating Air Pressure |
|-----------|--------------|--------------------------|----------------|----------------|--------------------|------------------|------------------------|
| | | Crosswise (kick) (N) | Vertical (C) | Traverse (I) | | | |
| SC900 | Single-stage | 600 | 900 | 1710 | 12 | 520 | 5 kg / cm ² |
| SC1100 | Single-stage | 780 | 1100 | 1950 | 12 | 530 | |
| SC1300 | Single-stage | 900 | 1300 | 2130 | 12 | 540 | |
| SC900D | Telescopic | 600 | 900 | 1710 | 12 | 530 | |
| SC1100D | Telescopic | 780 | 1100 | 1950 | 12 | 540 | |
| SC1300D | Telescopic | 900 | 1300 | 2130 | 12 | 550 | |
| SC1500D | Telescopic | 950 | 1500 | 2190 | 30 | 710 | |
| SC1700D | Telescopic | 1190 | 1700 | 2310 | 30 | 730 | |
| SC2000D | Telescopic | 1430 | 2000 | 2490 | 30 | 750 | |
| SC2500D | Telescopic | 1550 | 2500 | 3010 | 50 | 980 | |
| SC3000D | Telescopic | 1970 | 3000 | 3010 | 50 | 1000 | |

Operation Voltage: AC 220V 3 phase



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