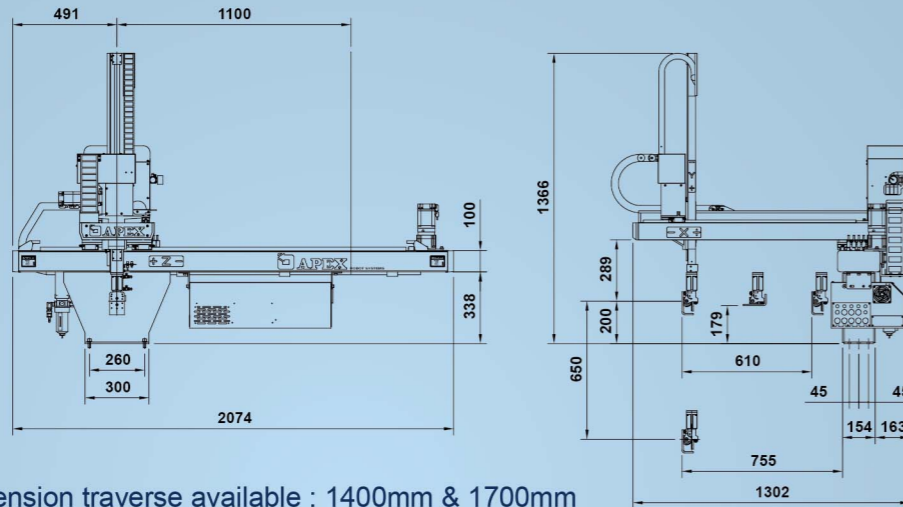


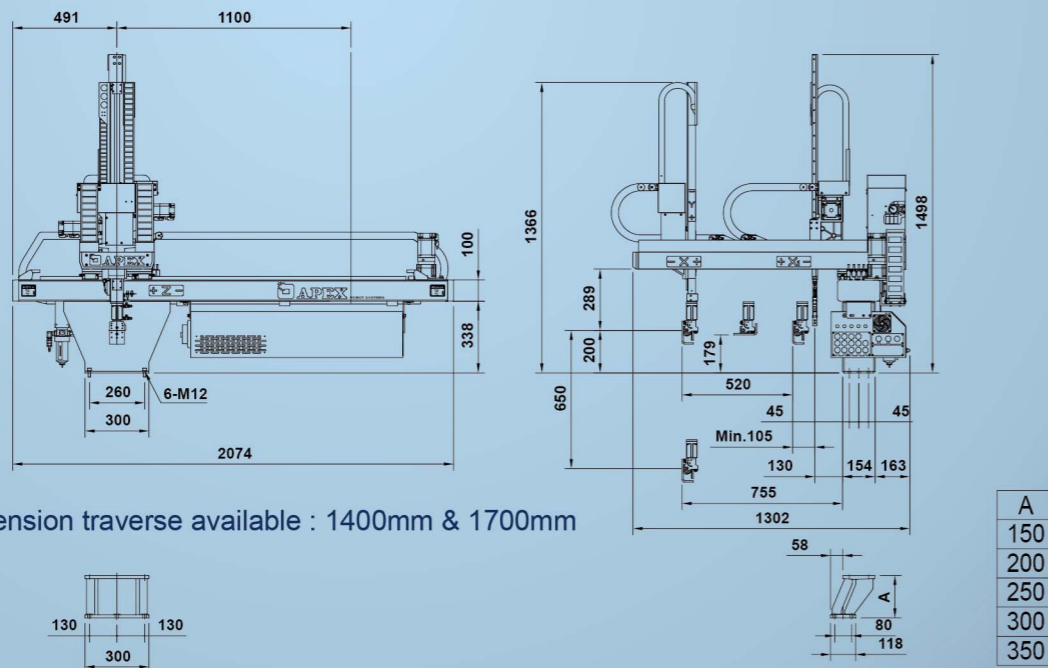
Mechanical Drawings

● SH650



Extension traverse available : 1400mm & 1700mm

● SH650M



Extension traverse available : 1400mm & 1700mm

| A |
|-----|
| 150 |
| 200 |
| 250 |
| 300 |
| 350 |

Technical Specifications

| Model No. | Dry Cycle(sec.) | Stroke (mm) | Max. Payload(kg) | Net Weight(kg) | Operating Air Pressure | | | | | | | |
|-----------|---------------------------|-------------|------------------|----------------|------------------------|----------|-------|-----------|-----|----------|-----|-----------------|
| | | | | | | Take-Out | Cycle | Crosswise | | Traverse | | |
| | | | | | | | | Main | Sub | | | |
| SH650 | Single-stage & Single-Arm | 1.2 | 5.0 | 610 | — | 650 | — | 1100 | 3 | — | 280 | 0.5 MPa (5 bar) |

Operation Voltage : AC 220V SINGLE PHASE

| Model No. | Dry Cycle(sec.) | Stroke (mm) | Max. Payload(kg) | Net Weight(kg) | Operating Air Pressure | | | | | | | |
|-----------|---------------------------|-------------|------------------|----------------|------------------------|----------|-------|-----------|-----|----------|-----|-----------------|
| | | | | | | Take-Out | Cycle | Crosswise | | Traverse | | |
| | | | | | | | | Main | Sub | | | |
| SH650M | Single-stage & Double-Arm | 1.2 | 5.0 | 520 | 520 | 650 | 700 | 1100 | 3 | 3 | 290 | 0.5 MPa (5 bar) |

Operation Voltage : AC 220V 3 PHASE



APEX DYNAMICS, INC.

SH650/SH650M 3/5 AXES SERVO DRIVEN CNC ROBOT



SH650/SH650M SERIES

3 AXES/5 AXES SERVO DRIVEN CNC ROBOT

- Slim vertical arm design, the minimum distance 100mm between two arms, very suitable for small machines and three pieces of mold applications
- Faster taken out and shorter cycle time, taken out time 1.2s, cycle time 5s
- Two types of control boxes for different factory arrangements, control box either under traverse beam or at the side of it
- 3 axes/ 5 axes motion transmission by belt, can reduce noise and dust from metallic friction to be met clean room level

- Rigid box frame design on the cross axis. Very sturdy under high speeds operation.
- Strong and lightweight Aluminum alloy extrusion material that can absorb shock wave furthermore to reduce vibration.
- 3/5 axes synchronized movement. Free tracking control with pulse generator, easy to program.
- Sub-arm model equipped with electrical motor for easy strokes adjustment. No need to climb up.



NEW



- Cable guide protection on all electrical wires and air hoses.



- End-of-arm tooling accessories.



Equipped with AC brushless servomotors and individual control. 3 axes/5 axes can be synchronized move to designate point at the same time. Accuracy within + / - 0.1mm.

Application

14 spare inputs and 12 spare outputs for interfacing with other ancillary equipment.

1. Parts removal :

- Synchronized movements reduce complexity and cost to build end-arm-tooling.
- 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. 3D Path :

The robot can follow teaching point-to-point path to move. It lets the track move smoothly and shorten the cycle time.

5. Inspection :

- Reject program : Detects signal from the moulding machine, set the reject part count 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. If counting good parts only, 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.



- Vacuum pad & frame. Quick change system.



- SPI or Euromap plug

