

STRONG

3-AXIS ROBOTS FOR INJECTION MOLDING MACHINES FROM 700 TO 2800 TON

Strong is a line of universal 3-axis robots featuring the latest generation of Sepro technology.

Robust and economical, Strong is ideal for the simple automation of 700 to 2800-ton Injection Molding Machines.

The user-friendly Touch 2 control makes it easy to program and operate the robot.

- | STRONG 40
- | STRONG 50
- | STRONG 60



NEW ECO Air 

THE SOLUTION TO HELP YOU REDUCE
YOUR COMPRESSED AIR CONSUMPTION

The Strong robots range benefit from Sepro's latest generation technologies of the new Sepro heavy payload capacity robot platform.

- The level of components are highly reliable thanks to the mutualization of designs, and components with high technological value: SLS guides, motors and speed drivers are standardized on all our models.
- The rationalization of all basic sub-elements.
- The pre-mounting and test by function for easy installation and maintenance.
- Simple programming and operation of the robot with Visual control.

SLS GUIDES (SEPRO LINEAR SYSTEM WITH GUIDE RAILS) ON THE X BEAM AXIS AND Z VERTICAL ARM

Unique Sepro Advantage, the result of 30 years of experience, the SLS guides have an unrivalled service life and reliability, especially for large strokes and heavy loads.

They are extremely sturdy in difficult environments: abrasive dust, oxidizing vapors (PVC) and water vapor. The integrated lubrication system offers the advantage of reduced maintenance (changing of sticks once a year only).



Y FREE FUNCTION

The Y free-function is a Sepro manufacturing standard. It simplifies the programming of part ejection tracking and can reduce the gripper costs (simplified design).

QUICK ELECTRIC, PNEUMATIC CONNECTIONS AND MECHANICAL COUPLING

Optimize your mold change times thanks to the quick couplings. Their simple implementation ensures sustainable management of your tooling.

COMPACT BEAM-MOUNTED CONTROL CABINET

The compact control cabinet is mounted on the end of the beam as standard. Its innovative feature is its flexible installation, as it can be installed on the left or right, depending on your setup, to free floor space only available for pneumatic.

A floor-standing cabinet option is also available.



DESIGN AND STURDINESS

Strong robots have been specially designed to be sturdy and optimized for a 24/7 use.

- A Z arm with aluminum profile, which provides an excellent mass/stability ratio and an optimal compact design for applications with limited headroom. No need of balance cylinders thanks to a clever control of motor servo and brake which enables a reduction in noise and maintenance operations as well as a reduction in energy consumption (compressed air and electricity).
- Single- beam demoulding structure with a large section for a high stability and a lower moving mass. For the Y axis, the prismatic guide represents the optimal cost/stability solution.
- Simultaneous management of the 3 CNC axes to optimize the intervention time in the mould.

With the Simple Pick-and-Place module, create your cycle by just answering the system's questions and see the result immediately in 3D on the video (Simple Pick-and-Place and regular stacking).

«WHAT YOU SEE IS WHAT YOU GET»

Make your daily routine easier

- When fine-tuning, the joystick makes delicate settings in the mold possible.
- The large 10" LCD screen gives you clear and precise information.
- The documentation can be consulted online when you want.
- If a fault appears, troubleshooting data is displayed automatically.
- USB key allows for ease of transferring and downloading programs.
- Eco Mode: Once the cycle is started, a single key can reduce energy consumption and extend your robot's working life.
- Digital vacuum switch (option): set and save your part grip settings for each mold directly on the pendant.

FROM TOUCH 2 TO VISUAL 2

For your complex applications, Strong can be equipped with Visual 2. A modular offer that can evolve over time.

- A PLC associated with each application to manage your stacking or insert distribution peripherals.
- Possible to associate up to 3 simultaneous subroutines with the robot's program and the PLC.
- Manage up to 1000 different applications (100 on Touch 2).
- Make mold changes completely safe using mold encoding and/or EOAT encoding (encoded plug).

STRONG 40	STRONG 50	STRONG 60
Mold clamping force (T - Metric Tons)		
700 - 1000	1000 - 1600	1600 - 2800
Horizontal stroke (mm) - Can be adapted by 500 mm steps		
2500 - 10000	3000 - 10000	3500 - 10000
▪ <i>Maximum instantaneous speed (m/s)</i>		
2	2	1,8
Demold stroke - Transversal layout		
1100 1300 (LD)	1300 1500 (LDV)	1600 1800 (LDV)
▪ <i>Maximum instantaneous speed (m/s)</i>		
1,8	1,8	1,5
Vertical telescopic arm		
✓	✓	✓
▪ <i>Vertical stroke (mm)</i>		
1800 2000 (LV)	2000 2500 (LDV)	2500 3000 (LDV)
▪ <i>Maximum instantaneous speed (m/s)</i>		
2,5	2,5	2,5
R1 pneumatic rotation (0-90°)		
✓	✓	✓
▪ <i>Maximum load (parts + EOAT) (kg)</i>		
20	40 35 (LDV)	50 40 (LDV)
Part grip - Vacuum circuit up to :		
8	8	8
Part grip - Pressure circuit up to :		
8	8	8
Compact beam-mounted control cabinet		
✓	✓	✓
Touch 2 control system		
✓	✓	✓
OPTIONS		
ECO-Air		
✓	✓	✓
R2 pneumatic rotation (0-90°-180°)		
✓	✓	✓
▪ <i>Maximum load (parts + EOAT) (kg)</i>		
15 - 20 (LV/LD)	35	40
R1 servo rotation (0 -180°) + R2 (0-300°)		
✓	✓	✓
▪ <i>Maximum load (parts + EOAT) (kg)</i>		
20	35	40
Floor-standing control cabinet		
✓	✓	✓
VISUAL 2 control system		
✓	✓	✓

LD: Long Demolding version cannot be combined with LV/ LV: Long Vertical version cannot be combined with LD