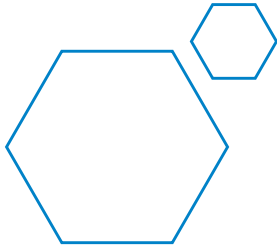


STRONG

Strong, is a range of efficient and competitive 3-axes robots for 700 to 2800 T. Injection Molding Machines



-  STRONG 40
-  STRONG 50
-  STRONG 60

Sepro is the specialist in the automation of 700 to 5000 T injection molding machines.

Our large robots offer is designed around a unique technological platform of the latest generation to meet the most varied production requirements, *such as yours*.

From the 3-axes robot to the 5-axes robot, there is a solution to all your new or existing press equipment needs, for simple unloading applications or complex applications or for optimum adaptation to the most demanding applications.

YOUR FREE CHOICE IN ROBOTS

— STRONG FOR THE FUTURE

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 pre-mounting and test by function for easy installation and maintenance.
- The rationalization of all basic sub-elements.
- Simple programming and operation of the robot with Visual control.

— EFFICIENCY

New 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.

Exclusive elastic mount of gripper (option)

The entire EOAT unit is mounted on a linear axis, parallel to the injection axis. A cylinder ensures the elastic pressure for the unit and a sensor detects any depressions to stop the robot. This mechanical device is used to protect the EOAT and the mold during part grip settings and to damp the contact between the EOAT and the part when there are slight variations (a few mm) on the ejection or mold opening stroke.

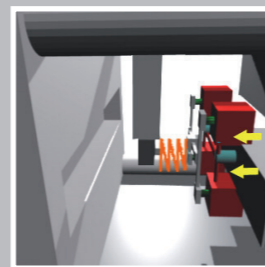
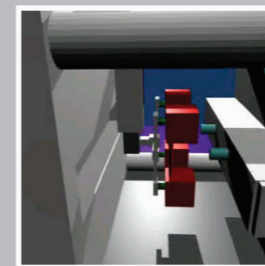
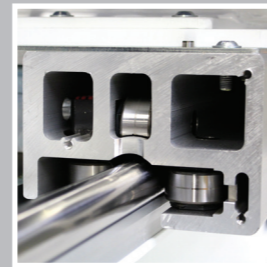
Compact beam-mounted control cabinet

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. 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.



— TOUCH 2 -STRONG IS EQUIPPED WITH THE TOUCH 2 CONTROL SYSTEM AS STANDARD



Simply Intuitive

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 on line when you want
- If a fault appears, troubleshooting data is displayed automatically
- Thanks to the USB key, operators, setters, programmers and maintenance staff have direct access to the relevant data
- 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

Tried and tested ergonomics

Task-based navigation means you can directly access the job to be done:

- Production
- Mold Change
- Programming
- Maintenance

— 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.

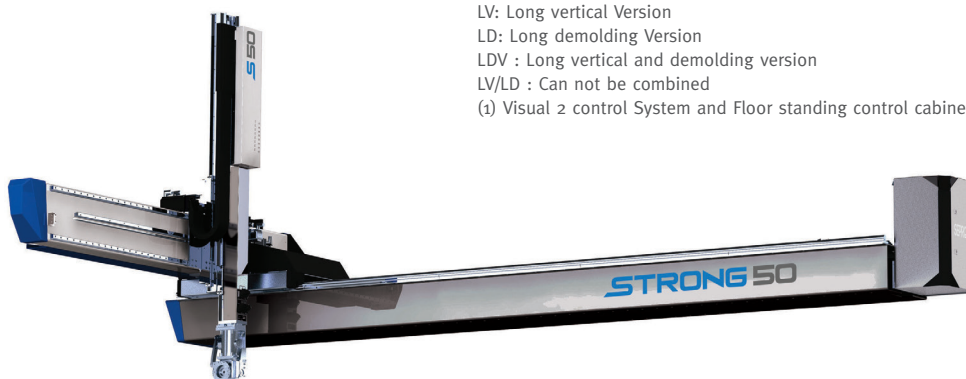
- A PLC associated with each application to manage your stacking or insert distribution peripherals
- Possible to associate up to 3 simultaneous subroutines with the robot's program and the PLC
- Manage up to 1000 different applications (100 on Touch 2)
- Make mold changes completely safe using mold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

	Strong 40	Strong 50	Strong 60
Mold clamping force - Indication metric Tons	700 - 1000	1000 - 1600	1600 - 2800
Mold clamping force - Indication US tons	772-1102	1102-1764	1764-3086
Horizontal stroke (mm) - Can be adapted by 500 mm steps	2500 - 10 000	3000 - 10 000	3500 - 10 000
Maximum instantaneous speed (m/s)	2	2	1,8
Demold stroke (mm) - Transversal layout	1100 - 1300 (LD)	1300 - 1500 (LDV)	1600 - 1800 (LDV)
Maximum instantaneous speed (m/s)	1,8	1,8	1,5
Vertical telescopic arm	✓	✓	✓
Vertical stroke (mm)	1800 - 2000 (LV)	2000 - 2500 (LDV)	2500 - 3000 (LDV)
Maximum instantaneous speed (m/s)	2,5	2,5	2,5
Maximum load (parts + EOAT) (kg)	20	40 - 35 (LDV)	50 - 40 (LDV)
R1 pneumatic rotation (0-90°)	✓	✓	✓
Part grip - Vacuum and/or pressure circuit	1	1	1
Compact beam-mounted control cabinet	✓	✓	✓
TOUCH 2 control system	✓	✓	✓

OPTIONS

R2 pneumatic rotation (0-90°-180°)	✓	✓	✓
Maximum load (parts + EOAT) (kg)	15 - 20 (LV/LD)	35	40
R1 servo rotation (0 -180°) + R2 (0-270°) (1)	✓	✓	✓
Maximum load (parts + EOAT) (kg)	20	35	40
Floor-standing control cabinet	✓	✓	✓
VISUAL 2 control system	✓	✓	✓

LV: Long vertical Version
 LD: Long demolding Version
 LDV : Long vertical and demolding version
 LV/LD : Can not be combined
 (1) Visual 2 control System and Floor standing control cabinet mandatory



WHY CHOOSE SEPRO ?

- Sepro manufacturer leader in Europe and in North and South America
- Main supplier in the Automotive Industry in Europe and the USA - global leader for IMMs over 800T
- A full line of robots from 3 to 6 axis with one unique and user-friendly control
- Over 30,000 installations worldwide

YOUR FREE CHOICE IN ROBOTS

www.sepro-group.com