

5X line

FOR 30 TO 800T INJECTION MOLDING MACHINES

5X Line robots are designed from latest generation fast and precise Sepro 3-axis Cartesian robots with a Sepro 2-axis servo wrist. A unique combination that provides a number of solutions for automating injection molding machines. These robots installed on the IMM can be used for unloading and processing parts; they can be located at the end of the IMM to perform post-processing. They can be programmed quickly and efficiently thanks to the power and user friendliness of the Visual 3 control system.

OVERVIEW

Three models to choose from:

5X-15 | 5X-25 | 5X-35

- Structural frame for increased rigidity
- Linear rails designed for greater speeds
- Redesign of the vertical arm and pneumatic components
- Powerful servomotors and intelligent anti-vibration software
- Path tracking function standard with Visual 3
- Direct, Telescopic, or low height vertical arms for maximum flexibility
- Heavy load option available on 5X-35 payloads up to 20kg
- Y free function



NEW ECO Air 

**THE SOLUTION TO HELP YOU REDUCE
YOUR COMPRESSED AIR CONSUMPTION**

NEW SERVO WRIST

Sepro introduces its new servo wrist, result of a two years development. Available in three variations to fit the three sizes of robots and their needs.

- Designed for the plastic injection industry: reduced footprint and high payload capacities.
- High performances: precision, speed and torque.
- Focus pushed upon reliability and maintainability.



5X Line is a range of high-performance and flexible 5-axis industrial robots with servo wrist rotations designed by Sepro

SPECIFICATIONS

	5X-15	5X-25	5X-35
Mold clamping force - Metric tons	30 - 180	120 - 450	350 - 800
Horizontal stroke (mm) (1)	1500 - 4000	1500 - 6000	2000 - 9000
Maximum instantaneous speed (m/s)	4	4	3,5
Demold stroke (mm) - Transverse layout	500	700	900
Maximum instantaneous speed (m/s)	3	3	3
Vertical stroke direct (mm)	1000	1200	1400
Maximum instantaneous speed (m/s)	5	4	3,5
Maximum load (parts + EOAT) (kg)	5	10	15 20 (HL)
Servo rotation R1 (0-180°) + R2 (0-300°)	✓	✓	✓
Part grip - Vacuum circuit up to:	6	8	8
Part grip - Pressure circuit up to:	6	8	8
Smart digital vacuum switch	✓	✓	✓
Floor-standing control cabinet	✓	✓	✓
VISUAL 3 control system	✓	✓	✓
Path tracking	✓	✓	✓
OPTIONS			
Compact beam-mounted control cabinet	✓	✓	✓
Vertical telescopic arm :			
- Vertical stroke (mm)		1400	1800
- Maximum instantaneous speed (m/s)		4	3,5
- Maximum load (parts + EOAT) (kg)		10	15 20 (HL)
- Compact telescopic option		✓	✓
Eco Air	✓	✓	✓

(1) Horizontal stroke: customizable in 500mm increments

HL : Heavy Load version

VISUAL 3

Visual 3, Sepro's exclusive, powerful and easy to use control system has been specifically designed to meet the automation needs of plastic injection molding processes.

FAST PLC FUNCTION (20ms)

Checking intelligent peripheral systems, such as a camera to determine the position of a part, as well as external CNC axes.

SOFTWARE PACK ON PC

To create, edit and manage your programs in a Windows environment. The robot's programs and data can be centralized via your company's IT network (TCP/IP Ethernet cable or Wifi as an option).

DIGITAL VACUUM SWITCH

Available as standard on Visual 3 to program and save your part grip settings for each mold.

3D VISUALIZATION

With the Simple Pick-and-Place module, create your cycle by answering the system prompts and see the result immediately in 3D animation.

Thanks to Visual 3 Path Tracking function, the 5X Line robots can deal with the most specific applications, such as complex part extraction from the mold.



SEPRO GROUP

Sepro Group designs, develops and manufactures smart solutions and systems for the automation of plastic injection lines. Our modular solutions optimize and automate the take-out of parts from any type of new or existing machine.