

# 5X line

For 30 to 800 T Injection Molding Machines



**FLEXIBILITY | SPEED | PRECISION**

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

## OVERVIEW

- 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

Three models to choose from:

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



## NEW FEATURES

- All three models utilize our newly redesigned SEPRO CNC Wrist.
- Redesign of the vertical arm.
- Compact beam mounted cabinet available as standard (opt.) to reduce footprint.
- Optimized maintenance: maintenance operations are simplified thanks to direct access to modify certain key components.
- Spare parts used across the Sepro Robot line allow for simplified maintenance.

## 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 PCL 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 robots' 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 offers smart modular solutions for the automation of injection molding machines and downstream operations ranging from simple unloading robots with peripheral axillary equipment to complex integrated automation cells.

## SPECIFICATIONS

	5X-15	5X-25	5X-35
Mold clamping force - Metric tons	30 - 180	120 - 450	350 - 800
Mold clamping force - US tons	33 - 198	132 - 496	386 - 882
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 (0-270)	✓	✓	✓
Part grip - Vacuum circuit up to:	6	8	8
Part grip - Pressure circuit up to:	6	8	8
Digital vacuum switch	✓	✓	✓
Floor-standing control cabinet	✓	✓	✓
Path tracking	✓	✓	✓
VISUAL 3 control system	✓	✓	✓
<b>OPTIONS</b>			
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)
- Low height telescopic option		✓	✓

(1) Horizontal stroke: customizable in 500mm increments

HL : Heavy Load version