

For 30 to 800 T Injection Molding Machines



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

# **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.





# 1

## 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.

# **SPECIFICATIONS**

	5X-15	5X-25	シス・ゴラ
Mold clamping force - Metric tons	30 - 180	- 450	0 - 800
Mold clamping force - US tons	33 - 198	132 - 496	<mark>38</mark> 6 - 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	✓	<b>√</b>	✓
Path tracking	✓	<u> </u>	
VISUAL 3 control system	$\checkmark$	<b>√</b>	✓

#### **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)
- Low height telescopic option		✓	✓

(1) Horizontal stroke: customizable in 500mm increments

#### HL : Heavy Load version

### **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.