5X line

MILACRON

TRULY FLEXIBLE

For 30 to 800 T Injection Molding Machines

INNOVATION

5X Line : Range of 5-CNC axes' robots

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





For greater power and flexibility

YOUR FREE CHOICE IN ROBOTS

5X Line or 6X Visual

THE CHOICE IS YOURS

- 5X Line is a range of 5-CNC axes' Cartesian robots, designed for universal and complex applications and easily operated with the Visual 3 control system.
- 6X Visual is a range of 6-CNC axes' polyarticulated robots for your plastic injection molding applications, simple to program thanks to Visual 3.

Both ranges can be mounted on IMMs or on peripherals to complete your parts.

5X Line and 6X Visual

AN INNOVATIVE OFFER

Sepro and Stäubli have joined forces to multiply the possible types of robots for the plastics industry and can offer you an original and unique choice between Cartesian and polyarticulated robots.

Try both technologies: 5X Line and 6X Visual are both driven by the same Visual control system.

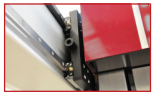
Good-looking mechanics!

5X line is a range of high-performance and flexible 5-axes industrial robots. It can be adapted to all your unloading and injected part completion applications.

- The range comprises 3 models, the 5X-15, the 5X-25 and the 5X-35, to equip your IMMs ranging from 30 to 800 tons.
- 5X is a Cartesian robot, based on the latest, 3-axes S5 Line platform and a rapid and precise, Stäubli 2-axes servo rotation.
- Thanks to the Visual 3 Path Tracking function, the 5X Line robots can deal with the most specific applications, such as complex part extraction from the mold. Path tracking is a standard feature.
- These robots are directly installed on the IMM to unload and process parts, but they can also be installed next to the IMM for post processing plastic parts.
- As the Visual 3 control system is both powerful and user-friendly, they are quick and easy to put into use, even for applications with peripherals.

RIGID

The monobloc frame structure and prismatic guide rails ensure greater rigidity, adapted to the high acceleration of moving parts.



FAST MOTORS AND INTELLIGENT SOFTWARE

Powerful servomotors associated with intelligent, anti-vibration software guarantee maximum acceleration and minimum mold intervention time.



Y FREE FUNCTION

A historical standard on all of Sepro's Cartesian robots: it simplifies the programming of part accompaniment during ejection and can reduce the cost of your EOATs by simplifying their design.



The assurance of a Stäubli servo wrist

The Stäubli 2-axes, compact servo rotations guarantee high precision, high speeds and can be easily adapted to even the most elaborate applications: insert placing, complex extraction paths in the mold, path tracking for flame treatment.



The assurance of high performance and simplicity!

5X Line associated with the power of Visual 3:
A perfect solution for the most complex Automation systems with up to 16 axes.

HIGH PERFORMANCE

- With the 5 CNC axes, the standard Path Tracking function can be used to demold undercut parts following curved paths, flame treat parts or cut sprues using simple, economical tooling systems.
- Thanks to the fast 20 ms PLC function, you can check intelligent peripheral systems, such as a camera to determine the position of a part, as well as external CNC axes.
- Use the Software pack on your 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).
- The Digital vacuum switch is available as standard on Visual 3 to program and save your part grip settings for each mold.

REALLY SIMPLE - IT'S SO EASY

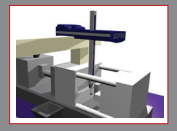
- See what you're creating in 3D: with the Simple Pick-and-Place Module, create your cycle by answering the questions the system asks you and see the result immediately in 3D on the video.
- When fine-tuning, the Joystick makes delicate settings in the mold possible.



MAKE YOUR DAILY ROUTINE EASIER

- Consult the online documentation in full screen mode at any time.
- Transfer information from one team to another using the notepad function.
- Thanks to the USB key, operators, setters, programmers and maintenance staff have direct access to the relevant data.
- Troubleshooting assistance from Sepro's Hotline: with the USB key, download and send the relevant information via internet for remote assistance.







5X line

MILACRON

	5X-15	5X-25	5X-35
Mold clamping force - Indication metric Tons	30 - 180	120 - 450	350 - 800
Mold clamping force - Indication 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 direct arm :	✓	✓	✓
- Vertical stroke (mm)	1000	1200	1400
- Maximum instantaneous speed (m/s)	5	4	3,5
Maximum load (parts + EOAT) (kg)	5	10	15 - 20 (HL)
R1 servo rotation (0 -180°) + R2 (0-270°) STÄUBLI	✓	✓	✓
Part grip - Vacuum and/or pressure circuit	✓	✓	✓
Digital vacuum switch	✓	✓	✓
Floor-standing control cabinet	✓	✓	✓
Path tracking	✓	✓	✓
VISUAL 3 control system	✓	✓	✓
OPTIONS			
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)

(1) Can be adapted by 500 mm steps

HL : Heavy Load version

THE ALLIANCE OF TWO LEADERS IN THE ROBOTICS MARKET:

For over 40 years, Sepro has been selling 3-axis, 5-axis and 6-axis robots for the plastics industry in over 40 countries worldwide, offering a global solution to answer the needs of processors and injection-molding OEMs.

Stäubli is an innovative Swiss group specialized in 3 main sectors, whose common feature is mechatronics: fabric machines, connection systems and robotics. Stäubli robots are designed and manufactured in France and used in industries such as plastics, automotive, machine tools, medical or food processing and cover all types of applications.

A full line of robots from 3 to 6 axis with one unique and user-friendly control

YOUR FREE CHOICE IN ROBOTS

www.milacron.com