5X line

For 30 to 900 T Injection Molding Machines

MILACRON®

TRULY FLEXIBLE INNOVATION

5X Line: Range of 5-CNC axes robots

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

For greater power and flexibility

A FULL LINE OF 5 AXIS SERVO ROBOTS WITH ONE UNIQUE AND USER-FRIENDLY CONTROL

5X SERIES LINE OF ROBOTS

- 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.

Milacron's Auxiliary Equipment offers customized solutions to multiply the possible types of robots for a wide range of applications in the plastics industry. Milacron can offer an original and unique choice between Cartesian and Articulating Arm Robot Solutions.

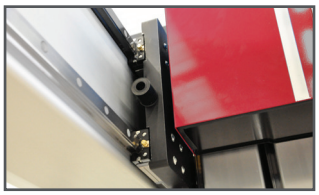
EXTRAORDINARY MECHANICS!

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 IMMs ranging from 30 to 900 tons.
- 5X is a Cartesian robot, based on the latest, 3-axes S5 Line platform, and a rapid and precise Staubli 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 the 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.

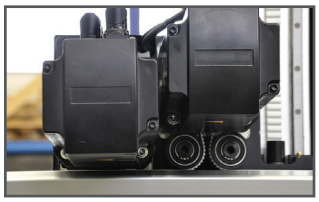
RIGID

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



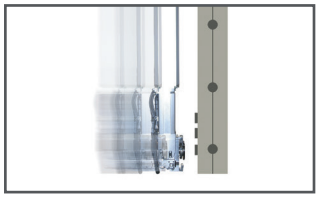
FAST MOTORS AND INTELLIGENT SOFTWARE

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 Cartesian robots, it simplifies the programming of part accompaniment during ejection and can reduce the cost of EOATs by simplifying design.



THE ASSURANCE OF A SERVO WRIST

The Servo Wrist, R1 Wrist Flip and R2 Wrist Rotation, guarantee high speeds and can be easily adapted to even the most elaborate applications: insert placing, complex extraction paths in the mold, path tracking and much more.

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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

HIGH PERFORMANCE

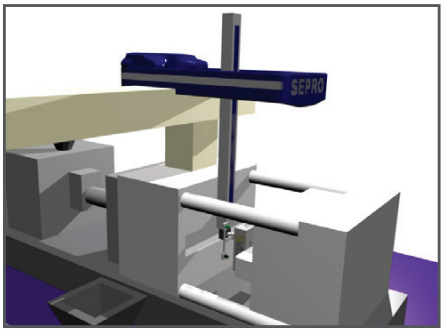
- With the 5 CNC axes, the standard path tracking function can be used to demold undercut parts following curved paths, flame treat parts or cut sprues using simple, economical tooling systems.
- Thanks to the fast 20 m/s PLC function, intelligent peripheral systems can be monitored, such as a camera to determine the position of a part, as well as external CNC axes.
- Use the Software pack on the PC to create, edit and manage programs in a Windows environment. The robots' programs and data can be centralized via a 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 part grip settings for each mold.

SIMPLICITY

- See what's created in 3D: with the Simple Pick-and-Place Module, create cycles 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 DAILY ROUTINES 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 and setters, programmers and maintenance staff have direct access to the relevant data.
- Troubleshooting assistance from hotline: with the USB key, download and send the relevant information via Internet for remote assistance.



5X line

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	5X - 15	5X - 25	5X - 35
Mold clamping force - indication metric tons	30 - 300	150 - 400	400 - 900
Mold clamping force - indication US tons	1500 - 4000	1500 - 6000	2000 - 9000
Horizontal stroke (mm) (1)	4	4	3,5
Demold stroke (mm) - transverse layout	500	700	900
Maximum instantaneous speed (m/s)	3	3	3
Demold stroke (mm) - transverse layout	1000	1200	1400
Maximum instantaneous speed (m/s)	5	4	4 - 3,5 (HL)
Vertical direct arm :	5 - 3 (S)	10 - 7 (S)	15 - 20 (HL)
- Vertical stroke (mm)	☑	☑	☑
- Maximum instantaneous speed (m/s)	6	8	8
Maximum load (parts + EOAT) (kg)	6	8	8
R1 servo rotation (0 -180°) + R2 (0-270°)	☑	☑	☑
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

YOUR FREE CHOICE IN ROBOTS

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