



S5 Line
The Industrial Robot par excellence



CM S5 Line

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Reliable

S5 Line is Milacron's 5th generation of robots. Milacron offers a high-performing robot with accomplished design.



Rigid

The single-piece, frame structure and prismatic linear guideways bring high rigidity adapted to high accelerations of the mobile parts.



Quick motors and clever software

Powerful servomotors allied with a clever anti-vibration software ensure maximum accelerations and minimum intervention times.



Precise

S5 Line reliably carries out your most complex applications (insert placing, stacking, etc.). Our CNC rotations allow precise positioning and great flexibility thanks to their compact design that facilitates access into the mould.



The **Y free function**, available as standard makes programming easier for parts ejection tracking and enables you to save on gripper costs thanks to a simpler design.

A control cabinet with an innovative, modular layout

The compact beam-mounted control cabinet comes as standard on S 5-15 and S 5-25, and is designed to save floor space.

Milacron also offers, as an option on S 5-15 and S 5-25, a floor mounted control cabinet, to facilitate easier access for maintenance.

Both cabinet configurations are available as standard on S 5-35 which can automate moulding machines up to 800T. You can choose between saving space on the floor with the compact beam-mounted cabinet, or facilitating easier access for maintenance with the floor mounted cabinet.

On all S5 Line robots, the floor mounted cabinet is necessary to drive complex applications and configurations requiring over 3 CNC axes.



The S5 Line robots combined with the powerful Visual 2 control make it possible to drive Automation systems with up to 16 axes.



It's so easy

- See what you're creating in 3D with the **Simple Pick & Place Module**: create your cycle by answering the questions the system asks you and see the result immediately in 3D on the video.
- Fine-tuning movements in the mould made easy thanks to the **joystick**.



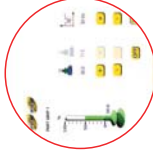
Visual 2: make your daily routine easier

- You can consult the full-screen **documentation** at any time.
- Transfer information from one team to another using the **notepad** function.
- Thanks to the **USB key**, operators, setters, programmers and maintenance personnel have direct access to the relevant data.



Tried and tested ergonomics

- **Task-based navigation** means you can directly access the job to be done.
- **Eco Mode**: after having programmed your cycle, you just need to press one key to limit power consumption during the cycle.
- **Digital vacuum switch**: program and save your part grip settings for each mould (option).



The **Milacron Automation Pack** gives you very large scope for all your stacking, insert placing, fabric overmoulding, vision, etc. operations.

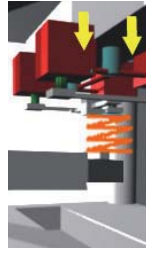
Take one step further with the Milacron Automation Pack:

- The standard, 100 ms PLC function is upgraded to 20 ms and allows you to manage external, digital axes.
- Create and fine-tune your complex program with the PC editor/monitor function in a familiar, Windows® environment.
- You manage intelligent peripheral units (vision, bar codes, RFID, etc.)



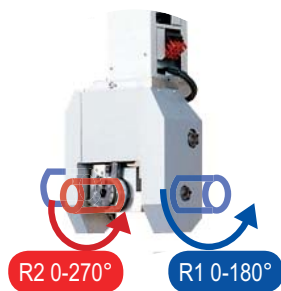
Unique Elastic Unit (option): This mechanical unit protects the gripper and mould during part gripping settings and softens the contact between the gripper and the moulded part in the case of small inaccuracies (a few mm) on the ejection movement or the mould opening.

The wrist is mounted on a linear axis parallel to the injection axis. A corrector unit applies elastic pressure on this axis and if the sensor detects that too much force is applied, it automatically brings the robot to a halt.



	CM S5 15	CM S5 25	CM S5 35
IMM clamping force	30–180 T	120-450 T	350 – 800 T
Traverse stroke	59"–157" 1500–4000 mm	59"–236" 1500–6000 mm	78"–275" 2000–7000 mm
Maximum speed	4 m/s	4 m/s	3,5 m/s
Strip stroke	20" 500 mm	27" 700 mm	35" 900 mm
Maximum speed	3 m/s	3 m/s	3 m/s
Vertical stroke - direct arm	39" 1000 mm	47" 1200 mm	55" 1400 mm
Vertical stroke Telescopic arm (option)	N/A	55" 1400 mm	71" 1800 mm
Maximum speed	5 m/s	4 m/s	4 m/s
Standard R1 rotation 0–90°	0–90° pneumatic	0–90° pneumatic	0–90° pneumatic
Part gripping	1 vacuum and/or pressure circuit	1 vacuum and/or pressure circuit	1 vacuum and/or pressure circuit
Maximum payload (part + gripper)	5 Kg 11 lbs	10 Kg 22 lbs	15 Kg 33 lbs
Compact beam-mounted control cabinet	Standard	Standard	Either
Floor-mounted control cabinet	Option	Option	

Options			
CNC vacuum switch	✓	✓	✓
Automation Pack on Visual 2	✓	✓	✓
Pneumatic rotation R2 0-90-180° (parallel to demoulding axis)	✓	✓	✓
Elastic unit	✓	✓	✓
CNC vacuum switch	N/A	N/A	✓
R1 (0–180°) + R2 (0–270°)	N/A	N/A	20 Kg 44 lbs



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All specifications reflect average values based upon typical machine layouts. Actual figures will vary depending on final machine configuration. If you require more specific data, consult a certified installation print for your particular machine. Performance specifications are based upon theoretical data. Due to continual improvements, specifications are subject to change without notice.
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