

# 6X Visual

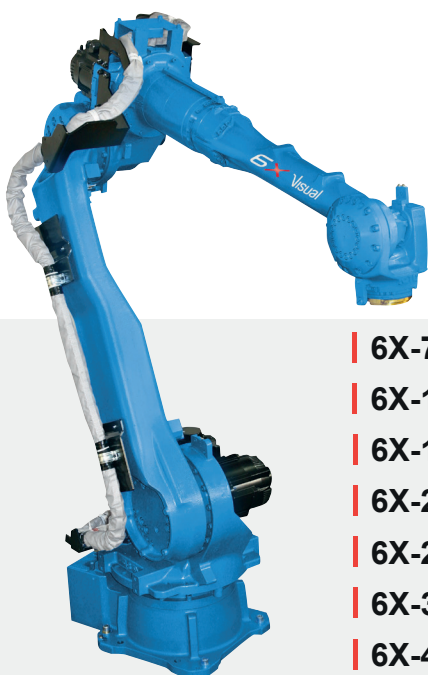
## TWO RANGE OF 6-AXIS ROBOTS FOR IMM FROM 20T TO 5000T

Sepro is offering two complementary ranges of 6-axis robot:

- The **Sepro-Yaskawa** range for equipping IMM from 20t to 5000t.
- The **Sepro-Stäubli** range for equipping IMM from 20t to 500t.

Both these ranges use the Visual control platform which allows easy and equal programming of 3-, 5- or 6-axis robots and provides access to Sepro Service worldwide.

The Visual control of 6X robots can be implemented in the control system of the injection molding machines from manufacturers who cooperate with Sepro by means of Agile Integration.



**SEPRO**  
**X YASKAWA**

- | 6X-70.2 6X-70.2L
- | 6X-140.2
- | 6X-170.2
- | 6X-205.2 6X-205.2L
- | 6X-270.2 6X-270.2L
- | 6X-315.2
- | 6X-400.2



**SEPRO**  
**X STÄUBLI**

- | 6X-60.2 6X-60.2L
- | 6X-90.2L 6X-90.2XL
- | 6X-160.2 6X-160.2L



## POLYARTICULATED 6-AXIS ROBOT OR CARTESIAN 5-AXIS ROBOT, THE CHOICE OF ADDITIONAL ROBOT FOR ALL SIZES OF INJECTION MOLDING MACHINES

6X Visual is a range of polyarticulated robots with 6 CNC axes that are simple to program thanks to Visual 3, especially designed for all your injection molding applications.

Sepro is expanding the range of robotics in the plastics industry with original and unique alliances that offer a winning choice by proposing two additional 6X Visual ranges:

- **Yaskawa Motoman** polyarticulated robots for equipping 20 to 5000 tons injection molding machines and marketed under the **Sepro-Yaskawa** brand are offering best price/quality ratio.
- **Stäubli** polyarticulated robots for equipping 20 to 500 tons injection molding machines and marketed under the **Sepro-Stäubli** brand are dedicated for technical and specific applications.



### THE POWER OF A 6-AXIS POLYARTICULATED ARM AND THE SEPRO VISUAL 3 CONTROL PLATFORM

This range is designed to equip your injection molding machines and/or post processing parts outside of the IMM.

6X Visual are 16 sizes of versatile robots to meet the specific needs of the plastics industry.

For simple unloading or complex path tracking applications, implementing the polyarticulated 6-axis is as easy and quick as for a 3-axis, thanks to the power and ease of Visual 3.

These robots are used for unloading directly from the IMM or on peripherals for post processing of plastic parts.

### SEPRO INTEGRATION

Sepro-Stäubli and Sepro-Yaskawa 6X Visual robots have Sepro plug and play integration with the Visual 3. Vacuum and pressurized pneumatic circuits and digital inputs and outputs are available on the end of arm connectors.

The EUROMAP 67 interface is standard. A fast mechanical Sepro interface is offered as an option.

Integrated in automation projects by *Smart Automation Systems* team\*, 6X Visual robots enable expansion of the perimeter of automation around injection molding machines.

\*Sepro Integration Department.



## 6X AND VISUAL 3, THE PERFECT COMBINATION FOR A UNIVERSAL AUTOMATION SOLUTION

- The speed and precision of Staübli articulated arms for the most complex applications.
- Easy programming and use thanks to the Visual 3 control system.
- For Sepro customers already familiar with the Visual environment, a short training course is sufficient to use an installation with a polyarticulated robot from the 6X Visual range.



## THE ASSURANCE OF HIGH PERFORMANCE AND SIMPLICITY!

### High Performance

- The standard Path Tracking function can be used to demold undercut parts following curved paths or flame treat parts.
- Thanks to the fast 20 ms PLC function, you can check intelligent peripheral systems, including external CNC axes.
- Use the Software pack on your PC to create, edit and manage your programs in a Windows environment.
- The Digital vacuum switch is available as standard on Visual 3 to program and save your part grip settings for each mold.

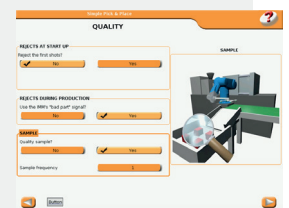
### Make your daily routine easier

- 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.



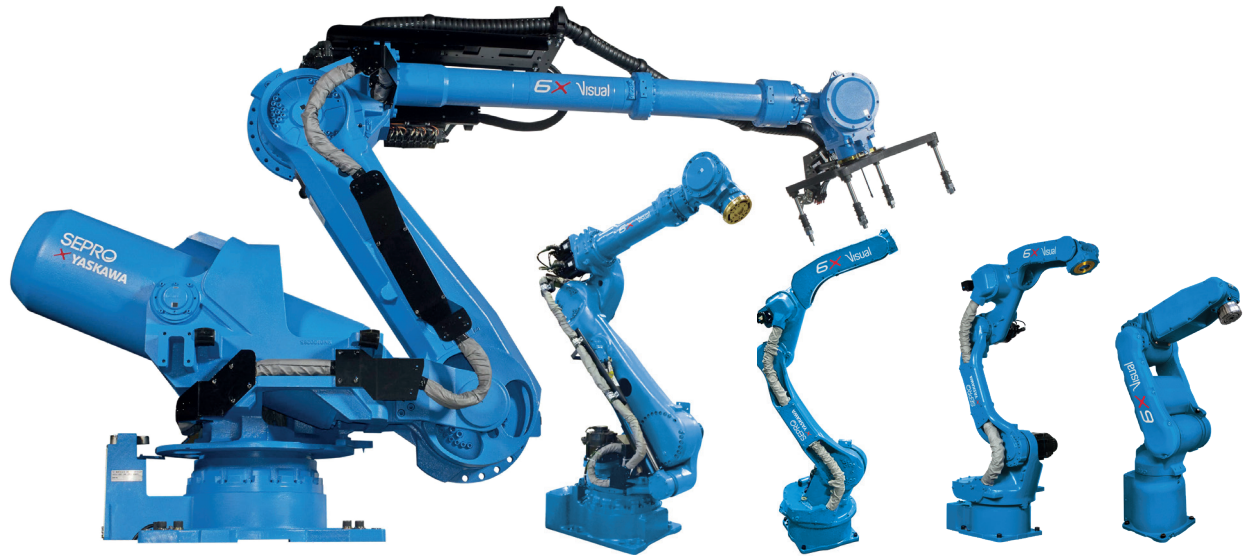
### Really simple - It's so easy

- 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.



## SEPRO-YASKAWA - THE TECHNOLOGY OF A WORLD LEADER

6X-70.2 - 6X-70.2L | 6X-140.2 | 6X-170.2 | 6X-205.2 - 6X-205.2L  
6X-270.2 - 6X-270.2L | - 6X-315.2 - 6X-400.2



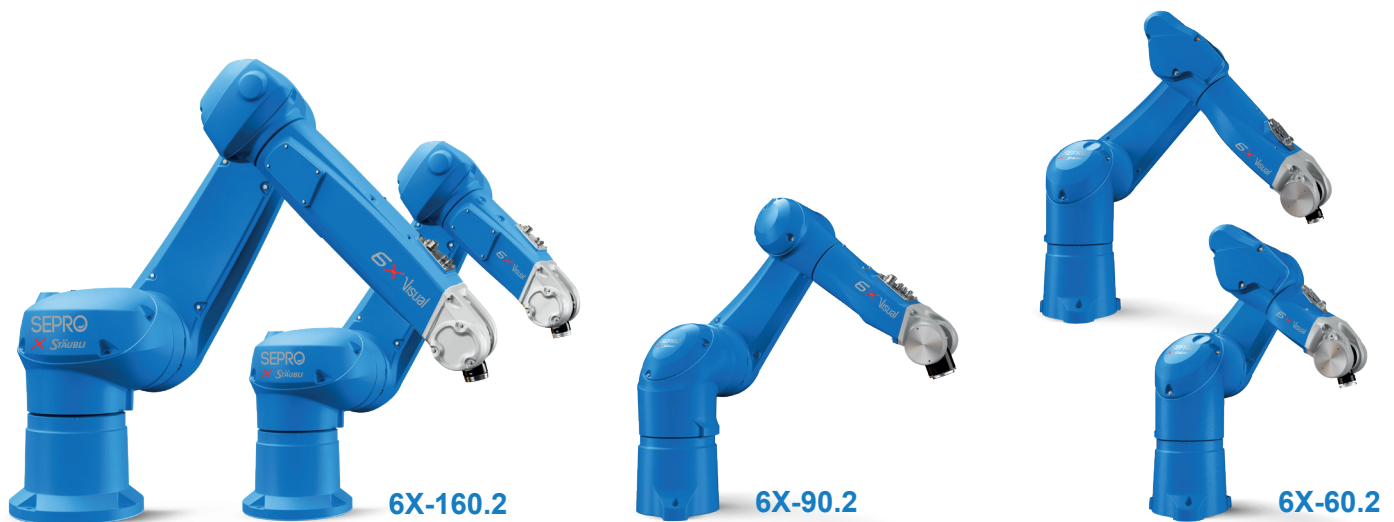
### OUR COMPLETE 6-AXIS RANGE

6X-70.2		6X-140.2		6X-170.2		6X-205.2		6X-270.2		6X-315.2		6X-400.2	
Mold clamping force (T - Metric Tons)						Mold clamping force (T - Metric Tons)							
20 - 200		80 - 200		150 - 500		500 - 1000		800 - 2000		1000 - 2000		1500 - 5000	
Version						Version							
6X-70.2	6X-70.2L	6X-140.2		6X-170.2		205.2	205.2L	270.2	270.2L	6X-315.2		6X-400.2	
Maximum load (kg)						Maximum load (kg)							
8	7	12		25		50	35	180	120	165		120	
Radius of action (mm)						Radius of action (mm)							
727	927	1440		1730		2061	2538	2702	3058	3143		4004	
Repeatability (ISO9283)						Repeatability (ISO9283)							
+/-0,02	+/-0,03	+/-0,08		+/-0,06		+/-0,07		+/-0,2		+/-0,2		+/-0,2	
Protection category (*wrist)						Protection category (*wrist)							
IP67		IP54/67		IP54/67		IP54/67		IP54/67		IP54/67		IP54/67	
Type of installation - Side Entry Ground						Type of installation - Side Entry ground							
✓		✓		✓		✓		✓		✓		✓	
- Side Entry Ceiling*						- Side Entry Ceiling*							
✓		✓		✓		✓		N/A		N/A		N/A	
- Top Entry (on IMM's fixed plate)						- Top Entry (on IMM's fixed plate)							
N/A		N/A		N/A		N/A		✓		N/A		✓	
Floor-standing control cabinet						Floor-standing control cabinet							
✓		✓		✓		✓		✓		✓		✓	

\* Contact Sepro Group

## SEPRO-STAÜBLI - HIGH END TECHNOLOGY

6X-60.2 - 6X-60.2L | 6X-90.2L - 6X90.2XL | 6X-160.2 - 6X-160.2L



### OUR COMPLETE 6-AXIS RANGE

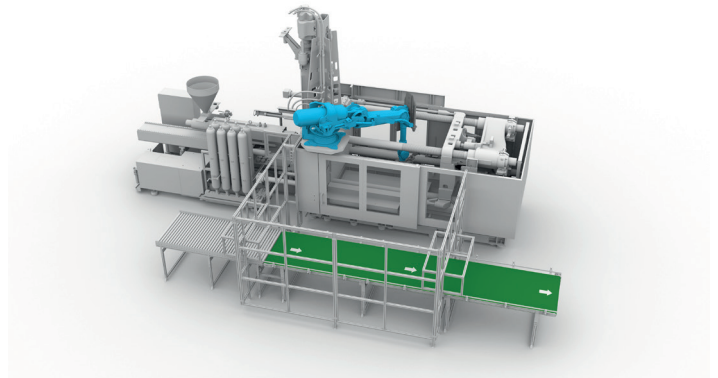
6X-60.2		6X-90.2		6X-160.2	
Mold clamping force (T - Metric Tons)					
20 - 100		80 - 200		150 - 500	
Version					
6X-60.2	6X-60.2L	6X-90.2L	6X-90.2XL	6X-160.2	6X-160.2L
Maximum load (kg)					
9	5	15	9	40	25
Radius of action (mm)					
670	920	1200	1450	1710	2010
Repeatability (ISO9283)					
+/-0,02	+/-0,03	+/-0,035	+/-0,04	+/-0,05	+/-0,05
Protection category (*wrist)					
IP65 / IP67		IP65 / IP67		IP65 / IP67	
Type of installation - Side Entry Ground					
✓		✓		✓	
- Side Entry Ceiling					
✓		✓		N/A*	
- Top Entry (on IMM's fixed plate)					
N/A		N/A		N/A	
Floor-standing control cabinet					
✓		✓		✓	

\* Contact Sepro Group

## INSTALLATION ADAPTED TO YOUR SPECIFIC NEEDS

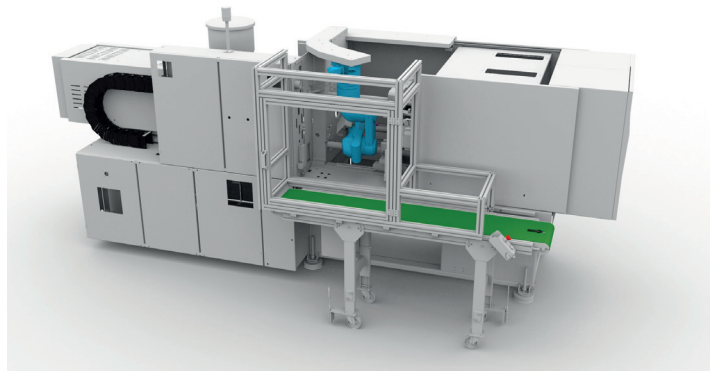
### INSTALLATION ON THE IMM'S FIXED PLATEN - TOP ENTRY

- No floor area is occupied by the robot
- Enables IMM operation with the doors closed



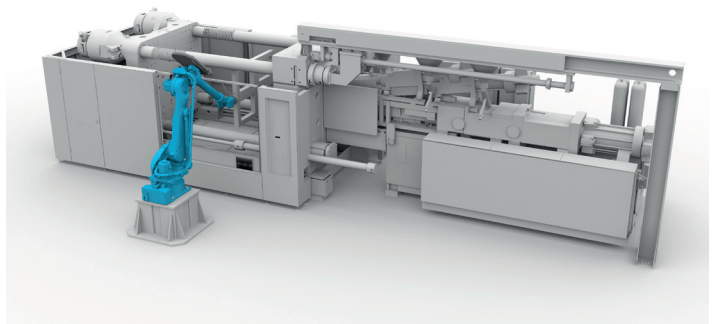
### CEILING INSTALLATION SIDE ENTRY

- Very compact installation integrated in the IMM
- Laminar flow above the mold and easy to install



### FLOOR INSTALLATION SIDE ENTRY

- Wide work zone for the robot
- Near the floor for serving the peripheral units



Discover all our solutions online  
[www.sepro-group.com](http://www.sepro-group.com)