PRESS INFORMATION

19 October 2016

CONTACT: Caroline Chamard, Sepro Group - France, +33 (2).51.45.46.37; cchamard@sepro-robotique.com
Scott Collins, Public Relations, +1.216.382.8840; scollins@collins-marcom.com

At K 2016, Sepro Suggests Industry 4.0 Starts with Connecting People

Industry 4.0 and the Factory of the Future are expected to be subjects on the mind of every visitor to K 2016, the world's biggest plastics show taking place in Dusseldorf, October 19 – 26. Most people will be thinking about machines that are able to communicate and collaborate with other machines or with human beings. Sepro Group, the robot manufacturer exhibiting in Hall 12, Stand A49, has bigger ideas.

"I think the general assumption is that Industry 4.0 is an evolution of technology," says Sepro CEO, Jean-Michel Renaudeau. "Many people think it is a feature or capability that is built into equipment they can buy. However, we believe that idea is too limiting. If you look at robots and injection-molding machines, Industry 4.0 is already here. Our equipment has been communicating with molding machines and human beings for years. It has to do so to function properly.

"Of course, that communications technology will become more advanced," he continues, and we are already seeing collaborative robots or co-bots that can work side-by-side with humans in some cases. However, we need to think of Industry 4.0 in broader terms. At Sepro, we believe the real Industry 4.0 will see communication, integration and collaboration not only between machines, but also between people and between companies around the world. That is what will take industry to the next level. That is what will create the factories of the future."

Indeed, Sepro has already taken significant steps toward Renaudeau's vision of Industry 4.0. It started with the company's proprietary Visual control platform: one control, developed specifically for plastics injection molding that can be customized to control the simplest sprue picker or the most advanced 3-, 5- or 6-axis robots; that can control one robot or an entire automation cell.

This same control can be used to operate not only Sepro robots, but also robots developed by other companies, including Sepro robots partners Stäubli Robotics, Yaskawa Motoman and Machines Pagès. It can integrated into the control systems on injection-molding machines made by Sumitomo Demag, Billion, Stork and others, making it easier for molders to set up and operate manufacturing cells.

A demonstration of this advanced connectivity is taking place on the Sepro stand at K 2016, where a Sumitomo Demag molding machine is producing syringe barrels with the help of a Sepro 6X-60 articulated-arm robot manufactured in collaboration with Stäubli. It illustrates how Sepro collaborates with different companies so it can offer three different levels of integration between the molding machine and the Sepro Visual 3 control.

- Level 1 – Mirroring: The IMM doesn't control the robot, but it does provide the interface to the robot control. In this configuration, it is possible to control the robot either from the robot control pendant or from the machine control panel.
- Level 2 – Shortcuts: This configuration adds the ability to use shortcut icons and keyboard functionality built into the IMM control. Also, IMM set-up actions – like selecting or entering a mold or job code – automatically trigger similar actions in the robot control.
- Level 3 – Full Integration: The robot application program is fully integrated in the IMM control and all application data, including robot programming and possibly other auxiliary equipment like mold temperature controls, are filed in one place in the IMM control memory. This arrangement is best for molders that want to centralize management of plant production and prevent any chance of a conflict between robot and machine controls.

Collaboration Between Companies

The demonstration described above would not be possible without Sepro's consistent pursuit of partnerships with other automation companies and IMM manufacturers. That level of collaboration is also evident throughout injection-molding exhibits in Halls 12, 13 and 15, where a total of 24 Sepro robots can be seen operating not only on the Sepro stand, but also in the booths of 10 different exhibitors representing 7 different countries.

COUNTRY	NAME	HALL	STAND	EXHIBITING
Benelux	Stork	13	D72	1 Robot
Brazil	Romi	15	D40	3 Robots
China	Haitian	13	A57	2 Robots
China	Chen Hsong	13	B43	1 Robot
China	Confidential	13	–	1 Robot
China (Taiwan)	FCS Group	12	B11	2 Robots
Europe/USA	Confidential	15	–	1 Robot
France	Billion	15	B24	3 Robots
Germany	Confidential	13	–	1 Robots
Germany/Japan	Sumitomo Demag	15	D22	2 Robots

Driving Industry Forward
Jean-Michel Renaudeau also points out that Industry 4.0 is bigger than the plastics industry alone. This is why he and Sepro are working with other businesses and institutions to share knowledge, resources and perspective.

For instance, Sepro is collaborating with the Robotics Institute at Carnegie Mellon University in Pittsburgh, PA, to develop the next generation of robot and injection-molding machine controls. The project is still in the development phase, but it is likely that the new controls will feature elements like 'agile' ergonomics, similar to tablets, the ability to 'learn by doing,' 3D simulation to make programming easier, extensive customization, and 'apps' to facilitate routine functions like maintenance and troubleshooting.

However, collaboration cannot be confined within one industry. So, Renaudeau is actively involved in developing innovative management practices with Audencia Business School in Nantes, one of the top business schools in France and in Europe. The school has 3470 students from over 80 countries in its bachelors, international and specialized masters, MBA, doctoral and executive education programs.

He calls this "crossing the border." When people and companies share resources, he says, they develop a more global view. They gain information and understanding that allows them to become stronger quicker. He points to his own company as an example of how these kinds of connections ultimately benefit plastics injection molders. "How does a relatively small company like Sepro, in the middle of nowhere in western France, become a global leader in robotics and automation," he asks? "Industry 4.0 is not just about technology that allows machines to communicate. That's a part of it, but more importantly it is about people and companies multiplying our own capabilities through collaboration and a shared vision of the future. Why else are auto companies like Ford actively working with service companies like Uber?"

This vision of Industry 4.0, what Renaudeau refers to as "the commons sense view," and his commitment to it, has allowed Sepro has been able to make big things happen in a short period of time. At K 2016, he is urging visitors and exhibitors alike to embrace a more expansive and more inclusive approach to creating the factory of the future.

About Sepro
Sepro was one of the first companies in the world to develop Cartesian beam robots for injection-molding machines, introducing its first CNC controlled "manipulator" in 1981. Today, Sepro Group is one of the largest independent sellers of Cartesian robots and is on track toward its fourth straight year of record sales. With 3-, 5- and 6-axis servo robots, special-purpose units and complete automation systems, all supported by one universal control platform developed by Sepro especially for injection molders, Sepro offers a wider choice of robots that any other supplier in the plastics industry. Customers around the world are supported by wholly-owned daughter companies and sales and service offices ten key markets, and numerous independent business partners, distributors and service hubs extend Sepro's global network to over 50 other countries. To date, Sepro has equipped more than 30,000 injection-molding machines worldwide.

<p style="text-align:center">xxx</p>