

MILACRON

Find a Better **Way**

In today's competitive economic environment the saying "Nothing ventured, nothing gained" strongly persists. Customers expect that machine builders provide great solutions for their needs, as they are looking for advanced technologies to get an edge in business. However, latest trends show that technology is not everything. What sets Milacron apart from many other suppliers in the plastics industry is their focus on sales and support services, as well as providing the customer with cutting edge technology.



Derek Beeker
Manager, Quality and Product Validation,
Milacron - US Injection Machinery Business

Q: Outstanding Quality, service and support are major factors in establishing a long lasting customer relationship - How does Milacron distinguish itself from competitors on the Market and how does B&R support you?

"Providing service in a very quick manner and resolving any issues quickly is very important to our customers. B&R supports us by taking care of our control warranty needs through their Atlanta office with less than 24 hour part delivery to our customers. They also provide us with local and Austrian support for troubleshooting any issues our Service guys may get into. They also monitor very closely what parts do get shipped under warranty looking for root causes to help us both produce better products for our customers."

Q: How would you describe Milacron's relationship with B&R?

"I feel we have a good close working relationship with B&R, in essence a good partnership. We stay in close contact with B&R Austria, even though they are thousands of miles away and 6 hours time difference. Together, we have resolved and improved our control reliability dramatically."

Find a Better Way

To "find a better way" has been the key philosophy of Milacron's success since 1884. What started out as a small manufacturing company, has become a renowned global leader in the manufacturing of plastics processing equipment. Today, Milacron offers full lines of advanced injection molding, extrusion and blow molding equipment and supplies.

Serving the World Markets

Despite the recession in 2001 and the trend of downsizing among OEM's, Milacron - a diverse and global machinery and equipment supplier - is well positioned in this ever changing marketplace.

Milacron builds injection molding machines (hydraulic, electric, horizontal and vertical, thermoplastic, thermoset and structural foam) in the U.S., Germany and India, blow molding machines (single- and two-stage shuttle models) in the U.S. and Italy, and single- and twin-screw extruders in the U.S. Some of the industry's best known brands are part of the company's product lineup: Cincinnati Milacron, Ferromatik Milacron Europe, Ferromatik Milacron India and Autojectors for injection molding machines, Uniloy Milacron and Uniloy Milacron B&W for blow

molding machines as well as Cincinnati Milacron for extruders.

With manufacturing facilities in more than 10 countries and sales and service offices worldwide, Milacron is where its customers are. With over 4,000 committed employees worldwide, Milacron's global presence is one of the company's biggest strengths. Keeping the world markets in mind, Milacron is a significant player in the Asia Pacific region in addition to the company's ongoing success in North America, Europe and India. Milacron's presence in the Peoples Republic of China is represented by their manufacturing joint venture located in Jiangyin, Jiangsu which operates as Milacron Plastics Machinery Jiangyin Co. Ltd.

Plastics Technologies

Milacron has particular expertise in Injection Molding, which is the most widely used polymeric fabrication process. It is used to form a wide variety of products. Complexity is virtually unlimited, sizes may range from very small to very large, and excellent control of tolerance is achieved. Identical parts are produced through a cyclic process involving the melting of a pellet or powder resin followed by the injection of the polymer melt into the hollow mold cavity under

"B&R has become our complete solution provider for automation technology."



N.K. Balgi
President
Ferromatik Milacron
India

Q: What is your view about local B&R service and support capabilities?

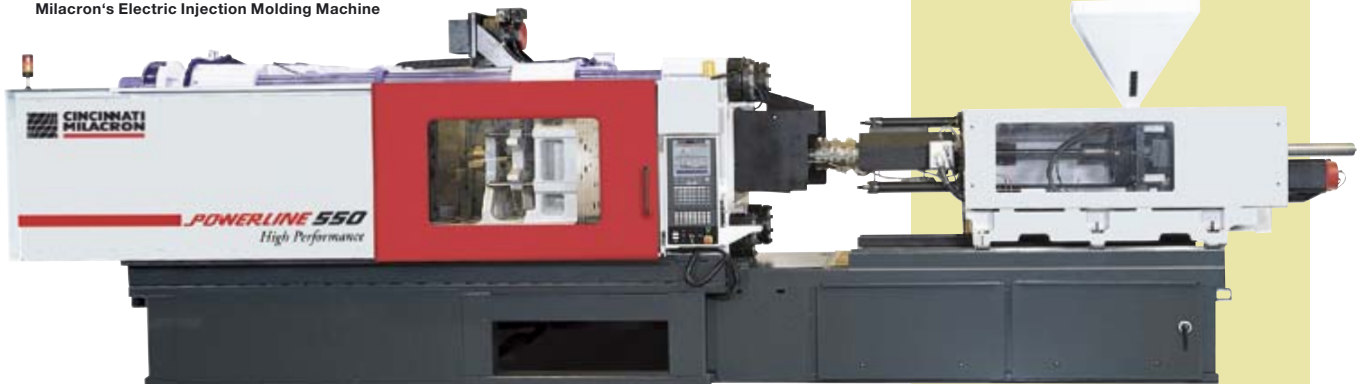
“1. Technology - always exceeded the expectations in providing the differentiating as well as cost effective solution 2. Delivery - flexible to meet customer expectations.”

Q: How has B&R helped you to fulfill the requirements of your Market?

“Ferromatik Milacron India markets were looking for machines at different technology and price level for commodity applications and molding technical / functional parts. B&R India configured appropriate hardware for controls at different technology and cost level at no sacrifice on reliability and user-friendliness. B&R Controls thus complemented robust, reliable, high performance image of Ferromatik Milacron India Injection Molding Machines.”

high pressure. As a manufacturer of various different machines, Milacron faces many challenges when it comes to automating these applications. The requirements include highly optioned machines with a full blown Windows HMI and highest cycle times in the controller for the hydraulic circuit. This is solved with a PC based solution. Servo drive based motion applications are developed with B&R ACOPOS and very price critical machines are equipped


Milacron's Electric Injection Molding Machine



with B&R PLC's and embedded HMIs. B&R with its broad product range of scalable hardware allows Milacron to find the optimal solution for each task at hand, from the largest size hydraulic machines to the smallest of all electric molding machines and blow molding machines. From High end PC based systems to PLC based solutions, as well as drives for the all-electric injection molding machines, B&R offers a complete solution. Depending on the control requirements the B&R System 2005, System 2003 or X67 is used to either control the machine or can be used as the I/O system. B&R's system allows for custom solutions based on the requirements of the industry.

Partnership & Support

B&R, a technology leader in the development and manufacture of Integrated Automation Solutions, has had successful business relations with Milacron since 1991. Over the last 14 years B&R has become the supplier of automation equipment for Milacron worldwide.

Milacron makes a strong commitment to their customers to manufacture extremely reliable machines. If there is a problem it must be fixed quickly, as up-time is the most important factor for customers. B&R, with its worldwide network of sales and service offices, provides the necessary support to help them achieve these goals. Additionally, B&R's research and development team is dedicated to develop new technologies needed in the marketplace to support Milacron in its goal to help the world's leading companies produce your favorite products. 

www.milacron.com



Dr. Wilfried Lehmann
Manager Engineering
Ferromatik Milacron
Europe

Q: How does your company cope with increasing market demands and which role is B&R taking in this regard?

“The continuous mechanical, hydraulic as well as electrical and control related development and enhancement of our injection molding machines helps us cope with increasing market requirements. Joint product development in various locations based on global standards and an increasingly modular design are key factors for good technical as well as economical results; besides the use of efficient tools and flexible components. This is also the basis for efficient worldwide service offerings to our customers. Additionally, all related decisions are made to achieve the greatest customer value.

B&R's role in Milacron's efforts to achieve these goals is being a reliable, international partner in automation related issues. The B&R subsidiary in Heilbronn is fulfilling this task through general and project oriented support in a very satisfactory way.”

Q: How would you describe the B&R product developments since the beginning of our business relations in 1991?

“B&R has become our complete solution provider for automation technology. Besides the control technology we are successfully employing B&R's visualization, communication and drive technology in the manufacture of our machines today.”