Specialty Manufacturers

Shapes the Future

A Newsletter by Specialty Manufacturers, Inc.

Volume 03, Spring 2004

Specialty Manufacturers Adds New Technology to all of Its Divisions.

t seems that in the plastic injection molding industry, nothing ever stands still. Customers constantly are designing better, more innovative products that perform more complex tasks. Along with these investments in time and effort comes the need to produce these products more

efficiently. The concept-to-market cycle is moving faster than at any other time in history as companies attempt to fill consumers' insatiable demands for new products.

It's a never-ending, performance-driven task faced by the manufacturing industry which must continually invest in well-trained personnel and advanced technology in order to keep pace with customers' needs.

To ensure Specialty

Manufacturers' leadership role in the global marketplace, the company recently has added new high-tech equipment at three of its facilities. To the already impressive list of equipment at D&M Tool in Springville, Indiana, Specialty Manufacturers has added the Roeders RP 800 high-speed milling machine. Apollo Plastics Corporation in Chicago has added the Nissei Model THM7 compact vertical insert molding unit and an Engle 200-ton multi-shot molding machine. And, last but certainly not least by any means, a JSW 200-ton thin wall molding machine was added to the

arsenal of technology at PRD, Inc., also in Springville, Indiana.

"At a time when many molders in the United States have closed their shops," states David Lucas, vice president of Specialty Manufacturers,

> "we have maintained our financial stability and have found ourselves in a position that allows us to expand our equipment inventory."



The Roeders RP 800 high-speed milling machine for hardened steel utilizes an onboard laser to direct the cutting process.

ENTER THE ROEDERS RP 800 HIGH-SPEED MILLING MACHINE.

Billed as a high-speed milling machine for hardened steel, the RP800 utilizes an onboard laser to direct the cutting process. According to Mike Baker, CAD/CAM Engineer at D&M Tool Corporation, the

Roeders RP 800 unit provides the company with "an accuracy edge."

"There are certainly other machines in this category," states Baker, "as the industry sees the need for this type of equipment. However, the one thing this unit has is superior accuracy."

According to Baker, this accuracy allows for more than just the perfect mold. It helps speed the production process. Says Baker, "In this day and Continued on page three.

People First is Our Philosophy in this Business

eople First has been the foun dation of Specialty Manufacturers' success for over fortysix years. It is my belief that the talented people at our plants provide us with a real competitive edge in the marketplace for our products. Their hard work, dedication to our company's mission and their desire to master the needed skills have helped us build a stellar reputation for the four divisions - a real success story during tough times in the industry.

As you will see in this issue, we understand the concept that for our workforce to meet customer's needs, we must provide them

with the best tools of the trade. High tech tools that offer greater versatility and faster performance. Tools each plant who are completely tuned to the diverse world in which we operate. I believe this culture is

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ihapes the Future

We are exceptionally proud of the progress we have made in promoting diversity and open communications across our companies.

John W. Lucas, Jr., Founder Specialty Manufacturers

that challenge our employee's talents to be productive, to work smarter while meeting our customer's varied design requirements.

We have leadership teams in place at

one of our most important competitive advantages. It is this culture that influences the way we treat customers, associates, and our community, and it impacts all our successes in business. We are exceptionally proud of the progress we have made in promoting diversity and open communications across our companies. Our commitment to giving associates free rein to make decisions at the division level promotes and creates greater opportunities for growth and success within their divisions.

Please Take a moment and browse through this latest issue of our newsletter. It's all about some really capable people doing great things with cutting edge machinery. It's the perfect combination of talent and technology that's hard to beat.

For Mike Baker Learning is Job One!

ike Baker a CAD/CAM Engineer



Supervisor at D&M Tool Corporation, a division of Specialty Manufacturers, is no stranger to the hard work it takes to keep up in the high tech world. He has

> fashioned his talents around extensive training on the new RP 800 by traveling several times to Roeders offices in Detroit. A longtime employee of D&M (since 1982),

Mike has been impressed with the resources Specialty Manufacturers has devoted to the training and development for him and his staff. Since technology is a driving force in the industry, Mike says it's wonderful to know that his company is on the cutting edge with both resources and training. "We're (still) in a learning process," states Mike, "and I hope that never stops. That's what I like about my job." Mike, a native hoosier, born

Employee Profile

and raised in Bloomington, IN enjoys the summers there building hot rods at his home where he uses his newly aquired skills to craft an item of a different sort - a 1967 (classic red) Corvette. When not working with his hands, Mike enjoys spending time with his wife of 26 years and their daughter Katy a sophmore at Indiana University Bloomington.

New technology to meet customer needs

Specialty Adds New Equipment (con't. from pg. one).

age, everybody wants things faster and faster, with customers requiring shorter lead times. There are occasions when this machine's speed is not that much greater than a regular machine's speed. The secret, however, is in the time it saves with other processes down the line (polishing, inspection etc.). That makes this unit the best possible addition to our company."

The Roeders RP800 provides precision cutter placement while offering increased cutter feed and cutter speeds of up to 2,362 inches per minute at 36,000 rpm, respectively.

Other features of this unit include:

Laser measurement

and alignment of cutters while the machine is running.

- Accuracy greater than .0004 inch.
- Reduced need for hand polishing of finished work.
- Built-in 3D probe allows inspection of work without removing milled items from the machine.
- The unit is controlled by the Roeders RMS 6 high-performance parallel computer control. This control enables optimal feed rate adjustment to tool path geometry while providing automatic compensation and vibration prevention.

According to Baker, "It's nice having the capability of milling hardened steel. It

eliminates some other processes that we have had to use in the past, especially a lot of time on the finishing side, because the part that's coming off the mill has such a nice finish and it's so accurate, nothing much else needs to be done with it."

Speed, accuracy and well-designed technology are only part of the equation for growth at Specialty Manufacturers. The other ingredient involves the dedicated and talented workforce. (See the related column by John W. Lucas Jr., Founder of Specialty Manufacturers.)

Specialty Manufacturers already has sent Baker to a two-week training program to be updated on the newer version of the software for the unit. Additional staff will be taking the same training as the machine becomes fully integrated on the floor. "It's all new technology that we're learning very quickly," Baker says. "And it's a learning process that I hope never stops... that's what I like most about my work."

David Lucas sums it up by stating, "We believe it is important to remain competitive by keeping abreast of these emerging technologies for the tool making and injection molding industries. We have raised the bar for the competition with the purchase of these new machines."

The learning column

Looking into the Future with Mold Flow

It sounds like a story from a sci-fi movie where the hero can foretell the future by peering into a crystal ball. Well, what may seem mysterious to some, is quite routine at Specialty Manufacturers where our specialists can look inside the molding process before the customer's idea ever leaves the computer. It's called Mold Flow and with this integrated software, Specialty can take a customer's CAD/CAM drawings and give them a comprehensive view of how the mold will look before it is created for production.

According to Tom Copeland, President of the Medical Products division of Specialty Manufacturers, Mold Flow can simulate how the plastic will react in the virtual environment of a computer.

This software allows the user to sample various options and conditions for the injection molding process including: the type of plastic to be used, run temperatures, gate placement, and, without ever leaving the confines of Specialty's computer, Continued on page four.

Looking into the Future (con't. from page three).

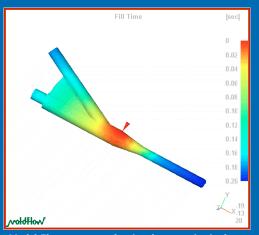
simulate a test shot of the design. Each condition can be

saved and reviewed and provide valuable data for measuring the results of the process.

By using various colors, the software demonstrates for the customer how the material will flow into the mold, which area will fill first

and last, reveal short shots and any no fill problems, as well as detect thin wall concerns. "By using this approach," states Tom Copeland, "We

can model or predict how the plastic will flow into the mold



Mold Flow uses color to demonstrate how the material will flow into the mold.

before we cut that first piece of steel, saving our customers time and money." Best of all, Specialty service representatives can take their crystal ball

directly to the customer, (on CD of course) to demon-

> strate the process. In this manner the CAD/CAM drawings can be adjusted riaht at the customer's office.

No, the software cannot predict what the winning lottery ticket will be, but with near perfect

intuitive accuracy, Mold Flow can deal Specialty Manufacturer's customer the perfect winning hand.

Trade Show Dates

If you're in the neighborhood please make come by and visit our booth at the following trade shows:

Plastics Encounter Booth 635

March 23-25, 2004 Charlotte Convention Center. Charlotte, NC

MD&M East **Booth 2747**

June 15-17, 2004 Jacob J. Javits Convention Center. New York, NY

MD&M Minneapolis

October 20 & 21, 2004, Minneapolis Convention Center Minneapolis, MN

Divisions of Specialty Manufacturers, Inc,



MEDICAL PRODUCTS

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Medical Products produces plastic and metal components for the medical industry. Medical Products assures compliance with applicable quality system regulations and standards such as cGMP and ISO/EN. Medical Products offers a class 100,000 Clean Room for molding and assembly and will provide modular clean room enclosures as needed for arowth.



APOLLO PLASTICS Alberto Silva, President

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Apollo specializes in complicated thin wall molding and secondary operations including assembly, machining, painting, laser etching, silk screening, pad printing, and chemical & mechanical bonding. The company has expertise in building high-speed assembly equipment to reduce costs and improve quality. Apollo is certified to ISO 9002 and QS 9000.



PRD. INC.

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PRD has for over 20 years been a manufacturer of high quality injection molded products. In addition to injection molding, PRD offers machining, assembly and test services to customers in North America, Asia and Europe. PRD is certified to ISO 9002, QS 9000 and ISO 14001.



D&M, TOOL CORP.

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D&M Tool is Specialty's state-of-

the-art facility for creating molds for plastic injection molding and die casting. D&M also machines tight tolerance metal and plastic components. D&M Tool Corporation's quality system is certified to ISO 9002 by ABS Quality Evaluation, Inc.