

# “There’s No Reprocessing System Like Ours Anywhere Else”

## With 10 Years of Experience in Reprocessing and Over 60 Million Pounds of Plastic Materials Reprocessed, Monoflo Leads the Way With Support from WITTMANN BATTENFELD



Crystal Gagnon, WITTMANN Marketing Communications Manager; Ashly Hawkins, Operations Manager at Monoflo; Calvin Wetzell, Extrusion Supervisor at Monoflo; Brent Strawbridge, National Key Account Manager.

Based in Winchester, VA, Monoflo International is a well-known manufacturer of injection molded totes, bins, pallets and other packaging solutions. They supply their products to some of the world’s largest companies including CVS, General Motors, Amazon, and many others.

What Monoflo is perhaps not as well-known for are its large-scale plastics reprocessing operations. Starting back in 2010 with their first foray into recycling, Monoflo has worked for years to perfect the process. Today, Monoflo’s plastics reprocessing business is booming; the company now features two highly automated lines that feature 3,000 lbs/hour capacity. To keep up with the growth, Monoflo has added new buildings, new equipment, and new technology – and it’s just getting started.

“It took several years to perfect the most efficient way to run this re-pro operation,” said Ashly Hawkins, Operations Manager at Monoflo.

“Now we have a proven system in place that can reprocess 12-15 million pounds of material per year. What we have here is unique.”

### ‘Totalizing’ the Process

When Monoflo first got into reprocessing, they called on WITTMANN BATTENFELD for support. WITTMANN was already supplying robots and material handling systems to Monoflo.

“Monoflo reached out to us back in 2011 asking for our advice,” said Steve Mussman, Division Manager – Material Handling & Auxiliaries at WITTMANN BATTENFELD. “They told us they wanted to develop a recycling system that could shred used tote bins, reprocess the materials and reuse the material in new molded bins.”

Mussman and other WITTMANN personnel visited Monoflo’s plant in Virginia to consult on the new system. “We are experts in material

handling, and that expertise helped a lot," he said. "We worked hand in hand with Monoflo to design a system that totalize and convey the reprocessed material to the designated silo or building."

WITTMANN coined the name 'Totalizer' for the system, and it stuck. Since 2012, with WITTMANN's help, Monoflo has made continuous improvements to the line and now runs 2 'Totalizers' at its Winchester facility. From a modest 1,000 lbs/hour capacity at start-up in 2012, the Totalizers now process over 3,000 lbs/hour of HDPE, PP, and structural foam parts.



Scrap totes on conveyor on their way to granulator for grinding

### From Tote to Pellet

Monoflo's reprocessing operation involves buying back used or end-of-life containers from its customers, regrinding and reprocessing the material, and reintroducing the materials into newly molded containers. What started out as an idea has turned into a major, and growing, part of the company's business model.

"The market for recycled and reprocessed resin continues to grow," said Hawkins. "The demand for these materials comes from our customers, but we also have made it part of our mission to encourage the industry to increase its recycling. Lately, the high cost of virgin resin has led to increased customer demand for more repro," she said.



Monoflo chunks



Monoflo repropellets

A major challenge for the business is to keep a steady stream of scrap products coming in, said Calvin Wetzel, Extrusion Supervisor at Monoflo. "We get most of our scrap from our customers, but we also source it from other suppliers," he said. "We need to vet the scrap that we receive to make sure it doesn't include products or materials we can't use."

The importance of controlling the entire reprocessing in-house at Monoflo is critical, said Wetzel. "We know the source of our materials and can maintain control over, and ensure the quality of the reprocessed resin," he said.

### Partnership

Monoflo has three WITTMANN M7 control systems managing material handling in their main building; a fourth system is being installed this year, and another one is being added to a new building in 2022. While the products are working flawlessly, it's WITTMANN's support that means the most to Monoflo.

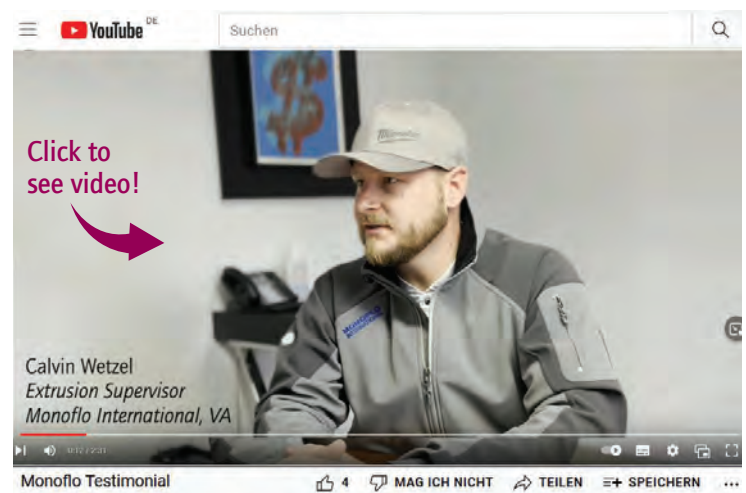


WITTMANN was instrumental in designing and installing new piping and granulators at Monoflo

"Over the years Monoflo has asked us to work with them to continually improve the material handling aspect of their injection molding and reprocessing operations," said Mussman. "We've helped with numerous things including adding silos to replace storage bins, moving the repro material from the buildings to the silos, and implementing a railcar unloading system

to move material from the silos to other parts of the facility. Overall, we've provided the know-how and advice to help Monoflo lay out its reprocessing operations for the highest efficiency."

"The material handling focus that WITTMANN offers has been a big part of our success," said Hawkins, "but it's their consulting support and advice that has really set them apart. They are transparent and accountable in all that they do. Our relationship with WITTMANN is a true partnership."



## From the President David Preusse, President, WITTMANN BATTENFELD USA

While the past year has been challenging to our company and so many others around the world, WITTMANN has plenty of positive news that I would like to share with you.

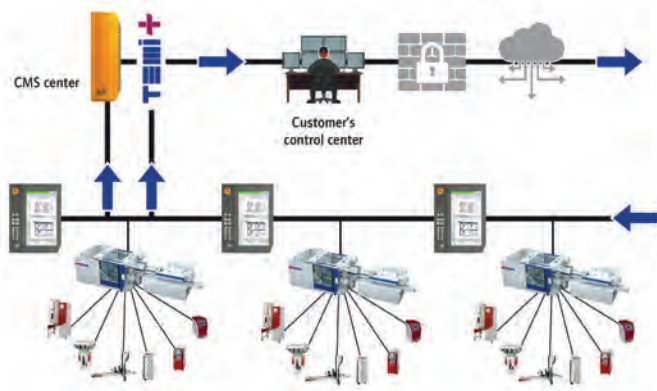
### Record Sales and Demand for Our Products

At WITTMANN USA, we enter 2022 with an all-time high backlog of orders. In addition, we saw yet another record year in 2021 for overall sales. We are in this position due to a robust economy, stimulus infusions, and the hard work of our employees and the continued loyalty of you, our valued customers.


WITTMANN sells IMM's, Robots, and Auxiliaries and we have been experiencing a heightened market demand across many products since mid-2020. We attribute this demand to several things:

**-higher resin prices**, which triggered a larger demand for our granulators, blenders and loaders, products that allow processors to insure they capture and return sprues and scrap back into their parts production wherever possible;

**-the continued global pandemic and worker shortage**, which triggered a larger demand for our robots. Robots are more attractive than ever to molders, as they help offset the difficulties of finding workers; they do not have pandemic exposures or sickness, they just keep running. Clients are also replacing older robots as they modernize their plants; they want increased automation besides the traditional 'pick and place' robots for added return on investment; and



**-the increased adoption of Industry 4.0**, which has led to increased sales of our integrated work cells of injection molding machines, robots and auxiliaries. 4.0 Smart Factories provide numerous advantages. They are more efficient, use less energy, and provide more throughput and smarter processing for greater machine utilization, faster mold set ups and change-over times, and less scrap. All of this is helping processors use the Internet of Things as never before. WITTMANN has a unique 'one-stop-shopping' business model. We are the only plastics industry supplier that builds all of its own machinery and equipment.

Customers prefer to work with a single source supplier, which provides them with one point of contact that takes responsibility for all of their equipment, integrated systems and mold runoffs.  Industry 4.0 Solution

### Continued Push for Sustainability

We're proud that many of our products, including our material handling systems, are involved in real-world waste reclamation projects that represent our industry's efforts to contribute to the circular economy. Check out the Monoflo International story in this newsletter, which is a great example of how WITTMANN has helped a company successfully grow its reprocessing business. Not only did WITTMANN provide Monoflo with the products to help them succeed; we helped them with our engineering and consulting expertise to help them design their reprocessing lines for maximum efficiency.

Sustainability is a movement in our industry that continues to grow. WITTMANN has the products and expertise to help any processor who wants to implement sustainable practices into its operations. Our engineers, sales and service personnel are experts who can help design systems to meet each customer's specific needs.

Contact us today to discuss your sustainability initiatives.

### New Products, New Image

I'd like to mention our new R9.1 robot (see story in this newsletter), which we are finally launching along with the 'QuickNew Wizard' program this Spring. WITTMANN has led the way in the plastics industry for many years with our robots and automation solutions, and the R9.1 is the latest example of this. In addition to best-in-class performance, the R9.1 features an ease of programmability that allow users to select robot activities and run without programming skills. Check out the story and stay tuned as we announce robot availability and training classes – coming soon.

Finally, you may notice that the new logo we are using says 'WITTMANN' – and not the 'WITTMANN BATTENFELD' we have used since 2008. It has been decided by our parent company that with the continued growth of our 'One-Stop-Shop' advantage, it was best to create one uniform brand designation for our entire product line. Going forward, all of our advertising activities and product lines will use the WITTMANN logo.

Thank you to all of our customers for your continued support. Feel free to contact me at:

[David.Preusse@wittmann-group.com](mailto:David.Preusse@wittmann-group.com)



# New QuickNew Wizard for WITTMANN BATTENFELD R9.1 Robots Provides Enhanced Functionality, Expanded Capabilities

*New Program Provides More Customization, Easier Programming for Molders*

WITTMANN BATTENFELD has introduced its newest robot programming tool, the R9.1 QuickNew Wizard. R9.1 QuickNew Wizard is designed to provide molders with an easier and more detailed tool for programming the functionality of their WITTMANN R9.1 robots.

Customer research and feedback led to the improvements that are being introduced in the R9.1 QuickNew Wizard, resulting in a more flexible and functional program.

The QuickNew Wizard is a guided programming tool consisting of two components:

1) The first component is a questionnaire where the user selects the processes required to successfully remove any combination of parts / runners from the injection molding machine (IMM) and place them in the appropriate location and mechanism (conveyor, tote, drawer, grinder) downstream from the IMM.

2) The second component is the 'QuickEdit'. Based on the selections from the questionnaire, a series of parameters are generated for fast and simple editing of all positions, timers and speeds needed to complete the process resulting in an efficient structured text program, reference program and EOAT Change program.

The answers provided by the user automatically create a text program that is used to program the R9.1 robot. WITTMANN BATTENFELD has added many new functions and features to create programs that create easy programming and allow operators to complete and teach the robot program in a minimal amount of time.

While the R9.1 QuickNew Wizard questionnaire has expanded the number of options, it reduces the work required to edit the text program to add functionality. The R9.1 QuickNew features descriptive animations to make the process easier for the user, and allows a completed text program to be generated without the need of programming in text.

To allow easy programming based on the skill and experience level of the operator, customers will receive the R9.1 robot with 4 predefined password protected users:

**Admin User** has total access to the control including creating additional users;



Don't Miss Our In-Booth Demo at PTXPO:  
**Booth 706**  
 Wednesday, March 30  
 11:30 am - 12:00 pm

**Basic User** will have access to a QuickNew program generator with a streamlined guided interview to create simple pick and place structured programs;

**Advanced User** will have access to a QuickNew program generator with an expanded guided interview to allow for additional functionality in creating a structured program; and,

**Complex User** will have access to the complete guided interview process and all the options a more complex work cell may require.

The Admin User will also have the ability to customize the guided interview even further to meet the specific requirements of the user to produce structured programs that exactly match the needs of the production work cell. For example, if a work cell only utilizes runnerless molds then the questionnaire can remove the steps pertaining to runner removal; or if a work cell never requires a degating process, these options can be removed and the questionnaire is reduced even further.

## The Enhanced R9.1 QuickNew Program Generator

The R9 QuickNew Wizard programming tool allows for the entire configured axis, vacuums, grippers and outputs of the robot to be utilized in the program generator. The expanded features of the questionnaire now include:

- Part handling with vacuum, gripper or both
- Runner handling with vacuum, gripper or both
- Selectable part and runner monitoring
- Selectable activation of runner handling before or after ejection
- Selectable runner release location
- Selectable placing methods of standard placing with up to 16 drop locations or Bulk filling of multiple containers.
- Selectable palletizing at each location
- Reject Sequence is selectable for placing at separate location or to a reversible conveyor
- QC Part Drop selectable based on Auto-switch, part count or both

- Selectable mold entry utilizing patented time saving Smart Removal or a traditional take out method waiting for completion of mold open
- Safe Wait selection if needed to wait outside of mold area due to mold obstructions
- Selectable Core Sequence
- Selectable use of Soft Push function to remove longer parts
- EOAT Expansion selection with monitoring
- EOAT Compliance Cylinder selection with monitoring
- Mold exit options selectable independent of mold entry type to allow for patented Smart -Removal or traditional including a safe wait location option to allow robot to exit mold area prior to mold closing.
- Selectable degating option to choose which axis moves into the nipper first

## The new TEMPRO plus D120 temperature controller

In 2019, the pressurized TEMPRO plus D100 temperature controller quickly established itself on the market with impressive sales figures. Following the introduction of this appliance, targeted market research revealed a similarly great demand for a directly cooled pressurized unit of the same size. The secret of WITTMANN's success lies in the development of need-oriented innovative products in line with the market, so the company decided to respond to the call and fulfill its customers' wish for a corresponding directly cooled pressurized model. WITTMANN now presents its new, directly cooled TEMPRO plus D120, in a single-circuit as well as a dual-circuit version. The latter is the first directly cooled dual-circuit appliance from WITTMANN.

The compact, powerful TEMPRO plus D120 dual-circuit temperature controller offers the advantage of two independent temperature control circuits with high cooling performances. Direct cooling imposes stringent demands in terms of wear-resistance on the cooling valve which, depending on the application and the specific temperature control required for the individual process, switches over with varying frequency. WITTMANN has taken this into account by installing a durable piston cooling valve in the TEMPRO plus D120. This valve withstands a considerably larger number of switching cycles without maintenance, and consequently offers a much longer service life than a conventional membrane cooling valve.

The new TEMPRO D120 impresses users with its more-than-complete standard version which, in combination with a wide range of optional equipment (all of which cannot be enumerated here) leaves nothing to be desired in terms of configuration options.

As standard, the appliance features a highly efficient direct cooling capacity of 80 kW with an  $\Delta t$  of 75 °C.

Apart from the 9 kW standard heating capacity, capacities of 12 kW or 16 kW are also available, depending on the production heat required for various applications.

In its choice of pumps, WITTMANN relies exclusively on high-quality stainless steel pumps with wear-free magnetic couplings, covering a range of maximum flow rates from 40 to 90 l/min. As a specialty, the choice includes a frequency-controlled pump with 1.1 kW / 50 l/min / 9 bar. The great advantage of a frequency-controlled pump installed

in the directly cooled TEMPRO model is its high flexibility in control parameters, since it offers a choice of being controlled either by motor speed, pressure or flow rate. This allows every user to choose in each case which parameter they wish to use for controlling their process. A choice which also supports the general effort to save energy. The new TEMPRO comes with a WITTMANN 4.0 interface as standard, which enables integration of the appliance into the work cell's control system.



### TEMPRO plus D120

- Magnetically couple pump
- No pump seals
- Infinite mold purge
- WITTMANN 4.0 interface standard
- Max flow: 24 gpm (90L/min)
- Optional Frequency controlled pump



## WITTMANN BATTENFELD Inc. Personnel News

### ***Crystal Gagnon Promoted to Marketing Communications Manager!***

Crystal Gagnon has been promoted to Marketing Communications Manager for WITTMANN USA. Crystal graduated from Southern CT State University in 2005 with a BS in Marketing. She joined WITTMANN BATTENFELD USA's marketing department in December 2013. Prior to that, she held a marketing position at an academic book distributor where she was involved in marketing, sales and conferences. Since joining WITTMANN she has been involved in all aspects of marketing, including; Advertising, Web Development, Social Media, Trade Show Management, PR, Technical Conference and Trade Show coordination,

and Webinar Production. Her latest project involved creating a brand new WITTMANN USA Corporate Video. On a personal note, Crystal is also getting married this summer to another WITTMANN employee, Jeremy Brocius. We want to wish Crystal the best of luck in her new role and to her and Jeremy in their upcoming nuptials.

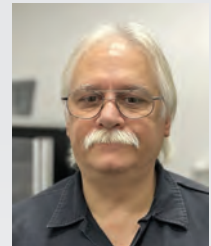


### ***Bill Huggins Assumes New Role as Robot Trainer***

Bill has been doing Field Service and Training for WITTMANN for nearly 17 years.

In that time he has started, programmed and serviced every Robot control platform the company has had. He has also programmed all of the company's robots to control a wide variety of custom automation equipment.

est scores ever on the interview exam we use. This made sense as Bill came to us with years of Service and Controls Engineering experience. He is no stranger to WITTMANN robots and will do a great job as our new Trainer."



Duane Royce, WITTMANN USA Vice President - Robots and Automation, said, 'when we hired Bill back in 2005, he had the one of the high-

### ***Jim Daly Retires***

WITTMANN was sad to say goodbye to our long-time Trainer, Jim Daly, who retired at the end of 2021. Jim started at WITTMANN in November 2006 and was the company's Robot Trainer and NPE Show Manager.

As Robot Trainer, Jim did all in-house customer training at WITTMANN's USA headquarters in Torrington, CT. He also visited customers at their locations, and led training classes at WITTMANN's Technical Centers around the country. He was instrumental in developing and growing WITTMANN's training program, and he also created training videos that continue to have the top views on WITTMANN's USA YouTube channel. Jim has always played a big part in WITTMANN's robot software development and testing, including the new R9.1 Quick New Wizard (see separate story in this newsletter).

As NPE Show Manager, Jim managed all aspects of WITTMANN BATTENFELD's exhibits and displays at four NPE shows (2009, 2012, 2015, and 2018). This required a huge effort to coordinate the company's displays, which included as many as 12 operating injection molding machine cells, complete with robots and auxiliary equipment. Jim also worked with show management to successfully manage all the tasks that go into a booth display, including installation and dismantling, utilities, etc.



## Upcoming Events

**Our Innovations Roadshow Truck is sanitized and on the road and ready to visit your shop so you can check out our products up close!**



Currently making it's way around the Eastern Midwest (MI, OH, IN, KY, WV)!

**EXPERIENCE WITTMANN 4.0**

Learn how it can help you increase your productivity!

LIVE PRODUCT DEMONSTRATIONS:

**W822 Robot**

**B8 Injection Molding Machine Control**

**Drying, Blending and Water Temperature Control Technologies**

Contact Us Today for more information:

Crystal Gagnon, Marketing Communications,  
Crystal.Gagnon@wittmann-group.com



[Click to Register](#)



**QUALITY AND ENGINEERING FORUM**  
March 10-11, 2022 | Virtual

Don't Miss Our Regional Sales Manager, **Dan Spohr**,  
Presenting: **Is it time to replace your injection molding robots?**  
at 12:00 pm on March 10th!



**Plastics in Motion 2022**

March 23 - 24, 2022

Charleston, South Carolina

[Click to see Agenda](#)

Don't Miss **Jim Mitchell** presenting "Novel Lightweighting with Foaming and Gas Assist Technology" at 4 pm on March 24th!

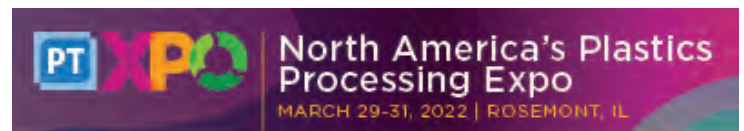


March 25-26, 2022

Detroit, MI

[Click to Register](#)

**COME VISIT US AT BOOTH #424!**



**VISIT US AT BOOTH #706**

[Click here for your FREE Expo Hall Pass!](#)



**Don't Miss Our IN-BOOTH DEMO ON THE R9.1!**

**Jason Long**, National Sales Manager- Robots

Wednesday, March 30

11:30 am - 12:00 pm



**DON'T MISS OUR UPCOMING FREE WEBINARS!**

April 20th at 2 PM

Presenter:

**John DePasquale**, Product Manager- MH & Auxiliaries

"Introducing Regrind to your Molding Process"

[Watch PT for Registration!](#)

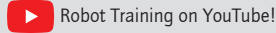


An E-newsletter from WITTMANN BATTENFELD USA



WITTMANN BATTENFELD Training

In-Person Robot Classes Starting Up Again!



We are happy to announce that WITTMANN BATTENFELD USA is starting up its in-person robot training classes again. While we have been happy to provide complete training services remotely over the past year, it will be a welcome sight to have customers visiting us at our three USA locations in Torrington, CT, South Elgin, IL, and Placentia, CA.

Please visit our new website for dates for upcoming training classes: [https://www.wittmann-group.com/en\\_us/training](https://www.wittmann-group.com/en_us/training)

Connect With Us on Social Media!

Make sure to connect with WITTMANN BATTENFELD USA on our social media channels! Here is some of our recent activity:



- WittmannBattenfeldUSA
- Wittmann-Battenfeld-USA
- @WITTBATT
- WittmannUSA

world of innovation

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