

**ENGEL and Infiltrator Water Technologies:  
Where collaboration is huge**

## **ENGEL supplies two 8,000-tonne injection molding machines to North America**

Schwertberg/Austria – February 2023

**Austrian injection molding machine manufacturer ENGEL has set a new record with two injection molding machines delivered to the USA. With a clamping force of 8,000 tons each, they are the largest machines ever built at the St. Valentin plant in Austria. The two ENGEL duo 130000/130000H/8200 combi US machines were placed at Infiltrator Water Technologies (IWT) in Winchester, Kentucky. The subsidiary of Advanced Drainage Systems (ADS) produces water management products there.**

The two duo injection molding machines each have two 85,000 cm<sup>3</sup> injection units which allow for injecting a total shot weight of 270 lbs (122 kg). The giant machines have a total length of 96 feet (29.3 meters) and a width of 37 feet (6.4 meters). This can be considered a relatively small footprint compared to the clamping force and shot size. This is where the two-platen design of ENGEL large-scale machines shows its strength.

ENGEL is increasingly receiving requests for custom solutions in the extremely high clamping force range. Clamping forces of 10,000 tons and more are possible. Machines of this size can process individual shot weights of several 100 kilograms of material and achieve material throughputs of two tonnes per hour.

### **The largest machines ever built by ENGEL**

Even though the St. Valentin plant is accustomed to building large equipment, working on these two huge machines was special to all team members involved. "I am proud to have been a part of this," says Jim Moran, Business Development Manager at ENGEL North America. "You can imagine the special shipping and ground transportation arrangements needed

**ENGEL**  
be the first

ENGEL AUSTRIA GmbH | A-4311 Schwertberg | tel: +43 (0)50 620 0 | fax: +43 (0)50 620 3009  
sales@engel.at | www.engelglobal.com

to move the machine from Austria to the U.S. The platens were transported to and from the St. Valentin manufacturing facility along the Danube River on barges," Moran explains, just one of many challenges that had to be overcome. He continues: "Each machine was fully assembled and tested prior to shipping and then disassembled to be shipped to the U.S."

Once at the Infiltrator site, the enormous size and scale of these machines, required new manufacturing facilities to house them. David Gedrits, Director of Manufacturing Capital Implementation, describes the logistics coordination necessary to complete the new 59,000 square-foot building expansion at the same time 29 truckloads of machine parts were arriving from Austria. Over the next 2 months the machine was assembled while the building and all the necessary auxiliary equipment and utilities were installed. A 150-ton overhead crane was installed for moving molds in and out of the machine and was also used to help assemble the new press. Dozens of individuals worked on the project completing thousands of hours with a perfect safety record. "The work ethic of the ENGEL team was incredible as they worked long hours, including weekends to finish the machine assembly and turnover to Infiltrator in rapid fashion."

### **Quick collaboration from design to delivery**

It was a hand-in-hand journey imagining, designing, and building these machines. "We chose to work again with ENGEL based on our existing relationship and previous capital projects that were delivered on time and on budget," says Ron Brochu Vice President of Manufacturing for Infiltrator. "Not only does ENGEL work with us to specify the right equipment, once installed the equipment has an excellent track record of operation and production. Reduced downtime and greater throughput are a hallmark of ENGEL equipment."

ENGEL received the purchase order in November 2020. The handover of the first machine was completed in February 2022. Now, a year later, the second machine, a replica of the first, was delivered.

### **Sustainability, long-term partnership, and investment for the future**

ADS and ENGEL share their commitment to sustainability. "We are managing a precious resource, water, through innovative products, using a high content of recycled plastic," says

Scott Barbour, President, and CEO of ADS. The company recycles more plastic than any other in North America. As a result, ADS was recognized for its commitment to recycling by receiving the number 1 ranking by Plastics News in 2022.

"We have made significant investments in new equipment, and this will allow us to produce our products more effectively and efficiently," says Bryan Coppes, Vice President of Engineering and R&D at Infiltrator. "It is the new capabilities and opportunities for continued product development that is truly exciting. This new equipment will allow us to continue to bring new and innovative products to market and meet and exceed our customers needs."

ENGEL has recently been awarded EcoVadis' "gold" sustainability rating. For customers like Infiltrator, this is further confirmation that they have chosen the right partner. EcoVadis is the world's largest provider of sustainability rankings. The rankings include data from more than 90,000 evaluated companies and focus on the global supply chains in each case. In addition, the companies' environmental, social, and ethical performance is evaluated.

ENGEL is proud of long-term partnerships with customers like Infiltrator and ADS. "A project like this one is always a challenge. Along with the size of the machines, the innovation required, and the related investment comes a certain risk. However, our long-standing partnership, mutual trust, and truly just understanding what is essential for the other party helped tremendously," says Vanessa Malena, President of ENGEL North America. She adds: "We are excited to see what we have accomplished together. When developing solutions with our customers, we endeavor to surpass the limits and contribute to their success and growth with forward-thinking design and manufacturing."



The entire ENGEL team from conception, design, assembly, testing and transport with representatives from Infiltrator at the Factory Acceptance Test for machine number one in St. Valentin, Austria. (Picture: ENGEL)



Special transportation was required for many parts of this huge machine. Pictured is the arrival of the 257,941 pound stationary platen at the Infiltrator facility in Winchester, KY. (Picture: ENGEL)





One of several large molds that can be installed in ENGEL 8200 ton clamp injection molding machine using a 150-ton crane. (Picture: ENGEL)



A view of the clamp area reveals the sheer size of the overall machine at 96 feet. (Picture: ENGEL)



A seamless installation of automation for the handling of large parts with shot weights up to 270 pounds. (Picture: ENGEL)



Infiltrator Water Technologies' molding campus in Winchester, KY., has seen more than \$100 million in expansions in recent years. (Picture: Infiltrator)

## **ENGEL AUSTRIA GmbH**

ENGEL is one of the global leaders in the manufacture of plastics processing machines. Today, the ENGEL Group offers a full range of technology modules for plastics processing as a single source supplier: injection moulding machines for thermoplastics and elastomers together with automation, with individual components also being competitive and successful in the market. With nine production plants in Europe, North America and Asia (China and Korea), and subsidiaries and representatives in more than 85 countries, ENGEL offers its customers the excellent global support they need to compete and succeed with new technologies and leading-edge production systems.

### Contact for journalists:

Susanne Zinckgraf, Manager Public Relations, ENGEL AUSTRIA GmbH,  
Ludwig-Engel-Strasse 1, A-4311 Schwertberg, Austria  
PR Office: Theodor-Heuss-Strasse 85, D-67435 Neustadt, Germany,  
tel.: +49 (0)6327 976 9902, fax: -03, e-mail: [susanne.zinckgraf@engel.at](mailto:susanne.zinckgraf@engel.at)

### Contact for journalists in North America:

Kleta Childs, Senior Manager Marketing, ENGEL North America  
3740 Board Rd., York, Pa., 17406,  
tel.: 717.764.6818 ext. 3390, fax: 717.764.0314, e-mail: [kleta.childs@engelglobal.com](mailto:kleta.childs@engelglobal.com)

Birgit Degwerth, Vice President Marketing, ENGEL North America,  
3740 Board Rd., York, Pa., 17406,  
tel.: 717.764.6818 ext. 3391, fax: 717.764.0314, e-mail: [birgit.degwerth@engelglobal.com](mailto:birgit.degwerth@engelglobal.com)

### Contact for readers:

ENGEL AUSTRIA GmbH, Ludwig-Engel-Strasse 1, A-4311 Schwertberg, Austria,  
Tel.: +43 (0)50 6200, fax: -3009, e-mail: [sales@engel.at](mailto:sales@engel.at)

### Legal notice:

The common names, trade names, product names and similar cited in this press release are protected by copyright. They may also include trademarks and be protected as such without being specifically highlighted.

[www.engelglobal.com](http://www.engelglobal.com)