

FOR IMMEDIATE RELEASE

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## ***Mold-Masters® Releases Fusion Series® G3 Optimization Enhancements That Improve Overall Productivity by Minimizing Downtime and Enhancing Overall Performance.***

Georgetown, ON, June 13, 2024 – Mold-Masters®, a leading developer and supplier of hot runners, controllers, auxiliary injection, and co-injection systems, has enhanced its latest generation of drop-in ready Fusion Series hot runner systems.

The Fusion Series G3 system's improvements from the previous G2 system optimize mold design to simplify installation, minimize downtime, and enhance overall performance. The new enhancements include:

- **Quick Valve Pin Stroke and Height Adjustment**
- **Quick Release Actuators**
- **Compound Nozzles**
- **Heated Nozzle Flange**
- **Waterless Actuators featuring PACT**



### **Quick Valve Pin Stroke and Height Adjustment**

In addition to offering more compact actuator dimensions, all units now offer quick and easy adjustment of valve pin height and stroke. The valve pin height can be adjusted without the need to remove the actuator from the mold. This enhancement makes adjustments during the system installation process much quicker and easier without the need for machining.

### **Quick Release Actuators**

Fusion Series G3 actuators can now be detached from the hot runner system, without having to remove the valve pin with it, to make servicing the actuator much quicker and easier.

For comparison, hot runner system designs that need to pull the valve pin to remove the actuator require that the system be heated to release the valve pin from the cold resin which takes extra time to complete. In addition, on systems incorporating long valve pin lengths, it would be necessary for hydraulic lines to be fully disconnected which adds to service times and risks creating a mess from leaks when having to disconnect the hydraulic lines.

This extra complexity and hassle are eliminated with the new G3 quick release actuators.

### **Compound Nozzles**

Compound G3 nozzles are also available which feature a tapered nozzle body to maintain gate access in areas with limited clearance. These nozzles feature a larger runner channel at the base of the nozzle to

reduce pressure drop and improve melt flow performance. Compound nozzles are a durable one-piece design without any split line connection in transition and are available in standard lengths up to 800mm.

### **Heated Nozzle Flange**

For high pitch systems, a heated nozzle flange is now available for enhanced leak protection from the effects of thermal expansion. These minimize the core deflection effect to ensure proper hot runner alignment is maintained and are recommended when drop length (N) to pitch ratio (MP) is not satisfied. Heated nozzle flanges are available for F5-F8 nozzle sizes.

### **Waterless Actuators**

Waterless actuators feature an advanced design incorporating **PACT (Passive Actuator Cooling Technology)** which maintains operating temperature by transferring heat to the top clamp plate. As such, they can eliminate conventional hose-plumbed cooling circuits to actuators. Benefits to the molder include faster mold changes (less components to manage, allows for simultaneous shut down of Mold Cooling and Hot Runner), provides long-term performance reliability (eliminates issues associated with clogged cooling circuits) and enhances safety when the hot runner is used at Pre-Heat stations. Valve pin height adjustment is also a standard feature.

Fusion Series G3 systems are now engineered to be installed and uninstalled at room temperature. It can be pulled directly from the shipping box and placed into the mold. This helps to significantly reduce installation time, eliminate extra equipment such as a temperature controller and improve safety conditions during installation, assembly, and removal.

Fusion Series G3 nozzles are available in customizable lengths up to 1,000mm and feature more compact nozzle bore cut-outs. Fusion nozzles incorporate field replaceable heater bands and gate seals to ensure molders can respond and fix issues quickly on-site to minimize downtime. Most gate seals are interchangeable between G2 and G3, so customers can convert to the new system, in many cases, without any special retooling.

Mold-Masters Fusion Series G3 hot runner systems are shipped pre-assembled, pre-wired, plumbed, and tested for fast, one-step installation. They are also available with our industry-leading 5-year warranty.

Fusion Series hot runner systems are also compatible with our advanced Servo Electric Valve Gate (SeVG+) actuation control system. SeVG+ offers absolute control and precision of actuation profiles over each individual valve pin and is well suited to your most challenging applications.

To learn more about Mold-Masters products and innovations or to speak with a technical expert, please visit [www.moldmasters.com](http://www.moldmasters.com) or contact [info@moldmasters.com](mailto:info@moldmasters.com)

#### **About Mold-Masters**

Mold-Masters is a leading global supplier of hot runners, controllers, auxiliary injection and co-injection systems. We design, manufacture, distribute, sell and service highly engineered and customized plastic processing equipment that caters to every market. Mold-Masters is credited for patenting the first commercially viable hot runner system in 1965. Today, Mold-Masters conducts business in more than 100 countries and employs a diverse workforce that exceeds 2,150 professionals. Mold-Masters Global Headquarters is located in Georgetown, ON Canada. Mold-Masters is an operating company of Hillenbrand (NYSE: HI). [www.moldmasters.com](http://www.moldmasters.com)

Hillenbrand (NYSE: HI) is a global industrial company that provides highly engineered, mission-critical processing equipment and solutions to customers in over 100 countries around the world. Our portfolio is composed of leading industrial brands that serve large, attractive end markets, including durable plastics, food, and recycling. Guided by our Purpose — Shape What Matters For Tomorrow™ — we pursue excellence, collaboration, and innovation to consistently shape solutions that best serve our associates, customers, communities, and other stakeholders. To learn more, visit: [www.Hillenbrand.com](http://www.Hillenbrand.com).