

PRESS RELEASE

For immediate release, general distribution

New Auto Color Change System Cuts Changeover Time and Reduces Labor, Colorant Use and Scrap

[NPE Booth W3045, Orlando, FL – May 7, 2018]...

Sumitomo (SHI) Demag Plastics Machinery North America, Inc. introduced today a new, fully automatic, fast color change system for its injection molding machines.

An SE50EV-A all-electric machine demonstrated the new system by molding PP vacuum cleaner fan blades on a 14-sec cycle. The SEEV-A platform machine is one of 10 models at NPE ranging in size from 56 to 562 U.S. tons. Four models are in the company's booth, W3045, and six are in other exhibitors' booths.

The new color change system, which is available as an option on SEEV-A machines:

- Saves labor by automating the process steps from purge to production
- Increases color changing efficiency, reducing the time to change colors, the amount of resin and colorant used
- Prevents defective parts from reaching the production line by distinguishing defects by optional image sensor and the SEEV-A's QC capabilities



The demo featured a 3-cavity, cold runner mold for the 1.9-gram parts.



[MORE]

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The programmable Pigmic mixer changes colors prior to the last shot and begins feeding the next color. A color definition camera with image sensor works together with the Pigmic mixer to log desired color(s) and determine non-conforming parts based on color for rejection. Auto purging and part rejection will continue until the desired color is achieved.

Working as a closed-loop system, the mixer also receives feedback from the camera when color adjustment is required, and optimizes the amount of color used to achieve the desired color. Approximately 17% less colorant is required due to this optimization.



The Pigmic pigment mixer (CAM Co., Ltd.) precisely weighs and meters colorant to the screw.

The Pigmic system's precision weighing equipment and mixer are installed above the hopper on the injection molding machine. Pigment is precisely fed directly to the screw by the metering process. Benefits of the Pigmic system include:

- Cost savings compared with using masterbatch
- Input structure prevents powder from collecting inside of hopper
- Eliminates waste because only the amount needed is colored and a tumbler is not necessary
- Easy to precisely adjust and maintain the color tone from closed loop feedback

In addition to the color changing system, the company introduced the capability for a new, optional cavity pressure sensor and material temperature sensor for inside the mold. These can be added to the machine's QC logging screen for added prevention of defective parts reaching the production line.

The mold, Pigmic pigment mixer and conveyor for this demo were provided by CAM Co., Ltd. Other companies contributing to this demo included: Total Petrochemicals & Refining USA, Inc. (resin); Star Automation, Inc. (robot); Advantage Engineering, Inc. (chiller & mold temperature controller); and Matsui America, Inc. (dryer & loader).

[MORE]

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The SE50EV-A is just one of Sumitomo (SHI) Demag's 12 diverse machine demos at NPE highlighting the **Productivity⁺** benefits that expand molding capabilities and increase profitability for molders. To see all of the company's NPE demos, attendees are encouraged to visit the following booths:

Sumitomo (SHI) Demag	Booth W3045
RJG Inc.	Booth W3383
Yushin America, Inc.	Booth W2173
Gammaflux L.P. (Männer molds)	Booth W763
Canon Virginia, Inc.	Booth W223

Sumitomo (SHI) Demag's worldwide group of companies is dedicated to helping plastics processors compete more effectively in the global market. The company manufactures a wide range of high-precision IM machines for diverse applications. Its all-electric platform (SE, SR and CL series) spans from 8 to 935 U.S. tons, including micro to mid-sized, high-speed, packaging, high-duty, vertical, insert and high-speed multi-shot machine series. Ultra-high-speed hybrid machines (EI-Exis SP and Systec SP series) are offered in models from 165 to 825 U.S. tons for packaging and other thin-wall applications. Configurable, high-performance hydraulic and toggle machines (Systec Series), including multi-component models, are also provided for applications from 39 to 2248 U.S. tons. Equally important, Sumitomo (SHI) Demag has an extensive worldwide network, ensuring customers of sales, parts, training, service and processing support when and where it is needed.

Information on the North American operations of Sumitomo (SHI) Demag can be found at www.sumitomo-shi-demag.us.

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