



Market Monitoring Newsletter

THE ESSENTIAL NEWS OF ROTOMOULDING WORLDWIDE

Plastics pros enhance skills at Penn College.



A diverse group of plastics professionals from throughout North America experienced higher-level technology in rotational molding during a recent workshop hosted by Pennsylvania College of Technology and its renowned Plastics Innovation & Resource Center (PIRC).

Twenty-one individuals from 13 companies learned the connection between material preparation, molding and final part quality at the Rotational Molding & Advanced Materials Workshop. The two-day session offered a mix of lecture and hands-on experience at the college's Shell Polymers Rotational Molding Center of Excellence. Dru Laws, an industry leader and operations expert who is CEO of Halltech Systems in Rexburg, served as workshop presenter. He is a member of the Association of Rotational Molders' Rotational Hall of Fame. The workshop earned rave reviews from the participants, representing nine states and Canada. M. Holland Co. in Northbrook, Illinois, served as platinum sponsor. The PIRC is one of the top plastics technology centers in the nation for research, development and education related to injection molding, extrusion, blow molding, rotational molding and thermoforming.

<https://www.psu.edu/news/penn-college/story/plastics-pros-enhance-skills-penn-college/>

Rotational Molding Hall of Fame elects two new inductees.



Two rotational molding industry veterans, Corey Claussen and Alvin Spence, have been elected by the Association of Rotational Molders (ARM) to the Rotational Molding Hall of Fame. Claussen, the president of Custom Roto-Mold LLC in Benson, Minn., has been involved in rotomolding for more than 25 years, growing up in the family business started by his father.

Claussen, who received the Charles D. Frederick Award for Distinguished Service in 2009, has twice served on the ARM board of directors, including two terms as president. Spence's 30+ year career in rotomolding began in 1991 at Queen's University Belfast where he completed his PhD. He then managed the Rotational Moulding Research Centre, overseeing industry-sponsored research projects. In 1997, Spence joined North Liberty, Iowa-based rotomolder Centro Inc., where he is now vice president of engineering. His research and development efforts include patented "Rotoloperm" technology used to make CARB/EPA-compliant fuel tanks, and reactive nylon 6 processing known as anionic polymerization. Claussen and Spence will be inducted on Sept. 28 at the ARM Annual Meeting in Kansas City

<https://www.canplastics.com/plastics-processes/rotational-molding-hall-of-fame-elects-two-new-inductees/1003461809/>

Ravago Buys Controlling Interest in M. Holland.



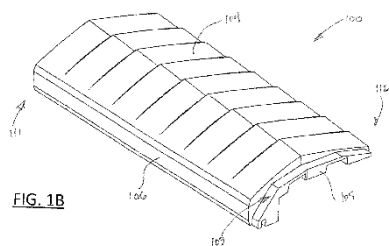
The Ravago Group has agreed to buy a controlling interest in M. Holland Company and its subsidiaries, the company has announced.

M. Holland has been in the thermoplastic resin distribution business for more than 70 years, providing suppliers with strategic channels to market, and customers with innovative product and supply chain solutions. Financial terms were not disclosed. The transaction is expected to close in late 2023, subject to the satisfaction of customary closing conditions, including regulatory approvals. Thereafter, M. Holland will continue to operate independently as a subsidiary of the Ravago Group family of companies.

<https://www.ptonline.com/news/ravago-buys-controlling-interest-in-m-holland>

Research & Patents

Moulded cladding panel.



Some embodiments relate to a moulded cladding panel. The panel may comprise: a hollow plastic body formed by rotational moulding, the body having a length, a width and a depth, a first end, an opposite second end, an upper section, an opposite lower section, a first major face defined by a front wall extending from the first end to the second end and from the upper section to the lower section, and a second major face defined by a back wall opposite the first major face, the second major face extending from the first end to the second end and from the upper section to the lower section. The upper section defines a plurality of first mounting formations to facilitate mounting of the panel to a structure to be clad. The lower section defines a plurality of second mounting formations to facilitate mounting the panel to the structure. (patent filed by AUS **GROUP ALLIANCE PTY LTD**)

<https://worldwide.espacenet.com/publicationDetails/biblio?CC=AU&NR=2023204377A1&KC=A1&FT=D&ND=3&date=20230803&DB=EPODOC&locale=fr> EP

Injection Molded, Blow Molded, and Rotational Molded Articles that Integrally Incorporate a Photovoltaic Device, and Method and System for Producing Such Articles.



Injection molded, blow molded, and rotational molded articles that integrally incorporate an operable photovoltaic device, and method and system for producing such articles. A method includes: placing an operable photovoltaic device at an inner-side of a mold cavity of a mold; performing injection molding or reaction injection molding or blow molding or rotational molding, of raw plastic materials or raw polymeric materials; and forming a single or singular, monolithic, unified or uniform, molded article that integrally incorporates and fixedly holds and tightly secures, therein or thereon, the operable photovoltaic device, directly and securely and tightly via the solidified molded plastic or the solidified molded polymer that are adjacent to it. (Patent filed by SOLARPAINT LTD)

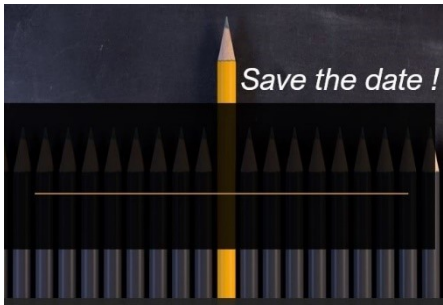
<https://worldwide.espacenet.com/publicationDetails/biblio?CC=US&NR=2023261125A1&KC=A1&FT=D&ND=3&date=20230817&DB=EPODOC&locale=fr> EP

Numerical simulation of “sand-like” polymer flow during rotational moulding using smoothed particle hydrodynamics method.



Rotational moulding is a versatile polymer shaping process used to create enclosed parts from powdered precursors using heat and multi-axis rotation. Controlling the heating process and mould motion is critical to producing high-quality parts, and failures due to incorrect mould coverage or variable wall thickness are common. To date, limited simulation tools exist to predict the motion of the powder within the mould, and operators rely on unreliable prior experience to avoid defects. This paper presents an SPH (Smoothed Particle Hydrodynamics) simulation framework to predict particle flow patterns and powder contact time within a rotating mould. The powder-to-wall contact time was derived from the transient rigid body force (RBF) of different sensors on the mould. The method was compared with the results of DEM simulation and validated by the particle flow pattern of two experimental results. Results showed that the SPH method was capable of simulating particle flow macroscopic properties. The great computing efficiency of SPH compared to DEM simulation was also demonstrated.

<https://www.sciencedirect.com/science/article/abs/pii/S0307904X23003669>



1 /13 September 2023
[Rototour Nordic 2023](#)

10/12 September 2023
[ARMO World Conference 2023](#)

27/30 September 2023
[ARM 2023 Annual Meeting](#)

28/29 November 2023

[Master Class AFR](#)

28/30 January 2024.

StaR 2024 Annual Conference & Trade Show

<https://www.starasia.org/conference-2024.php>

