



## Market Monitoring Newsletter

ARMO'S ROTATIONAL MOLDING NEWSLETTER

vendredi 11 juin 2021

### Events

#### **THE AFR'S 2021 MASTERCLASS : THE FIRST ONLINE SESSION WILL TAKE PLACE ON THE 2ND OF JULY**



The first online session's theme will be the cryogenic cleaning of rotomolding tools and molds. This technology needs to take multiple parameters into account in order to guarantee good results.

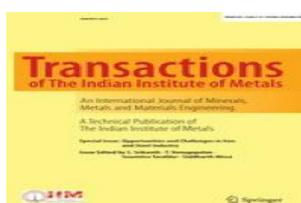
The event will focus on the following points:

- A presentation of the cryogenic technology
- Its applications regarding the rotational molding process
- Its advantages
- Its drawbacks

Click here to read more : [AFR](#)

### Research & Patents

#### **Rheological and Thermal Investigation of Industrially Processed Glass Fiber Blended with Linear Low-Density Polyethylene for Rotational Molding Process**



Rotational molding is a technique used to process plastic materials that provide the advantage of obtaining a stress-free end product. While linear low-density polyethylene (LLDPE) is largely preferred for this method, LLDPE is mixed with different additives in order to obtain adequate strength for some critical applications. In contemplation to obtain a

sound product, proper mixing of base resin and additives while sustaining rotomoldability is desirable. In the present study, processibility analysis of LLDPE/glass fiber is investigated. Researchers are familiar with the use of glass fibers as an additive in such criteria. However, the rotational molding process has yet to be studied using its industrially processed dust. In particular, the residue of industrially obtained glass fiber (GF) as a waste is mixed with LLDPE in the different weight ratio of 10% to 50%, with 5% increase subsequently. Fourier transform infrared spectroscopy is a technique performed to obtain the optimum percentage range where the result infer the dominant peaks of LLDPE and glass fiber assuring the needed blending. Melt flow index test was carried out to assess the rotomoldability of LLDPE/GF fiber in terms of fluidity. Furthermore, the current research examines the effects on the shear modulus and crystallinity of LLDPE/GF blends based on the rheological and DSC analysis, respectively. In conclusion, the experimental results suggest that 20% LLDPE/GF blend is an optimal percentage for the rotational molding process to achieve requisite processibility.

Click here to read more : [link.springer.com](https://link.springer.com)

### **Effects of some settings of rotational-molding process on the aeromechanical performance of an axial fan**



The study purposes to establish the influence of some settings of the conventional rotational-molding process on the aeromechanical performance of a hollow-blade axial fan. It is recognized that the surface state quality, the material characteristics and the blades design have an effect on the performances of the turbomachines. The use of conventional rotational-molding is an innovative method well suited for achieved hollow-blade fans, reduced cost and relatively easy manufactured. In the present work the material employed represents one grade of linear low-density polyethylene (LLDPE-3200 natural, supplied by "C4-Polymers Company"). The variables of the process studied attend the initial mass of polyethylene powder, the oven temperature and the heating time. For comparisons, a fan of similar geometry machined in an aluminium block serves additionally as a reference. The results show an optimal choice of the settings of the manufacturing process is necessary to achieve the desired aeromechanical performances for this fan.

Click here to read more : [iopscience.iop.org](https://iopscience.iop.org)

## **Rotomolding Market News - Europe**

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**The French company Rotomod selected to exhibit its new fishing kayak at the "Fabriqué en France" event**

08/06/2021



The French company Rotomod, which will celebrate its 50<sup>th</sup> anniversary in 2023, has been selected to represent its administrative district (called Lot-et-Garonne) at the “Fabriqué en France” event which will take place at Élysée Palace, the official residence of the President of the French Republic. Rotomod has been selected among more than 2,300 national applications studied by the selection committee. The company will exhibit its new fishing kayak, the Hiro, on July 3 and 4. Unveiled in March 2020, this kayak, propelled by paddle or by a pedal and propeller, is offered both in France and internationally. Rotomod designs and produces nearly 18,000 canoes and kayaks each year. These boats are made of polyethylene by the rotomolding technique. Since 2020, the company has been using regenerated polyethylene from its own production. (Translated from French)

**Click here to read more :** [www.rotomod.com](http://www.rotomod.com)

### **Gerbaldo Polimeri revolutionising the Rotomoulding market**

17/05/2021



Through innovation and R&D activities, Gerbaldo Polimeri have collaborated with Ecoplasteam by using their Ecoallene range of products - a revolutionary material from the recycling of poly laminates deriving from the carton of beverages and confectionary wrappers. The Ecoallene range was used as a starting point for developing highly technical products that are dedicated to the rotational moulding market. From the Ecoplasteam partnership, the GECO project was born. GECO are unique products deriving from an exclusive technology which is able to meet the needs of the rotational moulding market - a market that is increasingly aimed at increasing sustainability. All GECO products are characterised by a green mottled colour, representing a nature-friendly line that maximises sustainability through recycling, decreasing the use of fossil bases and infinite recyclability. Moreover, the GECO products have mechanical characteristics that allow the production of different objects for parks, outdoor furniture and sustainable infrastructures. Gerbaldo Polimeri has recently obtained the ‘Second Life Plastic Certification (PSV)’ on their GECO line of rotomoulding products, which is a first and novelty in the market.

**Click here to read more :** [interplasinsights.com](http://interplasinsights.com)

## **Rotomolding Market News - North America**

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### **Tank Holding acquires Rotational Molding Of Utah**

19/05/2021



## Canadian Plastics

Tank Holding, said to be North America's largest rotational molder, continues its buying streak with the acquisition of Utah-based rotomolder Rotational Molding of Utah (RMU). The financial terms of the deal have not been disclosed. RMU designs and manufactures proprietary tanks, pallets, and refuse products as well as a variety of other custom products. The transaction includes the facility located in Brigham City, Utah. The RMU announcement represents Tank Holding's 14th acquisition in the past two years.

**Click here to read more :** [www.canplastics.com](http://www.canplastics.com)

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