



AFFILIATO:



Market Monitoring Newsletter

THE ESSENTIAL NEWS OF ROTOMOULDING WORLDWIDE

Software Enables Rotomolders to Streamline Scheduling, Machine Planning, Revenue Operations



RotoEdge Pro Version 1.8 now enables rotational molders to review the progress of any order at any time, view the rate and detailed statistics of scrapped production, and prioritize production scheduling by machine. Developed by rotomolder SmaK Plastics to solve the problem related to Rotational molding and the chaos around the machines, the software also includes expanded international capabilities that enable manufacturers to schedule production across multiple time zones, and the ability to request real-time orders of parts to assembly.

These new features will help rotational molding companies increase productivity up to 40% per machine and improve revenue by reducing scrap (or product mistakes) up to 25%. According to SmaK Plastics, RotoEdge Pro is the first and only professional rotomolding-specific scheduling and production control application that solves complex manufacturing challenges. Now, with RotoEdge Pro, operations managers can track machine productivity, available capacity, nonconforming or scrap product, trends and order status, as well as employee performance, all in real-time. RotoEdge Pro is a web-based application that runs securely in **Amazon Web Services (AWS)**, offering real-time machine scheduling, future production planning, order tracking, labor planning and better inventory control, which enables rotomolding plant management to make fast, data-oriented, revenue-generating decisions. Rotational molding companies can now know instantly when to schedule or add new machine processes or employees, and plan production weeks and months in advance across multiple locations and product lines.

<https://www.ptonline.com/products/software-enables-rotomolders-to-streamline-scheduling-machine-planning-revenue-operations>

Redline Plastics nominated for different distinctions.



The Redline Plastics team has been named to the list of Plastics News’ “Best Places to Work” for the fourth year running. The “Best Places to Work” program from Plastics News allows North American plastics processors and suppliers to get feedback on their employment practices, policies, culture, and benefits. Included in the detailed submission requirements is a confidential employee survey conducted by a third party.

The annual survey and awards program is managed by Best Companies Group, a Harrisburg, Pa.-based research firm that has spent more than a decade administrating data and identifying exceptional places to work in several industries. Moreover, Redline Plastics has also announced its nomination for the Manitowoc Chamber Awards of Distinction in the category of Large Business of the Year. This prestigious nomination reflects Redline’s unwavering commitment to excellence, innovation, and community engagement. As a cornerstone of the Manitowoc business community, Redline takes pride in its contributions to the local economy and the positive impact it has on the lives of its employees and stakeholders. Redline Plastics has been named one of 10 other nominees for the Large Business/Industry of the Year.

<https://redlineplastics.com/fourfold-fantastic-redline-plastics-earns-a-spot-on-plastics-news-best-place-to-work-list-for-2024/>

<https://redlineplastics.com/redline-plastics-recognized-as-nominee-for-manitowoc-chamber-awards-of-distinction/>

The Hera Group and the circular economy



The Hera Group took part in the “Circular economy and biodiversity protection: strategies for a global challenge” workshop in Turin, organized by the Circular Economy Alliance (Alleanza per l’Economia Circolare) coordinated by Agici Finanza d’Impresa, to present the circular economy initiatives that the Group’s multi-utility subsidiary,

AcegasApsAmga, is developing in various sectors. Among the experiences illustrated, AcegasApsAmga has introduced a new supplier qualification model that assesses not only technical, economic-financial and reputational capabilities, but also their compliance with ESG criteria: environmental, social and governance ratings. With regard to Group companies, a circular economy and materials recovery project is underway at AcegasApsAmga with a view to efficient warehouse and inventory management. The aim of this project is to use only those materials that are really necessary, and to recover the value of those that have reached the end of their useful life, thus enabling the regeneration of resources. In addition, as part of the rehabilitation of public and private buildings and facilities, the energy services company Hera Servizi Energia (HSE) has launched a pilot project for the recovery of construction site waste such as boilers and doors and windows. To finish, Hera Luce certifies the circularity of materials for Loomer, a circular lighting project for urban environments, created using Lorelux technology designed and developed by Niteko Illuminazione, with recycled plastic from Aliplast S.p.A., a Group subsidiary and leader in the regeneration of plastic materials.

Armchairs from a Franco-Luxembourg collaboration conquer the world



Although still confidential, Wheelchair Sevens Rugby Union is on the rise, and could make Luxembourg's name shine internationally thanks to the armchairs used to play it. Called the Wallabys, these armchairs are designed by French company Rotam International, which called on Rotomade's expertise to produce the seat to create an "inexpensive, lightweight yet robust" armchair.

Based in Ellange, in Luxembourg, Rotomade specializes in the manufacture of rotomolded plastic parts. Although Rotomade concentrates its activities on the design of water tanks, the company immediately embraced the project of this inclusive sport. It was already present at the first edition of the "Roues ovales luxembourgeoises" and continues its commitment. To date, between 150 and 200 wheelchairs have been created in Luxembourg, and they are the only ones approved by the Wheelchair Sevens International Board to play matches. Caught up in the rise of the Wheelchair Sevens Rugby Union, Rotomade is now working with Decathlon Pro, which has listed the Rotam International wheelchair, and intends to open up internationally thanks to the democratization of wheelchair rugby.

<https://lequotidien.lu/luxembourg/des-fauteuils-franco-luxembourgeois-a-la-conquete-du-monde/>

Fruitful exchanges between Buddle industrie and Rotovia



Rotovia has invited the company BUDDLE INDUSTRIE DESIGN GmbH for a seminar on rotational moulding and a tour of its Deventer factory. Budde Industrie Design is a leading design consultancy for Agriculture and industrial goods.

During this special day, the guests from Budde Industrie Design had the perfect opportunity to explore rotational moulding and get updated with key information about this plastics manufacturing technology. By touring the production hall, they were able to see the rotational moulding machines in action, learn more about process control and see finished products made using otomoulding technology. Rotovia thanks to its guests from Budde Industrie Design for the visit to its Rotovia Deventer factory and the interesting discussions they had during the seminar and the presentation of the rotational moulding process. It was an incredibly enjoyable day, full of fun and new insights into the endless possibilities of rotomoulding.

https://www.linkedin.com/posts/rotovia_visit-of-budde-industrie-design-in-rotovia-activity-7158480226107195392-MzpW

LightManufacturing Solar Rotomolding : zero carbon plastic molding using solar heat from heliostats

LightManufacturing's Solar Rotational Molding (SRM) systems use solar thermal energy focused by our H1 Heliostats to heat and melt plastic to make durable, useful products like water tanks, boats, furniture, toys, road barriers, and much more.

Traditional rotomolding burns fossil fuel for heating, and emits more than 1 Kg of greenhouse gasses for each Kg of product made. LightManufacturing's SRM system burns zero fossil fuels in molding, and reduces greenhouse gas emissions to zero. Factories are compact and 'containerized', requiring no infrastructure to install - no water or electricity is required, and systems can install on bare land (parking lot, brownfield, gravel, etc). Because factories can be installed inexpensively close to customers, transportation costs and associated emissions are reduced. Now operating in Hawaii and California, with more locations coming soon!

<https://www.youtube.com/watch?v=21NfKYFu2go>

France's HelioRec sets up partnership for floating solar in Bretagne

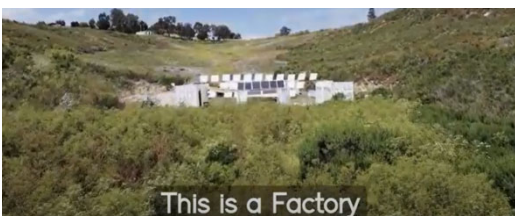


France-based start-up HelioRec has established a partnership with EMP ROTOMOULAGE, a company dedicated to rotational molding techniques, with the aim of spearheading the production of floating solar systems in the Bretagne region.

According to HelioRec, who has developed a floating solar system whose compact design makes it easy to transport and set up, this strategic alliance marks a significant milestone in the company's expansion plans throughout France and Europe. With over 30 years of experience in rotomolding, EMP brings a wealth of expertise and innovation to the table and this new partnership aims to focus on continuous research and development and push the boundaries of innovation, leveraging collective expertise, resources, and insights, the company said.

According to HelioRec, the Bretagne region, renowned for its breathtaking coastline and abundant water bodies, serves as the perfect backdrop for this pioneering venture and the company's presence in Bretagne underscores its commitment to local communities. HelioRec's floating solar system is accompanied by a machine learning system said to help improve efficiency in power generation operations and maintenance efforts. The system also features a 'hydro-lock' feature, which keeps water inside the floater to give additional mass and, consequently, additional stability while avoiding extra costs from other materials for ballasting, such as metal and concrete. The start-up company in October 2023 completed the installation of a 25 kW floating solar unit in the Port of Brest, in France, which is used for demonstrating the different technologies employed in its newest floating solar model.

<https://www.offshore-energy.biz/frances-heliorec-sets-up-partnership-for-floating-solar-in-bretagne/>



A systematic approach for the selection of additives for rotational molding process

Rotational Molding is defined as a plastic manufacturing method wherein a benefit of stress-free plastic product is accessible. Linear Low-Density Polyethylene (LLDPE) has consistently been on elevated priority as base material for rotomolded product. Notwithstanding, LLDPE requires to annotate its strength as needed in couple of applications.

Added substances or fillers can fill the void to upgrade the mechanical properties. A legitimate choice of additives to convey a suitable required mechanical property in rotationally molded product has consistently been on research mode. Composites prepared using synthetic fibers have always proved to sustain better mechanical properties in the end product. Multi-criteria dynamic procedures were utilized to address the selection of a suitable additive considering various attributes from an enormous number of options. In the current context of investigation, multi-criteria decision making techniques (MCDM) like TOPSIS and MOORA strategies were made as a wellspring of help to select the feasible synthetic fiber that can be opted for blending with the base resin for rotational molding process. MCDM techniques has been observed to be fruitful in solving the real time problems for selection of materials. The findings thus attained are relatively reasonable and can be used in the design process of the roto-molded product for blending with the resin. Polyester from synthetic fibers was classified as the top-ranking material based on the characteristics used in deciphering these methods.

<https://link.springer.com/article/10.1007/s12046-023-02402-x>

A theoretical approach based on machine learning for estimation of physical properties of LLDPE in moulding process.

We have developed a novel hybrid methodology for prediction of polymeric mechanical properties in rotational moulding process. The considered polymer in this study is linear low-density polyethylene, known as LLDPE, which has extensive application in plastic industry.

The mechanical properties of the polymer were assessed and correlated to the oven residence time to build the predictive model of moulding process. In this study we modeled a tiny dataset containing only 25 data rows via a number of machine learning models. Oven residence time is the only input, while the LLDPE's properties including tensile strength, impact strength, and flexure strength are the outputs considered in the machine learning models. We used tree-based ensemble methods for modeling in this work and they are tuned using FA (firefly algorithm ?)

optimization algorithm to find optimal hyper-parameters of them. Finally, the optimal models had shown a great performance to predict the outputs accurately. For tensile strength the best model (FA-ET) has an R2 score of 0.9994, this score is 0.9995 for impact strength and 0.9968 for flexure strength. The tree-based models tuned in this study revealed to be robust in estimation of polymeric properties and can be used to obtain the products with the best quality.



<https://www.frontiersin.org/articles/10.3389/fchem.2024.1343573/abstract>

13th June 2024 - 14th June 2024

ARM & IT-RO Tour of Italian Rotomolders

LOCATION:

Italy

MORE INFORMATION:

<https://rotomolding.org/page/ExecutiveForum>

17th June 2024 - 19th June 2024

ARMA Event

LOCATION:

Gold Coast Australia

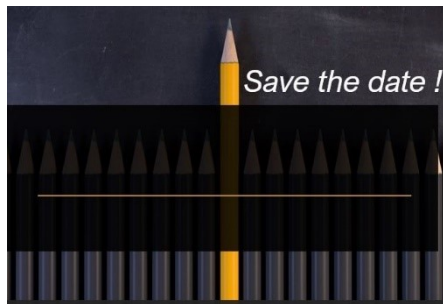
MORE INFORMATION:

www.rotomouldconference.com.au

24th September 2024 -26th September 2024

Rotoplas 2024

LOCATION:



Rosemont, Illinois, USA

MORE INFORMATION:

<https://www.rotoplas.org/>

