



Market Monitoring Newsletter

THE ESSENTIAL NEWS OF ROTOMOULDING WORLDWIDE

Simop innovates in rainwater harvesting.



Simop has launched a range of extra-flat tanks for recovering, reusing and regulating rainwater. At the request of users, it has developed a tank that does not require digging too deep to install. The study was launched in 2021 to design a rainwater harvesting tank that is as flat as possible for storing and reusing rainwater.

In addition to the shallow depth to be dug, the ground footprint is optimised, while the installation is all-terrain. This new tank, whose shape is reminiscent of a tortoise, is also extremely robust, according to its designers. It is easy to transport and handle. At the end of 2023, the first tank, around 1 m high and with a capacity of 3

m³, was completed. A second, with a capacity of 5 m³, will start up in March. They are being manufactured at the Le Ham plant in the Manche département and at Montdidier in the Somme département. These tanks, which are primarily intended for private customers, can be paired up, making it easy to achieve a water storage capacity of 10m³.

 $\frac{https://www.ouest-france.fr/normandie/sainte-mere-eglise-50480/\underline{a-sainte-mere-eglise-simop-innove-en-matiere-de-recuperation-deaude-pluie-844c39d4-c665-11ee-bfe6-fbc37e462228$



PlayMoovin', designer and manufacturer of sports wheelchairs for all, believes in a social and ecological approach for a better future. The company assembles its mechanical parts with local ESATs, offering

employment opportunities to those who need them.

With 10 suppliers within 100km of its site, including the French rotomoulder SAAM Industries Rotomoulage, PlayMoovin' supports the local economy and favours 'Made in France'. What's more, its environmental approach, supported by the eco-design centre based in Saint-Étienne ("Pôle Eco-conception"), guides its choices: from eco-design to the use of recycled materials, the company is committed to a sustainable future.

https://www.linkedin.com/posts/playmoovin_engagementsocial-aezcoresponsable-rse-activity-7161765716935827456-N_T7

20th anniversary celebration.



Rising Sun Rotomolding Machinery will hold a new factory open day on April 20, which will also be the 20th anniversary celebration of Rising Sun. Rising Sun Rotomolding will present an intelligent and automated modern factory to visitors, as well as talk about our design concept, development history, etc.

The factory has complete machine and mold processing production lines, and visitors can see the entire processing process and quality control process. This open day has perfect timing, after the open

day, 2024 Chinaplas will be held in Shanghai. Rising Sun can arrange bus delivery to Shanghai based on actual conditions.

 $\frac{https://www.linkedin.com/posts/risingsunrotomoldingmachinery_risingsunrotomolding-rotomolding-rotationalmolding-activity-7160890612504743936-C88$

Pentas Welcomes status holders.



On 8 February, Pentas Moulding welcomed a group of 50 status holders and civic integration teachers a. In collaboration with the ROC van Twente, Aqua+, Novon, Kleurrijk & Niverplast, Pentas Moulding organized for the third time a company tour along various enterprises in Twente.

The tour was focused on discovery and orientation, aiming to give the status holders a better understanding of the employment opportunities within the region and to support them in taking the first steps towards integration into the Dutch labor market.

Sustainable approach of Rotovia.



Rotovia was among the sponsors of the 13th Nordic Arm Conference on sustainability in rotomoulding which took place in Reykjavik, Iceland at the beginning of February. The participants discussed innovations, challenges and strategies to reduce the environmental impact of production.

Dadi Valdimarsson, CEO of Rotovia, shared the company's experience in running electrical rotomoulding machines during his speech, with a

particular focus on company's mission and road to sustainable rotomoulding. By 2028 the company will take back 30% of products. 20% material of the material used then will be post consumer recycled material. Its manufacturing machines will be converted to carbon-free rotomoulding ovens. The first carbon-free rotomoulding oven has been installed in Dalvik, Iceland, back in 2012. Since its installation, the company built 54.000 hours of experience in running this carbon-free rotomoulding machine. The energy savings of the machine has proved to 45% in kWh/kg compared to the traditional machine. Taking advantage of the renewable energy that Iceland is using for over a century, the company has used both hydropower and geothermal energy to run this machine. This has led to a saving of 5.530 MT of CO₂e over the last 11 years. Over this winter Rotovia has installed another carbon-free electric rotomoulding oven in Dalvik, Iceland. This will give a total annual CO₂e saving of 900.500 Kg CO₂e - equal to 200 personal cars, or CO₂ absorbing from 36.000 trees.

https://www.linkedin.com/posts/rotovia_sustainability-innovations-sustainable-activity-7161707835188363266-ImHX?

Anti-waste campaign at BIOROCK and ROTOMADE.



A team from BIOROCK and ROTOMADE recently got together to clean up the area around the company. Armed with gloves and bin liners, the company's employees scoured the area, meticulously picking up every piece of rubbish.

The aim was to keep the 4,000m² outside the premises clean and help protect our planet. A total of 110 kg of waste was collected. This action is not a flash in the pan, but a long-term commitment. The company has decided to repeat this initiative regularly, because it believes in its responsibility towards the environment. In this way, the company's surroundings will remain clean and welcoming to all.

 $\underline{\text{https://www.linkedin.com/posts/biorock-france}} \ \underline{\text{action-anti-d\%C3\%A9chets-activity-7163167433539727360-nlTn}} \\ \underline{\text{https://www.linkedin.com/posts/biorock-france}} \ \underline{\text{https://www.linkedin.com/posts/biorock-france}} \ \underline{\text{https://www.linkedin.com/posts/biorock-france}} \ \underline{\text{https://www.linkedin.com/posts/biorock-france}} \ \underline{\text{https://w$

New rules in Wales.



Leafield Environmental Ltd UK reminds that the Welsh Government are introducing a new workplace recycling law for all businesses, charities and public sector organisations from 6th April 2024, to improve the quality and quantity of recycling.

Leafield already have experience assisting with the supply of recycling bins into Wales by providing recycling bins that can collect separate waste materials at source, reducing contamination and recyclable waste going to landfill.

https://www.linkedin.com/posts/leafield-environmental-ltd recycling-wales-workplacerecycling-

activity-7163177519871959040-1DmL

Vision Marine unveils its Phantom rotomolded boat and secures exclusive Florida distribution deal.



Vision Marine Technologies Inc. has unbveiled the Phantom, a rotomolded, recyclable, and hard-to-damage boat at the Miami International Boat Show 2024.

Designed to comfortably seat up to 10 passengers, the Phantom enables Vision Marine to produce up to an estimated 300 units annually at a cost that is 70% lower than that of fiberglass alternatives, with potential scalability to 1,500 units per year. Setting a

new standard for capacity and durability, the Phantom's high-density polyethylene hull is both strong and environmentally friendly, capable of being recycled up to nine times, distinguishing it from smaller models like Brunswick's Veer. Vision Marine has secured an exclusive distribution agreement with Nautical Ventures Marine Group for Florida, highlighting market confidence in the Phantom. This partnership is reinforced by an initial order of 50 units, positioning the Phantom as a future staple on Florida's waters.

 $\underline{https://investors.vision marinetechnologies.com/2024/02/15/vision-marine-unveils-its-phantom-rotomolded-boat-and-secures-exclusive-florida-distribution-deal/$

New installation.



Harlequin Manufacturing highlights another installation of its CAP 12 Sewage Treatment Plant at a large country home in Staffordshire.

 $\underline{https://www.linkedin.com/posts/harlequinmfg_sewagetreatmentplant-sewagetreatment-installers-activity-7163550337402822657-P8Ar$

New partnership in the Croatian market.



Agri-Plastics, Group of Companies is proud to share that POLJOPRIVREDNO GOSPODARSTVO MLADIĆ, a dynamic farm with approximately 150 heads, has chosen Agri-Plastics technology for their livestock management needs.

In collaboration with its esteemed local dealer **Agro Robomar**, Agri-Plastics is excited to bring the benefits of its group hutch to this forward-thinking farm, in particular: Optimized Livestock Welfare: this group hutch design prioritizes the comfort and well-being of animals, ensuring optimal living conditions for healthier growth; Streamlined Management: With innovative features, this hutch simplifies farm

management tasks, allowing for efficient monitoring and care of livestock;

Increased Efficiency: By leveraging cutting-edge technology, this group hutch enhances productivity, leading to better outcomes for the farm's operations;

Proven Performance: With a track record of reliability and durability, this group hutch is trusted by farmers worldwide for its superior performance and longevity.

https://www.linkedin.com/posts/hanna-kavaleva-814151199_farm-livestockmanagement-agrorobomar-activity-7163806327125884929-vtOw

Sebico inaugurates a new production unit.



Sebico, a French specialist in plot-based water management, is expanding its production capacity for polyethylene tanks and pits.

For almost a century, Sebico has been offering solutions in concrete or rotomoulded polyethylene for non-collective sanitation (traditional pits, Biomeris compact filters and Aquameris microstations), storage, drainage and infiltration of rainwater or stormwater (Pack'eau range), and lifting stations. To meet the growing demand for polyethylene solutions, the

company built a new production workshop at its Villetaneuse plant in Seine-Saint-Denis in February. It is equipped with a **SAT** three-arm rotational moulding machine. Sebico has thus doubled its production capacity at Villetaneuse for the non-collective sanitation and Pack'eau ranges.

https://www.revue-ein.com/actualite/sebico-inaugure-une-nouvelle-unite-de-production-a-villetaneuse

Installation of an effluent storage tank.



Plasteau presents a fine example of the installation of a polyester tank designed to temporarily collect effluents from a washing area on an industrial site in the Landes region of France.

The tank is both strong and light, and is made from a rot-proof material with smooth walls that make it easy to clean. The company would like to thank Sogea Environnement and PUM - SGDB France for their confidence in this project, as well as the team on the ground.

Rototec updates its web application.



The new version of the Rototec web application is now available online. The update aims to make it easier to manage water treatment and storage facilities, thanks to a revamped, intuitive and simplified interface.

The platform has been optimised to provide a better user experience, enabling each installation to be configured quickly and seamlessly. Rototec places a strong emphasis on personalised advice, employing highly specialised technicians ready to offer sustainable solutions to meet a wide range of needs. The company invites users to explore the new

features of the Rototec-App application, accessible directly via the browser, to discover how it can make water management simpler and more accessible.

https://www.linkedin.com/posts/rototec-s-p-a_rototec-app-activity-7165269774132887553-UaHU

Research & Patents

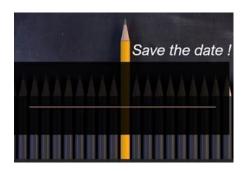
A case study on the rotomolding behavior of black tea waste and bio-based high-density polyethylene composites: Do active compounds in the filler degrade during processing.



This study verified the possibility of using waste material from the food industry (black tea) as functional filler of rotomolded biobased high-density polyethylene-based composites. As part of the experimental work, the influence of the materials preparation, i.e., dry blending versus twin-screw extrusion, on the effectiveness of the stabilizing antioxidant effect of the black tea was analyzed.

The aim of the work was to verify whether, despite the initial degradation of the structure of the lignocellulosic filler, it would be possible to keep its antioxidant capacity and the stabilizing effect on the polyethylene matrix. The research showed that the filler allowed to stabilize the polymeric matrix during the rotomolding process, despite the appearance of numerous defects in the form of pores and a reduction in mechanical properties, more significant for composites prepared by dry blending, obtaining elastic modulus drops of about 50 %. Furthermore, the pre-processing step by melt mixing results in a significant improvement of the composite's thermo-oxidation stability, with increases in the oxidation induction time (OIT), from 25 min for the HDPE to over 70 min for composites with 5% black tea, and improved rheological behavior, preventing the crosslinking of the matrix, indicative of its thermo-oxidative degradation. The tea brewing process caused the decrease of antioxidant activity of the filler; however, it did not significantly affect the antioxidant behavior, maintaining its influence on the polymeric matrix when the material is prepared via twin-screw compounding, which was proved to provide better stability, increasing OIT by approximately 20 min later when compared to dry blending.

 $\underline{\text{https://www.sciencedirect.com/science/article/pii/S2666682024000082}}$



June 6-7 June 2024 -

VIII Conference - Rotopol 2024
Pragua - Czech Republic
https://rotopol.pl/index.php/en/conference/location

13th June 2024 - 14th June 2024

ARM & IT-RO Tour of Italian Rotomolders LOCATION:

Italy

https://rotomolding.org/page/ExecutiveForum

17th June 2024 - 19th June 2024

ARMA Event
LOCATION:
Gold Coast Australia
www.rotomouldconference.com.au

24th September 2024 -26th September 2024

Rotoplas 2024 LOCATION: Rosemont, Illinois, USA https://www.rotoplas.org/























