

On the occasion of JEC World 2023, the DEMGY Group takes stock of its news.

DEMGY innovations are to be found on the JEC Hall 5 - Stand B46

Do not hesitate to contact me to arrange an interview with a DEMGY Group spokesperson:

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St-Aubin-sur-Gaillon, April 12, 2023 - The DEMGY Group, whose head office is located in Normandy, will participate in the JEC World 2023 exhibition to present its latest innovations and news.

1. The DEMGY Group is developing its *Multiplasturgy* concept® which becomes *circular Multiplasturgy*® - cM.

Based on the DEMGY Group's 14 areas of expertise, the Circular Multiplasturgy concept[®] integrates an eco-design approach from the very beginning, which allows for upstream management of the end-of-life of products and their ability to be recycled.

The DEMGY Group's two R&D centers create innovative, customizable production processes to meet all demands for complex parts.



2. FLAXCOMP® CLEAR, encapsulate nature!



ODEMGY

Flaxcomp® by DEMGY is the transformation of thermoplastic composites reinforced by natural fibers and illustrates our know-how on the transformation processes of thermoplastic composites reinforced by natural fibers. The strength of the new FLAXCOMP® CLEAR solution, a combination of a transparent resin and a natural fiber (association of flax with transparent recyclable thermoplastic resins):

- ✓ A finish reminiscent of **the gloss of epoxy finishes**, an aesthetic enhancement of the linen fiber thanks to a process solution that brings depth and gloss, **while being 100% recyclable**
- ✓ The use of **processes respectful of the** linen **fiber** to preserve its specific properties (mechanical properties and vibration absorption): 2/2 linen twill fabric associated with a transparent thermoplastic matrix.
- ✓ The innovative Flaxcomp® solution is fully **customizable** with multiple options such as surface texturing
- ✓ Flaxcomp® is **applicable to high volume markets** such as automotive interiors, luxury, sports and leisure.

3. Net-shape hybrid process.

DEMGY accompanied Kipsta, Decathlon's soccer brand, in the development of their new TRAXIUM COMPRESSOR soccer shoe, officially **launched and now available in stores: ecodesigned, 100% thermoplastic, made in France**.

Designed in Tourcoing, co-developed and manufactured in Nantes by Demgy Atlantique, the Traxium Compressor is available since January 13, 2023 in 21 Decathlon stores in Europe.





Kipsta/Decathlon

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To design the Traxium Compressor, DEMGY innovated in the hybrid Net-shape process from textile preforms.

While traditional shoes are made from varnished 2D fabrics, cut and then shaped to the shape of the foot in 3D by gluing on an injected sole, the Traxium Compressor is designed without sewing or glue. It is molded in a single manufacturing step. This technique gives it a durability well above the average with a promise of 350 experiences (uses), 3.5 times more than another shoe. It is guaranteed for 10 years against delamination between the upper and the sole.

Its public price is 95 euros.

The Traxium Compressor will also be presented on the Planet innovation area of the JEC.

The DEMGY Group is also...

Hybrid composite: stamping and overmolding.

The hybrid instrument panel concept patented by Airbus Atlantic as part of the Advanced Cockpit project was developed with DEMGY experts.

Within the framework of this main control panel substructure project, DEMGY Group worked on the development, optimization and industrialization of this new hybrid thermoplastic structure concept, proposed by Airbus Atlantic.





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The Group has created an innovative shape from a sheet of composite material by stamping, machining and overmolding parts to assemble them into a single piece. This new development is a demonstration of the Group's ability to combine technologies into a large, complex part made up of more than twenty components of different materials. This part will be on display at JEC on the Group's booth.

With its DEMGY 3D Workshop, including 2 additive manufacturing stations, the DEMGY Group is the 1st European industrialist equipped to produce functional parts and components delivered worldwide, in high performance PEKK carbon polymers:

With its EOS P 810 stations, including a new one acquired in 2022, a laser sintering machine using the EOS HT-23 material (based on PEKK Kepstan®, Arkema's extreme polymer, and reinforced with carbon fibers).

With a build volume of 700 x 380 x 380 mm, the EOS P 810 enables rapid production of high performance polymer parts in series directly from CAD data without the need for tooling. These parts offer high strength at low weight and withstand temperatures well above 200° C.



Examples of complex technical parts in PEKK Carbon Additive Manufacturing

All parts or components from the DEMGY 3D workshop can be metallized to provide electrical continuity or to serve as electromagnetic shielding.



Examples of metallized parts in carbon-filled PEKK Additive Manufacturing

About DEMGY:

Founded in 1947, DEMGY designs and manufactures high-performance plastic and composite solutions that are lighter than metal to promote energy savings in sectors with a high carbon footprint.

Its Multiplasturgy® concept, a one-stop shop for our 14 areas of expertise, is evolving to become circular: circular Multiplasturgy®. A new cycle is beginning thanks to eco-design, which makes it possible to manage the end-of-life of products and their capacity to be recycled upstream.

DEMGY is still in a new era of innovations and has become a key player in Industry 4.0 thanks to:

- its 3D Workshop to mass produce directly functional parts with additive manufacturing (PEKK reinforced carbon, PA11);
- the development of Flaxcomp®, on the transformation of bio-composite 100% recyclable;
- the launch of a new technology: the hybrid composite and a new generation of products in thermoplastic composites with complex geometry "net-shape";
- the creation of Protectiv®, a range of personal protection products.

The Norman Group has five sites in France, including its headquarters in St-Aubin-sur-Gaillon (27), two in Romania and one in the United States, as well as two R&D centers that create innovative production processes.

In 2022, the DEMGY group achieved a turnover of 74 million euros, of which 7% was invested in R&D. DEMGY has 660 employees.



DEMGY is an ambassador member of the French Fab.

DEMGY Group is a member of the community of leaders who are convinced of the need to act and who are already committed to the ecological and energy transition.



DEMGY Normandie and DEMGY SPN are laureates of the Aeronautics project call within the framework of the French Recovery Plan.

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