

PRESS RELEASE

Cannon Ergos collaborates with Boeing to mould thermoplastic composite aircraft sidewall panels using recycled carbon fibre

Caronno Pertusella, (Varese), Italy, May 3, 2022

Cannon Ergos, a company of the Cannon Group, a world leader in technologies, processing equipment and mould manufacturing for the composites industries, is working with Boeing on moulding trials for the feasibility of using recycled carbon fibre (rCF) for the fabrication of aircraft cabin interior sidewall panels.

The recovery and reuse of carbon fibre waste during production processes and end-of-life applications, such as automotive and aeronautics, has proved to be economically viable. This supports the implementation of the EU Waste Framework Directive (2008/98/EC) to greatly reduce landfill disposal which is environmentally essential and is also in line with targets set by the EU Circular Economy Package for sustainable production practices.

“For several years, together with sister companies Cannon Afros and Cannon Tipos, we have successfully undertaken numerous projects that offer new life to recycled carbon fiber,” said Mattia Andolfatto, Project Manager R&D at Cannon Ergos. *“By combining various technologies and production processes tailored for each application, we have been able to effectively process recycled carbon fiber whether impregnated with diverse resins, or already integrated within a thermoplastic matrix. The project with Boeing demonstrates the viability of fabricating interior sidewall panels with high-performance thermoplastics reinforced with recycled carbon fibre.”*

The project’s latest stage involves Mitsubishi Chemical Advanced Materials (MCAM), a global supplier of high-performance reinforced polymers for which Cannon Ergos has designed, manufactured, and installed a customized and fully equipped thermo-compression unit. This equipment was utilized to produce prototype sidewall panels with the new Kyrontex® material. Typical resin matrices utilized for Kyrontex® thermoplastic composite aeronautical applications include polyamide (PA), polyetherimide (PEI), polyphenylene sulfide (PPS), polyetheretherketone (PEEK) and polyaryletherketone (PAEK).

At JEC World 2022, Mattia Andolfatto will join other industry experts in one of the four round-table discussions focusing on sustainability: ‘Rethinking Composite Materials Manufacturing: The Path to Sustainable Production’ on May 4, Agora 5 (11:30-12:10) during which the panel will present latest insights into how composites manufacturers are improving the sustainability of their production processes.

Cannon Group is exhibiting at JEC World 2022, Paris Nord Villepinte, Paris, France (May 3-5), in Hall 5 Booth N56.

* Kyrontex is a registered trademark of Mitsubishi Chemical Advanced Materials (MCAM)

About Cannon Ergos

Cannon Ergos was created in 2012 by combining the competencies and know-how of Cannon Group’s Tecnos, TCS, and Forma businesses and is dedicated to manufacturing turnkey plants and machinery for polyurethane, composite and thermoplastic materials, and die-cast aluminum processing. Today, Cannon Ergos’ R&D department, and technical laboratories support customers worldwide in developing innovative tailor-made technologies and production processes



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by designing, manufacturing, and installing customized facilities and stand-alone adapted thermoforming units for the following main industrial applications: automotive, aerospace, refrigerator insulation, building and construction insulation, technical components and medical equipment, wind power, sanitary, furniture and consumer and industrial goods.

About Cannon Group

Founded in 1962, Cannon Group comprises 30 companies, with a global presence in more than 40 countries and is recognized as a market leader in technologies, processing and molds for polyurethanes and urethane elastomers for the plastics and composites industries. The Group designs and manufactures high- and low-pressure dosing machines and mixing equipment, for continuous slab and discontinuous molded polyurethane foams. Dedication to continuous innovation now positions Cannon Group as a driving force offering the design, manufacture, servicing, and maintenance of equipment also in other key technology areas including: Energy - industrial boilers for standard and special applications, comprising steam boilers, hot water heaters, heat recovery boilers, and thermal oil heaters, with in-house engineering and fabrication services; Water & Wastewater Treatment - deaerators, condensate treatment and recovery, effluent treatment plants, sanitary water treatment and sewage treatment, injection water treatment, demineralization, produced water; and Automation, where Cannon Group offers process digitization and condition monitoring, connect-IT and emissions monitoring. Cannon Group is committed to reducing the ecological footprint of all the Group's technologies and industrial processes offered to the market through energy efficiency, resource consumption reduction and emissions reduction. Cannon Group delivered net sales of €230 million in 2021. To learn more, visit www.cannon.com

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Production line set-up for sidewall moulding trials
(Photo: Cannon Group)



737 recycled carbon sidewall prototype
(Photo: Cannon Group)