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PRESS RELEASE

EFSA/FDA-compliant production process enables manufacture of food-safe film from PET recyclate

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Reifenhäuser Cast Sheet Coating has developed a particularly efficient production process with which PET recyclate can be processed directly into food-safe film without a pre-drying process. The process meets the criteria of both the US Food and Drug Administration (FDA) and the European Food Safety Authority (EFSA). This was proven via a so-called challenge test.

If recycled goods come into direct contact with food, special certification by the EFSA or the FDA is required in advance in some markets. The production of films for such food packaging is correspondingly complex and demanding. Reifenhäuser Cast Sheet Coating now facilitates the economical production of such films for flat film manufacturers with a simpler production process and provides advice on certification.

Mark Schuster, Product Manager PET Sheet at Reifenhäuser Cast Sheet Coating, explains: "The market for recyclable food packaging made of PET already has a high volume. At the same time, the growth potentials are equally interesting considering the current global collection rates. We are now making it easier for customers to successfully participate in this market."

The EFSA/FDA-compliant PET process uses a co-rotating twin-screw extruder and a specially developed high-performance vacuum system that enables producers to process PET recycling material directly, without pre-treatment and pre-drying - as is necessary with other processes. Processors thus save the investment in an additional line component and avoid additional energy and maintenance costs, which leads to significant savings, especially in times of rising energy prices. Fast material and product changes are also possible, for example between post-consumer PET bottle scrap (PCR), post-industrial PET production waste (PIR) and virgin PET. The end product, for example a meat tray, meets the highest hygiene standards and can be used safely in direct contact with foodstuffs in accordance with the criteria of the authorities.

Certification made easy: Consulting

Reifenhäuser Cast Sheet Coating supports customers in the certification process with the relevant authorities. For this purpose, not only the cleaning process of the ground material, but also the quality monitoring of the input material and the production under the criteria defined by EFSA are considered.

EFSA audits made easy: automatic documentation

Another feature of the line is the automatic documentation of relevant production data. For EFSA audits, recipe- and product-related data of the certified process must be stored for several years. The specially developed ExtrusionOS Production Compliance software bundle helps to monitor and securely document production processes and compliance with EFSA-relevant thresholds in a data-based and real-time manner. A live dashboard transparently shows ongoing production and its thresholds, enabling fast action in case of irregularities. ExtrusionOS Production Compliance is based on Reifenhäuser's connectivity solution ExtrusionOS Core & c.Hub Middleware, and can also be retrofitted to existing lines.

Recycling made easy: digital product passport

Via ExtrusionOS, production data can also be transferred to a digital product passport - for example, via the open R-Cycle standard. Digital product passports are data records clearly linked to primary and end products that contain relevant data on materials, ingredients and the use of the product. Via special markings, they can be used, among other things, for data-based and thus more precise waste sorting and recycling processes.

EFSA/FDA-compliant food-safe film from PET recycle at K 22:

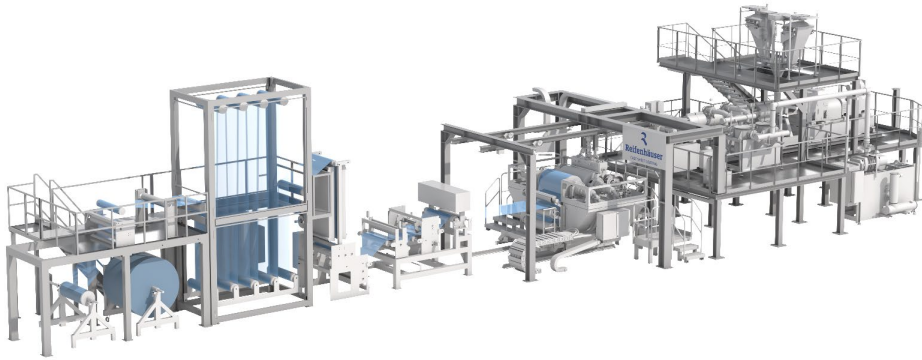
REIFENHÄUSER MAIN BOOTH: Hall 17 / C 22

More information about food-safe film from PET recycle:

<https://reifenhauser.com/en/company/media/news-and-stories/success-story/pet-recycling-food-safe-sheet-made-from-recyclate>

About the Reifenhäuser Group

The Reifenhäuser Group is the leading provider of innovative technologies and components for plastics extrusion. Founded in 1911, the company supplies high-technology solutions all over the world. With its technologies and the know-how of its 1,750 employees, Reifenhäuser has the world's largest network of expertise in plastics extrusion technologies. The CEO of the Group is Bernd Reifenhäuser.



Reifenhäuser PET Sheet lines produce sustainable PET film from up to 100 percent PET bottle flake for direct food contact (according to EFSA/FDA).
Picture: Reifenhäuser