

Single-step processing of rPET flakes into food-contact preforms, with XTREME RENEW from SIPA

Technology debuts at EREMA Discovery Day 2016

A highly cost-effective PET recycling system for production of injection-compression molded preforms directly from washed PET flakes made its world debut on June 1. The result of a collaboration between SIPA and EREMA, a world leader in recycling technology, XTREME RENEW was unveiled at this year's EREMA Discovery Day in Ansfelden, Austria.

Over 250 international customers and guests were there at EREMA's headquarters as the curtain went up. From sorters and washing plant manufacturers to downstream producers, fillers and brand owners, representatives from the entire PET recycling value chain. Expectations were high, if only because, with prices of virgin PET lower than those of any other polymer, making money out of PET recycling with current technology is not easy. The development signals the dawn of a new era in PET recycling, the two companies agree.

SIPA's XTREME technology is already providing important advantages for production of preforms from virgin PET: it is possible to produce preforms that are 10% lighter than even the lightest injection molded preform, at much higher speeds and lower energy consumption. And with its rotary configuration and its pneumatic actions, XTREME makes an ideal fit into integrated preform molding, blowing, and even filling operations. Now, its advantages are open to preform producers using rPET washed flakes too.

In XTREME RENEW, food-contact-compliant melt produced by EREMA's VACUREMA process feeds directly into SIPA's XTREME preform production process, without the need for intermediate cooling and pellet production. The benefit of this direct processing is an enormous boost in energy efficiency, plus considerably lower thermal damage to the PET material.

"We are proud to have developed such a sustainable product together with EREMA," says Gianfranco Zoppas, SIPA Chairman. "Sustainable in the sense of the company and sustainable in the sense of the environment. Moreover, the processing provides unrivalled benefits in logistics. XTREME RENEW not only saves space, CO₂ and energy, it also reduces production costs."

"The reason why a producer decides in favour of a major investment in a recycling solution is based on a broad-sighted, entrepreneurial approach," says Christoph Wöss, Business Development Manager for Bottle Applications at EREMA. "Only those companies willing and able to adapt will remain in the long term."

"Thanks to the collaboration with SIPA, we make it possible for plastics producers to show the necessary flexibility. The cooperation between two big players in the plastics industry made it possible to develop a direct processing solution which stands out through better preform quality characteristics when using rPET washed flakes."

Some 1.2 million tonnes of PET are already recycled every year around the world with EREMA's VACUREMA technology. The recyclate is turned into preforms as well as thermoforming sheet, fibers, strapping, and other products. Decontamination, drying, dedusting and crystallisation of different PET input materials take place in just one step. As a result, the washed PET material is

already food contact compliant prior to extrusion. VACUREMA technology offers a very high degree of flexibility in PET recycling, which is enhanced even further through the successful collaboration with SIPA.



#01: Presentation of XTREME RENEW : Gianfranco Zoppas, Chairman SIPA/Zoppas Industries; Manfred Hackl, CEO EREMA; Klaus Feichtinger, CEO EREMA; Marc Jacobs, CEO marcjacobsconsulting; Christoph Wöss, Business Development Manager Application Bottle EREMA; Enrico Gribaudo, General Manager SIPA

SIPA. The PET Specialists.

For more than 30 years SIPA has specialized in complete manufacturing lines for PET containers, including design, production, filling, and packaging solutions. SIPA tailors technology recommendations to customer needs based on unmatched knowledge and experience of the entire PET process. Headquartered in Italy, the company can rely on 17 sales branches, 3 manufacturing facilities and 28 service centers for fast access to service, parts, and expert engineering support.