

PET RECYCLING, INLINE APPLICATIONS & BOTTLE-TO-BOTTLE**Global premiere of XTREME RENEW at the EREMA Discovery Day 2016: Direct processing of PET flakes for food contact compliant inline preforms in just one processing step**

This year's EREMA Discovery Day – now well known throughout the industry – was held at the EREMA headquarters in Ansfelden on 1 June 2016. Over 250 international customers and interested guests once again found the technological edge of the Austrian global market leader convincing this year as EREMA, in collaboration with SIPA, the leading Italian PET packaging solutions' company with 30 years of experience in the field of preform/bottle production and filling plants, presented the recycling system XTREME RENEW. This achievement enables direct and flexible processing of washed PET flakes to produce preforms, signalling the dawn of a new era in PET recycling.

From sorters and washing plant manufacturers to downstream producers, fillers and brand owners, representatives from the entire PET recycling value chain were present at the EREMA headquarters. The expectations of the interested attendees were high as, further to the currently low oil price, the conclusion may be drawn that PET recycling is not profitable at the moment. "In my experience with customers, the reason why a producer decides in favour of a major investment in a recycling solution is based on a broad-sighted, entrepreneurial approach. Only those companies which are willing and able to adapt will remain in the constantly fluctuating plastics industry in the long term. Thanks to the collaboration with SIPA we make it possible for plastics producers to show the necessary flexibility," says Christoph Wöss, Business Development Manager for Bottle Applications at EREMA. 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.

The food contact compliant melt produced by VACUREMA[®] runs when hot and thus without the otherwise common, intermediate cooling stage in pellet production directly into the XTREME production process developed by SIPA to make preforms in a single step. The benefit of this direct processing, therefore, is an enormous boost in energy efficiency plus considerably lower thermal damage to the PET material. Enrico Gribaudo, SIPA General Manager, notes: "We are proud to have developed such a sustainable product together with EREMA. Sustainable in the sense of the company and sustainable in the sense of the environment. Moreover, the processing gives you unrivalled benefits in logistics. XTREME RENEW not only saves space, CO₂ and energy, it also reduces costs."

1.2 million tonnes of PET recycled so far worldwide with VACUREMA[®] technology

Some 1.2 million tonnes of PET are already recycled every year around the world with VACUREMA[®] technology for end products such as preforms for the beverage industry as well as for thermoforming sheet, fibres, strapping, etc. This shows that recyclers and producers can count on flexibility in their production processes to react to fluctuating economic factors. The claim of adaptability applies likewise to the highly efficient MPR[®] which can be retrofitted to existing extrusion lines. 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 between EREMA and SIPA.

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#01: Discovery Day 2016: 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



#02: EREMA Discovery Day 2016: PET Recycling, Inline Applications & Bottle-to-Bottle



#03: MPR – Multi Purpose Reactor complements existing extrusion systems

Photocredit: EREMA

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EREMA Group

The company EREMA Engineering Recycling Maschinen und Anlagen Ges.m.b.H., which specialises in the development and production of plastics recycling systems, was founded in 1983. Besides EREMA itself, the EREMA Group comprises the sister companies 3S, PURE LOOP (January 2015) and UMAC (beginning of 2016). With subsidiaries in the USA, China and Russia plus around 50 local representatives in all five continents, the EREMA Group has a reliable network to realise customised recycling solutions for international customers. Around 480 people around the world now work for the Austrian company group which is headquartered in Ansfelden near Linz.

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.

The pivotal product from SIPA in the cooperation with EREMA is the XTREME Preform Production System. In this process the PET material is subjected to four times less pressure, which is why preforms with significantly better key characteristics and with up to 10 per cent less weight than in injection molding production can be made.