

US converter Plastipak, which has capability for both one-step and two-step production (injection moulding and blow moulding), unsurprisingly takes a more nuanced view. If a customer has a low annual demand, or uses a variety of shapes, then one-step offers cost-effective production, the company says. However, it acknowledges that the one-step process is slower and more energy-intensive than two-step, so there comes a point where it is more beneficial to move to the latter.

One aspect of the preform market that all the participants appear to agree on is the exponential growth of rPET. Plastipak claims to be the largest producer of food-grade rPET in Europe, and Kinza Sutton, head of public affairs and sustainability for Europe, says that its proportion of the company's overall resin use continues to grow rapidly.

"The concept of replacing virgin PET with rPET is simple, but the actual implementation is complex and requires careful management with extensive acceptance testing, full packaging trials, and, of course, the management and blending of the resin within the production plants," she explains. "Best practice in this area has been developed and rolled out across the group."

While rPET is easily processable and does not require machinery replacement or major upgrades, it is not considered as stable as PET, and may result

in lower production efficiency or finished-product quality.

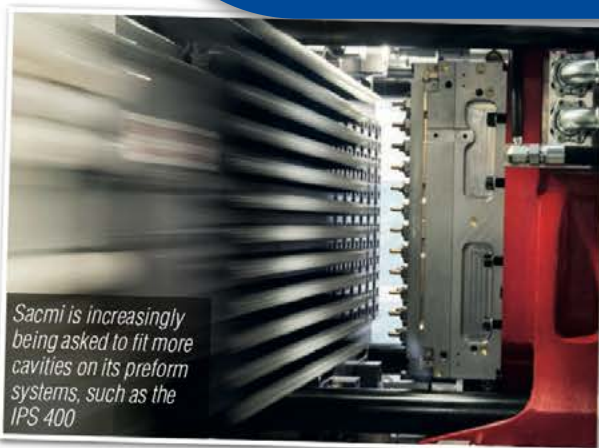
With this in mind, CMG Granulators recently introduced a high-capacity preform recycling line that it says "safeguards" all the mechanical properties and physical characteristics of the polymer, so that the regrind can be reintroduced into the production process flawlessly, with no implications or negative quality impact.

Further rPET innovation comes from Erema, through its Vacurema inline preform technology for producing food-contact compliant 100 per cent rPET preforms directly from post-consumer PET flakes – all in one process step. The technology was launched in conjunction with Sipa, combining the benefits of Vacurema with the latter's Xtreme preform production system.

Another quality consideration, which applies to all types of preforms, is moisture content. Masi at Sacmi describes moisture as the "enemy" of preform production systems, adding that auxiliary equipment that supports its removal is an important component of the company's supply provision.

German equipment maker Eisbär manufactures mould dehumidifiers, material drying systems and lift-coolers for the preform market, and chief executive Martin Spiegel says the highest quality production standards are key to successful preform production.

"We enable customers to provide an optimal climate in the mould area," he claims. "Our



LiftCooler, for cap cooling, makes preform production even faster. Also, with energy consumption still the second most expensive cost factor in preform production, we provide the lowest energy requirement on the market."

With the trend towards more sustainable packaging and manufacturing processes only likely to accelerate, expect quality and efficiency demands in preform production to continue on their upward trajectory. The most successful players will be the ones best able to minimise the impact of shifting from virgin resin to recycled material. **P**

More information from:

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Keeping a global partnership local

Producing more than 30 million beverage items annually across more than 60 manufacturing sites worldwide, Refresco lays claim to being the world's largest independent bottler.

The company, which has grown rapidly thanks to a series of acquisitions over the past two decades, has a global partnership with PET preform specialist Retal that is tailored to suit regional markets.

"Maintaining quality is expected across all aspects of working with global partners, but that doesn't mean that everything is the same everywhere," says Gennadiy Khmelevskiy, global key account manager at Retal. "The details specific to local markets are important, as is knowing the preferences of each team in different locations."

Retal produces PET and rPET



preforms and HDPE closures for Refresco. The partnership, which began when Retal successfully tendered for a project with Refresco Benelux, hinges on being able to produce and provide the right product at the right volume. Offering the correct technical solution with the best price-

performance ratio is, of course, imperative, Khmelevskiy says, but it's what goes beyond this that makes the partnership. "As a dedicated sales and service person, it's particularly important for me to diagnose any pain-points in the business and find an agile service solution that heals that pain. I also rely on our excellent service team, and I trust the Retal team."

who can get to any Refresco business unit within 24 hours." Khmelevskiy is Retal's single point of contact for Refresco and regularly communicates with Martijn Tempelaar, Refresco's senior central purchasing manager, to ensure projects are progressing as agreed. "Keeping open communication with my Refresco contacts means that I stay aligned with Refresco's headquarters in Rotterdam [in the Netherlands], as well as understanding the evolving needs of each business unit." Tempelaar agrees that being able to create solutions that can be quickly adapted for other locations helps to make a profitable partnership for both parties. "It is far easier to work with a smaller number of partners and repeat whatever elements of the project can be repeated, so we're focused on the aspects that need to be changed. Building up trust is a long-term priority for us, but also rely on our excellent service team, and I trust the Retal team."