

Efficient PET drying

As the make-up of PET feedstock change, so do the requirements to dry the resins. Piovan's new Genesys drying system was introduced to dry PET effectively and efficiently.

The Genesys drying system is said to consume lower levels of energy. By integrating an automatic air flow control and stabilising the air flow within the drying hopper, Piovan claims to reduce energy consumption by 35% to 55% compared to conventional drying systems.

Before moulding, PET resin may be exposed to dry, hot air for up to 6 hours, running up high electrical bills. The Genesys sys-

tem is capable of recovering the energy used in the regeneration process for drying. With a minimum overall savings of 30%, a system producing preforms at 1,000 kg/hour may save at least 220,000 kWh each year.

Italy's Piovan launched the Genesys system at the Drinktec show last year to meet more demanding requirements for PET drying. Nowadays, there are new PET applications on the market, including PET incorporating recycled materials, modified PET for extrusion blow moulding as well as to cater to larger PET capacities.

The Genesys system is available since the beginning of this year.



Conair moves upstream

At this year's Chinaplas in Shanghai, Conair unveiled three new pieces of ancillary equipment that represented a shift towards upstream processes. The new products aim to improve productivity and profitability for mono-layer and co-extrusion applications.

The first, the TrueWeigh gravimetric control system tracks material fed to the extruder and automatically adjusts screw speed and the haul-off device so as to maintain a consistent product output regardless of changes in raw materials, ambient conditions or processing variables.

The TrueWeigh system takes the guesswork out of maintaining constant throughput, furthermore, improved precision and control results in better quality and dimensional stability. It can also gather loss-in-weight data from two or more hoppers for multi-layer extrusion, controlling up to 12 extruders in an extrusion line.

The TrueBlend EXT gravimetric extrusion control blender (right) tracks the amount of material being fed to the extruder and also automatically adjust parameters to maintain consistent output. It can control both the extrusion throughput and blender functions for mono-layer applications, thereby allowing the operator single-point access and reducing system cost. In coextrusion applications, the TrueBlend EXT combines blender control with weigh-hopper monitoring, while control of throughput, layer ratios and haul-off speed are managed by a separate TrueWeigh touch-screen controller.

In response to increasing demand from processors to incorporate scrap material, Conair introduced a new ScrapSaver feeder

as part of an integrated film-scrap reclaim system. It keeps virgin and ground fluff separate until they reach the extruder feed throat.

Larry Doyle, vice president, global sales and marketing said that more processors are seeing the benefits of using scrap. Besides reducing the amount of virgin material used, processors save on disposal cost and can be

friendly to the environment.

"It is a fine balance," Doyle cautioned, "we don't want to compromise quality of the final product by using scrap."

The ScrapSaver maintains an accurate scrap-to-virgin ratio by feeding the fluff into the centre of the material stream, which means that the virgin pellets are surrounded by fluff as it enters the extruder feed throat.

