

Trexel showcases new P-series SCF metering systems for packaging production

(Siegen, Germany, October 2018) – Trexel will be making a strong showing with new products and systems at the Fakuma 2018 in hall A4, stand 4007. Leading-edge developments include physical foaming for thin-walled packaging, chemical foaming agents added to the company’s product portfolio and microcellular foaming for blow-molded components. Building on many years of experience in physical foaming, Trexel is implementing a systematic expansion into new application areas and moving into new sectors. Even broader service and engineering support completes the product portfolio.

Thin wall packaging with MuCell offers huge potential for savings

It’s not only in technical applications that foamed plastic components offer benefits, in the packaging industry too, foam injection molding offers huge potential for savings. Benefits include weight savings resulting from the lower densities; down 3-6% in packaging applications. Even more important are smoother flow behavior, lower cavity pressures in the mold and reduced clamping force requirements. “This means packaging components can be thinner walled or even designed with a thicker sealing edge at the flow-path end,” explained Brian Bechard, CEO & President of Trexel Inc. “It’s fair to say,” he continued, “that potential savings can run to 20% lower weight, 15% reduced cavity pressure and 30% lower clamping force.” These advances are made possible by the use of the new MuCell P Series gas dosing units where the dosing control system is adapted for the short plasticizing times. Paired with suitable injection units, the system achieves consistent, high-precision dosing, even with minimal SCF (Super Critical Fluid) volumes, together with a long-term stable and repeatable process. The Fakuma 2018 will be its European premiere.

TecoCell chemical blowing agent expands MuCell

Already widely known for its MuCell physical foaming technology, Trexel is now applying its extensive know-how to chemical foaming. Decades of experience have given the company the knowledge base to select the optimal foaming process for each application, which will generate the maximum benefit for each customer. Trexel is the first company to offer both chemical and physical foaming solutions complete from a single-source supplier. This product range puts the company in an optimal position to help customers choose which applications, given their particular circumstances, are best suited to chemical foaming and which to MuCell, or even to a combination of the two processes. The patented TecoCell chemistry is far superior to traditional foaming agents. Utilizing only CaCO₃ nano particles of 0.08 microns or less, TecoCell produces highly uniform cell structures evenly distributed throughout the molded part. The outcome is components with impressive weight savings, outstanding mechanical characteristics and good surface quality.

Pictures:



*Picture : 2018-004_P-300 packaging system Photo HR
 P-300 SCF dosing unit for thin-walled packaging*



*Picture: 2018-005_MuCell-IML-yoghurt-cup
 MuCell foamed IML yogurt cups with 0.25mm wall thickness*



*Picture: 2018-007_TecoCell
 TecoCell, a chemical foaming agent capable of achieving highly uniform microcellular structures, has been added to Trexel's product portfolio*

For more information visit:

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About Trexel

Trexel is in the business of providing technology which places tiny cells of gas in plastic parts, and our passion is manifested in the broader benefits that these micro bubbles can deliver. Our microcellular foaming technology reduces production cost while increasing environmental sustainability. We make it possible for designers to break some of the rules of thermoplastic part design, resulting in design for function instead of design for manufacturability.

Our technology enables lighter, more dimensionally stable products which can be produced faster on smaller, more energy efficient equipment.

Since 1995 we have been applying our technology to thousands of applications in dozens of industries. We have developed unsurpassed know-how, continuously improved our technology and enhanced our services, growing into the global leader in microcellular foaming technology we are today.

We deliver systems for physical foaming injection molding, chemical foaming agents and provide extensive technical advice up to complete handling of engineering projects. Mold trials, services and education or training activities complete our activities.