



EXPERTS in foaming

**Trexel is the leader in material foaming solutions
for the injection molding and blow molding industries.**

As the only company to offer both physical and chemical foaming solutions, we are uniquely capable of bringing the best foaming technology to your specific application.

We offer unparalleled expertise in placing microcellular bubbles inside injection and blow molded parts. Our physical and chemical foaming solutions enable lighter, more dimensionally stable products which can be produced faster on smaller, more energy efficient equipment.

Each application and situation have unique processing needs, volume requirements, and manufacturing environments. Trexel will provide an unbiased foaming technology recommendation based on your unique situation.



MuCell

Physical Foaming Technology

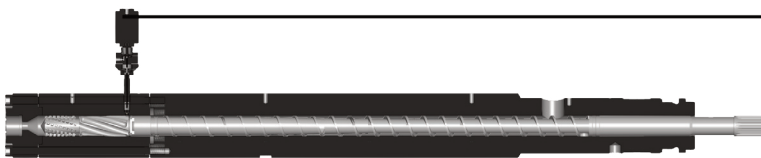
For the ultimate in microcellular foaming capability and flexibility, MuCell® has been in commercial production for 20 years enabling lighter and more dimensionally stable injection molded parts. The latest evolution of MuCell® features a smart, simple user interface with highly accurate dosing capability.

Implementing the MuCell® Process

The MuCell® capable injection molding machine consists of Nitrogen or CO₂ supply, a SCF metering and control system, and a specialized plasticizing unit including positive screw control and a shut off nozzle.

MuCell® Advantages

- Low Molded-in Stress
- Reduced Warp & Sink
- Reduced Clamp Force
- Expanded Flow Length to Wall
- Ability to Fill Thin to Thick
- Reduced Cycle Time
- Lower Density
- Reduced Weight through Design Freedom
- Energy Savings



Watch MuCell in Action



TecoCell

Chemical Foaming Technology

TecoCell® chemical foaming agents feature microcellular structures unmatched by other chemical foaming products. We bring our deep foaming process and application experience in recommending the right foaming technology for your application.

TecoCell® Advantages

- Cleaner chemistry. No damage to the mold.
- Longer shelf-life due to use of hydrophobic coating
- Single reaction temperature leads to greater process control and reproducibility
- Patented nanoscale grind size which results in uniformly distributed microcellular structure for achieving greater dimensional stability and highest quality surface appearance



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Full Range of Services

Trexel is much more than a technology and equipment supplier. We leverage our 20+ years of foaming expertise in providing a full range of services to support you from exploration to design through serial production to ensure your program's success.

- Engineering & Consulting
- Field Service & Spare Parts
- Training
- Molding Trials

Industries We Serve

Trexel is established across key manufacturing industries, creating process efficiencies and optimization in part creation. The MuCell® process offers unique injection molding processing advantages in a variety of different industries.

Automotive

The Trexel complete process solution provides a lighter and more accurate plastic part at lower production costs. Trexel's foaming solutions process enables automotive components manufacturers to lightweight plastics parts for overall vehicle weight reduction and improved fuel economy.

Part costs are typically reduced by 10 to 20% as a result of lower material consumption, shorter molding cycle times and reduced machine clamping tonnage requirements.

Engine Cover

- 35% Weight Reduction
- Improved Sound Insulation
- Improved Heat Insulation



Consumer

Trexel delivers some unique advantages to the consumer goods industry beyond just cost reduction, design freedom, and sustainability. MuCell® has been used for its energy return capabilities in athletic footwear and for its buoyancy characteristics in water sports equipment, for example.

Footwear Sole Element

- Light Weight Sole Components
- 40% Improved Rebound
- Use of High Performing Resin



Packaging

Trexel released the P-Series, a MuCell® system specifically designed to meet the unique processing demands of thin-wall packaging molders.

500g Margarine Tub

- 6% Material Reduction
- 15% Cavity Pressure Reduction
- 40% Clamp Tonnage Reduction



Industrial

Trexel's foaming technologies are used in many diverse industrial applications from shipping pallets to fill level floats in liquid tanks.

Composter Parts

- 10-15% Weight Reduction
- 7% Higher Material Savings Than Chemical Foaming
- 5-10% Cycle Reduction Time





FOAM DESIGN TO THE EDGE

2LIMIT GmbH
Trexel & GK Concept
Joint Venture

Key factors to release
the full potential of the
MuCell® technology



Trexel Partner Companies

Successful applications are the result of several companies working together to create a high-performance injection molding system. Over the years, Trexel has established close partnerships with leading injection molding machine suppliers and other industry partners, providing the end user with a maximum return on the investment in our technologies.

View our partners



Trexel Global Presence

Trexel's headquarters are in Wilmington, MA, a suburb of Boston. In support of a global client base, Trexel operates subsidiaries in Germany, Japan, and China with engineering, applications, and processing expertise. Trexel's worldwide subsidiaries are augmented by a network of competent independent representatives and distributors.



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