



HUSKY[®]

BREAKTHROUGH

Multi-Layer Technology

Unlocking packaging possibilities in PET



BREAKTHROUGH

with the benefits of **Multi-Layer** Technology

Husky's Multi-Layer Technology is an integrated solution for PET preforms that offers more flexible material properties for enhanced package design and performance, allowing you to consider more attractive packaging options over alternative materials, such as high-density polyethylene (HDPE), cartons, metal, and even glass. With the highest ever system capability, Multi-Layer Technology can produce preforms with a wide range of barrier content, from less than 2.5% to more than 40%, while delivering up to 50% savings on barrier material costs for some applications. This enables design freedom across a wide range of applications to customize the amount of barrier content used. The ability to precisely dose barrier content and adjust the range within an application successfully ensures seasonal variations are considered with relation to package shelf life.

Multi-Layer Technology combines the benefits of our high performing HyPET® HPP5 technology with an advanced melt delivery system and highly sophisticated controls to deliver all-new capability. This capability enables the precise distribution of barrier material exactly where it is needed. Built upon the proven HyPET® HPP5 platform, Multi-Layer Technology has no requirements for special tooling or equipment. Packages can be blown and filled on existing lines, making this a drop-in solution that still benefits from all future technology advancements.





Performance

Built on a proven, industry-leading platform with integrated controls and automated features



Capability

Advanced melt delivery system and sophisticated controls enable precise distribution of barrier material exactly where it is needed



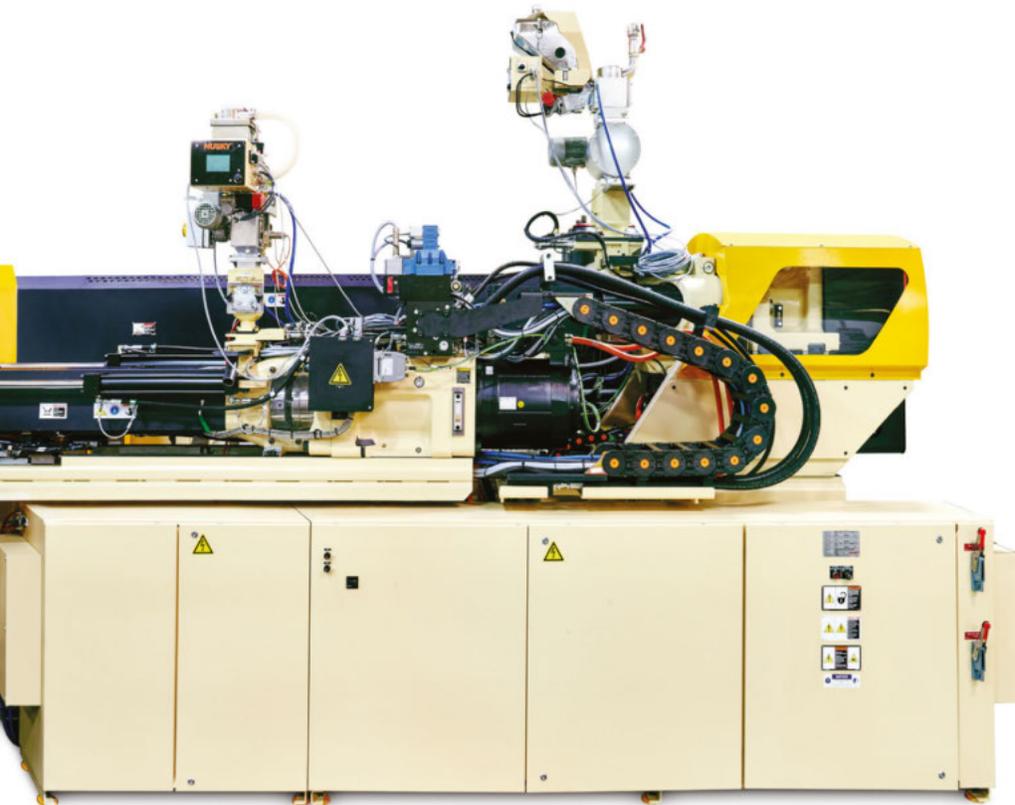
Low Maintenance

Superior design minimizes maintenance and reduces downtime



Flexibility

Adaptable to different types and quantities of barrier materials and PET applications



Husky HyPET[®]
HPP5 system
with Multi-Layer
Technology

BREAKTHROUGH

with **innovative packaging** opportunities

Multi-Layer requirements vary by application

Enhance package performance properties for specific applications by adding one or more barrier materials to the preform's mid-layer.



CO ₂	✓			✓	
O ₂		✓		✓	
Light			✓	✓	
Decorative					✓

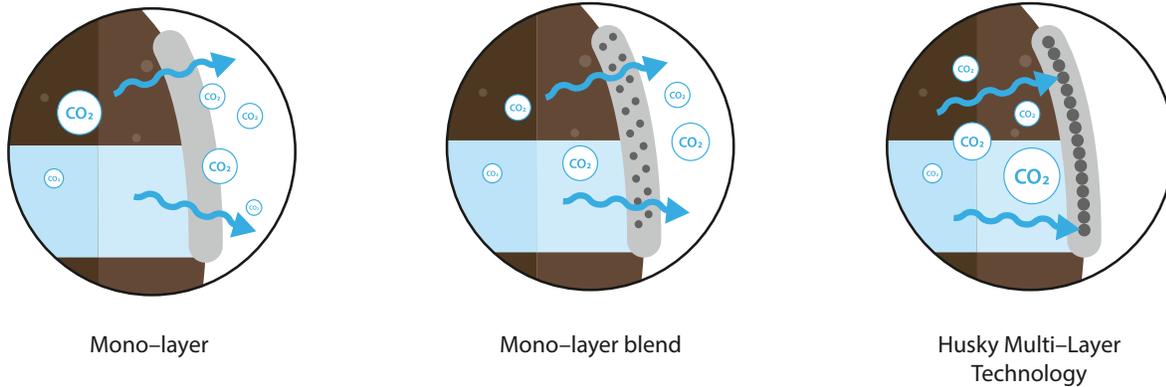
Multi-Layer Technology creates opportunity to expand share for PET packaging into adjacent markets, bringing new alternatives to consumers. By adding one or more materials to the preform's mid-layer, Multi-Layer Technology provides the ideal combination of product protection and package design, including innovative decorative capabilities for a wide variety of packaging applications.



PET preforms and bottles with decorative layer

Providing long shelf life, reducing material costs, lightweight opportunities

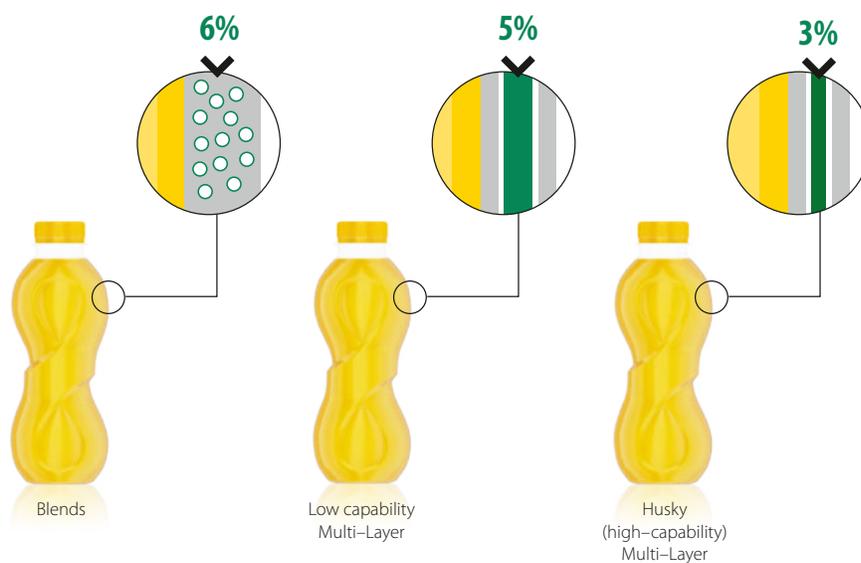
Example for carbonated application



A concentrated layer of additive positioned in the center of the preform's mid-layer is more effective at protecting content to enable significant material and additive cost savings and improving product shelf life versus mono-layer blended preforms.

More sustainable packaging

The capability of Multi-Layer Technology to precisely dose the barrier layer and inject material exactly where it is needed allows for preforms and packages that achieve the required level of product protection while using less material than conventional barrier technologies. This, combined with the potential to use recycled PET in the mid-layer, results in a smaller carbon footprint and less strain on recycling streams. As an industry leader, Husky supports increased recyclability through technology innovation and by working with industry partners to develop improved materials and processes.



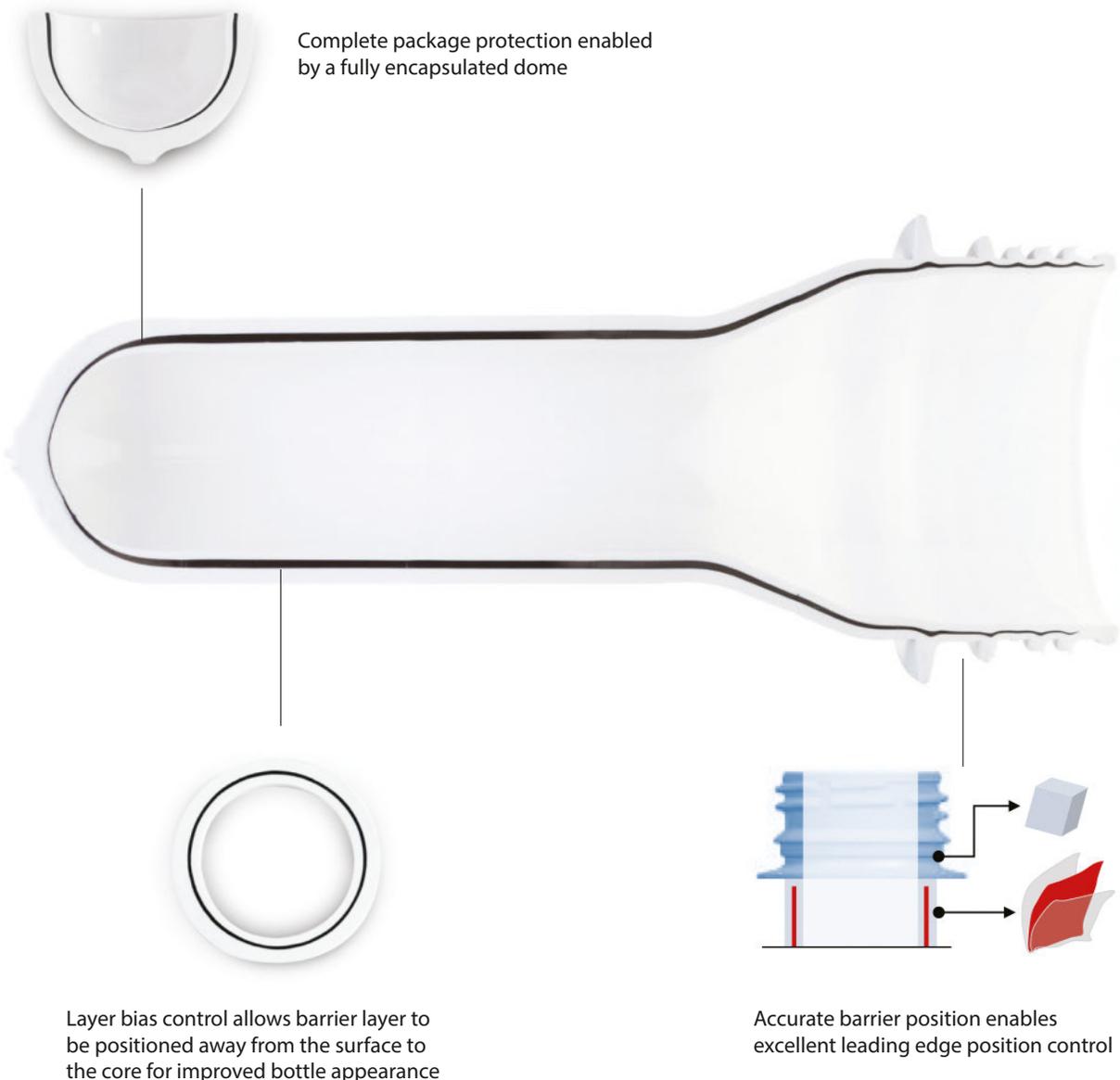
40%–50% less barrier material with (high-capability) Multi-Layer vs. conventional barrier technologies

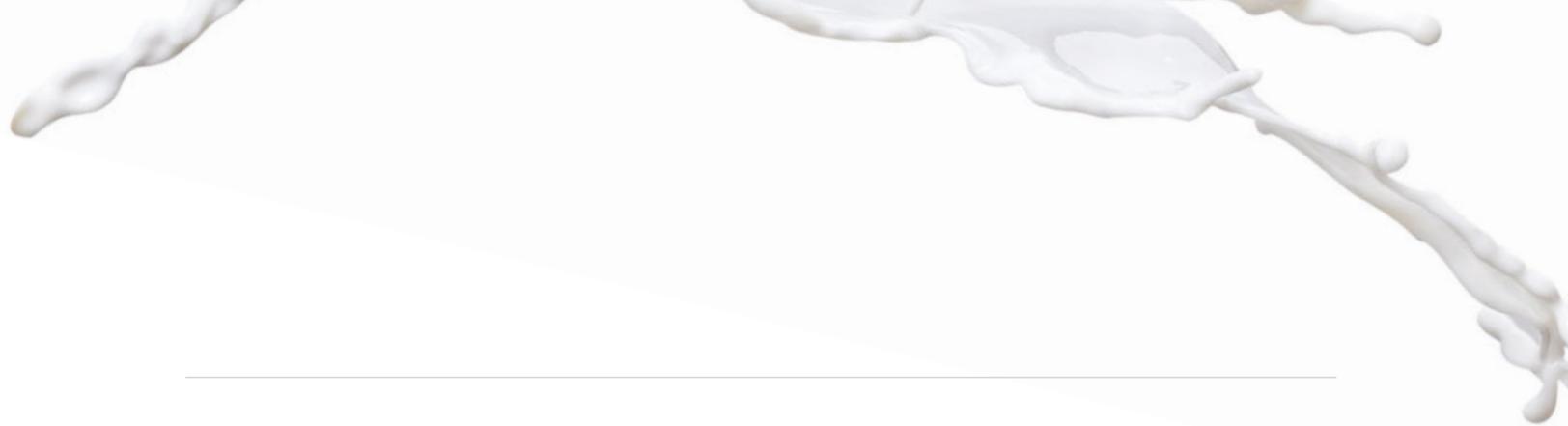
Figures are example only

BREAKTHROUGH

with a **precisely engineered** package

Multi-Layer Technology precisely positions barrier material exactly where it is needed. An advanced melt delivery system delivers unrivaled balance with only two melt splits, allowing flexibility to vary the barrier layer position and fully encapsulate the dome using the same hardware.





Global Service and Support

Husky is committed to providing unparalleled service and support. In addition to producing robust machines and high-performance systems, we also provide delivery and documentation, start-up service at the customer site, troubleshooting, advisory services and extensive training. Additionally, Shotscope™ NX process and productivity monitoring software allows molders to collect, manage and analyze production information in order to maximize productivity and reduce downtime.

Our mold and machine manufacturing facilities help customers bring products to market faster by providing manufacturing flexibility and the capacity to handle projects of any size. Each location is equipped with state-of-the-art technology and equipment enabling machines and tooling to be produced with the highest levels of quality.





HUSKY®

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