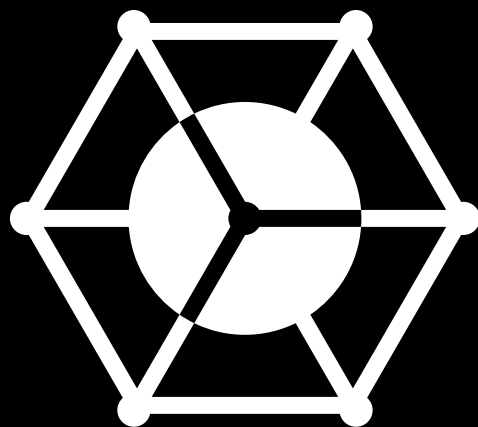


BOOKLET

ENGINEERED FOR PERFORMANCE



hypercell

## ENGINEERED FOR PERFORMANCE

A revolutionary lightweight foam technology by Co.Bo.

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Hypercell is Co.Bo.'s advanced, next-generation lightweight foam technology engineered for superior performance. Offering exceptional flexibility, durability, and high energy rebound, it ensures optimal comfort and technical excellence, making it ideal for high-performance sports footwear, safety footwear or lifestyle sneakers.



# What is it

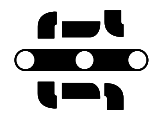
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Hypercell is Co.Bo.'s advanced, next-generation lightweight foam technology engineered for superior performance. Offering exceptional flexibility, durability, and high energy rebound, it ensures optimal comfort and technical excellence, making it ideal for high-performance sports footwear, safety footwear or lifestyle sneakers.

Beyond performance, Hypercell offers excellent dimensional stability, which helps minimize material waste during injection and ensures a smooth, predictable assembly process. It significantly reduces the risk of deformation or sizing inconsistencies that can occur with other compounds. Hypercell also delivers a uniform color finish, with no flow lines or surface streaks, ensuring a clean and premium aesthetic ideal for high-quality footwear applications.



# Tech properties and advantages



**ENHANCED DURABILITY** **+60%**

Engineered for resilience, Hypercell resists wear and tear, significantly extending the lifespan of high-performance footwear products.



**EXTREME LIGHTWEIGHT** **-30%**

Hypercell reduces overall product weight by 30% compared to traditional injected EVA materials, enhancing performance and efficiency without compromising structural integrity.



**HIGH ENERGY RETURN** **+70%**

Hypercell provides exceptional energy rebound, boosting responsiveness and performance while reducing wearer fatigue.

## TECHNICAL FEATURES

|                        |                    |
|------------------------|--------------------|
| Density                | 0,15 – 0,20 gr/cm3 |
| Hardness               | 45 - 48 Asker C    |
| Flexural strength      | > 100.000 cycles   |
| Energy return          | > 50%              |
| Abrasion resistance    | < = 160 gr/mm3     |
| Compression resistance | < 30%              |
| Split Tear             | 3,5 mm (20 mm)     |

# Hypercell vs Other Materials

See how Hypercell sets a new benchmark against conventional materials in performance and efficiency.

## EVA



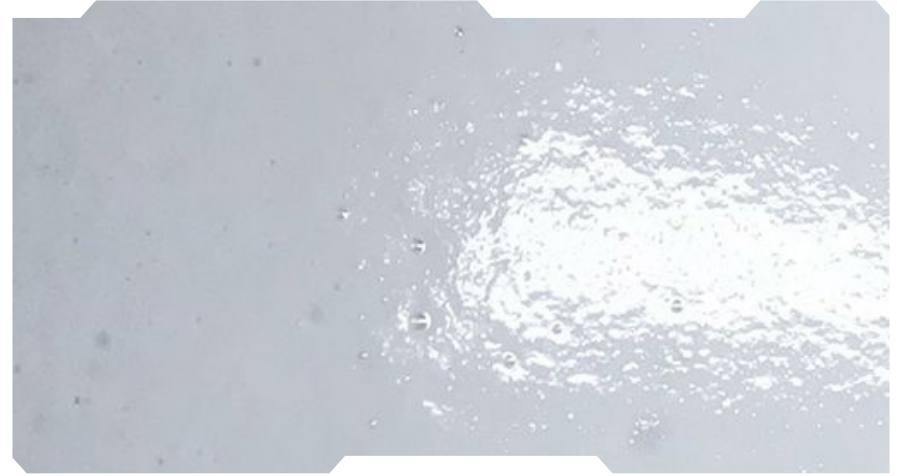
- 1 Higher energy rebound
- 2 Significant reduction in wrinkling due to weight or applied force
- 3 ~30% lower density compared to standard injected EVA (0.30 g/cm<sup>3</sup>)
- 4 Eliminates dimensional shrinkage (typically 2–3 mm in EVA)
- 5 Guaranteed dimensional stability
- 6 Provides energy return (vs. EVA's absorption behavior)
- 7 Specifically engineered for technical running footwear

# TPU



- 1 Weight reduction equal to or exceeding 50%..
- 2 Enhanced surface definition
- 3 Greater abrasion resistance due to improved cell structure
- 4 More uniform cell expansion, even in thinner sections
- 5 Superior rebound and responsiveness

# PU+FILM



- 1 Allows sharper geometries and better edge definition for greater design flexibility
- 2 Significantly lighter ( $\geq 50\%$  weight reduction vs PU+film systems)
- 3 Increased walking comfort under dynamic stress
- 4 Greater flexural strength: 100,000+ cycles vs 30,000 standard value
- 5 Improved consistency in weight and hardness

# Applications

Hypercell is engineered to excel across a wide range of footwear design. Its versatile properties make it an ideal choice for various uses and footwear applications. Discover how Hypercell adapts to different needs, delivering comfort and performance in every step.



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# MIDSOLE

Hypercell midsoles applications offer optimal comfort, energy return, and durability, making them ideal for high-performance sports footwear and technical running shoes. Engineered for athletic performance, it is suitable also for safety and lifestyle applications.

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# SINGLE-MOLD

The Single Mold application allows for a seamless, one-piece product construction, improving durability and reducing assembly time. Perfect for casual sneakers, lifestyle shoes, and slip-ons where lightweight comfort and streamlined design are essential.

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# INSERT

Designed to complement existing midsole structures, Hypercell midsole insert applications provide targeted comfort and energy rebound in specific areas. Ideal for technical footwear, including trail running and hiking/safety shoes, where additional support and responsiveness are needed.

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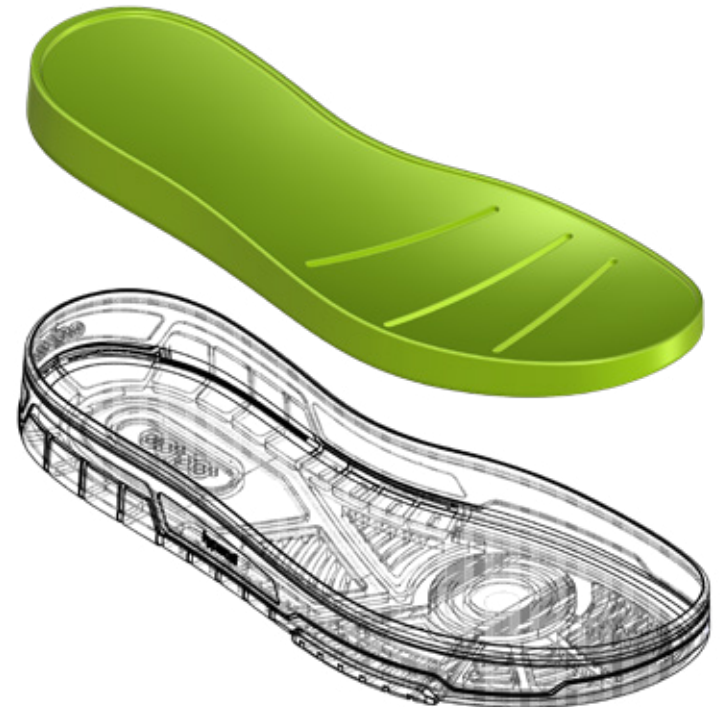


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# FILLER

Hypercell midsole filler applications optimize material usage by filling voids within the sole structure, reducing weight without compromising strength. Commonly used in performance footwear and fashion sneakers to balance lightweight design with structural integrity.

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# Sustainability

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At Co.Bo., we are committed to integrating innovation with environmental responsibility. Hypercell has been developed to support sustainable practices: up to 20% recycled material can be incorporated during the compounding phase, and production waste can be efficiently recycled through a dedicated regranulation process.

co.bo.

INJECTION MOULDING FOR FOOTWEAR

