## **ROHACELL®**

# HYPERLOOP. **ROHACELL® GETS A TICKET.**





Hyperloop – a creative initiative first proposed in 2013 to explore the realm of high-speed transportation of people and goods.

An exciting new concept in transportation took one step toward reality in June of 2015 with the announcement of an Hyperloop Pod Design Competition. Students and designers were invited to build pods that would compete on a mile-long track as a first step toward the ultimate goal of super high-speed transportation for our future.



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The Technical University of Munich (TUM) accepted the challenge and went to work immediately. Their designs have proven to be highly successful. Since the beginning, TUM's pod prototypes have won all rounds of the event, establishing competition benchmarks for top performance and then going on to break their own records.

Evonik, with their ROHACELL® foam, has been an important partner to the Technical University of Munich. ROHACELL® plays a key role in forming the pod's main beam that is built as a sandwich-design composite using a ROHACELL® foam core to optimize the part's strength and stiffness. The pod's main beam must carry all the attached components and withstand the high acceleration forces as it moves.



The ROHACELL<sup>®</sup> SHAPES department in Darmstadt, Germany supported the TUM Hyperloop Team with highly accurate CNC-shaped core parts. Through constant communication and excellent collaboration between TUM and ROHACELL<sup>®</sup> SHAPES, just-in-time delivery of the shaped cores to the TUM team meant they got the parts they needed at the exact time they were needed.

Whether you are designing a bicycle to explore mountain trails, an electric vehicle to travel the countryside, an airplane to commute between cities, or even a high-speed hyperloop transportation pod to zip smoothly underground across a continent – ultra-lightweight ROHACELL® foam sheets or shapes deliver the mechanical performance and weight advantages needed to design the future.

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