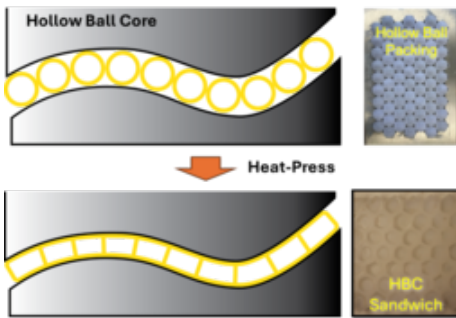


Hollow Ball Core for Sandwich Structured Composites

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Hollow Ball Core for Sandwich Structured Composites

Mechanical Engineering

Abstract

A simpler, improved core material for use in sandwich-structured composite for use in multiple geometries. HBC is a new manufacturing approach that combines the benefits of light-weight construction with much-needed manufacturing benefits. These include a faster processing speed, high compatibility with complex geometry needs, and ability to be used with existing blow molding technologies.

Problem

Weight and durability are highly crucial to sustainability for composite sandwich structures. Yet, available structures have constraints between weight, durability, and manufacturing cost.

Solution

Hollow-ball core sandwich structures deliver a lightweight, durable structure, even under high-pressure, that keeps manufacturing costs down and works in various structures.

Value Proposition

Reduce the weight of polymer liner by 50-60% while preserving structure integrity in high pressure/temp environments to impact the energy-efficiency and physical properties of the structure to improve resilience and reliability.

Benefit

Provides a simpler technique that does not require pre-defined structures in core design. Faster to process and highly compatible with complex geometry needs. Technology is the only way to create sandwich structured enclosed vessels compatible with existing blow molding technologies and has versatility in terms of material selection.

Market Application

The HBC technology can be used in any industry where sandwich composite structures are used.

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Intellectual Property

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