

Nano Science, Technology and Industry Scoreboard

Lyten Introduces LytR, Reduces Weight of Manufactured Plastic Products by Up to 50 Percent

2022-11-11 Lyten, an advanced materials and applications manufacturer and inventor of the novel Lyten 3D Graphene[™] materials platform, announced the debut of LytR[™], its unique polymer composite product line.

Pelican Products, Inc., a renowned maker of high-durability protective cases, will incorporate LytR[™] into a new generation of transport cases, including cases intended for U.S. military forces. The infusion of LytR technology will allow Pelican to manufacture cases up to 50 percent lighter while maintaining the same strength and durability as their standard cases. Pelican customers will have an improved experience while moving and handling these cases, including eliminating the need for two-person carry in some instances. Based on the reduced container weight, LytR reinforced cases will enable customers to reduce bodily strain, reduce transportation and fuel costs, increase payload capacity, and reduce their carbon footprint.

"We are honored and excited that Pelican selected our LytR[™] polymer as a way to extend their strategic advantage," noted Dan Cook, Lyten's CEO and Co-Founder. "By introducing our LytR technology into Pelican products, they are setting the new industry standard for lightweight protective cases."

LytR[™] is a polyethylene formulation infused with a proprietary, carbon-based material called Lyten 3D Graphene[™] that significantly reduces weight while maintaining product strength and durability. LytR can be applied to a wide range of products and potentially displaces traditional materials in a vast array of polyethylene-based products. The Lyten 3D Graphene[™] platform of materials is a special form of graphene. Graphene is a material known to be 300 times stronger than structural steel.

Director of Product Management at Lyten, Bryce Anzelmo, Ph.D. states, "LytR is purposely

architected as a drop-in polymer replacement for the rotomold industry to unlock weight reduction without compromising strength." Anzelmo continued, "Helping our customers manufacture products utilizing up to 50% less polyethylene could help reduce the carbon footprint in the \$100B polyethylene market."

"We're constantly innovating our products, so we are excited to integrate Lyten's new materials technology into Pelican containers to provide our customers with a lighter weight case without reducing the protection and durability Pelican is known for," stated Phil Gyori, President & CEO of Pelican Products, Inc. "Pelican's mission is to protect what you value, and this includes the environment around us. Using less polyethylene material to achieve the same or greater strength is a game-changer in the rotomold market, but even more impactful is the long-term benefit for our planet."

Lyten's Cook noted, "Lyten 3D Graphene advanced materials platform may be applied to a vast number of product categories across dozens of industries in the near future, which ultimately delivers enhanced product features and benefits the environment through decarbonization."

Read the original article on Business Wire.