

September 29, 2008

Amphenol chooses VICTREX® PEEK™ Polymer for new high performance clamps

WEST CONSHOHOCKEN, PA, USA — When Amphenol, one of the world's largest manufacturers of interconnect products, wanted to develop a high performance wiring, cable, and hydraulic tubing clamp that would replace and outperform traditional P-clamps and Saddle clamps, it chose [VICTREX® PEEK™ polymer](#) because of its superior strength and ability to reduce overall weight.

Originally developed for the new Boeing 787 all-composite aircraft, the new high performance clamps consist of VICTREX PEEK polymer, a high performance thermoplastic, that is over-molded with a silicone rubber cushion. By using VICTREX PEEK polymer, Amphenol was able to develop a lighter and stronger clamp — one that, unlike metal, is completely non-corrosive and non-conductive for use throughout the aircraft.

"VICTREX PEEK polymers are exceptionally strong, inert, inherently flame retardant, and can be easily fabricated into tight tolerance parts," said Michael Sandeen, Product and Technical Leader at Victrex. "They offer significant advantages to aerospace engineers looking for lightweight materials that provide processing flexibility, reduce manufacturing costs and provide durability in harsh environments. VICTREX PEEK polymers have successfully [displaced metals](#), traditional composites and other plastics in a growing number of [aerospace applications](#)."

Amphenol uses a proprietary silicone over-molding process to produce the high performance clamps, which are also used in a wide range of shipboard, industrial and railway applications. The advantage of Amphenol's over-mold process is that it bonds the silicone rubber cushion to the plastic. Unlike cushions in metal clamps, they will not detach or come off, thereby reducing the possibility of wire chafing. In addition, because the cushions allow for varying compressions, the same size clamp can accommodate multiple bundle diameters.

Driven by Amphenol's lean manufacturing expertise, the high performance clamps are equipped with a locking feature that makes installation quick and easy. "A "lock-open" feature keeps the clamp open and a second "lock-closed" feature keeps the clamp closed. When an installer wants to insert a wire bundle or tubing, instead of holding the clamp with one hand and inserting the wire bundle or tubing, he can open it, put the wire bundle or tubing in, and then close it and the clamp will stay in place. He can then insert the screws to complete the installation, resulting in efficient assembly.

Another feature of the high performance clamps is the easily recognizable labels on the top and bottom of each clamp. This enables quick inspection, allowing installers to easily distinguish between clamps and eliminate time wasted in identifying diameters.

Available in single leg (P-clamp) and double leg (Omega) configurations, the new high performance clamps are available in 36 sizes, allowing them to meet most wire bundle and application-specific load requirements. They are also compatible with tubing up to 2" diameter. In addition, newly designed high performance clamps with fluorosilicone over-molded cushions have been designed for harsh-environment fuel tank applications.

Victrex USA, Inc. is a division of Victrex plc, which is the sole manufacturer and supplier of VICTREX PEEK polymer worldwide. For more information on the properties and performance advantages of VICTREX PEEK polymer, please call (800) VICTREX or visit the Victrex website at www.victrex.com.

Read more about the success of VICTREX PEEK polymer as a [metal replacement solution](#) in aerospace components.

About Victrex

Victrex plc is an innovative leading manufacturer of high performance materials, including VICTREX® PEEK™ polymer, VICOTE® Coatings and APTIV™ film. These materials are used in a variety of markets and offer an exceptional combination of properties to help processors and end users reach new levels of cost savings, quality, and performance.

VICTREX® is a registered trademark of Victrex Manufacturing Limited. PEEK™, PEEK-HT™, T-Series™, MAX-Series™ and APTIV™ are trademarks of Victrex plc. VICOTE® is a registered trademark of Victrex plc.

About Amphenol

Amphenol is one of the largest manufacturers of interconnect products in the world. The company designs, manufactures and markets electrical, electronic and fiber optic connectors, coaxial and flat-ribbon cable, and interconnect systems. For more information visit www.amphenolpcd.com.