

Trelleborg Supplies Bespoke Gasket to Protect Historic Ship on the Åland Islands



Trelleborg's marine and infrastructure operation has supplied a specially designed Gina gasket (G110-80) to a bespoke dry dock, built for the purpose of protecting the renowned historic ship Pommern, located in Mariehamn on the Åland Islands in the Baltic Sea. Built on the Clyde (Scotland) in 1903, Pommern is the only tall ship in the world that has remained structurally unaltered since her days in active service. Since 1953, she has served as a museum ship, moored next to the award-winning Åland Maritime Museum. The dock, which is unique in that it is built out in the water, was constructed by ByggAb (Åland) and designed by the same company's owner, Bengt Eriksson.

Purpose-built Leak-free Alternative

Trelleborg was tasked by EE Engineering, who constructed the dock gate, to provide a purpose-built leak-free alternative to a standard D-fender. The option chosen was the Gina gasket. Only one of this type of gasket is required as opposed to several gaskets needed in the D-fender to obtain the same result as the smaller Gina gasket. In addition to this, Trelleborg also supplied its low friction, wear resistant UHMW-PE fender panels, which guide the floating dry dock door into its recess before the Gina gasket is compressed and closes off the dry dock.

Maritime Heritage

Emil Engblom, CEO at EE Engineering, commented "The Pommern is widely considered a symbol for Mariehamn and its maritime heritage. Therefore, there has been significant investment in the ship's refurbishment and preservation. Central to that plan is the construction of a dry dock to safely and effectively moor the ship at the western harbour of Mariehamn.

Richard Hepworth, President of Trelleborg's marine and infrastructure operation, commented "Our custom Gina gasket provided the ideal solution as it ensured a watertight closure, greater tolerance bandwidth and low jacking force due to its various levels of hardness. It also facilitated fewer fixation materials on the dry dock door and offered a simple, hassle-free installation process."

Heavy Duty Applications

To seal the dry dock door, the Gina gasket is made from natural rubber combined with various levels of hardness to accommodate for the variation in hydrostatic pressure and is supplied as a U- frame. The fender panels were faced with Trelleborg's ultra-high molecular weight polyethylene UHMW-PE, the first choice for this and other heavy duty applications. It combines very low friction with excellent impact strength and wear resistance superior to that of steel.

For more information, visit: www.trelleborg.com/en/marine-and-infrastructure