Yokohama Rubber’s Fender Watch System Permits Remote Monitoring of Air Pressure in Pneumatic Marine Fenders

Company’s Fender Watch system reduces maintenance burden greatly

Tokyo—The Yokohama Rubber Co., Ltd., announced today that it has developed a system for monitoring the air pressure in pneumatic marine fenders by remote sensing. Pneumatic marine fenders prevent damaging impact between ships and between ships and wharves. They typically require periodic inspection of their inflation pressure, which has traditionally entailed lifting them out of the water. Yokohama’s new Fender Watch system allows for monitoring the air pressure in the fenders while they remain in the water. It thereby simplifies the work of checking the inflation pressure.

In the Fender Watch system, a sensor installed on a metal fitting inside a pneumatic marine fender detects the inflation pressure. The sensor transmits the inflation data via a wireless signal, and maintenance personnel equipped with handheld terminals can monitor the inflation pressure at unobstructed distances of up to 30 meters. In addition to simplifying the work of checking the inflation pressure, remote pressure sensing can help monitor the distance between two moored vessels during ship-to-ship transfers of crude oil or liquefied petroleum gas (LPG).
Users frequently use pneumatic marine fenders in multi-fender combinations, and Yokohama has designed the Fender Watch system to take pressure readings from up to four fenders simultaneously. It has also equipped the sensors to transmit alarm signals if the inflation pressure moves significantly above or below the levels set by the users.

Yokohama, a leading tire manufacturer, is the world’s largest supplier by far of pneumatic marine fenders. It supplies some 80% of the pneumatic marine fenders sold worldwide. The Fender Watch system incorporates pressure-monitoring technology that Yokohama introduced in October 2005 in its Air Watch system for passenger car tires.