Trelleborg’s marine and infrastructure operation has successfully trialed AutoMoor at the TT Line cruise ferry facility at Station Pier, located at the Port of Melbourne in Australia. AutoMoor has been developed following several years of customer consultations. Using vacuum technology to rapidly attach to and secure a vessel at berth, it reduces vessel motions, and continuously monitors all mooring loads acting on the vessel at berth. This provides live data to the operator to optimize day-to-day port and terminal operations. It also minimizes personnel involvement to reduce human error and improve safety.

Stuart Michael, General Manager Marine Operations at TT Line, commented: “Since commissioning in early September, Trelleborg’s AutoMoor system has significantly increased the mooring capacity of Station Pier’s existing conventional mooring bollard equipment. This is because it has successfully enabled a safer berthing process for vessels including the 195 meter long, 29,000GT Spirit of Tasmania sister ships and improved overall safety levels within the port environment.

“Achieved without the need for costly and time-consuming infrastructure upgrades, it’s safe to say that Trelleborg’s AutoMoor system is fast proving a welcome addition to the berth.”

Using an automated mooring system to dampen vessel motions and extend the range of conditions in which efficient transfer can take place can have huge implications for efficiency. Automated mooring technologies can also minimize downtime by reducing the effects passing ships have on moored vessels. When using mooring lines, operators may need to interrupt operations, costing time and money in delayed product transfer.

AutoMoor is also intended to help ports and terminals become more environmentally efficient, because vessels can be secured in under a minute and released in 30 seconds. This reduces vessel idling time and reduces the time tug boats are required alongside the vessel until the mooring operation is complete, cutting emissions overall.

Trelleborg’s AutoMoor solution falls under the operation’s SmartPort portfolio. SmartPort powers the critical interface between ship and port, on land and at sea. It connects port operations, allowing operators to analyze performance and use data to improve decision making. The system integrates assets like fenders, mooring equipment, ship performance monitoring, and navigation systems, underpinned by cloud and Internet of Things (IoT) technologies.