Trelleborg’s marine and infrastructure operation has supplied its latest navigation and piloting solution to PrimePort Timaru in New Zealand, as part of an upgrade in order to increase capacity at the port and facilitate the accommodation of larger vessels.

Enabling the port to berth Rio-class ships, which can handle up to 5,900 TEUs, PrimePort has installed Trelleborg’s SafePilot CAT MAX. The solution consists of heading and positioning units, which can communicate with each other and the pilot’s display via Wi-Fi. It also boasts an integrated six-axis gyro/motion sensor, offering precise and independent rate of turn, roll, and pitch. This, coupled with the capability to charge wirelessly, makes SafePilot CAT MAX an ideal solution for ports where accurate under-keel clearance is of significant importance.

Captain Thejs Pedersen, marine pilot at PrimePort Timaru, commented: “Maneuvering in the port is tricky due to under-keel clearance restrictions and a very restricted swinging room. Therefore, it was vital that we specified a high-accuracy positioning solution to enable the berthing of Rio-class ships and enhance the efficiency of our operations.

“Trelleborg’s CAT MAX allows us to view under-keel clearance data in real-time to permit the safe transit of these larger vessels and remove the risks of grounding and the increased chance of collisions. Having used Trelleborg’s SafePilot CAT ROT navigation and piloting solution for the piloting of smaller vessels, we had no hesitation in turning to them once again.”

Richard Hepworth, President of Trelleborg’s marine and infrastructure operation, commented: “Piloting requires the safest, most efficient and reliable technology. It demands exceptional performance, ease of operation and accuracy to facilitate optimum approach, berthing and departure. CAT MAX is the latest example of our long-standing commitment to continually exploring ways in which we can further strengthen our navigation and piloting offering to ensure it delivers exactly that.”

CAT MAX delivers a speed accuracy down to 1 cm/s and a heading accuracy down to 0.01°, allowing the system to be used in the most challenging operations in confined waters and also during high-risk operations, like offshore maneuvers and oil and gas transfer.

Developed in conjunction with working marine pilots from across the world, SafePilot is known for its intuitive ease of use, offering optional software modules that can be selected according to operational pilotage requirements. Benefits include improved accuracy, as data is filtered to only display what is relevant during each operational phase, eliminating the risk of information overload and enhanced safety through improved situational awareness and accurate, real-time data.

SafePilot is a critical component of SmartPort by Trelleborg, which 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.