

# Australasian Port Takes Navigation and Piloting to the Max

Powered By  
SmartPort®



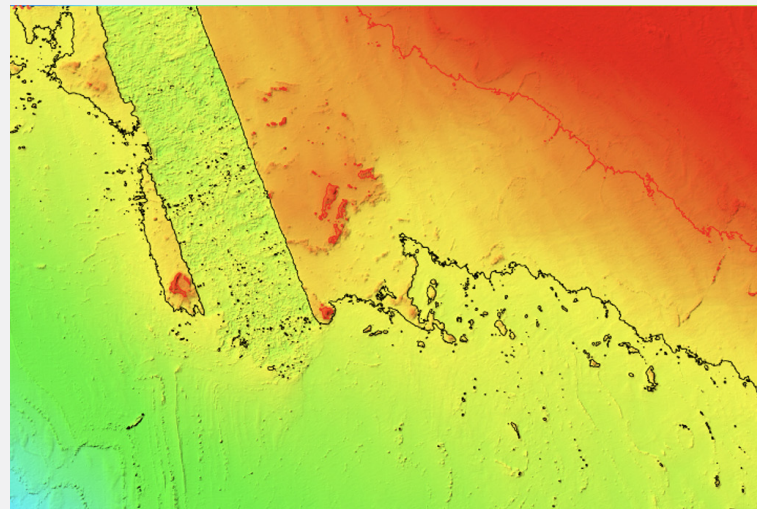
**Trelleborg Marine and Infrastructure has enhanced navigation and piloting operations at an Australasian port that suffers from under-keel clearance (UKC) restrictions and limited space. The port is now benefiting from Trelleborg's SafePilot Pro solution, which combines professional piloting software with portable pilot units (PPUs). With SafePilot Pro, the pilot is now able to safely maneuver vessels to within 1cm of accuracy in confined areas of the port.**

## An Ideal Solution

Trelleborg supplied its SafePilot Pro solution with CAT MAX PPUs to the port. Each PPU is fitted with an integrated inertial measurement unit (IMU) system that enables SafePilot Pro to accurately measure roll and pitch to provide accurate UKC data in real-time, crucially enabling the port to increase the efficiency of maneuvers.

The portable and lightweight PPU technology also supports the accurate and safe positioning of vessels within the port's turning basin, offering predictions of a vessel's eventual location, giving the pilot a greater opportunity to make adjustments.

Trelleborg's SafePilot Pro with CAT MAX PPUs consist of heading and positioning units, which can communicate with each other and the pilot's display via Wi-Fi. The PPUs boast 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 the ideal solution for this Australasian port where accurate under-keel clearance is of significant importance.



## Better Navigational Accuracy

Trelleborg's SafePilot Pro with CAT MAX PPU is specifically designed for use in demanding applications, including the piloting of ultra-large container vessels and LNG ships in confined waters and offshore operations.

The solution delivers a speed accuracy down to 1 cm/s and a heading accuracy down to 0.01°, allowing the system to be used in challenging operations. Built-in UHF radio facilitates the exchange of environmental and other data between all parts in the operation, including RTK corrections to the CAT MAX. Combined with SafePilot software, this information can also be exchanged via the cloud.

Developed in conjunction with the world's working marine pilots, SafePilot is highly intuitive and easy to use, and offers 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, while enhancing safety through an improved situational overview and accurate, real-time data.

## SmartPort by Trelleborg

SafePilot Pro is a critical component of SmartPort by Trelleborg, which is Trelleborg's answer to the need for a standardized way to collect and store data. SmartPort connects port operations, allowing operators to analyze performance and use data to improve decision-making across the port environment. The system integrates assets such as fenders, mooring equipment, ship performance monitoring, and navigation systems, and is underpinned by cloud and Internet of Things (IoT) technologies.

To find out more about Trelleborg's range of SafePilot navigation and piloting solutions, please visit: [trelleborg.com](https://trelleborg.com)

# SmartPort by Trelleborg

SmartPort by Trelleborg powers the critical interface between ship and port, on land and at sea. Visit our website to access our case studies and whitepaper, plus the entire suite of SmartPort solutions.

Powered By  
SmartPort®



Learn more  
about SmartPort  
solutions

### GET IN TOUCH:

Website | [trelleborg.com/marineandinfrastructure](https://trelleborg.com/marineandinfrastructure)

Email | [marine\\_infra@trelleborg.com](mailto:marine_infra@trelleborg.com)