

CASE STUDY

SPARE PART TRACKING SOLUTION

The spare part tracking system (SPTS) addresses the proper tracking of the spare part in storerooms of ships. Marine engineers can continuously monitor exact inventory levels and shelf locations. The solution was designed to manage the inventory at high seas.

Objectives

Track spare parts in storerooms: This refers to keeping a record of all the spare parts that are stored in a specific location or room.

Monitor exact inventory levels: This involves keeping a real-time record of the amount of inventory that is available in the stock.

Monitor exact shelf locations: This refers to keeping track of where each item is placed on the shelves or racks within the inventory storage area.

Solution

Intellistride proposed the use of RFID tags and RFID readers with shelf antennae, communicating with the Crosstalk server. Enabling marine engineers to continuously monitor exact inventory levels of spare parts as well as exact shelf locations. Intellistride deployed the listed sensors hardware and software components to implement the solution.

Hardware Components

Hardware/Software Components
RFID RRU 4500 Reader
Smart Shelf RFID UHF Antenna
Heavy-duty Industrial Barcode Reader
Crosstalk - 3.0 IoT Suite

Challenges

Locating exact shelves in real-time

Real-time tracking of spare parts

Accurate monitoring of inventory levels

Highly metallic environment for RFID is a challenge.



Results

Factual and accurate data on inventory levels.

Real-time tracking of spare parts in storerooms

Accessing exact shelf location thus providing ease of operation during downtime.