

Faro Laser Tracker Hull Movement Study

PROJECT SCOPE

Grand Bahamas Shipyard hauled out a tanker that was badly damaged. Half of the steel had to be replaced on the bottom of the outer hull. The shipyard needed a way to determine that the large amount of steel replacement was not going to affect the integrity of the hull. It was determined that the best way to determine the hull movement was to measure the hull at several instances throughout the course of the steel replacement.

HOW WAS ACQUIP INVOLVED?

ACQUIP was contacted to determine and execute the best process to analyze the hull movement over a 60-day period. We decided to use the FARO ION Laser Tracker to establish a baseline and then measure the deviation of the points from the baseline. Fixed targets were set up as references to use through the project. Hull targets were welded to the vessel to track throughout the steel replacement. ACQUIP visited the site on 4 separate occasions to measure the hull with the FARO laser tracker and recorded all data into the computer.

RESULTS OF THE PROJECT

ACQUIP Alignment Engineers determined that no significant movement occurred during the steel replacement process. Grand Bahamas shipyard was assured that there were no issues with the shape of the hull before launching vessel. ACQUIP was able to provide a cost effective solution to quickly determine the hull movement profile over a long period of time.

