

IN-SITU LINE BORING OF 6 THRUSTER HOUSINGS IN SINGAPORE SHIPYARD

TIGHT TIMELINES MET ON DRILLING SHIP REFIT IN JURONG SHIPYARD

In-situ line boring is a routine job for Goltens but tight timelines and dimension make certain jobs more complicated than others. When Goltens was asked to undertake the machining of 6 Rolls Royce thruster housings on a drilling vessel undergoing refit in Jurong Shipyard in Singapore this was just the case.

The 6 thruster housings required boring to a diameter of 1,270mm and the timeline for the job was compressed. To accommodate the large propeller thruster housing bore diameter, Goltens' Line Boring Team had to modify its line boring equipment in order to meet the customer specifications and requirements. Additionally Goltens manufactured custom fixtures to mount and support the Line Boring Bar.

Once the modifications and fixtures were prepared, the In-situ boring bar was mounted in the correct position using laser alignment tools, and line boring was completed within the schedule provided by the customer.

IN-SITU LINE BORING CONSISTED OF:

- Customized line boring tools and fabricated mounting fixtures
- Performed laser alignments on thruster housing to set up boring bar in order to maintain parallelism and perpendicularity
- Line bored thruster housing internal diameter to required size and specification

LINE BORING RESULTS:

Goltens' Line Boring team completed the difficult job within 10 days. The satisfied customer commented that Goltens was able to complete the complex job on time, the final results were excellent and the dimensions were all within the finite tolerances required.

PROJECT FACTS: DRILL SHIP LINE BORING

Thruster Manufacturer:	Roll Royce
Year Built:	1975
Vessel Tonnage:	7,403 DWT
Housing Dimension:	ID 1270 mm
Max Water Depth:	7,000ft
Max Drilling Depth:	25,000 ft



One of the Six thruster housings machined



Line boring one of the 1,270 mm diameter propeller thruster housings