

## SHEARED PROPELLER SHAFT MANUFACTURE AND REPLACEMENT IN INDIA

### RAPID RESPONSE AND PRECISE EXECUTION RESTORE OFFSHORE VESSEL TO SERVICE

A 38-year old offshore supply vessel experienced a failure of its port side propeller shaft with the shaft shearing off near the forward end bush.

The customer approached Goltens to request assistance in the supply and installation of the shaft. Goltens accepted the challenge and worked closely with the vessel's class society, Indian Registry of Shipping (IRS), for recommended procedures and for approval for the forging and manufacture of a replacement shaft.

Goltens worked with class to gain approval for the procedure and arranged for inspection at various stages. Once approved, Goltens initiated the process starting with material identification and testing to ensure the proper material was used for the shaft.

Once the work on the shaft, including shaft seal liners and required machining was completed, final inspection by IRS Class was performed and the shaft was accepted.

#### PROPELLER SHAFT WORKSCOPE CONSISTED OF:

- Forging and Manufacturing of propeller shaft per drawing approved by Class
- Manufacturing of 3 shaft seal liners and installation on the propeller shaft by interference fit of 0.25mm
- Tapering of the shaft at both ends with key way
- Drilling and tapping 4 holes at the coupling end of the shaft
- Bedding propeller and coupling on the propeller shaft
- Final inspection and class acceptance of the shaft.

#### RESULTS:

The entire activity from forging to final inspection and dispatching to the shipyard was closely monitored and successfully executed by the Goltens India team.

Goltens completed this job working 2 shifts teams to meet the customer's schedule requirements. The job was completed on time to the full satisfaction of the customer.

#### PROJECT FACTS: PROPELLER SHAFT

Client: Innocean Maritime Pvt Ltd.  
Vessel Name: HALANI 2  
Propeller Shaft: Length 7688mm x Diameter 225.25mm.  
Shaft Seal Liners: 222.00mm, 228.60mm

