

DAIHATSU 12DKM36 CRANKSHAFT REPLACMENT MAIN ENGINE CRANKSHAFT REPLACEMENT IN CHINA

After experiencing a main engine casualty, the owner of an 11,000 DWT suction hopper dredger engaged Goltens' In-situ specialists to inspect suspected damage on the crankshaft. The inspection revealed significant cracks on the damaged crankpin. Goltens determined that the crack depth exceeded the minimum rated diameter and that the crankshaft was beyond repair.

The ship-owner had never experienced such complex and technically challenging project. Goltens China was presented to the owner as the engine maker's recommended service provider to replace the crankshaft. After a technical meeting between the ship senior superintendent, maker's advisor, shipyard Quality Control and Goltens' Technical Manager, Goltens produced a thorough plan and was awarded the job to replace the condemned crankshaft and rebuild the starboard engine.

The job would require close coordination between Goltens' workshop, Chocking and Diesel specialist teams. Goltens immediately dispatched one service team to the vessel to begin the removal of the shaft.

CRANKSHAFT REPLACEMENT SCOPE OF WORK:

- Full inspection of STBD main engine crankpin journals;
- Fabricated special tools for engine block support and for safe removal of the damaged crankshaft;
- Engine disassembly and crankshaft removal;
- Laser alignment check of all main bearing pockets.
- Dismantle the hydraulic coupling from old crankshaft and installation on the new crankshaft;
- Cleaning and installation of the new crankshaft in the block;
- Alignment and chocking of the engine using ITW Polymers Coatings' Chockfast Orange product;
- Rebuilding of the STBD main engine and full commissioning.

RESULTS:

Goltens' closely coordinated service teams completed the entire job within 20 days, a full 10 days earlier than expected. The job was performed to the complete satisfaction of the OEM and the vessel owner. PROJECT FACTS:Vessel type:TrailTonnage:10,9Main Engine:Daih

TS: M/V CHANG JING 2 Trailing Suction Hopper Dredger 10,966 DWT Daihatsu 12DKM36 × 2 units (6,325KW)



















