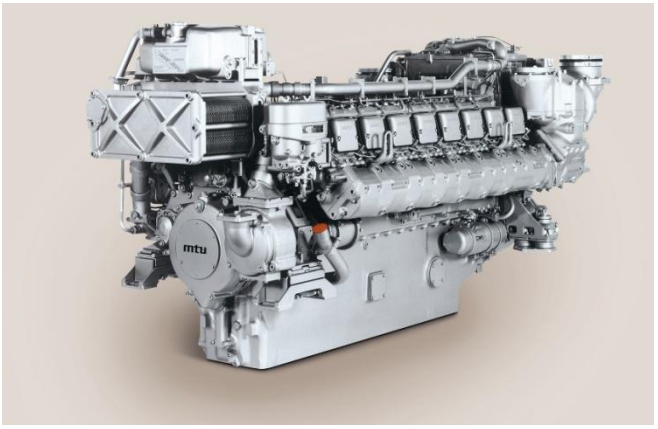
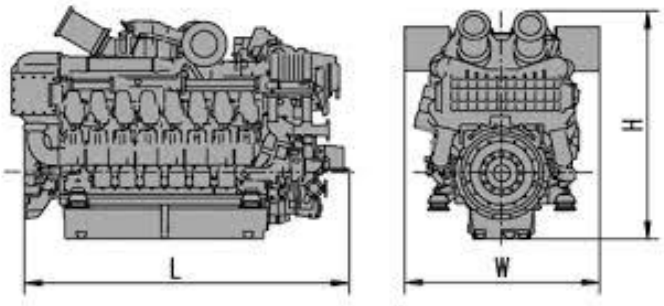
LINE BORE INSPECTION BED PLATE BEARING POCKETS



MTU 16V 396 diesel engine



MTU diesel engine drawing

In General

Purpose
The main scope of this application was the alignment inspection of two MTU 16V 396 after machining the bearing journal pockets of the bedplate. The reason for the inspection is to verify whether the machining was successful or not.

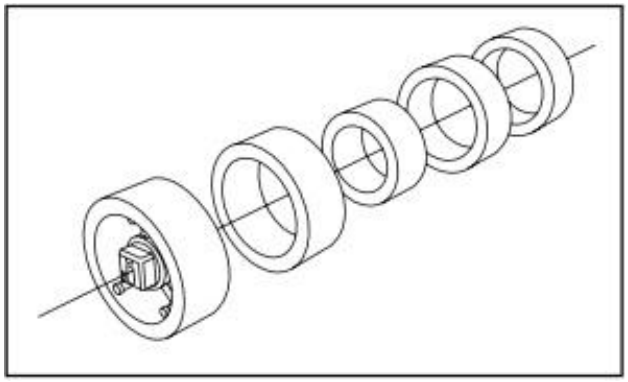
Field Work
1 day / 1 staff member

Utilized Easy Laser Instrumentation
- Easy Laser E 950 Bore Alignment

Deliverables
- Report

Difficulties
- The wind current

During measurements



Principles of function

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Measurement series

The measurements took place in Perama Shipyards. Special attention was given to wind currents as line bore application is a very accurate and demanding procedure. To avoid the effects of turbulence etc, high sampling period of time (filter) was used while capturing data.

The equipment used on this application was **Easy Laser *Line Bore System E 950*.**

The laser emitter were mounted on the first bearing journal on the aft side on both engines. All nine positions were inspected.

The first procedure is the rough alignment of the laser beam to the axis of the rotation of the crankshaft, then the fine alignment followed. The next step is the placement of the detector consistently to all essential positions.

Two series of measurements were performed for each engine in order to verify that no important random error is included in the procedure.

Immediately by the end of the measurements the software of the system creates the report in pdf format. The report can be exported to any USB stick. Then in the office a more detailed report can be issued if needed.

EASY-LASER®

Damalini
Measurement And Alignment Technology

E950 Line Bore System

During measurements

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