© iStock

DIGITAL SOLUTIONS

NAUTICUS™ MACHINERY
Crankshaft Fatigue

Calculation of safety against fatigue failure in diesel engine crankshafts and safety against slippage for semi built crankshafts.

The Crankshaft Fatigue module in Nauticus Machinery can calculate the safety against fatigue based on DNV GL Class Guidelines 0037. The program also covers the corresponding calculation method according to the IACS UR M53 (Rev.2, January 2011).

The calculation method applies to diesel engines for both main propulsion and auxiliary purpose, being designed for continuous operation at the specified rating. Further, the methods apply to solid forged per semi built crankshafts of forged and cast steel, and with one crank throw between main bearings.

Benfits

- Calculation according to DNV GL's Rules and CIMAC/IACS (IACS UR 53) in the same tool
- Import functions for cylinder pressures or theoretical calculation method
- Flexible input options (use pre-defined input for e.g. stress concentration factors or let the program calculate it)