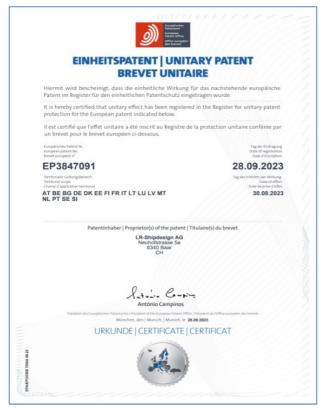
Patents, Certificates

LRSD Patents for AFT OPT: EU, PR China, Japan, S-Korea; SoF DNV, LISCR











Extract DNV statement reg. 2,900 TEU container vessel (above):

Conclusions

The following conclusions made by MARIN summarise the findings of the present project:

- The resistance of the LRSD AFT OPT© hull form is about 2.5% lower at low speeds and about 5.5% lower at the 19-20 knots speed range than the optimised conventional hull form.
- The required power of the LRSD AFT OPT© hull form fitted with MARIN-LRSD design propeller is about 2.5% lower at low speeds and about 6.5% lower at the 19-20 knots speed range than the optimised conventional hull form
- With LRSD AFT OPT© hull form and MARIN-LRSD design propeller, at a draught of TF/TA = 9.00/9.00 m at a shaft power of 11,700 kW a ship speed of 19.34 knots and a propeller rotation rate of 104.5 rpm are expected in trial conditions.
- The light running margin requirement of 8% was met with the AFT OPT© hull form fitted with MARIN-LRSD design propeller.
- In the measured model-wake the cavitation is on the edge of erosive bubble cavitation, while in the full-scale
 computed wake field the margins for cavitation erosion are according to common practise such that no erosion
 problems are expected.
- The predicted levels of full-scale hull excitation are within the commonly accepted ranges.

Qualification of the hull

Compared with MARIN's statistical records of propulsion test results, selecting vessels of similar type and size, the results of the present vessel at the tested conditions can be qualified as very good on a scale of poor, fair, satisfactory, good, and very good.

The direct comparison of the original vessel vs. AFT OPT vessel without Light Running Margins: propulsion at 19 kts: LRSD requires minus 7.3% PD which leads to abt. 10% less fuel demand.