

Propeller
Selection
Software
Since 1984

WHAT IS PROPEXPERT?

PropExpert is a software tool for the selection and analysis of propeller systems for work boats and pleasure craft. Built upon the award-winning NavCad™ technical library, *PropExpert* insures the proper selection of propulsion system components – engine, gear and propeller.

WHO SHOULD USE PROPEXPERT?

Anyone sizing commercial propellers – marine equipment salespeople, boat builders, designers – should use *PropExpert*. Particular consideration is given to the requirements of engine and propeller sales people. Companies large and small from every continent rely on *PropExpert* for their propeller sizing needs.

WHAT HULL TYPES CAN BE EVALUATED BY PROPEXPERT?

Work boats and pleasure craft generally describe the scope of *PropExpert*. This would typically include motor and sailing yachts, tugs, trawlers, patrol craft and sport fishing boats. Only a few data items are needed to adequately describe the vessel for *PropExpert*'s various analyses and calculations.

WHAT TYPES OF PROPELLERS CAN I SIZE WITH PROPEXPERT?

PropExpert can determine optimal diameter, pitch, blade area and RPM for virtually all commercially-available inboard propellers of 2 to 5 blades, from about 450 mm (18") diameter up to about 2.5 m (100"). Both flat-faced (Gawn) and foil-section (B-series) propellers are supported, as well as ducted propellers (Kaplan). Unique to *PropExpert* is its ability to evaluate cupped propellers.

CAN I USE PROPEXPERT TO ESTIMATE VESSEL SPEED?

PropExpert offers three techniques to estimate the speed of the vessel. The most accurate method is to base the estimation on a prior trial of the vessel. The trial of a similar vessel can also be used. When reliable trial data is unavailable, you can use *PropExpert*'s basic speed estimation formula.

WHAT MAKES PROPEXPERT DIFFERENT?

PropExpert shares the reliability and reputation of HydroComp's NavCad performance prediction package. Exhaustively tested in the office and in the field, *PropExpert* offers the most up-to-date techniques presented in an easy-to-use and powerful package. Special features have been included to support the needs of propulsion equipment salespeople. Minimal hull data requirements, automatic prediction of hydrodynamic properties, clear and concise data entry and extensive data handling capabilities make rapid sizing and review now possible.

WHAT DATA FILES ARE USED BY PROPEXPERT?

All *PropExpert* data is handled by an internal data manager. You can manage data for your projects, vessel sea-trials, default settings, propellers and engines.

WHERE CAN I FIND SOURCES FOR ENGINE & PROPELLER DATA?

You can link *PropExpert* to data that you build from scratch or to commercial database programs. Both the World Marine Engine DataBase and the HydroComp Stock Propeller DataBase can be directly linked to *PropExpert*. Both of these optional add-on files can be ordered with *PropExpert*.



EXAMPLE SIZING DATA PAGE



EXAMPLE PERFORMANCE CURVE

