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HydroComp PropExpert® 2022 Released

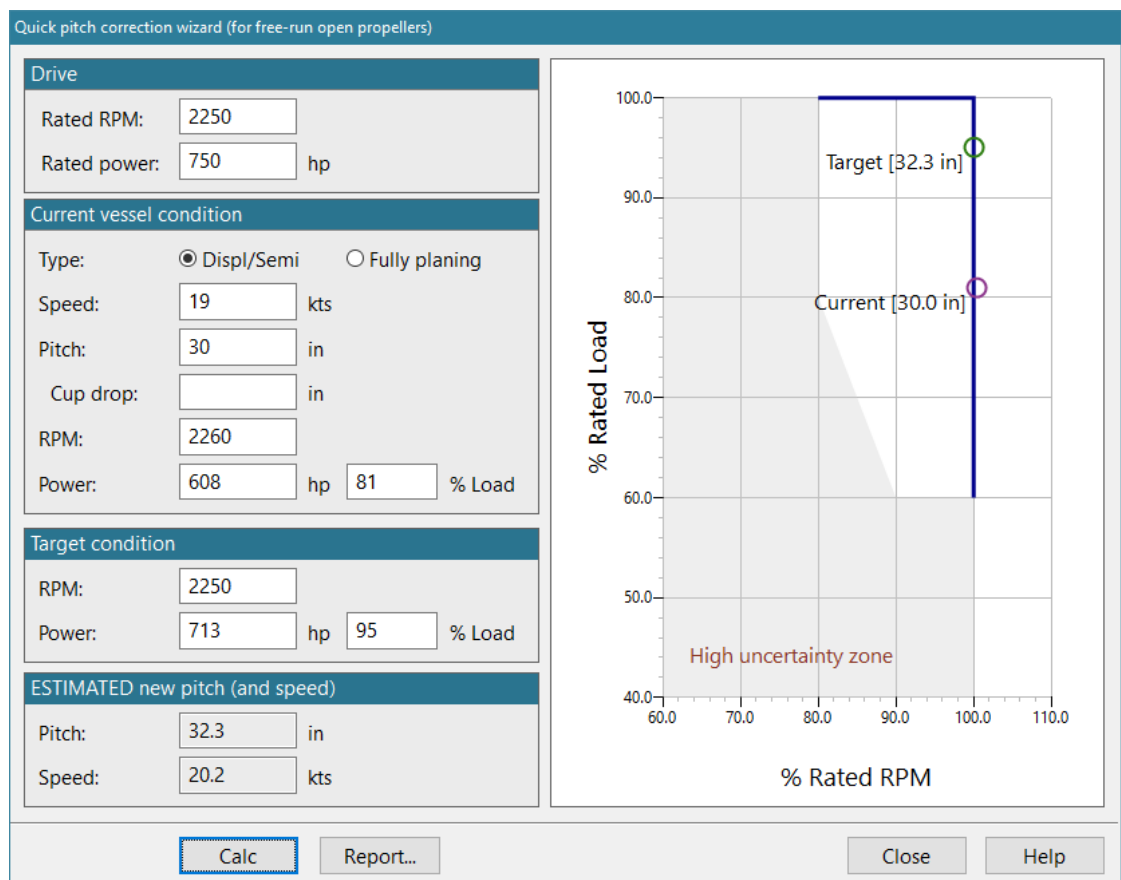
Ducted propeller enhancements, pitch correction utility, and other technical updates

Development in 2022 for HydroComp PropExpert offers updated capabilities for sizing and analysis of ducted propellers, as well as a new pitch correction utility.

New Quick Pitch Correction utility

A service frequently conducted by propeller shops is to correct the pitch of a propeller that is not meeting operational performance objectives. This might include a propeller with too much pitch that is overloading the engine so that it does not reach rated RPM, or one with too little pitch where RPM is restricted by the engine's governor and not being allowed to absorb full engine power.

While a more analytical approach is to utilize PropExpert's *Prior Trial* analysis, PropExpert now provides a *Quick Pitch Correction* utility to estimate a new pitch for free-run (transit) vessels with open propellers running at RPM and power near an engine's rating.



New performance model for 4-bladed Kaplan19A

The original Kaplan 19A and 37 series tests were limited to just a few specific variations of Expanded Area Ratio (EAR). In fact, only one EAR was developed and tested for the three- and five-bladed Kaplan models in the 19A propeller, and two EAR for the four-bladed models. This restricted the ability to solve for EAR as part of the sizing process.

This limitation has now been overcome for the 4-bladed 19A propellers! A new R&D effort has generated a new algorithm for a smooth distribution of the influence of EAR on performance. The best outcomes are with EAR from 0.55 to 0.85, but also offering acceptable predictions for as high as 1.00 EAR.

About HydroComp PropExpert

For additional information, click to: www.hydrocompinc.com/solutions/propexpert

About HydroComp

Since 1984, HydroComp has been a leader in providing hydrodynamic software and services for resistance and propulsion prediction, propeller sizing and design, and forensic performance analysis. Through its unique array of software packages and services, HydroComp now serves over 1200 naval architectural design firms, shipyards, yacht owners, ship operators, propeller designers, universities, and militaries around the globe.

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