

April 19, 2016

## HydroComp PropExpert® 2016 Released

*Enhanced for new propeller styles and vessel service*

Employed by more than 250 professionals in 40+ countries, HydroComp PropExpert is the industry's most widely used propeller sizing tool for inboard-driven workboats and pleasure craft. PropExpert was developed to provide a reliable technical tool for the propeller sales process. It is used for application sizing and performance assessment by manufacturers and distributors of marine propellers, engines and transmissions. The 2016 release of PropExpert offers new propeller styles, an updated towing analysis, and improvements for fast high-pitch applications.

### **New MAU-type propeller**

A popular style of propeller in Asia for many years, the **MAU** propeller – and its **MAUw** variant with pressure-side “washback” – is now available in PropExpert. Similar in character to the *B Series* propeller (of European origin), the *MAU* is generally used for commercial, workboat, and motoryacht applications. The series supports propeller with 3 to 6 blades with a broad range of blade area and pitch ratios.

Supporting the performance prediction of the *MAU* in PropExpert is the corresponding new geometric models for both the *MAU* and *MAUw* propellers in the HydroComp PropCad® geometric modeling software.

### **Prediction accuracy for high-pitch applications**

HydroComp has an active in-house Research & Development program to advance the accuracy of HydroComp's software products. One recent project improved the prediction of thrust and power for high-BAR Gawn-style propellers. A new R&D project of similar purpose now gives PropExpert the ability to reliably handle propellers with a pitch-to-diameter ratio as high as 2.0, expanding the applicability of PropExpert to very high-pitch propellers. Prior to this new development, a P/D of 1.4 to 1.6 was considered the reasonable limit of well-behaved performance for the *Gawn AEW* and *B Series* propellers.

### **Towing analysis**

A major reconstruction of the towing analysis module in PropExpert now provides users with improved accuracy and ease-of-use for the prediction of top speed for a *Towing* service. A prediction of towpull is conducted for the user-selected towing speed, and a separate solution of top speed is performed. This allows users the ability to quickly assess the implication of a propeller sizing on both towpull and attainable top speed.

The screenshot below (Figure 1) illustrates an engine power curve (with a parasitic power deduction), along with a speed-power curve and RPM-Power points for the propeller compromise design point, towpull condition (Tow), and the selected top speed (Top).

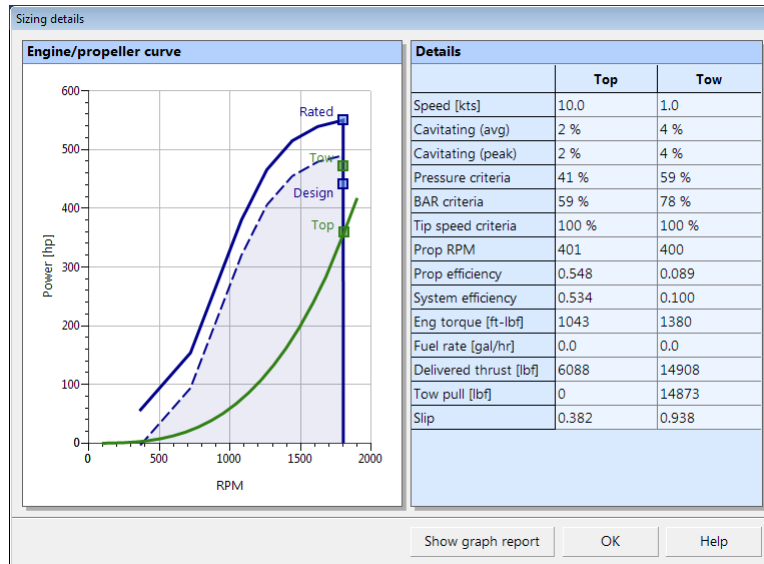


Figure 1 – Sizing and analysis details summary [Towing]

### 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 is able to serve naval architectural design firms, shipyards, yacht owners, ship operators, propeller designers, universities and militaries around the globe. [www.hydrocompinc.com](http://www.hydrocompinc.com).

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