

October 11, 2021

HydroComp PropExpert® 2021 Released

New Windows “visual styles” option and other technical updates

Development in 2021 for HydroComp PropExpert offers new user experience and technical features.

Enhanced GUI components

During 2021 HydroComp has undertaken a significant in-house initiative to enhance product “look-and-feel” for contemporary themes available in Windows 10/11. The overall workflow process remains unchanged and will be familiar to users, but new controls and graphs now support Windows “visual style”. This is available as a “Flat UX” theme option.

HydroComp PropExpert - Tutorial basic sizing

File Edit View Library Tools Help

Project Vessel Engine Sizing Utility Reports

Units Help

Propeller

Model: Generic motor yacht

Manufacturer:

Series: GawnAEW

Blades: 4

Blade area ratio: Size 0.706

Diameter: Size 580 mm

Effective pitch: Size 639 mm

Gear ratio: Keep 2.250

Cup type: [None]

Cup drop: 0.0 mm

Shaft angle: 0.0 deg

Factors: T: 1.000 P: 1.030

Effective FCR: 0.000

Strength

Material: Mn Bronze

MWR/BTF: M: 0.000 B: 0.000

Speed

Calc. sizing for: Top

Design speed: 19.4 kts

Calc'd max. speed: 19.4 kts

Summary results

	Top	Cruise
Speed [kts]	19.4	15.0
Engine RPM	2800	2319
Power [hp]	202	128
Thrust [kN]	9.77	7.67
Cavitation	Check	OK
Strength	Check	OK

Build View details

New performance model for 4-bladed Kaplan19A

Prior versions of PropExpert used a performance model developed from limited Expanded Area Ratio (EAR) test data. This restricted its application to 0.55 to 0.70 EAR range. A new model was developed by HydroComp that provides a smooth distribution of the influence of EAR on performance, greatly improving predictions at higher values of EAR. The new model is recommended for EAR values as high as 0.85 (but is indicated to be substantially improved for values 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.

For more information, please contact:

Jill Aaron, Managing Director
jill.aaron@hydrocompinc.com
HydroComp, Inc.
15 Newmarket Road, Suite 2
Durham, NH 03824 USA
+1 603-868-3344
www.hydrocompinc.com