

December 28, 2025

# HydroComp PropElements® 2025 What's New

## New features for wake-adapted propeller design and analysis

Development in 2025 for HydroComp PropElements offers new technical features and workflow improvements.

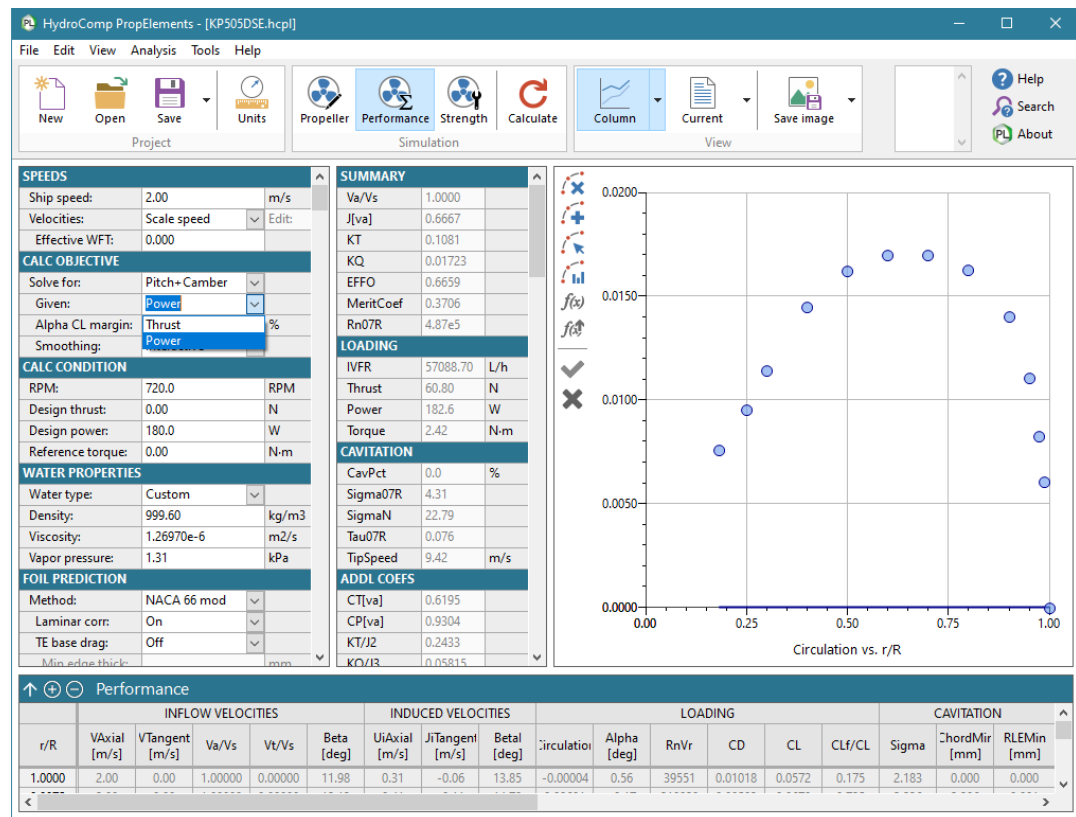
### Release Build 2025.1

#### Miscellaneous

- Updated table formatting.
- Added context tooltip information for data that exceeds criteria.

#### New Power-Based Design Reference

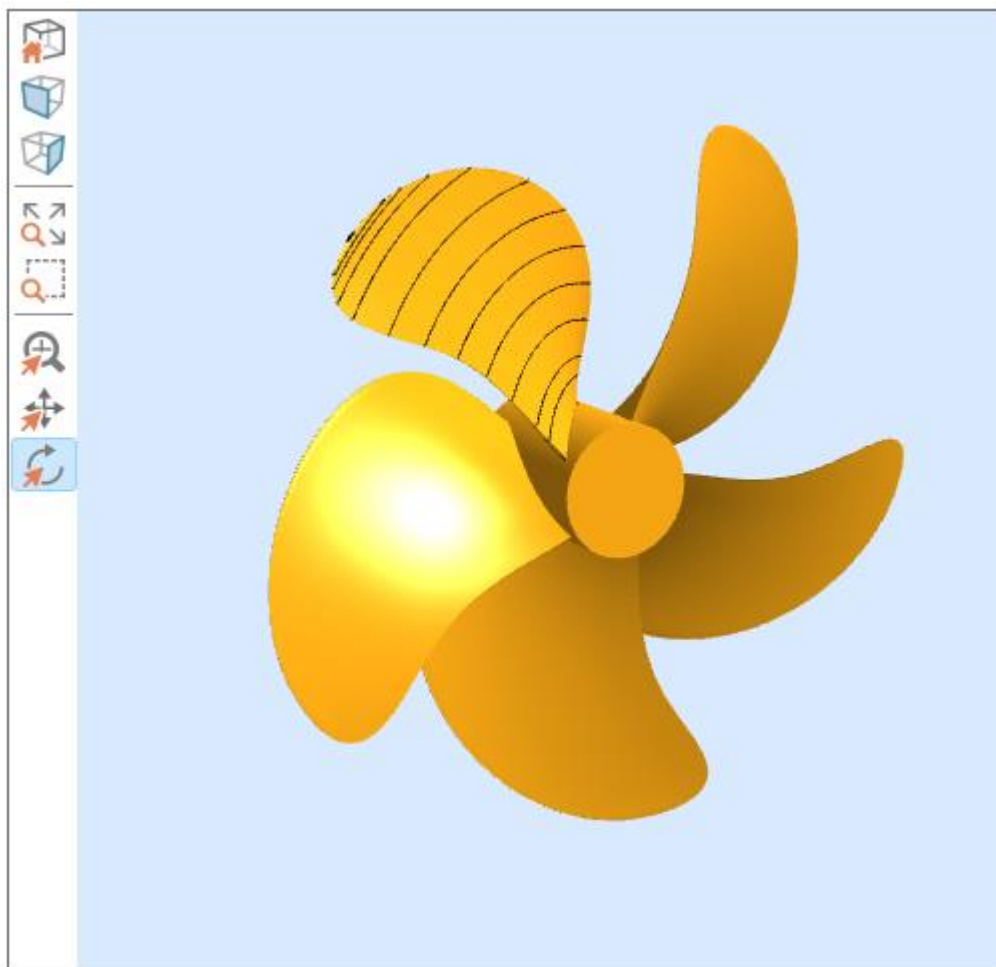
In addition to preparing a design solution for *Pitch* and/or *Camber* using a “thrust identity”, you can now use a “power identity”. By selecting the *Given* loading reference as *Power*, you can optimize a design for the objective of maintaining a particular power loading with highest thrust. This also extends to solving for an equilibrium *RPM*, whereby the loading reference can now be *Thrust* or *Power*.



## Enhanced 3D Rendering, Smoothing, and Exports

Several improvements to 3D data development, rendering, blade smoothing, and exports have been developed. This includes:

- Introduction of a minimum tip chord length
- A new “Polar” blade outline (chord distribution) option that is beneficial for 3D surface development
- Identification of *Rounded* or *Straight* blade outlines for best shape definition
- Updates to the rendering library
- Export of the 2D propeller in both IGES and STEP format. (The mesh variant can be exported as STL.)



## Release Build 2025.0

### Miscellaneous

- Added first-quadrant parameters to KTKQ calc (in four-quadrant format).
- Improved 3D rendering.
- New licensing options.

### About HydroComp PropElements

For additional information, click to: [www.hydrocompinc.com/solutions/propelements](http://www.hydrocompinc.com/solutions/propelements)

## 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 1400 naval architectural design firms, shipyards, yacht owners, ship operators, propeller designers, universities, and militaries around the globe.

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