

May 10, 2023

HydroComp NavCad® 2023 Released

New features for improved Vessel-Propulsor-Drive system simulation

Development in 2023 for HydroComp NavCad offers new features across the range of applications.

Miscellaneous updates

Every version year allows us to develop features requested by our user community, and this year is no exception. The first user-requested feature to be added for 2023 is a new **add/delete speed** capability using toolbar buttons in the results grid. For columns that have been manually entered, a new speed will have a spline-fit value determined for that column.

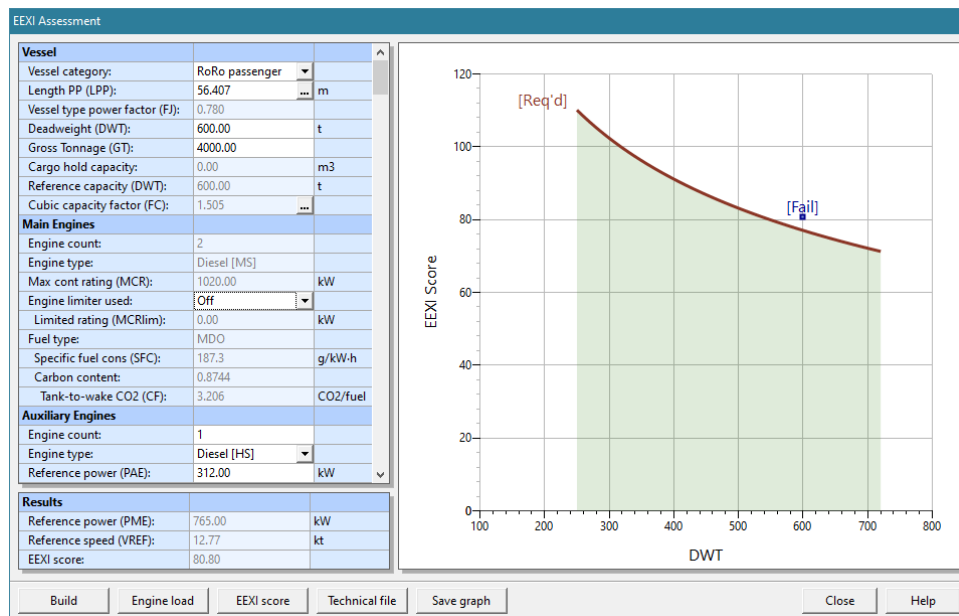
| SPEED COEFS | | |
|-------------|-------|-------|
| SPEED [kt] | FN | FV |
| 6.00 | 0.129 | 0.275 |
| 8.00 | 0.171 | 0.366 |
| 10.00 | 0.214 | 0.458 |
| 11.00 | 0.236 | 0.504 |
| 12.00 | 0.257 | 0.549 |
| 12.50 | 0.268 | 0.572 |
| 13.00 | 0.279 | 0.595 |
| 13.50 | 0.289 | 0.618 |

Previous Next

EEXI Assessment utility (Premium Edition)

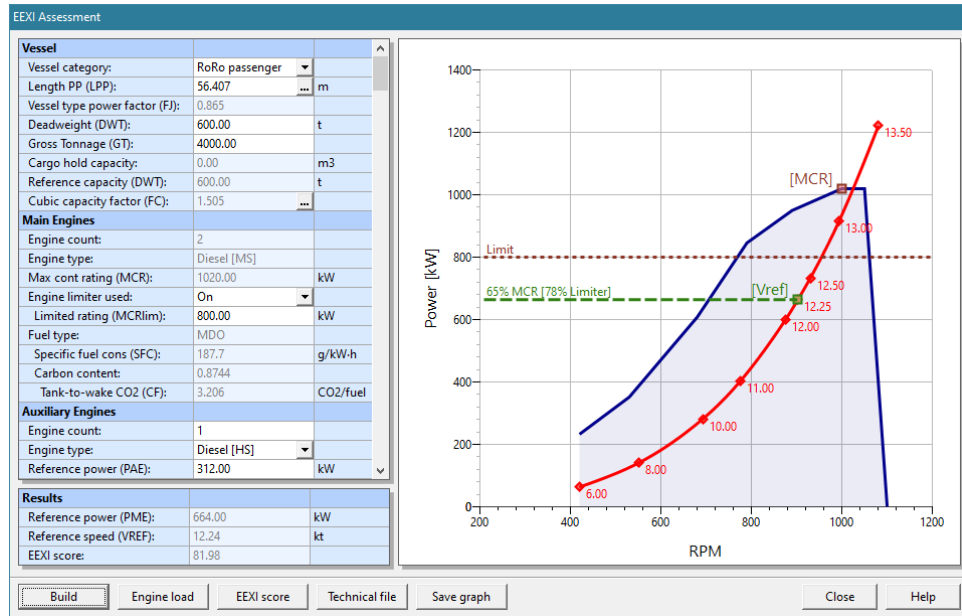
The *EEXI Assessment* utility provides the means to calculate an EEXI Score for a current NavCad project, to investigate how design options affect the score, and to prepare an EEXI "Technical File" document for review and benchmarking of compliance calculations.

Following published IMO MEPC calculation guidelines, the performance basis for the EEXI score calculation is found from a "Speed Power Curve". While current regulations dictate computation requirements for submittal of compliance, design-stage investigations of EEXI compliance can be made very efficient using the *EEXI Assessment* tool.



For the highest fidelity speed-power curve, NavCad can employ calibration of predictions to comparable reference ships and propellers via "Aligned Prediction" (for resistance and hull-propulsor interaction) and "Aligned Series" (for propeller performance). Reference ships and propellers are typically empirical model tests, but they could also be from

validated computational sources. For example, a suitable reference propeller KT-KQ curve for an Aligned Series could be prepared using *HydroComp PropElements* wake-adapted propeller design and analysis tool.



Suitable for virtually all ships under EEXI restriction, the *EEXI Assessment* utility in NavCad Premium provides quick and resource-friendly design guidance when the need comes to investigate where a ship stands regarding EEXI compliance. At the conclusion of the evaluation, the generated report can be used as reference documentation for quality assurance and benchmarking of future EEXI compliance calculations.

About HydroComp NavCad

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

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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