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## Fully Automated Ship Resistance Prediction using the Naval Hydro Pack

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A unique numerical environment for assessing ship resistance using CFD is presented in this paper. Predicting ship resistance in calm water with the Naval Hydro pack can be performed within few hours, including computational grid generation, simulating and result post-processing. Being able to predict the ship resistance within few hours renders CFD a cost-effective design tool, since a hull form designer can test multiple variants of hull geometry quickly. The process of setting up, running and post-processing is accelerated by automating the process to a high level, significantly decreasing the number of required man-hours. In this paper the capabilities of Naval Hydro pack are demonstrated by calculating steady resistance for three different benchmark hull forms, where time for pre-processing, processing and post-processing is reported. Results are compared to available experimental data for validation.

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