Dynamic Trimming Assistant for fuel efficiency

Trim to improve performance

The trim (the fore and aft floating angle) of the vessel is a major factor when calculating drag caused by the underwater parts of the hull. Vessels are designed to sail at a certain trim (at minimum drag), but knowing the current trim, until now, has been difficult. The optimum trim also varies from the designed trim with the environment; vessel speed, weather, weight alterations, water depth cause surprisingly large alterations in the vessel attitude.

Eniram has developed a way to measure the vessel attitude dynamically with extreme precision. It allows the vessel to be sailed at an optimum angle at a higher speed while saving fuel.

DTA

The Dynamic Trimming Assistant shows the current vessel trim on a self-explanatory user interface. It also creates a dynamic graphic trim curve during the voyage, which easily demonstrates changes in the trim.

The optimum trim is calculated by comparing previously recorded data to the data recorded in the existing conditions. Through the detailed DTA display, the system guides the crew to operate the vessel at an optimum trim.

Benefits

- Substantial direct fuel savings
  - 1% on average
  - Up to 5%
- Improved speed utilization
- Environmental improvements
  - Less pollution
  - Better utilization of machinery
- Improved understanding of vessel

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