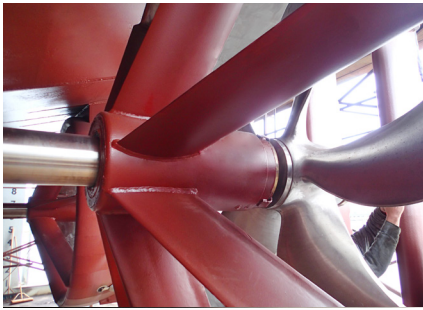


## PRE-SWIRL STATORS



### Uniform Flow with Increased Thrust

*Pre-Swirl Stators reduce the rotational losses incurred by the propeller and further increase the performance of the Nautican High Efficiency Nozzle by four to six percent. By directing the flow to swirl in the opposite direction of propeller rotation, energy that is normally lost in wake rotation is recovered. This increases thrust by an additional four to six percent.*

Pre-swirl stators insure a more uniform inflow to the propeller and eliminate the need for struts and bossings, which are often a source of vibration.

The Nautican Integrated Propulsion Unit combines Pre-Swirl Stators, High Efficiency Nozzles, Triple Rudders and Propellers for a level of performance that cannot be duplicated. The combination of Nautican High Efficiency Nozzles and Stators make the Nautican Integrated Propulsion Unit the most efficient propulsion system available.

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#### FUEL EFFICIENCY GAINS BY VESSEL TYPE

<b>Tug Boats</b>	10 - 25 %
<b>Push Boats</b>	10 - 30 %
<b>ATBs &amp; Tankers</b>	15 - 30 %
<b>Ferries &amp; Cruise Ships</b>	10 - 20 %
<b>Container Ships</b>	10 - 30 %
<b>Fishing Vessels</b>	15 - 30 %
<b>Yachts</b>	10 - 20 %
<b>SWAT Vessels</b>	10 - 20 %

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#### REQUEST AN OPERATIONAL ANALYSIS

We are happy to partner with you to help you determine the best solution for optimizing performance and reducing fuel consumption. By analyzing your fleet's operational needs, we can help you identify vessels that are the best candidates and assist you in determining the return on investment. Please fill out a form at <http://nautican.com/operational-analysis/> for each vessel you would like us to analyze.

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