## TECHNICAL SPECIFICATION

## QC1800 Underway S-Type Fin

## **DESCRIPTION**

A stabilizer fin is the external appendage that develops the hydrodynamic forces needed to counter the roll motions of the vessel. The fin is installed on the stabilizer hull unit shaft, which serves as the axis about which the fin is deflected. Much like an airplane wing, as the fin is deflected, pressure differences result in a hydrodynamic force on the fin. This resultant force is used to counter-act the roll of the vessel.

Designed based on extensive experience and model testing, the QC1800 S-series stabilizer fin is capable of significantly reducing vessel roll during underway operations.

## **FEATURES:**

SIMPLE INSTALLATION: The fin is installed on the stabilizer hull unit shaft via a hydraulic coupling method. This attachment technique provides a durable and reliable connection, easily achieved with the use of supplied tools and instructions.

MINIMAL NOISE: Quantum's stabilizer fins are designed with innovative features such as minimal hull-to-fin clearances and trailing edge vortex generators. These elements help to reduce hydrodynamic noise and vibrations.

ROBUST CONSTRUCTION: The fins are fabricated of steel or stainless steel combined with strategic internal reinforcement. This interior bolstering enables the fin to withstand the cyclic loads encountered during operation.

MINIMAL MAINTENANCE: The fin requires no maintenance during normal operation. The units are designed for maintenance intervals corresponding to vessel haul-outs every other year.

Equipment is covered by Quantum's 1-year comprehensive warranty. Service and technical support are available worldwide.



Typical Vessel Length\* 45-60m (148-197ft)

Fin Size Range\*\* 2.7-5.0m² (29-53.8ft²)

Typical Aspect Ratios 0.40-0.50

Typical Balance 25%

Dimensions Quantum for Drawings

\*Provided for reference only. Consult a Quantum representative for system sizing.

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<sup>\*\*</sup> Dimensions are of the equipment, and do not include service allowances.