

# ML460

## Rotor Stabilizer Hull Unit

### DESCRIPTION

The ML460 hull unit is designed to provide maximum energy transfer in terms of lift force based on the Magnus Effect. The unit is a compact rugged design built to withstand the most demanding military and commercial applications.

For maximum roll reduction, the ML460 is mounted in the turn of the bilge with the rotor oriented perpendicular to the vessel hull during underway operations. Rotor spin direction and speed are altered during operation, as needed, to obtain optimal performance. To minimize appendage drag, the rotor stows neatly, parallel to the vessel hull, when the stabilizers are not in use. The rotor orientation and spin functions are precisely managed by Quantum’s hydraulic and electrical control systems.

Designed using the latest technology and high-quality materials the ML460 hull unit offers the best performance of any system where significant roll reduction is required at loitering speeds.

### FEATURES

**SIMPLE INSTALLATION:** The stabilizer unit is delivered fully assembled with minimal disassembly required for installation. Ideally the rotor is housed in a hull pocket, but due to its slim design it is not required for the rotor’s stowed position, so complicated hull shape fabrication can be avoided.

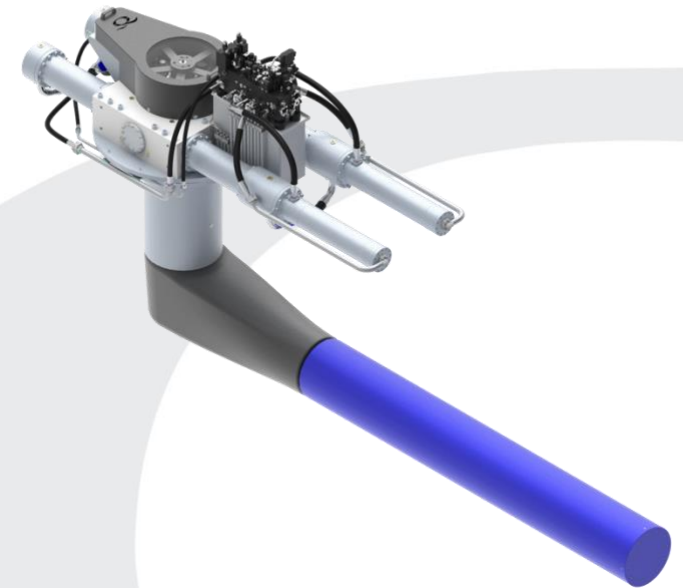
**SMOOTH OPERATION:** The unit provides smooth power transfer from the rotor to the ship’s hull via precision roller bearings used in both the spin drive shaft and the main shaft.

**PRECISION CONTROL:** By varying the RPM and direction of rotation of the tube, the lift force can be controlled with razor sharp precision, resulting in instantaneous response.

**EFFICIENCY:** When properly sized and operating within acceptable vessel speeds, rotary stabilizers provide exceptional hydrodynamic efficiency compared with other stabilizer systems available.

**SAFETY:** The rotor’s hydraulic system is equipped with automatic retract mechanism to allow the rotor to swiftly stow in case of impact during operation. While not in operation, the rotor is elegantly stowed along the hull, where it offers minimal possibility of impact and minimal effect during maneuvering conditions.

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



Typical Vessel Length*	45-70m (147 –230ft)
Operating Speed Range	0-14 knots
Rotor Dimensions	460mm x 3200mm
Angular Travel (total mechanical)	150°
Length (inside vessel after installation)**	3488mm (137’)
Width**	1150mm (45’)
Height (overall)**	2786 (110’)
Height (inside vessel, retracted)**	2190mm (86’)
Weight (dry)	6930 kg (15280lbs)

*\*Provided for reference only. Consult a Quantum representative for system sizing.  
\*\* Dimensions are of the equipment, and do not include service allowances.*

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