

# WÄRTSILÄ SHAFT POWER LIMITATION – ENSURE COMPLIANCE WITH EEXI







By December 2023 all existing merchant, cruise and ferry vessels must comply with the requirements of the IMO's Energy Efficiency Existing Ship Index (EEXI), which defines a minimum energy efficiency level for vessels. Wärtsilä has developed a shaft power limitation upgrade package for vessels with controllable pitch propellers that will enable compliance with the new requirements.

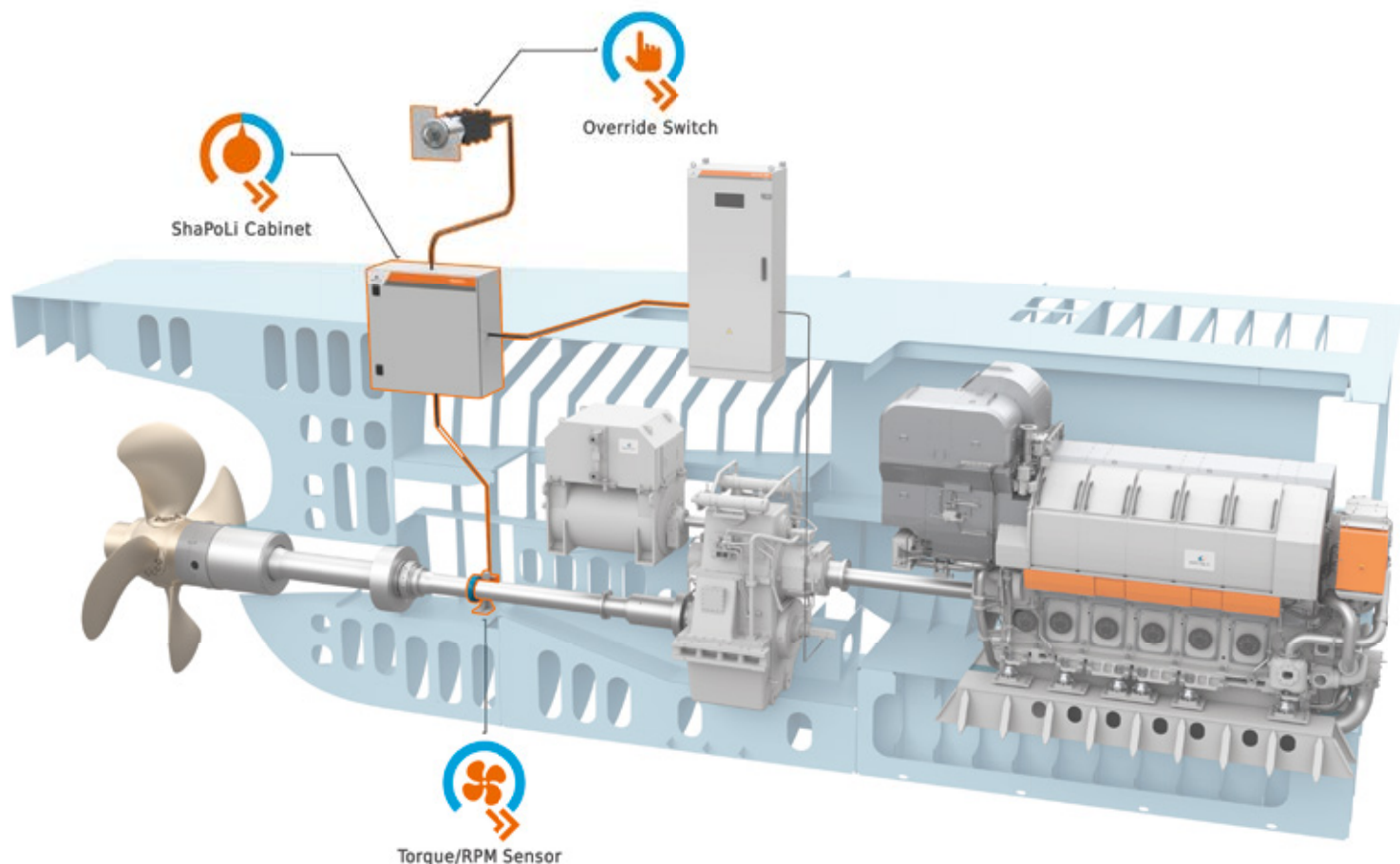
#### **About shaft power limitation systems**

An overridable shaft power limitation (ShaPoLi) system is a verified and approved system that limits shaft power during normal operation. The set limit can only be overridden by the ship's master or officer of the watch for the purpose of securing the safety of a ship or saving life at sea.

A measurement system attached to the propeller shaft sends a signal to the propulsion control system to limit the power at the shaft by limiting the pitch and/or rpm setting in a controlled manner. The system can be overridden with a key switch on the bridge.

#### **KEY BENEFITS**

- Ensure compliance with EEXI requirements
- A standardised and cost-effective solution
- Integrate with existing Wärtsilä propulsion control system
- Does not limit operational flexibility for ships with multiple shaft lines or multiple engines per shaft, or those with PTO and/or PTI systems



Wärtsilä Shaft Power Limitation is a complete upgrade package for vessels with Wärtsilä controllable pitch propellers. The fully integrated solution can be installed as an add-on to Wärtsilä systems. System data is stored in accordance with the requirements of the ISO 19030 standard for performance monitoring. Wärtsilä Shaft Power Limitation has been designed in collaboration with one of the major classification societies to ensure a smooth approval process.

#### Scope of supply

- Upgrade package with plug & play connections where possible
- Torque measuring system
- Control cabinet with data collection and storage functionality (ShaPoli unit)
- Interface adaption for propulsion controls system
- Key switch for bridge
- Installation package
- Documentation
- Onboard management manual

#### The scope excludes:

- Wiring between system components
- Installation of the hardware components
- Pedestal for torque measuring system

#### Why choose Wärtsilä?

Wärtsilä is a leading OEM supplier to the marine industry with a global network providing service and support. Wärtsilä supports its customers throughout the entire lifecycle of the supplied equipment, and we strive to maximise the useable life of our customers' equipment investments.

Wärtsilä Shaft Power Limitation is fully integrated into the vessel's propulsion controls system, ensuring optimum hydrodynamic efficiency, low propeller-induced noise and vibration levels, and guaranteed system stability.

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