



# SHAFT POWER METER (SPM)

## System for measuring engine / ship performance and fuel / propulsion efficiency as well as monitoring SHaPoLi

The Shaft Power Meter is the key component for measuring ship performance and fuel / propulsion efficiency. It is the cost-effective solution when reliable shaft power measurement and monitoring (Shaft power limitation) is required. The system is easy to install and requires no electronic parts on the shaft. SPM operates absolutely contact-free and can be extended with our fuel performance system FPS to obtain all important data for optimizing ship performance and fuel efficiency as well as ship propulsion performance.



### Features:

- » RPM, torque and power signals
- » Reliable data
- » SHaPoLi / EEXI
- » Key component for fuel performance system FPS to optimize fuel / propulsion efficiency
- » PLC-based system with web-based visualization via Ethernet
- » Data storage on SD card

### Benefits:

- » Cost-effective solution
- » Easy self installation possible - plug & play by crew
- » No electronic parts on shaft
- » Basis for every fuel performance system
- » Easy to read trend curves for performance evaluation
- » Steady observation of hull and propeller efficiency possible
- » Easy calibration of SPM based on indicated power measurement
- » Maintenance-free

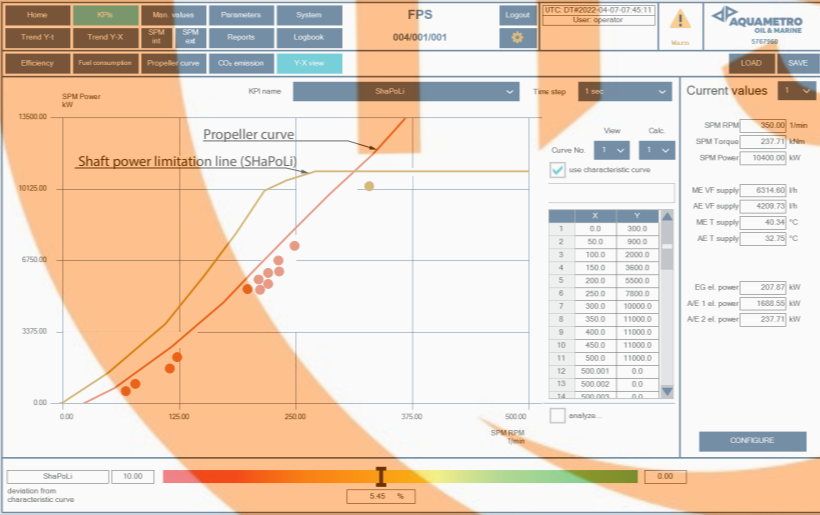
# SYSTEM OVERVIEW

The Aquametro Oil & Marine Shaft power meter SPM works on reliable magnetic principle. Therefore, the torsion angle of the shaft, resulting from the acting shaft power is measured. Only magnetic belts need to be fixed on the shaft surface, no electronic components have to be mounted on the shaft, therefore this system is maintenance-free and absolutely robust and reliable.

The connection to any ship automation system can be done easily with analog signals (0 / 4-20 mA). Available outputs are: RPM, Torque (kNm) and shaft power (kW) through analog or / Modbus slave ETH (TCP) signal interface.

### Specifications:

- » Power supply: 230 V AC
- » Power consumption: <2 A
- » Shaft diameter: 200 up to 1200 mm
- » Max speed of shaft: 800 rpm



Wheel House

Engine Control Room

Engine Room

Engine