Safe and Accurate Propulsion Control
from your finger tips to the propeller tips
**5 and 10 Year propeller maintenance**

To ensure the long-term peak performance and reliability of your Alpha propeller and Alphatronic propulsion control system – MAN Diesel & Turbo can now offer an extended package with after-sales services for new and existing systems.

### Maintenance concept

The service package will typically include our standard propeller maintenance performed in connection with the 5 and/or 10 year inspections – in accordance with the docking periods recommended by the classification societies.

#### 5-year package
- A 5-year package includes control of the entire propeller system, with focus on the mechanical, hydraulic and electrical key parameters.
- Blade seals and filters will be exchanged.
- Tolerances on wearing parts will be control-measured and recorded.
- Guidance for the remaining lifetime will be given.

#### 10-year package
- A 10-year package additionally includes an extended inspection and overhaul of the entire propeller hub.
- Wearing parts will be control-measured and recorded.
- Guidance for the remaining lifetime will be given.

### Customer advantages

**Example of parameters checked:**

**Hydrodynamic**
- Blade surface, possible cavitation marks or impact damages.
- Blade depth, via 3-point geometrical measurements.

**Mechanical**
- Clearance measurements of propeller hub, blade feet, pitch control head.
- Exchange of blade seals.

**Hydraulic and pitch control**
- Checks of gearbox or shaft servo-oil system and stern tube sealing.
- Performance test of the pitch control, and re-adjustment pitch control movement.

### Electricity
- Adjustment of pitch feedback system. Control of manual system response times. Checks of remote, local and emergency manoeuvres.

### Customer benefits and documentation

- Optimal service and overhaul planning
- Certificate and measuring reports supplied
- Maximum reliability between scheduled dockings
- Optimised operational economy
- Service cost transparency

**The extent of our service and scope of inspections are performed according to MAN Diesel & Turbo’s accumulated experience and durability recommendations to the classification societies.**

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**MANAGING RISK**

**VB type (above)**
- Propeller servo in gearbox
- **VBS/VSA (right)**
- Propeller servo in shaftline