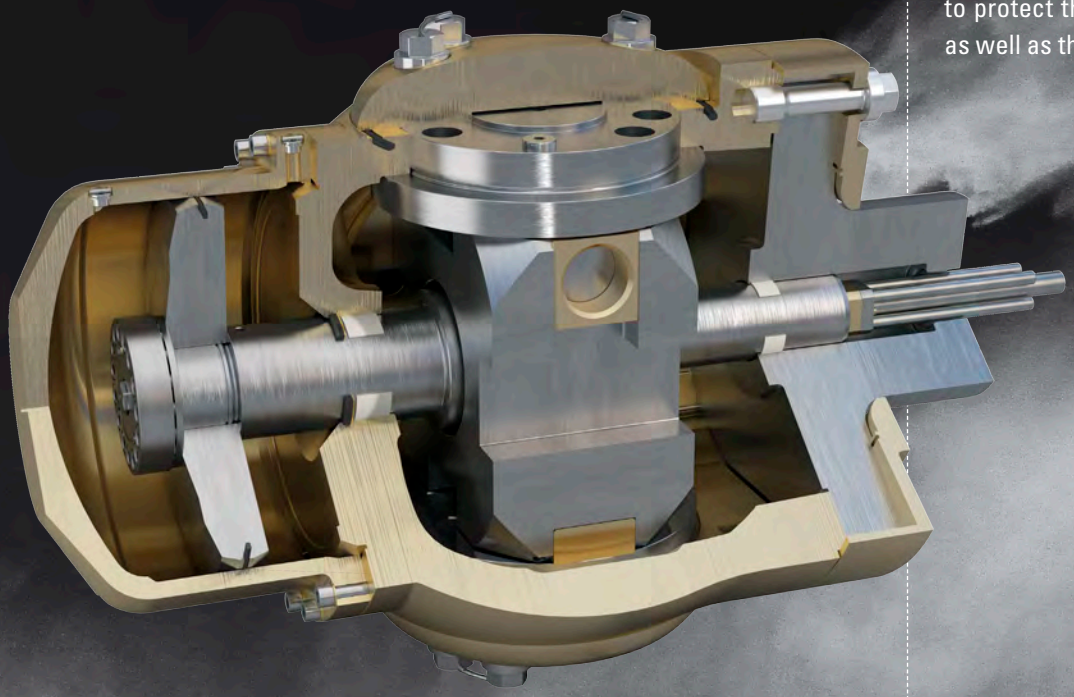
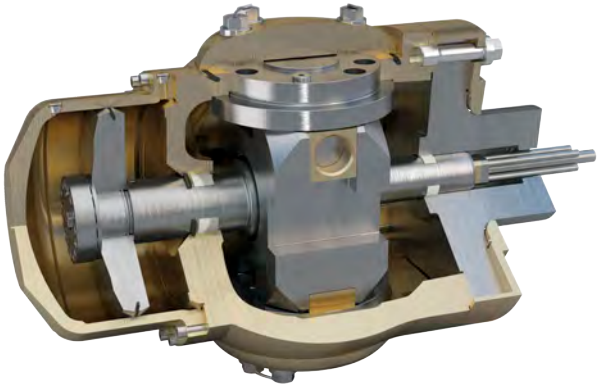
MPP HUB
CONTROLLABLE PITCH HUB



HEAVY-DUTY PERFORMANCE AND RELIABILITY

The MPP is developed for heavy-duty applications with the pitch setting hydraulic servo cylinder in the hub.

The hub lubrication system is a unique oil circulating system with an integrated moisture monitoring system. This is the first hub system in the shipbuilding industry where the moisture content is constantly checked, making it possible to protect the entire propeller system as well as the environment.



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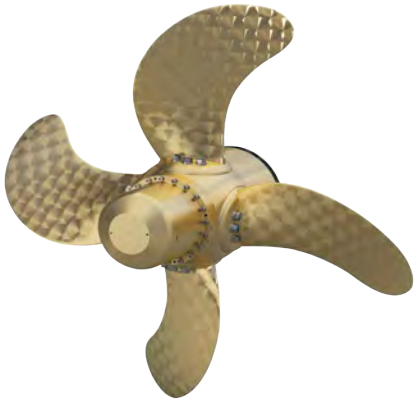


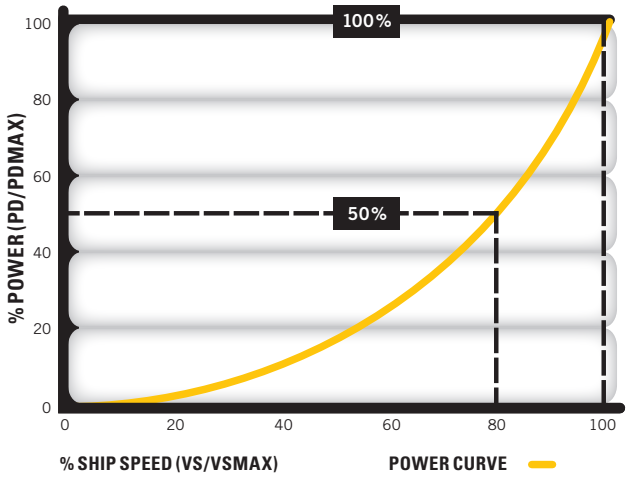
MPP ASTERN

MPP FEATHERED

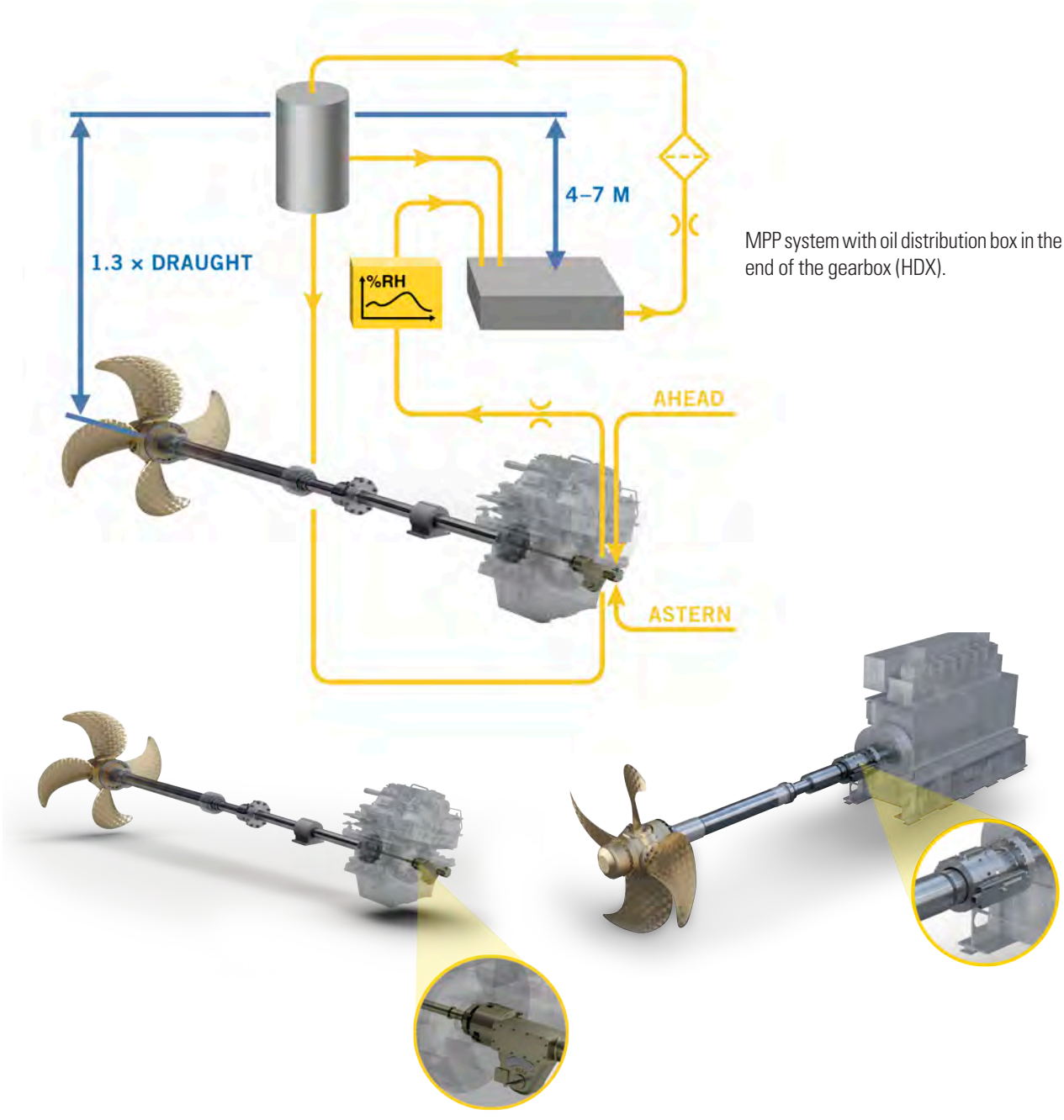
MPP AHEAD

MPP HUB IMPROVES FLEXIBILITY

To improve flexibility for ships with twin propeller installations, Caterpillar Propulsion added feathered features to the MPP hub. In feathered position, the blades are aligned with the flow, resulting in minimum resistance. In slow steaming mode withtwin screw configuration, one engine can be shut off and the blades can be turned to feathered position. For a typical coastal tanker, shutting off one engine would mean a reduced speed of only about 20% in ideal weather conditions while reducing the input power by 50% (see the diagram to the right).



MOISTURE CONTENT MONITORING



MPP system with oil distribution box in the forward end of the gearbox (HDX).

The MPP hub with the oil distribution box at the forward end of the gear box (HDX), intended for propeller installations where a hollow bored gearbox shaft is applicable.

The MPP hub with an oil distribution box on an intermediate shaft (BCX), intended for direct drive or systems with long intermediate shaft lines.

MPP HUB FEATURES

- Stiffness of the hub body.
- Largest possible bearing surface for the propeller blades.
- Optimal propeller blade sealing system.
- Completely separated circulating oil lubrication system with continuous monitoring of the moisture content in the oil.
- Logging of the moisture content, which makes it possible to foresee the need for, and plan, the overhaul of the hub.
- Order-unique blade design guarantees highest possible efficiency with low levels of noise and vibration.

ADVANTAGES

- Maximum reliability
- Minimum downtime
- Minimum maintenance
- Continuous propeller hub condition monitoring

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