

Alphatronic 3000

MAN 175D

Our state-of-the-art propulsion control system: The Alphatronic 3000 controls both MAN Alpha Controllable Pitch and Fixed Pitch Propeller packages – for geared MAN 175D engines.

Benefits at a glance

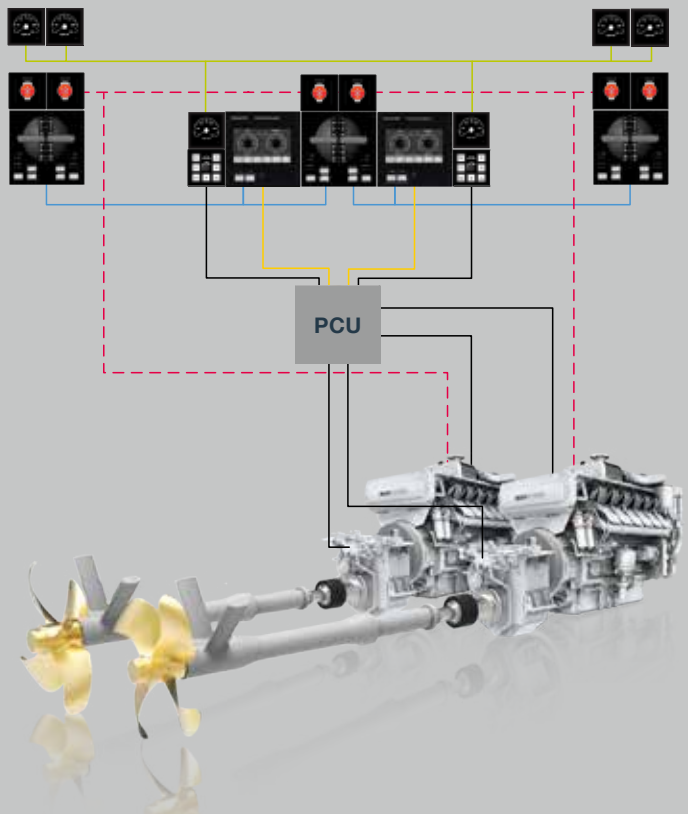
- Safe and reliable ship manoeuvres
- Optimal load and speed control
- Reduced fuel consumption
- Logical touch screen and user interfaces
- Easy installation of modularized components



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MAN 175D

A relatively simple system architecture is shown for a straight forward twin MAN 175D FPP plant. However, a vast number of various FPP and CPP propulsion package applications can be controlled by the Alphatronic 3000 system – customized e.g. for combinations of MAN medium- and high speed engines in a wide range of diesel-mechanical, hybrid or diesel-electric propulsion setups.



High speed package control

The new MAN 175D based propulsion packages are characterized by all core elements – such as main propulsion engines, reduction gearboxes, shaft lines, stern tubes, propellers and propulsion control systems – being designed, matched and optimized for integration into tailored solutions.

Alphatronic 3000 is 'type approved' and the overall key for propulsion control.

Alphatronic at your finger tips

Safe and accurate propulsion control all the way – from the navigator's finger tips to the propeller tips. Any manoeuvring order given is translated into electrical speed setting-, pitch- or clutch signals, governing the hydraulic servo circuits of the gearbox and propeller system. Swift and reliable vessel manoeuvres are ensured due to quick and stable system response.

Fuel and emission savings

- Economic operation due to optimized engine load and thrust control
- An optional speed pilot feature with interface to GPS can be deployed for various sailing modes (economy/speed/silence).

Engine lifetime protection

- Thermal protection of the engines via controlled running-up programs
- Overload protection.

'Human to MAN' interface

Ergonomically logic and clear layout of panels, levers, buttons, displays and touch screens ensure perfect interaction between the navigator and the propulsion package.

Panel design functionality

- Modular concept to fit any ship's console layout. Easy installation in compact consoles with limited space and free depth
- Configurable touch screens (and optional large 2nd displays) to meet a wide range of customer-specified functions
- Alarm and monitoring functionality
- 'Electrical shaft system' between control levers ensures synchronization and safe transfer of manoeuvre responsibility from one control station to another
- Bumpless mode change from 'FPP trolling' to ahead/astern speed increase
- Automatic thrust and engine power synchronization for twin propeller plants
- Control panel functionality is pre-tested for shipyards' plug-and-play installation.

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