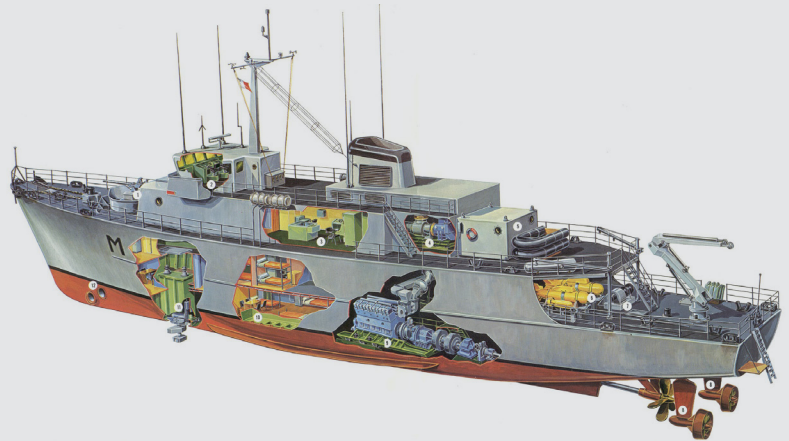


NAVAL EQUIPMENT AND SYSTEMS FOR MCMV'S



Supplier of OEM spare parts - high availability and reliability

Van Halteren Special Products (VHSP) is supplier of new building sub-systems, delivers spare parts and offers alternatives for obsolete spare parts of reputable OEM's in the naval industry. More over Van Halteren Special Products offers technical assistance and if required reverse engineering. Fast delivery of high quality spare parts, effective services and perfected logistics guarantee shorter downtimes, a long-lasting product life, high availability, reliability and high performances.

For a ship to operate at a high level of output a reliable supply of spare parts is crucial. Nevertheless there is no need for extended spare parts, VHSP takes care of the fast delivery of original (OEM) spare parts, not only for VHSP mechanical equipment but also for non-VHSP electrical and hydraulic equipment as well as active rudders. Retrofits and replacements of mentioned spare parts are elements of VHSP competences.

Capabilities

- New building sub-systems
- Delivery of spare parts
- Alternatives for obsolete spare parts
- Technical assistance
- Reverse engineering

SCOPE OF SUPPLY

Mechanical equipment

OEM: Van Halteren Special Products

- Main diesel engine
- Chilled water unit
- Flexible coupling
- Cardan coupling
- Shaft brake
- Thrust block
- Gearbox
- Controllable pitch propeller
- Fresh water heater
- Thermostatic valves
- Filters lubricating oil
- Pumps fuel oil
- Pumps lubricating oil
- Pumps cooling water preheating
- Heat exchangers
- Filters and filter-water separators for fuel oil
- Lubricating and dirty oil transfer pumps
- Rubber elements
- Flexible pipes
- Exhaust gas compensator
- Thermostatic valves for fresh water
- Thermostatic valves for lubricating oil

Electrical Equipment

OEM: Imtech Marine Netherlands

(former: van Rietschoten & Houwens)

- Alidade
- Navigation desk
- Main propulsion installation
- Static converter
- Anchor windlass
- Chart table
- Local panel
- Signalman desk
- Operational lightning fixtures
- Alidade
- Active rudder
- Sub assembly power supply unit
- Sub assembly electronic panel
- Sub assembly generator
- Sub assembly local control panel
- Turbine alternator
- Sub assembly local control panel
- Main switch board EFO 01000 and EFO 02000
- Air conditioning
- Pressure controllers
- NBC filter units
- Fan convectors

Hydraulic Equipment

OEM: Bosch Rexroth

(former: Hydraudyne)

- Sweeping and handling winches
- Deck cranes
- Swell compensating systems
- Ship stabilization systems
- Power drivers and controls

Active Rudders

OEM: Alstom Power Belgium

(former: ACEC)

- Auxiliary propulsion motor port side
- Auxiliary propulsion motor starboard side
- Propeller
- Propeller cap
- Shroud
- Supporting arms