

Hamilton Jet Model HM571
Application Review

Dutch Pilot Boat 'Discovery' Uses Twin HM571 Waterjets



Following evaluation of the prototype "new generation" pilot boat 'Voyager' (JetBrief No.242),

the Dutch Pilotage organisation has embarked on a building programme of a series of vessels, each powered by twin Hamilton Jet model HM571 waterjets, which will take them into the 21st century. The first of these to take to the water is the 21 metre vessel 'Discovery'.

Key Features...

Integrated Package: The 2 x HM571 jets were supplied as complete packages, each with integral intake, transition duct, JHPU hydraulic pump and Electronic Control System.

Electronic Control: Fully integrated modular electronic system for steering and ahead/astern control providing...

- Wheel helm at main cockpit-like console.
- Separate reverse/throttle levers (one pair per jet).
- Electronically synchronised steering.
- Jet controls interfaced with engine electronics, gearboxes (for back-flushing jets) and autopilot.
- Emergency control by 4-way joystick.

Manoeuvrability: Full thrust vectoring control through the entire speed range, for manoeuvres from on-the-spot rotation to sideways docking ability, is provided by the Hamilton Jet system.

Flexibility: The craft combine speed, favourable sea-keeping characteristics and outstanding manoeuvring

▶ Brief Specifications

NAME:

M.V. Discovery

SERVICE:

Pilot Boat

LENGTH:

20.95 metres [LOA]

17.10 metres [LWL]

BEAM:

5.49 metres [overall]

DRAUGHT:

1.00 metres [static]

CONSTRUCTION:

Aluminium

WEIGHT:

33.0 tonnes Displacement

49.0 tonnes Gross Tonnage

PAYLOAD:

3 Crew + 12 Pilots/Pax.

CERTIFICATION:

ABS 100A1 Pilot Boat AMS

SEAWORTHINESS CERT.:

Netherlands Shipping Insp.

SPEED:

28 knots [operational]

WATERJETS:

Twin Hamilton Model HM571

WATERJET CONTROLS:

Hamilton Jet Electronic

ENGINES:

Twin Duetz/MWM diesels

Model TBD 616 V12, each

720kW (980hp) @ 2100rpm

GEARBOXES:

ZF Model BU 250

DRIVELINES:

Centra-Link

DESIGNER

Camarc Ltd,

Worthing, Great Britain

BUILDER:

Engelaer Scheepsbouw b.v.,

Leeuwen, The Netherlands

OPERATOR:

Dutch Pilotage Organisation,

Rotterdam, The Netherlands

Hamilton Jet DISTRIBUTOR:

AMW Marine,

H. I. Ambacht, The Netherlands

abilities to ensure an efficient pilotage service up to 30 miles offshore. The absence of exposed rotating components in the waterjet system means rescue functions can be safely carried out if necessary.