

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Waterjet

with type designation(s)
HJ364

Issued to

C.W.F. Hamilton & Co. Ltd
Christchurch, New Zealand

is found to comply with

Det Norske Veritas' Rules for Classification of Ships/High Speed and Light Craft

Application :

The waterjet is approved for propulsion duty with ratings as given on page 2.

Product approved by this certificate is accepted for installation on all vessels classed by DNV GL.

This Certificate is valid until **2021-03-02**.

Issued at **Høvik** on **2016-04-14**

DNV GL local station: **Auckland**

Approval Engineer: **Maria Madigan**

for **DNV GL**

Oddvar Deinboll
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

Waterjet propulsion unit with reversing and steering system.

Application/Limitation

The waterjet HJ364 is approved for the following rating:

Max engine power:	670	kW
Max impeller shaft speed:	2600	rpm
Max torque:	2.844	kNm

The application factor, K_A , must be less or equal to 1.1

Type Approval documentation

Marking of product

The product to be marked with manufacturer's name or trademark and type number identification.

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform a survey every second year and before the expiry date of this certificate to verify that the conditions of the type approval are complied with.

The objective of the Periodical Assessment is to verify that the conditions for the Type Approval are not altered since the Type Approval Certificate was issued.

In cases where the Type Approved product is manufactured at other companies, the Periodical Assessment shall verify that the Type Approval applicant has a quality control system for consistent production at their licensees/subcontractors. Furthermore Periodical Assessment shall be carried out randomly at these companies.

Other conditions

The following items are not covered by this type approval and shall be submitted for approval on a case-by-case basis:

- Connection to hull (shipbuilder's responsibility)
- Hydraulic system diagram, including set points and alarms

Flexible hoses shall be type approved.

END OF CERTIFICATE