

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Waterjet**

with type designation(s)
DRB 550

Issued to

Marine Jet Power AB
Uppsala, Uppsala Län, Sweden

is found to comply with

DNV GL rules for classification – Ships
DNV GL rules for classification – High speed and light craft

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.

The approval is valid for propulsion duty with rating as given on page 2.

Issued at **Høvik** on **2018-10-01**

This Certificate is valid until **2023-09-30**.

DNV GL local station: **Stockholm**

Approval Engineer: **Terje Sollie**

for **DNV GL**

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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.



Job Id: **262.1-029008-1**
Certificate No: **TAM00000YY**

Product description

Waterjet unit with built in steering and reversing system and 6-bladed impeller.

Application/Limitation

The approval is valid for propulsion with the following maximum rating:

Input power	2500 kW
Impeller speed	1530 rpm
Maximum torque	15,6 kNm

Marking of product

The product shall be marked with the manufacturer's name or trademark and type designation.

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform an assessment after 2 years and after 3.5 years after the issue date of the Type Approval Certificate to verify that the conditions of the type approval are complied with. A renewal assessment will be performed at renewal of the certificate.

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 are not covered by this certificate:

- Torque transmitting shafting
- Connection to hull (yard responsibility)
- Connection to driving unit
- Remote control system
- Controls and alarms, including set points and delays
- Hydraulic cylinders for steering and reversing
- Hydraulic system for steering and reversing
- Flexible hoses shall be type approved

END OF CERTIFICATE