



Certificate No:  
**TACC000001A**

# TYPE APPROVAL CERTIFICATE

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**This is to certify:**

**That the Commercial Craft**

with type designation(s)  
**TMV1**

Issued to

**ARTEMIS TECHNOLOGIES LTD**  
**Belfast, County Antrim, United Kingdom**

is found to comply with  
**DNV Standard DNV-ST-0342 - Craft, 2022**

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**Application :**

**See next page**

Issued at **Høvik** on **2025-03-07**

This Certificate is valid until **2030-03-06** .

DNV local unit: **UK & Ireland CMC & VMC**

for **DNV**

Approval Engineer: **Per Annar Sandaune**

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**Thomas Revheim**  
**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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: TA 281

Revision: 2022-09

[www.dnv.com](http://www.dnv.com)

Page 1 of 3

## Conditions

Type certification means that the boat builder has engaged himself to build boats in series identical to the prototype which the Society has inspected and found to be in accordance with the abovementioned standard. The production of the type certified boat is subject to surveillance by the Society, by inspection. Boats of the certified type are to be equipped with an individual certificate to be issued upon product survey.

The certification is based on the assumption that the boats will be handled in a seamanlike manner as stipulated in the standard.

## Boat type

|                                  |                                                                                                                                                                                                                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Boat type identification number: | 661.01                                                                                                                                                                                                                                                                                     |
| DNV design ID:                   | P34753                                                                                                                                                                                                                                                                                     |
| Application of standard:         | <ul style="list-style-type: none"> <li>- Requirements for decked craft.</li> <li>- DNV Rules for classification: High speed and light craft, class notation 1A HSLC R1 Service applied for approval of hull structure (Ref. ST-0342 Sec.3 [3.1.3] Alternative design standards)</li> </ul> |

## Particulars

|                                               |                                             |
|-----------------------------------------------|---------------------------------------------|
| Length, Loa:                                  | 10.50 m                                     |
| Beam incl. fenders, B max:                    | 4.03 m                                      |
| Draught incl. keel, max:                      | 0.754 m (2.10 incl. foils)                  |
| Height above waterline, incl. mast, max:      | Approx. 3.95 m                              |
| Weight of boat, incl. engine, equipment, net: | 7 303 kg                                    |
| Hull material:                                | Carbon fibre reinforced vinylester sandwich |
| Propulsion:                                   | eFoil/EESS                                  |

## Restrictions

|                                            |                |
|--------------------------------------------|----------------|
| Engine power, max:                         | 250 kW         |
| Maximum load (fuel, persons, add. weight): | 1 254 kg       |
| Number of persons, max:                    | 2 crew + 6 pax |

## Special restrictions and additional comments:

### Design vertical acceleration

Design vertical acceleration at center of gravity  $a_{cg} = 2.27g$ .

The operation of the craft shall be carefully adjusted to the wave pattern in terms of heading and reduced speed, to prevent excessive loads on the hull.

### Recommended Vessel Restrictions

1. Operation less than 24 hours at sea
2. Operation in favourable weather conditions
3. Vessel to stay within proximity of shore / safe haven (up to 60 nautical miles)

### Technology Qualification

A Technology Qualification process has been performed with DNV Maritime Advisory on the following areas using novel technology:

1. Focus area 1: EEES
2. Focus area 2: Control Systems
3. Focus area 3: Mechanical systems

#### Non-conformances

1. Main source of power is Battery Power. Batteries are not Type Approved as required in DNV Technical and Regulatory News No. 01/2021. Accepted based on MCA Exemption No.5 and 6 (see below list).
2. The fixed fire extinguishing system (Stat-X) is not Type Approved as required in ST-0342 Sec.26 [26.5.2] and is not a system approved by DNV to protect against Li ion battery fires. Accepted based on MCA Exemption No.2 and 6 (see below list).
3. Novel propulsion drivetrain not Type Approved as required by ST-0342 Sec.21 [21.3]. Accepted based on MCA Exemption No.4 (see below list).
4. Novel steering / rudder system not approved according to ST-0342 Sec.23. Accepted based on MCA Exemption No.3 (see below list).
5. Location of emergency battery is not in accordance with ST-0342 Sec.25. Accepted based on MCA Exemption No.1 (see below list).

#### Relevant Exemptions/Equivalencies (accepted by MCA)

(References in square brackets are to MCA Workboat Code Edition 2 Amendment 1)

1. Equivalence acceptance of location for emergency batteries [8.8.4] – Letter MCA Southampton 2024-06-20;
2. Equivalence acceptance of Stat-X for Fixed Fire Fighting [15.6.3.1] – Letter MCA Southampton 2024-06-20;
3. Equivalence acceptance of Novel Steering / Rudder System Not Type Approved [9.1.5] – Letter MCA Southampton 2024-06-20;
4. Equivalence acceptance of Novel Propulsion Drive Train System Not Type Approved [9.3] – Letter MCA Southampton 2024-06-20;
5. Equivalence acceptance of Novel Battery Power System Not Type Approved [7] – Letter MCA Southampton 2024-06-20;
6. Equivalence acceptance of HV EESS and Fire Safety for Novel Prototype Workboat [14.1.1, 14.8, 15.6.2, 15.6.3] – Letter MCA Southampton 2024-06-20;

#### Periodical assessment

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>