Certificate no.:
TAS00004EA

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Gangway

with type designation(s)
Offshore gangway 30m

issued to
SubC Partner A/S
Esbjerg, **Denmark**

is found to comply with
DNV standard DNV-ST-0358 – Offshore gangways

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

Issued at **Høvik** on **2024-10-17**
This Certificate is valid until **2029-10-16**.
DNV local unit: **Denmark CMC**

for **DNV**

Approval Engineer: **Fredrik Per Olof Höglund**

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 USD 300 000.

Product description

Product: 30m offshore extendable gangway.

Application/Limitation

Categorization: TYPE 4 Offshore gangway

Operational*	Supported at both ends connecting two fixed installations, with controlled flow of people	
Live Load (LL)	720kg (6 persons)	
Operational length**	19m – 30m	
Max. Wind speed (at gangway location)	Operational	Parked / Survival / Transit
	24m/s	44 m/s
Operating angles ranging	±30° from horizontal	

Self-Weight***: 7500 kg

*) This gangway requires installation of turntable towards jack-up and ladder towards fixed offshore wind turbine platform. Turntable and ladder are not part of the type approval.
This type approval covers only the gangway configuration with connections to turntable and ladder. It is the end user's responsibility to ensure that the gangway is supported as per SubC gangway instructions.
**) Measured from the center of outer structure end towards vessel to ladder connection towards platform.
***) Mass of extendable parts of gangway, not including mass of turntable and ladder.

Design temperature: 0°C

The operational limitations defined above have been provided by SubC Partner A/S, data and procedures adopted for estimating them were not part of this review. It is the end user's responsibility to ensure that these are never exceeded during service.

It has been confirmed by the designer that the flow of people will be continuously monitored and regulated, with an operator, throughout the period in which the gangway is in operational / working condition, thus preventing the load on the gangway to exceed the above defined live load at any given time.

The Type Approval is not covering any mechanical, electrical or hydraulic components which, for certification, shall be provided with certificates as per DNV-ST-0358 Table 2-2 and Sec. 5.14, 5.15 and 5.17 and DNV-ST-0378 Table 2-3.

Approval limitations

The Type Approval is not covering the following:

- Lighting
- The turntable
- Lifting and installation
- Gangway tip Ladder

Type Approval documentation

Certification

This Type Approval covers design(s) only, i.e. the Type Approval is not valid for the final product, but may be used as basis for obtaining a product certificate.

If a DNV Product Certificate is required, the following shall apply:

- The manufacturing survey shall be followed-up by a DNV Surveyor
- Each gangway shall be tested in accordance with DNV-ST-0358 Section 7
- The gangway treads suitability @ min/max gangway operating angles shall be assessed, tested and approved by the attending DNV surveyor, ref. DNV-ST-0358 #5.12
- The turntable and gangway tip ladder must be approved separately and designed in line with DNV-ST-358 #5.7, i.e. clear width correlated with gangway bridge width.

- Lighting as per DNV-ST-358 #5.9. It is assumed that illuminating system will be provided with redundancy ensured by means of dual electrical supply, e.g. battery packs installed on each light or connection to vessel emergency power.

Marking of product

Each product shall be marked in accordance with DNV-ST-0358 Section 7.4 and DNV-ST-0378 Section 14.5.

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

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

End of certificate