DNV·GL

Certificate No:
TACC000000V

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Commercial Craft

with type designation(s)
Van Schie Modular Pontoon System 4500x2250x770

Issued to
Van Schie B.V.
Mijdrecht, Netherlands

is found to comply with
DNV GL standard DNVGL-ST-0342 - Craft, 2016

Application :

See next page.

Issued at **Høvik** on **2020-05-13**
This Certificate is valid until **2025-05-12** .
DNV GL local unit: **Netherlands CMC**

Approval Engineer: **Per Annar Sandaune**

for **DNV GL**

Christine Adal
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: **262.1-028101-1**
Certificate No: **TACC000000V**

Conditions

Type certification means that the manufacturer has engaged himself to build pontoons 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 pontoon is subject to surveillance by the Society, by inspection. Pontoons of the certified type are to be equipped with an individual certificate to be issued upon product survey.

Product description

The VSP770 is a modular pontoon which is equipped with a coupling system. By connecting several VSP770 pontoons to each other, various platforms can be created for multiple purposes.

Particulars

Length:	**4.500 m**
Breadth:	**2.250 m**
Depth:	**0.770 m**
Deck area:	**10.125 m²**
Weight (incl. 9 coupling keys, coupling blocks, welds and conservation):	**2250 kg**
Weight coupling key:	**8.5 kg**
Waterplane area (WPA):	**9.8602 m²**
Draught (empty) to bottom plate:	**0.228 m**
Draught (empty) to bottom (total):	**0.248 m**
Number of couplings:	**18**
Number of watertight compartments:	**3**
Material:	**S355J2+N** **S355J2C+N** **S355ML**

Application/Limitation

This Type Approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV GL.

The certification is based on the assumption that the pontoons will be handled in a seamanlike manner as stipulated in the standard. Maximum number of persons on a single pontoon during assembly of modular systems is 2.

The type certified pontoon is considered in compliance with relevant requirements laid down in the EU Directive (EU) 2016/1629 as "floating equipment".

Assembled modular pontoon systems need separate certification from relevant governing authority if the system is used as "floating equipment". If the system is used as "floating establishment" or "floating object" separate certification is not required. The terms "floating equipment", "floating establishment" and "floating object" are defined in the abovementioned EU Directive.

Limiting loads

Max. deck load	98.10 kN/m^2 (10 tonnes/m^2)
Max. force coupling system horizontal (x,y) directions	
Max. force coupling (1 coupling)	156.96 kN (16 tonnes)
Max. force couplings on short side of the pontoon (3 couplings)	470.88 kN (48 tonnes)
Max. force couplings on long side of the pontoon (6 couplings)	941.76 kN (96 tonnes)
Max. moment coupling system horizontal (x,y) directions	
Max. moment coupling (1 coupling)	115.36 kNm
Max. moment couplings on short side of the pontoon (3 couplings)	346.08 kNm
Max. moment couplings on long side of the pontoon (6 couplings)	692.16 kNm
Max force coupling system vertical (z) direction	
Max. shear force coupling-block	245.34 kN
Max. shear force coupling-block recess	225.117 kN
Max. force on short side of the pontoon (2 couplings)	450.234 kN
Max. force on long side of the pontoon (4 couplings)	900.468 kN
Max. bending/torsional moments pontoon (Transverse cross section of the pontoon)	Mx = 3500.421 kNm My = 2036.305 kNm T = 3158.167 kNm
Max. bending/torsional moments pontoon (Longitudinal cross section of the pontoon)	Mx = 11998.682 kNm My = 3704.749 kNm T = 6336.146 kNm
Max. pressure load bottom plate	72.594 kN (7.17 kN/m^2)

Type Approval documentation

Tests carried out

Load test to validate the design loads was carried out on the 18th December 2019 at Van Schies' yard in Mijdrecht, the Netherlands and witnessed by DNV GL surveyor. Reference is made to test plan approval letter M-SA-SP/PASAN/262.1-028101-J-26 dated 2019-11-28.

Marking of product

The product is to be indelibly marked with serial number and type designation.

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.dnvgl.com