



Potvrda br.
Certificate No.

01-015854/0112291

POTVRDA O TIPNOM ODOBRENJU TYPE APPROVAL CERTIFICATE

Potvrđuje se da ovaj proizvod udovoljava Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda.
This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TIP I OPIS PROIZVODA:
TYPE AND DESCRIPTION OF PRODUCT:

PLUTAJUĆI PONTON-VALOBRAN TIP M4320BRK, ZA GATOVE U MARINAMA
FLOATING PONTOON-BREAKWATER TYPE M4320BRK, FOR BERTHS IN MARINAS

PROIZVOĐAČ:
MANUFACTURER:

MARINETEK ADRIATIC d.o.o.
Draga 2
22000 ŠIBENIK
HRVATSKA • CROATIA

PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:
THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Pravila za klasifikaciju brodova, Tehnička okružnica HRB-a QC-T-191.
Rules for the Classification of Ships, CRS Technical Circular QC-T-191.

DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEĐINI.
FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

ODOBRENJE VRIJEDI DO: **2027-05-31**
APPROVAL IS VALID UNTIL:

Mjesto i datum: **Split, 2023-03-31**
Place and date:

M.P.
(Seal)

Marinko Popović, dipl.ing.

NAPOMENA: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodio valjanu potvrdu.
NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

PODROBNJI OPIS PROIZVODA:
DETAILED PRODUCT DESCRIPTION:

Plutajući ponton – valobran tip M4320BRK je izrađen od armiranog beton čvrstoće 45 N/mm² ojačanog plastičnim vlaknima. Jezgra pontona je ekspanzirani polistiren gustoće 15 kg/m³. Čelična armatura je pocinčana vrućom galvanizacijom.

Floating pontoon- breakwater type M4320BRK is made of steel reinforced plastic fibre concrete with strength 45 N/mm². Pontoon core is expanded polystyrene with density 15 kg/m³. Reinforcement is fully hot galvanized steel.

Dimenzije pontona:
Pontoon dimensions:

duljina/length 19.9 m

širina (preko svega) /breath (overall) 4.3 m

nadvode/freeboard 0.6 m

širina (beton) /breadth (concrete) 4 m

visina/height 1.8 m

čvrstoća spoja /joint strenght 2x812 kN

PODRUČJE PRIMJENE / POSEBNI GRANIČNI UVJETI:
APPLICATION / LIMITATIONS:

- **Značajna visina vala do 1 m**
- **Vež plovila duljine do 50 m**
- *Significant wave height up to 1 m*
- *Mooring of craft length up to 50 m*

DOKUMENTACIJA ZA TIPNO ODOBRENJE:
TYPE APPROVAL DOCUMENTATION:

Tehnički opis, tehnologija izrade, proračun stabiliteta i uzdužne čvrstoće pontona M4320 BRK; Nacrti: "Installation/Fixing sets" br. 1027161 /1033201/1043201 izm.2; Nacrt " Finger F6000" br. 4060020 izm.1; Finger F7500" br. 4075000 izm.1; Finger F9000" br. 4090000 izm.1 Finger F10500" br. 4010500 izm.1; Finger F12000" br. 4012000 izm.1; "Fixing sets for Fingers F6000, F7500" br. 4000103 izm.0; "Fixing sets for Fingers F9000" br. 4000104 izm.0; "Fixing sets for Fingers F10500, F12000" br. 4000105 izm.0; „Dimnsions and Equipement“ br. 1043209-300B; „Reinforcement“ br. 1043209-301B.

Izveštaj o ispitivanju pontona od 2010.03.04. i Izveštaj „Wave test for Marinetek floating breakwater pontoon“ od 2010. 12. 03.

*Floating pontoon M 4320BRK Technical description, Fabrication Technology, Stability Calculations and Longitudinal Tensile Strength Calculations; Drawing "Installation/Fixing sets" No. 1027161 /1033201/1043201 Rev.2; " Finger F6000" br. 4060020 Rev.1; Finger F7500" No. 4075000 Rev.1; "Finger F9000" No. 4090000 Rev.1 Finger F10500" No. 4010500 Rev.1; Finger F12000" No. 4012000 izm.1; "Fixing sets for Fingers F6000, F7500" No. 4000103 Rev.0; "Fixing sets for Fingers F9000 " No. 4000104 Rev.0; "Fixing sets for Fingers F10500, F12000" No. 4000105 Rev.0; „Dimensions and Equipment“ br. 1043209-300B; „Reinforcement“ br. 1043209-301B.
Pontoon Test report dated 2010.03.04. and Test report „Wave test for Marinetek floating breakwater pontoon“ dated 2010.12.08.*

OZNAČAVANJE PROIZVODA:
MARKING OF PRODUCT:

Proizvod se mora označiti imenom proizvođača, oznakom pontona i serijskim brojem.

The product shall be marked with name of manufacturer, type of pontoon and serial number.

UVJETI ZA CERTIFIKACIJU:
CONDITIONS FOR CERTIFICATION:

Hrvatski registar brodova izdaje posebnu potvrdu o nadzoru za svaki pojedinu proizvedenu količinu (HRB obrazac QF-PS-25).

Croatian Register of Shipping shall issue particular certificate on supervision for each manufacturer quantity (CRS form QF-PS-25).