

**POTVRDA O TIPNOM ODOBRENJU**  
**TYPE APPROVAL CERTIFICATE**Br / No **01-011221/017780**

Potvrđuje se da je ovaj proizvod, u skladu s Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda, odobren za ugradnju na brodove i postrojenja pod nadzorom Hrvatskog registra brodova.  
*This is to certify that this product on the basis of the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products, is approved for use on board ships and installations under supervision of the Croatian Register of Shipping.*

**TIP I OPIS PROIZVODA:**  
**TYPE AND DESCRIPTION OF PRODUCT:**

**PLUTAJUĆI PONTON-VALOBRAN TIP M3820BR(BRS), ZA GATOVE U MARINAMA**

**FLOATING PONTOON-BREAKWATER TYPE M3820BR(BRS), FOR BERTHS IN MARINAS**

**PROIZVOĐAČ:**  
**MANUFACTURER:**

**MARINETEK NCP d.o.o.**

Obala Jerka Šižgorića 1  
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: 2019-12-05**  
**APPROVAL IS VALID UNTIL:**

Mjesto i datum **Split, 2015-12-05**  
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.*

**PODROBNIJI OPIS PROIZVODA:***DETAIL PRODUCT DESCRIPTION:*

Plutajući ponton-valobran tip M3820BR(BRS) je izrađen od armiranog betona čvrstoće 45 N/mm<sup>2</sup> ojačanog plastičnim vlaknima. Jezgra pontona je ekspanzirani polistiren gustoće 15 kg/m<sup>3</sup>. Čelična armatura je pocinčana vrućom galvanizacijom.

*Floating pontoon-breakwater type M3820BR(BRS) is made of steel reinforced plastic fibre concrete with strength 45 N/mm<sup>2</sup>. Pontoon core is expanded polystyrene with density 15 kg/m<sup>3</sup>. Reinforcement is fully hot galvanised steel.*

**Dimenzije pontona:***Pontoon dimensions:*

duljina/length 19.9 m

širina (preko svega)/breath (overall) 3.8 m

nadvodelfreeboard 0.62 m

širina (beton)/breadth (concrete) 3.5 m

visina/height 1.2 m

čvrstoća spoja/joint strenght 2x812 KN

**PODRUČJE PRIMJENE / POSEBNI I GRANIČNI UVJETI:***APPLICATIONS / LIMITATIONS:*

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

**DOKUMENTACIJA ZA TIPNO ODOBRENJE:***TYPE APPROVAL DOCUMENTATION:*

Tehnički opis, tehnologija izrade, proračun stabiliteta i uzdužne čvrstoće pontona M 3820 BR(BRS); Nacrt "Installation/Fixing sets" br. 1027161 izm.0; Nacrt "Fixing sets for Fingers F6000, F7500" br. 4000103 izm.0; Nacrt "Fixing sets for Finger F9000" br. 4000104 izm.0; Nacrt "Fixing sets for Fingers F10500, F12000" br. 4000105 izm.0; Nacrt "Finger F6000 Assembly drawing" br. 4060020 izm.1; Nacrt "Finger F7500 Assembly drawing" br. 4075000 izm.1; Nacrt "Finger F12000 Assembly drawing" br. 4012000 izm.1; Nacrt "Mooring Finger F9000" br. 4090000 izm.1; Nacrt "Finger F10500" br. 4010500 izm.1; Nacrt "Dimensions and Equipment" br. 1038200–300; Nacrt "Reinforcement" br. 1038200–301; Nacrt "Reinforcement Details" br. 1038200–302A; Izvještaj o ispitivanju pontona od 2007.02.19; Izvještaj o ispitivanju pontona u Brodarskom institutu br. 5934-M od travnja 2007.

*Floating pontoon M 3820 BR(BRS) Technical description, Fabrication Technology, Stability Calculations and Longitudinal Tensile Strength Calculations; Drawing "Installation/Fixing sets" No. 1027161 Rev.0; Drawing "Fixing sets for Fingers F6000, F7500" No. 4000103 Rev.0; Drawing "Fixing sets for Finger F9000" No. 4000104 Rev.0; Drawing "Fixing sets for Fingers F10500, F12000" No. 4000105 Rev.0; Drawing "Finger F6000 Assembly drawing" No. 4060020 Rev.1; Drawing "Finger F7500 Assembly drawing" No. 4075000 Rev.1; Drawing "Finger F12000 Assembly drawing" No. 4012000 Rev.1; Drawing "Mooring Finger F9000" No. 4090000 Rev.1; Drawing "Finger F10500" No. 4010500 Rev.1; Drawing "Dimensions and Equipment" No. 1038200–300; Drawing "Reinforcement" No. 1038200–301; Drawing "Reinforcement Details" No. 1038200–302A; Pontoon test report dated 2007.02.19.; Test report from "Brodarski institut" No.5934-M dated April 2007.*

**OZNAČAVANJE PROIZVODA:***MARKING OF PRODUCT:*

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

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

**UVJETI ZA CERTIFIKACIJU:***CONDITIONS OF CERTIFICATION:*

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

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

Raščlana

31.00

Zamjenjuje potvrdu

01-009138