

**ANNOTATIONS**  
**of science works published in professional magazine**  
**«River transport (XXI<sup>st</sup> century)» 2(106)'2023**

**Improvement of methodology to determine losses of bulk cargoes during loading by grab into open warehouse / E. Adamov, N. Otdelkin, D. Kostyunichev, V. Orekhvo // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 34-36.**

Describes the authors' methodology to determine losses of bulk cargoes during loading by grab into open warehouse.

**Key words:** bulk cargo, dust formation, grab, calculation method.

**Contacts:** studvgu.sp@gmail.com, otdelkin@vsuwt.ru, kaf\_ptmm@vsuwt.ru, kaf\_ptmm@vsuwt.ru.

**Estimation of destructive effect on engine parts of gas abrasives primary agglomerates of diesel soot / V. Pyshnin, B. Lebedev, D. Sibrikov, O. Lebedev // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 38-39.**

Shows the results of comparison of gaseous destructions by primary agglomerates of soot of diesel summer fuel samples on a pneumatic installation and working chamfer of exhaust valve of engine (for example, diesel 1H8.5/11, with total weight of soot passed through valve, 750 g).

**Key words:** diesel fuel, soot, agglomeration, wear, valve.

**Contacts:** Pushnin3457@yandex.ru, Lebedevbo@list.ru, sibrikov@nsawt.ru, Razor1987@list.ru.

**Modeling of flow kinematics of navigable section of riverbed in bridge piers' area / T. Pilipenko, I. Botvinkov, A. Kalashnikov // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 40-43.**

Describes hydraulic model of river flow's kinematics of researching navigable section of Ob river in bridge piers' area near Novosibirsk city. Analyses results of conducted experiment.

**Key words:** riverbed, bridge piers, bottom flows, hydraulic scale model, safety of navigation.

**Contacts:** t.v.pilipenko@nsawt.ru, Elf1704@yandex.ru, aakalashnikovvipgts@yahoo.com

**Creating program module to forecast hydrological series / T. Pilipenko, A. Zueva // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 43-47.**

Describes the author's mathematical model for neural network and program module to forecast hydrological series.

**Key words:** forecast, hydrological series, neural networks, program module.

**Contacts:** t.v.pilipenko@nsawt.ru, zueva.963@mail.ru

**Dynamic potential of ship's safety / Y. Kochnev // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 47-48.**

Describes the author's proposals to estimate safety based on its potential, which means exceeding of actual indicators of ship's characteristics over their some dangerous values.

**Key words:** ship, safety, solidity, disposal, lifecycle.

**Contacts:** tmnkoch@mail.ru

**The analysis of ecological aspects of ship's life cycle / V. Naumov, I. Kochneva// River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 48-50.**

Describes ecological aspects of ship life cycle's stages, analyses their potential negative influence on environment.

**Key words:** ecological safety, environment, ship's life cycle, negative influence.

**Contacts:** iringre@mail.ru, kaf\_oospb@vsuwt.ru

**The analysis of renovation methods with EGS-technologies in yacht port in Balaklava bay / P. Garibin, S. Egorov, V. Shabanov // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 51-54.**

Describes the principles of renovation with EGS-technologies in yacht port in Balaklava bay.

**Key words:** yacht port, Balaklava bay, renovation, EGS-technologies.

**Contacts:** garibin@mail.ru, apsrt@mail.ru, shabanov-1948@yandex.ru

**Modelling ships' break (on the example of barge pr. R79A) by finite elements method/ I. Dantsevich, M. Lyutikova, Z. Zhumaev, Y. Kosolap // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 55-58.**

Describes the results of computer modeling by finite elements method to define potential deformations of ships' hull which lead to its break.

**Key words:** deformation of ship's hull, modeling of danger conditions, method of finite elements.

**Contacts:** dantsevich65@mail.ru, mnlyutikova@mail.ru, zhumaev.05@mail.ru, kosolap.aumsu@gmail.com

**The review of technical solutions for loading (unloading) cargo into barge / E. Kostylev // River transport (XXI<sup>st</sup> century). 2023. – № 2 (106). – p. 58-60.**

Describes technical solutions for loading (reloading) cargo into barge.

**Key words:** barge, technology of loading (reloading) cargo.

**Contacts:** kaf\_pgt@gumrf.ru