

**ANNOTATIONS of scientific articles published in international magazine
«River transport (XXIst century)» № 3 (74)' 2015**

The estimation of operation time of portal cranes on steel's St38b2 fatigue characteristics / O. Leonova, I. Petrova, E. Veretennikov, A. Veretennikova // River transport (XXIst century).2015 – № 3 (74). – p. 36-37.

Shows the research results of operation time's (during 40 years) influence on fatigue characteristics of steel's St38b2 samples cut from elements of metal construction of portal crane «Albatros 10/20-32/16».

Key words: operation time, portal crane, steels' mechanical characteristics, fatigue resistance, the fatigue curve.

Contacts: sm.al@mail.ru

The principles of state regulation of transport and forwarding activity (on the example of Japan)/ A. Telegin, A. Nichiporuk, O. Gerasimenko // River transport (XXIst century).2015 – № 3 (74). – p. 38-40.

Analyses foreign principles of state regulation of transport and forwarding activity and compares them with russian rules.

Key words: transport and forwarding activity, principles, licensing, Japan, Russia.

Contacts: kafedra-lim@yandex.ru

The estimation of possibility of renewal vegetable-melons products shipping by river transport based on logistic approach /V. Tsverov, A. Khokhlov // River transport (XXIst century).2015 – № 3 (74). – p. 40-43.

Substantiates possibility of renewal vegetable-melons products shipping by river transport based on creating terminal delivery system and defines actions to achieve this goal.

Key words: shipping vegetable-melons products by river transport, terminal delivery system.

Contacts: v.tsverov@yandex.ru

The reconstruction method of the drive mechanism for lifting floating crane grapple based on estimation of its steel structures' durability / A. Yablokov// River transport (XXIst century).2015 – № 3 (74). – p. 43-50.

Describes the problem of estimation steel structures' durability of engine room floating crane's frame and offers the way to solve it. Analyses aftermath of grapple's «suction effect» for floating cranes engaged in underwater mining.

Key words: high-cycle fatigue, experiment, damage, material parameters, torque converter, pump wheel, turbine wheel, reaction wheel, grapple.

Contacts: alex-vodnik@mail.ru

The probabilistic approach to calculation of hydrodynamic coefficients of river ship's mathematical model / A. Chernyshov // River transport (XXIst century).2015 – № 3 (74). – p. 51-53.

Substantiates practicability of using river displacement ship's probabilistic model instead of traditional, deterministic model. Describes the principle of definition mathematical expectations and their standard deviation.

Key words: ship's dynamic, deterministic model, probabilistic model.

Contacts: andrey.chernyshov5@gmail.com

Forming load mass in design of various types of inland navigation vessels / N. Rekhhalova // River transport (XXIst century).2015 – № 3 (74). – p. 53-55.

Describes the results of statistical research of distribution on value levels construction cost with taking into account overheads of 1 ton calculation units of inland navigation vessels – cargo ships and pushers. Shows goal function in mathematical model of optimization load mass's components in design of river fleet.

Key words: value level, load mass, design and construction of river ships.

Contacts: nrekhalova@yandex.ru

The aspects of development of water transport system «fleet–way» on Siberian rivers / S. Maslennikov, D. Galimova // River transport (XXIst century).2015 – № 3 (74). – p. 55-58.

Describes the features of water transport system's operation including cargo shipping and water ways maintenance. Substantiates practicability of using electronic navigational charts to solve transport process management's tasks.

Key words: inland water ways, electronic navigational charts, transport system management.

Contacts: s.n.m@bk.ru

About methods of detection torsion vibrations in ship's power transmissions systems / T. Rayanov // River transport (XXIst century).2015 – № 3 (74). – p. 58-61.

Analyses nonlinear method of calculation torsion vibrations in marine ship's power transmissions systems. Describes several features of method of modeling propulsion system's elements (on the example of tanker).

Key words: torsion vibrations, marine ship's propulsion system, finite element method, damping, added mass of water.

Contacts: rayanov.timur@yandex.ru

The method of fuel consumption regulation for shallow dredges and hydroreloader / A. Nikulina, L. Mokerov// River transport (XXIst century).2015 – № 3 (74). – p. 61-62.

Describes the method of fuel consumption regulation for shallow dredges and hydroreloader.

Key words: fuel economy, dredging fleet.

Contacts: anna3129@rambler.ru