

The research of fire hazard of textile materials and products used on passenger river ships / N. Konstantinova, A. Zuban', D. Nigmatullina, O. Korol'chenko // River transport (XXIst century). 2022. – № 4 (104). – p. 35-38.

Describes the results of comprehensive experimental studies to estimate fire hazard parameters of textile materials and products used on river passenger ships for decorating interior of residential and public premises. Gives proposals for correction some provisions of existing requirements of regulatory documents for fire safety application of materials.

Key words: passenger river ship, textile materials, fire safety.

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The influence of construction of ship's hull on its weight/ // River transport (XXIst century). 2022. – № 4 (104). – p. 40-42.

In order to optimize the design of a dry cargo vessel of mixed (river–sea) navigation, the simplest mathematical model for calculating the mass of its metal hull is described. The results of a test analysis of the mass for a number of variants of the set of the middle part of the body are presented.

Key words: dry cargo vessel, weight of hull, midsection frame.

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Laser strengthening of marine-building parts / V. Glebov, Y. Matveev, A. Khlybov, F. Repin // River transport (XXIst century). 2022. – № 4 (104). – p. 42-44.

Researches main parameters of laser processing mode of marine diesel engines' cylinder liners, characteristics of hardened zone, working surface treatment schemes. Describes influence of laser thermal hardening regime on structure and microhardness of tubing coupling' internal thread surface layer.

Key words: laser heat treatment, hardening of details, microhardness of surface layer.

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Methods of installation structures in river port / V. Pichkhadze, L. Pahomova // River transport (XXIst century). 2022. – № 4 (104). – p. 45-47.

Describes features of different methods of installation structures in river port.

Keywords: method of installation, structure, lifting crane.

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About increasing effectiveness of ships' propulsive complex / L. Arabyan, E. Grigoryev, M. Menzilova // River transport (XXIst century). 2022. – № 4 (104). – p. 47-50.

Describes the methods of improving effectiveness of ships' propulsive complex by increasing surface roughness and epilaming.

Keywords: ship's propulsive complex, epilaming, surface roughness, turbocharger, waterjet treatment.

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Calculation of soil volume to be removed from dredging slot / V. Osipov, K. Mochalin // River transport (XXIst century). 2022. – № 4 (104). – p. 50-52.

Describes recommendations and algorithms for constructing programs to analyze survey materials for creating task to dredger operating in trench method on rectangular slot.

Key words: dredging rectangular slot, soil volume, calculation.

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Automated processing of meteorological data archives by using a program in language «Python» / V. Abramov, I. Sikarev, A. Chestnov, A. Butsanets // River transport (XXIst century). 2022. – № 4 (104). – p. 53-55.

Describe the process of creating software code in interpreted language «Python» for automated processing of weather archives from open sources for meteorological surveys in design of any objects, including water transport.

Key words: program in language «Python», weather archives, meteorological surveys.

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Improvement of calculation method for universal port's general cargo berths / A. Kuznetsov, A. Kirichenko, A. Semenov, I. Gritsun // River transport (XXIst century). 2022. – № 4 (104). – p. 55-60.

Describes the authour's approach to calculation universal port's general cargo berths.

Key words: port, design, productivity, calculation quantity of berths, general cargo

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