

МОРСКОЕ СУДОСТРОЕНИЕ

Издается с 1898 г.

НАУЧНО-ТЕХНИЧЕСКИЙ И ПРОИЗВОДСТВЕННЫЙ ЖУРНАЛ

ISSN 0039-4580

ПРОЕКТИРОВАНИЕ СУДОВ

№ 4
2014
июль–август

**ВОЕННОЕ
КОРАБЛЕСТРОЕНИЕ**

**СУДОВОЕ
ОБОРУДОВАНИЕ**

**ТЕХНОЛОГИЯ
СУДОСТРОЕНИЯ**

ИСТОРИЯ



SUDOSTROENIE 4 2014

/SHIPBUILDING/

(815) July–August
Published since September 1898 г.

CONTENTS

***Aleshkin A.N.* Anniversary of JSC SSTC — 75 years!**

75 years at the peak of advanced technologies

This article analyzes activities of JSC SSTC in recent times. Described are: development and implementation of new knowledge-intensive shipbuilding and shiprepair technologies, design and retrofitting of shipbuilding and shiprepair centers, design and production of ship fittings and marine engineering, technological facilities. Fig. 13.

AT SHIPBUILDING YARDS

CIVIL SHIPBUILDING ПО СЕВМАШ, ЦС ЗВЕЗДОЧКА, ЯРОСЛАВСКИЙ СЗ, ОКСКАЯ СУДОВЕРФЬ, МОСКОВСКИЙ ССЗ, СЗ ИМ. ОКТЯБРЬСКОЙ РЕВОЛЮЦИИ, АМУРСКИЙ СЗ, СЗ ВЫМПЕЛ, ЛСЗ ПЕЛЛА. ПСЗ ЯНТАРЬ, ЗАВОД ГИДРОМЕХАНИЗАЦИИ

***Boyko M.S., Kuteinikov M.A., Odegov V.S.* General trends in updating requirements to hull of heavy-tonnage container carriers from classification societies**

One of most severe problems for classification societies is rating of hull strength for heavy-tonnage Post-Panamax container carriers. The authors hereby review potential update of hull structure requirements for such vessels. This article is based on research works and relevant experience of Russian Maritime Registry of Shipping.

***Egorov G.V., Tonyuk V.I., Kalugina N.N.* Three multifunctional shallow-draft supply tugs for Northern Caspian Sea**

The authors hereby describe multifunctional shallow-draft supply tugs designed by Maritime Design Bureau for servicing oil-gas fields in Northern part of Caspian sea.

***Frantsev M.E., Frantsev I.M.* Using numerical methods for design of composite coastal fishing vessel**

Advanced design methods for ships from composite materials are required to maintain development of this industry. Application of parametric methods to define general ship specifications allows advancing of the design process. This article reviews methods for designing ships from composites. Design algorithm is provided as well.

NAVAL SHIPBUILDING

***Antonov G.N.* Winged heritage of the academician V.N. Chelomey**

Vladimir N. Chelomey — the academician, twice the Hero of Socialist Labour, winner of Lenin Prize and three State Prizes, creator and chief of EDB-52 (JSC RPC Mashinostroyeniya). V.N. Chelomey and relevant contributions of shipbuilding design bureaus.

SHIP POWER PLANTS

***Timofeyev V.N.* Increasing fuel efficiency of marine diesel engines by adding hydrogen to diesel fuel**

This article reviews a method to increase diesel engine efficiency by adding hydrogen to diesel fuel.

SHIPBOARD SYSTEMS

***Teplyakov M.V., Khazieva M.D.* General approaches used for development of cable glands and feed-throughs for pressure structures**

The author hereby narrates about most frequently used types of cable glands and feedthroughs for supplying cables into casings of electrical equipment gate structural assemblies and loaders of cables into electric equipment cases. Given are main theoretical stipulations to be considered during development of such structures.

***Garmash D.E., Naumova T.B., Chugayenko A.V.* Offshore evacuation systems for offshore platforms**

This article describes first ever development in Russia of technical documentation and manufacturing of pilot sample of offshore evacuation system purposed to rescue personnel from emergency offshore platforms.

***Steshenkov A.L.* Development trends for domestic market of rudder propellers**

This article reviews most common rudder propellers and their advantages. The author raises the issue of replacement of foreign rudder propellers by domestic ones at Russian shipyards.

SHIPBUILDING ORGANIZATION AND TECHNOLOGY

***Karpov A.N., Sheptunov I.V.* Experience in manufacturing of complex parts by the example of propeller blade.**

The authors describe application of CNC machines for manufacturing procedure of complex parts, which shape cannot be achieved at general-purpose machines. Application of special software and 3D-scanning equipment secures fast generation of control code to obtain well-processed part.

SHIPREPAIR AND UTILIZATION

***Sherbinina N.N.* Third generation of «Zvezdochka». Ships and shipbuilders**

The authors narrate about main production achievements of JSC SRC Zvezdochka for past 60 years including repair and modernization of nuclear powered submarines and construction of new ships.

INFORMATION SECTION

JSC NRDC «Prometey» — 45 years anniversary!. *Ershov V.N., Ershov N.V., Panov A.Y.* Scientific and educational heritage of professor N.F. Ershov. «Transas» and «ClassNK» agreed on cooperation. Foreign information. Corvette «Stoykiy». Military transport ship «Academician Kovalev»

HISTORY OF SHIPBUILDING AND FLEET

***Afonin N.N.* Shipbuilding in Russia on the eve and in course of World War**

The author narrates about naval shipbuilding in Russia on the eve and in course of World War I (1914—1918).

***Kuznetsov L.A.* Projects for outfitting of «Admiral Butakov»**

This article reviews various projects for outfitting of light cruiser «Admiral Butakov». Advantages and disadvantages are analyzed. Provided are ship drawings at various design stages.