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# ЭНЕРГО-МЕХАНИЧЕСКОЕ ОБОРУДОВАНИЕ ПЕРЕКАЧИВАЮЩИХ СТАНЦИЙ НЕФТЕПРОДУКТОПРОВОДОВ

Под общей редакцией  
доктора технических наук,  
профессора Ю. Д. Земенкова

МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РОССИЙСКОЙ ФЕДЕРАЦИИ

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Федеральное государственное бюджетное образовательное учреждение  
высшего образования

«Тюменский индустриальный университет»

## **ЭНЕРГО-МЕХАНИЧЕСКОЕ ОБОРУДОВАНИЕ ПЕРЕКАЧИВАЮЩИХ СТАНЦИЙ НЕФТЕПРОДУКТОПРОВОДОВ**

*Допущено Учебно-методическим объединением вузов Российской Федерации по нефтегазовому образованию в качестве учебного пособия для студентов высших учебных заведений, обучающихся по направлению подготовки специалистов «Нефтегазовое дело», по представлению Ученого совета Тюменского государственного нефтегазового университета*

Под общей редакцией  
доктора технических наук,  
профессора Ю. Д. Земенкова

Тюмень  
Издательство «Вектор Бук»  
2017

УДК 621.65(075.8)

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**Энерго-механическое** оборудование перекачивающих станций нефтепродуктопроводов [Текст]: учебное пособие / под общей ред. Ю.Д.Земенкова. – Тюмень: Издательство «Вектор Бук», 2017. – 410 с.  
ISBN 978-5-91409-411-6

Рассмотрены основные этапы развития насосостроения в России. Описаны основные технологические показатели насосного оборудования и перекачивающих станций. Рассмотрены конструктивные особенности и принцип действия динамических и объемных насосов. Освещены вопросы эксплуатации основного энерго-механического оборудования перекачивающих станций нефтепродуктопроводов. Описаны методы регулирования режимов работы насосных станций при реализации основных схем трубопроводного транспорта нефти. Проанализированы особенности технического обслуживания основного и вспомогательного оборудования насосных станций. Отдельное внимание в книге уделено методикам решения типовых задач при проектировании и эксплуатации насосных станций нефтепроводов.

Учебное пособие предназначено для студентов высших учебных заведений, обучающихся по направлению подготовки бакалавриата «Нефтегазовое дело» и специалитета «Физические процессы горного или нефтегазового производства», а также для широкого круга специалистов и слушателей курсов повышения квалификации нефтегазового профиля.

ISBN 978-5-91409-411-6

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MINISTRY OF EDUCATION AND SCIENCE OF RUSSIAN FEDERATION

Federal State Budget Educational Institution of Higher Education  
«Industrial University of Tyumen»

**ENERGY AND MECHANICAL EQUIPMENT FOR  
PRODUCTION OF PIPELINES PUMPING STATIONS**

Approved Educational and methodical association of universities of the Russian Federation on oil and gas formation as a textbook for university students studying in the areas of training "Oil and Gas Business", on the proposal of the Academic Council of Tyumen State Oil and Gas University

Edited by  
Doctor of Technical Sciences,  
Professor YD Zemenkov

Tyumen  
Vector Bouck publishing house  
2017

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Energy-mechanical equipment of pumping stations, oil pipelines [Text]: a textbook / under the general editorship. YD Zemenkov. - Tyumen: Vector Bouck publishing house, 2017. - 410 p.

ISBN 978-5-91409-411-6

The main stages of development of pump engineering in Russia. The basic technological parameters of the pumping equipment and pumping stations. Design features and principle of operation of dynamic and positive displacement pumps. The questions of operation of the main power-mechanical equipment of pumping stations, oil pipelines. The methods of control of pumping stations operating modes in the implementation of major schemes of pipeline transport of oil. The features of maintenance of main and auxiliary pumping stations equipment. Special attention is paid methods for solving typical problems in the design and operation of oil pipeline pump stations.

The manual is intended for university students studying in the field of training of graduates "Oil and Gas Business" and "Physical processes of mining or oil and gas production", as well as for a wide range of professionals and students of training courses to oil and gas.

ISBN 978-5-91409-411-6

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