

## SELECTED ABSTRACTS OF PH.D. THESES SUBMITTED AT MOSCOW STATE UNIVERSITY OF RAILWAY ENGINEERING

Mishin, A. V. Method to provide sustainability of tower cranes under the action of random wind impacts. Abstract of Ph.D. (Eng.) thesis.Moscow, 2014, 20 p.

Since one of the reasons for the fall of tower cranes is variable in amplitude and frequency random dynamic wind impact, the provision of their sustainability does not lose its scientific and technological significance. Accordingly, the thesis systematically solves the problems associated with the assessment of the use of existing equipment and safety devices to control risks in the operation of steel structures, studies of random dynamic wind impacts by means of spectral analysis, including the study of resonance phenomena. Moreover, the thesis proposes a method and system for ensuring the stability of tower crane based on neural network and logic algorithms.

Nikitina, M. A. Economic justification of the interaction of freight traffic companies and rail transport infrastructure complex. Abstract of Ph.D. (Economics) thesis. Moscow, 2014, 24 p.

The author identifies the key trends in the development of the freight transportation market in the segment of alumina and aluminum, the principles of effective interaction between freight traffic companies and infrastructure complex. A classification characteristic is identified for the purpose of forming a flexible tariff policy of the transport company, taking into account negative aspects of the evolving conjuncture of the commodity market, as well as an approach is proposed for the justification of the level of tariffs for infrastructure services, taking into account the distribution of effect and balance of economic interests of interacting entities. Simultaneously the competitiveness of shipping companies of alumina and aluminum using innovative type of cars is assessed.

Odudenko, T. A. Technology of train handling in case of traffic breaks at railway sections of Far East region. Abstract of Ph.D. (Eng.) thesis. Moscow, 2014, 24 p.

In this thesis, a classification of factors and their impact on the time of train traffic recovery according to the chosen method for this organization is given, the features of the process, taking into account the planned breaks, the duration of planned works, technical equipment of the railway section and volume of traffic are analyzed. Based on these results, a comprehensive technology has been developed, which allows minimizing traffic recovery time on double track and single-track lines, to define rational variants for train handling, based on reliable estimates and on created automated program. Soroka, I. Yu. Cost management of a transport company branch on the basis of a process-oriented approach. Abstract of Ph.D. (Economics) thesis. Moscow, 2014, 24 p.

Basic theoretical considerations relating to the implementation of process-oriented cost management of a transport company branch are defined, referring to the structuring of the production process, process fixation of cost values, as well as to specification of business processes according to budget lines in order to proceed with decisionmaking. Approaches to budgeting, measuring to cost of telecommunications services in the context of technology needs and management criterion, oriented to reduce economic losses, are justified. The advantages of the process-oriented cost management tools based on the interconnection of deterministic goals and objectives of the development strategy of the transport company are shown.

Shakhanov, D. A. The economic rationale for management competitiveness of rail transportation of coal. Abstract of Ph.D. (Economics) thesis. Moscow, 2014, 24 p.

In the theoretical part of the study the methodology of assessing the competitiveness of transportation gets its development on the basis of determining the dynamics of the index of manufacturing capacity of railway infrastructure, of tariffs for its use and of quality of transportation services. Methodical approaches to assessing the impact of the infrastructure component of the transportation process on the economy of the Russian coal companies, of indexation of tariffs for bulk delivery on the return on investment of projects in the infrastructure sector are offered. An algorithm of management of competitiveness of rail transportation of coal is built in view of the economic interests of market participants.

Shilovets, A. V. Methods for the economic evaluation of the economic activity of a transport company's branch. Abstract of Ph.D. (Economics) thesis. Moscow, 2014, 24 p.

The author proves the need for more in-depth evaluation of a service branch of a transport holding through the introduction of specific indicators characterizing the dual nature of the types of work performed, and the application of a balanced evaluation system. The coefficients taking into account the characteristics of the object, which provides information services; the method of assessing effectiveness, involving ranking prospects of activity development, and obtaining baseline data in the context of projects / centers of accounting; fixation of the results for various periods of time by a predetermined subset of indicators, and their final interpretation are proposed.

WORLD OF TRANSPORT AND TRANSPORTATION, Vol. 13, Iss. 1, pp.275-276 (2015)