

The development of preparation and production management methods for excavation works in construction

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Abstract

© 2016, International Journal of Pharmacy and Technology. All rights reserved. Currently, there are several systems of building regulations. The types of applied manufacturing technologies increases at large volumes of construction works. Thus, the amount of applied equipment (machinery and mechanisms) also increases. When compressed terms of construction it is necessary to form an optimal structure of the building site, namely to determine the effective amount of engineers, machinery and workers. The main goal of this work is to develop the method of construction preparation and management using the example of excavation works. In order to create this work we used the method of empirical data collection, recorded on the construction sites directly and their further processing was performed (the assembling in complexes and the ranging by importance). The result of this work is the proposed method consisting of five algorithms. Algorithms select optimally a construction group among the construction machines and mechanisms owned by a company. An engineering staff and workers are attributed to them. The algorithm works according to the principle of minimal downtime and maximum productivity. The effect is provided by the bringing in of idle machines and mechanisms for supporting works. These algorithms can be used both by large and small construction companies.

Keywords

Construction, Continuous contract system, Engineering training, The unification of complex works