

Research on safety management of engineering construction

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Abstract: The rapid economic growth in China has promoted the development of all walks of life. The most prominent is the construction industry. The safety management of the project construction during the construction process is very important. If there is a safety problem in construction, it will not only affect the progress of the construction, but serious loss of people and property will occur. Therefore, we should pay more attention to the safety management of the construction. Therefore, we should strengthen the management of safety management and improve the prevention of safety technology. Only under the premise of safety can the progress of the construction work be normal and the requirements of the project before the design are reached. Today we are in the engineering construction safety management problem is analyzed, and the problems of construction safety management is put forward rationalization proposals, prevent the occurrence of all kinds of problems in the engineering construction, to ensure security in project construction.

Keywords: Engineering construction; safety management; problems; measures

1. Introduction

The coming of the new period, the rapid development of the domestic economy, the construction of the construction project in the continuous increase, the increase of the construction project also promoted the rapid development of China's economy. With the increase of engineering construction, the occurrence of safety accidents is also increasing. Because building construction is a relatively dangerous job, we found in the survey that there is a very high probability of accidents during construction. Almost every day, there will be safety accidents in the construction, and there are major accidents of death. With the increase of construction engineering, the number of deaths is still increasing. The number of casualties in the construction has accounted for a quarter of the casualties in China's safety accidents. The increase of safety accidents in the construction of construction has seriously affected the development of the construction industry in China. At the same time, people's life safety and property safety are not guaranteed. Therefore, in order to reduce the occurrence of construction safety accidents, higher requirements for the safety of engineering construction are put forward. To strengthen the management in the construction process, strictly follow the rules and regulations, find problems in the construction process, and use scientific and effective methods to solve them. Only by ensuring the safety, can we improve the efficiency of work and improve the development of construction.

2. Significance of construction safety management

Construction is a variety of diversified operation, the biggest characteristics is the construction work environment gap is larger, the production equipment used, higher technical requirements for personnel, and the whole construction period is longer, not easy to safety management. Engineering construction is a diversified work type, and it has great

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mobility in the use of personnel and production equipment, and is prone to unexpected situations. The occurrence of these factors, if there is a problem in the construction or management, will cause serious accidents, even the occurrence of casualties. Safety accident happened in the process of project construction is increasing, and the reason for the increase of safety accident is mainly caused, simply ignored the safety management in project construction process, is not operated according to the rules and regulations, etc. Therefore, it is urgent to strengthen the construction safety management. Safety management is a very important work in China. It is the key to the whole project construction, which is the foundation for the smooth construction of the project and the important guarantee for improving the work efficiency. Therefore, we should fully realize the importance of safety management in the construction of the project. We should always put the safety management in the first place in the construction of the project, and make use of the scientific safety management method to ensure the quality of the construction^[1].

3. Analysis of safety risk of construction construction

All kinds of safety accidents will occur in the construction. In order to reduce the occurrence of safety accidents, we should do preventive work before construction. Through the occurrence of safety accidents in the process of engineering construction as you can see, the safety accident occurs mainly in such as conditions, foundation pit precipitation, collapsed, falling, crane hoisting, construction site fire, etc. Earth collapse has direct relationship with the soil, because of the soft soil, coupled with the height and depth of excavation is bigger, is easy to occur the collapse of earthwork, once appear this kind of situation the consequences will be very serious. There are many safety accidents that occur in the construction. In addition, it is not required to operate according to the relevant operating rules, causing the occurrence of accidents. The hoisting and hoisting is also easy to appear in the safety accident. The personnel who command the hoisting are not in time to observe the environment of the operation area, and the binding of the things in the hoisting is not sturdy, and there is a safety accident. And because of the cause of the work, the construction personnel are in the construction site to eat and live, living conditions are more concentrated, the use of electric fire is frequent, which can cause the occurrence of fire. By analyzing the security risks, most of them can avoid or reduce the occurrence of accidents. As long as a scientific and effective safety management method is adopted, the security risk and the existing safety problems can be suppressed. Therefore, it is necessary to do a good job of safety risk analysis in engineering construction. We should find out timely problems, take effective safety management methods for them, and avoid accidents as far as possible^[2].

4. Causes the safety problem of project construction project

4.1 Insufficient understanding of construction safety management

This is not recognized in the safety management of construction unit construction. There are several aspects. First, the construction unit does not realize the importance of safety management, and the security management work is big loophole. The safety management of engineering construction affects the progress of the whole construction project, and is also the premise for ensuring the quality of the construction. The safety management of engineering projects directly reflects the overall level of construction construction. Moreover, the safety management of good engineering construction brings higher economic and social benefits to the construction unit. Therefore, the construction unit should fully realize the importance of safety management in engineering construction. Secondly, the construction operators are lack of safety awareness, and most of the personnel in the construction work are rural migrant workers. Due to the low level of education, they did not receive professional safety training and safety education. They did not fully understand the safety management work during the construction process, and they did not pay attention to the places where safety problems easily occurred. Thirdly, the construction units use very little equipment to prevent safety accidents, and they are not protected at the same time, resulting in various safety hazards.

4.2 The industry market lacks effective control

There are a lot of projects in the project. In order to comply with the market demand of engineering projects, more and more projects are being contracted by unit companies. In order to increase the profits of enterprises, enterprises decentralize or subcontract projects, which is very common in modern society. The management in this area is relatively low, especially the construction market control is not enough, there are many construction teams with low level, so the safety hidden danger in the construction is increased. There are still a lot of subcontractors in the lower level of the construction team. There are no professional personnel in the construction team to manage the safety, the construction technology is backward, the mobility of the builders is large, the safety of the construction is not guaranteed and the safety management of the construction enterprises is more difficult. Part of the reason is that some departments fail to supervise the work, and there is not a complete set of supervision system, which does not pay much attention to safety management. Only surface work is done in safety management, but not in the work of deep engineering construction, so that enterprises are also in the form^[3].

4.3 Insufficient funds for safety management

The increase of construction units has increased the competition in the construction market. In order to get more engineering projects, a lot of construction enterprises are advancing on their own in terms of project payment, which has increased the burden of construction units. There are also loans from banks. Some construction companies win the bid to get the project. However, in order to make money for the enterprise, it greatly reduces the cost of construction and reduces the capital of the construction in the security work, so that the fund of security management can not be guaranteed. There are clear rules about the money involved in the security management work, but the money for security management is already an added cost to the construction unit. Many units have already cancelled this part of the fund, even if it has not been cancelled, for the economic benefit of the construction unit, security management funds will also be secretly diverted. The lack of safety management funds has seriously affected the construction safety protection, resulting in the increase of safety accidents^[4].

4.4 Lack of safety management system and means

The rapid development of China's economy has increased the construction of cities. Engineering projects are also increasing. Too many engineering projects are also making accidents happen frequently. And on the safety management is relatively backward in our country, although the construction enterprise and construction projects in a continual growth, but in the enterprise safety management system and safety management has not been very good developed and improved. For example, some construction units lag behind in safety management equipment during construction, and the progress of the project is arbitrarily adjusted. The preparatory work in the early stage of construction is insufficient, and the analysis of safety factors is not thorough enough. The locations where accidents are easy to happen can not be clearly explained, and the design is unreasonable. The professional knowledge of the safety supervision technicians is not enough, and their safety management responsibilities are not clear. The construction technology is relatively backward, and the concept of safety management can not adapt to the development of the times. The emergence of these problems increases the occurrence of security risks. Another point is that the safety management system is not in place, the construction unit can not carry on the safety education to the personnel in time, which leads to the poor awareness of the safety of the personnel in the construction and the protection of their own. The division of labor in engineering safety management is unreasonable. There is no special personnel for supervision and inspection. Safety management is only written in writing.

5. Measures for the safety management of construction projects

5.1 Clear safety production targets

The government should strengthen the inspection of the safety production, the construction unit should strengthen the safety management of the construction, put the safety of the construction in the first place, and only under the premise of ensuring the safety can the construction be carried out. In the process of inspection, the construction unit

shall cooperate with the relevant security technicians to avoid any loopholes in the process of re-examination. In the process of engineering implementation, the construction enterprise should have a complete safety management system, find out the problems timely and take measures to ensure the safety of the construction. Meanwhile, the construction unit has a clear responsibility in the security management, and the responsibility is put into the individual, and each employee is involved. Let everyone know the importance of safety work, enhance the safety consciousness of personnel, further strengthen the safety management in construction.

5.2 Improve the responsibility of safety management personnel of construction unit

5.2.1 The importance of safety management in engineering construction cannot be ignored, and the responsibility of safety management personnel of the construction unit can be improved so that the safety manager can know the significance of construction safety. Safety management technicians should check the construction process at any time. If safety problems are found, it is necessary to correct and deal with them in time so as to avoid the occurrence of safety accidents. Moreover, the construction organization should organize safety management staff regularly to make clear the importance of safety work.

5.2.2 Improving the quality of safety management personnel can ensure that safety managers can detect and eliminate potential safety hazards in the process of re-inspection. At the same time, safety management personnel should have a high sense of responsibility. They are really responsible for unit safety and responsible for construction staff.

5.3 Standardize the order of the construction market

In order to ensure the safety management of the construction, the construction market should be properly planned. First of all, we should introduce relevant laws and regulations, standardize the construction industry, and use legal means to ban illegal construction industries. Secondly, we should strengthen supervision of the construction industry and strictly examine and approve all links. During the construction process, the supervisor should immediately stop the construction of the project and report the problems to the supervisor immediately^[5].

6. Conclusion

Construction safety plays a decisive role in engineering construction. Only when there is no safety problem during the construction process can the quality of the project, the completion of the project and the safety of the construction personnel be ensured. Therefore, the safety management work must be strengthened. In order to improve the safety management of construction, we must ensure the sense of responsibility, standardize the market and define the objectives of safety production. The safety hazard is eliminated in the bud state to ensure the smooth construction.

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