

# Research on Perfect Measures of Quality Management of Industrial and Civil Construction Site

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**Abstract:** With the continuous development of science and technology, our country's construction industry continues to rise, and has become the leader in economic development. Therefore, the scale of civil construction projects has also been greatly promoted. To improve the construction quality of industrial and civil buildings, it is necessary to do a good job in the quality management of construction sites. This paper introduces the defects existing in the quality management of the construction site of industrial and civil building engineering in our country and puts forward some suggestions to solve them.

**Keywords:** Industrial and civil building; Quality management; Problems

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## 1. Content of the measures of quality management of industrial and civil construction site

Industrial building refers to manufacturing workshops and other buildings that can be directly produced to meet people's basic work needs. Civil buildings refer to buildings that can meet people's basic living needs, such as residential buildings, computer rooms, and offices. As a kind of auxiliary building, industrial and civil buildings play an important role in life, industrial and civil buildings must understand, not including traffic engineering, bridge engineering, and geotechnical engineering. There is a certain connection between industry and civil buildings and there is a certain difference. It is necessary to master the basic concepts of industry and civil buildings, to improve the quality management of industrial and civil buildings construction sites.

From the above analysis, it can be known that the proportion of civil buildings is more than that of industrial buildings, and it is more complex. Civil buildings have the characteristics of full function and a wide range of uses and play a supporting role. In the process of construction of industrial and civil buildings, there will be equipment, personnel, and materials on the construction site. The management of construction personnel mainly refers to the training and selection of personnel to stimulate the enthusiasm of construction personnel. From the perspective of construction materials, construction materials have a close relationship with the quality of construction. In the process of selecting construction materials, we must consider the integrity, take into account all aspects of construction, meet the basic requirements of construction, comparatively select materials, and comprehensively consider the quantity, cost, specifications, and models. To meet the basic requirements of industrial and civil building construction. From the point of view of construction equipment, if the degree of mechanization of the building is relatively high, then the management of the equipment becomes very important, in the process of construction, we must check the equipment at any time, in the performance and work to meet the basic requirements of construction, to avoid serious mechanical failure in the process of construction, affecting the progress of construction. Therefore, the quality management of the construction site must be done well.

## 2. Problems remained in the industrial and civil building engineering construction site quality management

### 2.1 Human influence

Human influence is the most important subjective factor, and all projects need to rely on people to carry out specific operations during construction. The quality of the construction personnel will directly affect the quality of the project, for example, when working at altitude and using precision instruments for operation and use, it has a certain impact on the psychology of the staff. Only by meeting certain physiological and psychological requirements can we successfully solve the problems in the task. At present, the existing situation in the industry is that most of the first-line construction workers are migrant workers, who do not have enough construction ability themselves, just after a simple training immediately on the job. In addition, these construction workers, whether it is cultural literacy, professional ethics or sense of responsibility, are not enough to enable them to complete the construction task with high quality. In addition, the quality of management personnel in

industrial and civil construction sites is also worrying. Many construction teams still have a merit-based promotion model, in which managers are promoted by older construction workers with higher construction skills. Their management skills are unfamiliar, and they are unable to properly use incentives and punishments to improve the efficiency and quality of other workers. In addition, there are no professional training institutions for construction management personnel in the industry, and the quality of management personnel is difficult to improve.

## **2.2 Material Impact**

The impact of materials on building construction is indirect, but the quality of materials is a prerequisite to ensure the overall performance of the project. Therefore, we need to pay attention to the selection of materials in the initial stage. For example, when we select steel bars, we must first consider the raw materials with good elasticity and stability. While ensuring the quality of materials, it is necessary to take into account the investment of the project and try to choose high-quality and low-cost materials.

## **2.3 Influence of machinery and equipment**

With the continuous development of science and technology, there are more and more types of machinery and equipment in construction. In engineering construction, machinery plays a more important role, and the operation of equipment will directly affect the completion of the project. If a mechanical failure occurs during the construction of the project, which disturbs the normal construction steps, it will lead to slow construction progress. An excellent engineering team needs to configure the corresponding high-precision hope according to the actual situation of the project, to speed up the process of construction.

# **3. How to strengthen the construction site quality management**

## **3.1 Establish a sound quality management assurance system and strengthen quality awareness**

A perfect quality management assurance system and quality system are the primary conditions to ensure the implementation of quality management, so the enterprise should develop a reasonable management system, strengthen the quality awareness of the staff, implement its quality responsibility, and carry out unified management of the technical quality of engineering construction. Before the construction, the technical personnel of the project should carry out technical disclosure work, so that they can master the construction technical points and requirements, sign the quality assurance responsibility letter, and assume the quality responsibility, so that the realization of the quality goal is implemented to each person, and establish a reward and punishment system according to the provisions, linked with the economic interests of staff at all levels.

## **3.2 Strict material and equipment quality control**

The Material control work in construction mainly refers to the effective quality and quantity control work in the whole process from the procurement, transportation, and storage to the use of materials. Its main purpose is to ensure the economy and rationality of the use of engineering construction materials, to avoid the waste of materials. At the same time, in the process of material collection, it is necessary to select materials according to the unified requirements and purchase a reasonable and economic material selection mode, that is to say, in the process of material selection, it is not the more expensive the material, the better, or the cheaper the better. Construction machinery is a one-time investment, the use period is longer and belongs to the fixed assets investment of the larger project. Therefore, the construction machinery management needs to first check the equipment before construction, and strictly control the leasing and purchase of the equipment after the error, from which to choose the most affordable construction plan.

## **3.3 Management of relevant staff**

At present, in the civil engineering construction management in our country, most of the management personnel are not qualified, and low management level, management, there is no detailed understanding and mastery of the indicators of construction technology, which makes the process of construction, the management often appears chaotic situation. This makes it in a great extent to hinder the smooth progress of the project. For this phenomenon, we need to continuously strengthen the training of construction management personnel, and effectively improve the technical level of management personnel and their quality. The construction team organized by the construction unit needs us to carry out strict checks, high-quality talents are exactly what the construction unit needs, most of the front-line construction personnel are migrant workers, the technical level is not high, the high-quality talents quoted to the construction team, the construction team has a very important role in improving the technology and quality. At the same time, in the pre-construction operation, it is necessary to carry out systematic pre-job training to effectively improve the work efficiency of the construction personnel.

## **3.4 The construction**

A supervision system is indispensable for the supervision system in the construction management of civil construction sites, and it is inevitable to establish a targeted responsibility supervision system. A complete and sound management system requires each construction process and the relevant responsible person to cooperate so that each construction link and each work has the relevant personnel to manage. The

construction system is relatively large and complex, which will consume a lot of manpower, material, and financial resources, if not reasonable management, it is likely to lead to serious losses, to ensure quality, must standardize the management system of construction enterprises. Only by standardizing the supervision system of construction enterprises, effectively combining management and supervision, to comprehensively strengthen the rigor of construction management, can we fundamentally solve the problems that may occur in construction site management.

#### 4. Conclusion

The construction process of civil construction is a work that emphasizes quality assurance and scientific management. Civil construction needs to pay attention to every link, to ensure the smooth construction of the project, the units and the staff also need to carry out close cooperation, each do their duty, and each take responsibility, through the efforts of the whole team to make civil construction out of a good road.

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