# The innovation and practice of enterprise equipment management in the new era

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Abstract: In the process of development and growth of state-owned enterprises, many types of equipment will be used, there are small equipment with high precision, and there are powerful large equipment. These equipment have the characteristics of professionalism and strong operability, need the help of effective and diversified management to ensure that it maintains safety and stability in production, and give full play to its capacity value. However, in actual work, the equipment management of most state-owned enterprises is not closely combined with the pace of development of the industry, exposing some insufficient support, such as the management that maintenance system is not standardized, the replacement of new and old equipment problems, will affect the development of state-owned enterprises. Based on this, this paper takes state-owned enterprises as an example to explore the innovation and practical strategies of enterprise equipment management in the new era, hoping to provide valuable reference for the majority of colleagues.

Key words: New era; State-owned enterprises; Equipment management; Innovation and practice

With the continuous progress of science and technology, China's state-owned enterprises have entered a new stage of development and put forward higher requirements for production efficiency. In this context, many new types of equipment have been applied to the production process, and new requirements have been put forward for equipment management. For example, the equipment is increasingly scientific and intelligent, and the traditional management mode and maintenance means have been difficult to adapt to the current situation, which is not only conducive to exerting the advantages of the new equipment, but also affects the production capacity and reduces the production efficiency because the maintenance is not timely and the management is not in place. Therefore, it is of great practical significance to explore the innovative strategy of enterprise equipment management in the new era and test its effectiveness with the help of practice.

# I. The significance of equipment management in state-owned enterprises

1. It is conducive to stable production

With the development and progress of The Times, the level of science and technology in various industries has been greatly improved, effectively promoting the transformation and reform of various industries. In terms of production and business mode, there have been great changes compared with the past, for example, with the help of more automated production equipment, replacing more and more manual operations, greatly improving the efficiency of enterprises. From this we can see that the role played by equipment in the production of enterprises is more and more obvious, and its importance is more and more prominent. And strengthen the management of equipment, you can start from the procurement link, the quality of the imported equipment to do the whole process, comprehensive supervision. Maintenance is also an important link in equipment management, which can repair the faulty equipment in time, or nip the fault problem in the bud, so as to escort the stable production of enterprises.

2. It is conducive to increasing output

In the development of state-owned enterprises, products with sufficient quantity and good quality can produce greater economic benefits and meet the development needs of society. The introduction of new equipment and maintenance of old equipment, its purpose is to bring greater economic benefits to the enterprise. At the same time, management personnel routine management and maintenance work, need to rely on efficient and high-quality management measures to ensure that the equipment is in good running condition, and a variety of hardware and software are always in a high operating efficiency, so that the equipment continues to produce high-quality products. In this way, by ensuring that the equipment system runs more scientifically and effectively, to ensure that the equipment is always in the output state, and the quality of the products can be produced, so as to improve the output of the enterprise.

3. Is conducive to ensuring safety

"Safety" is the first principle for enterprises to carry out production operations, which can not only ensure the personal safety of workers, but also improve the production efficiency of enterprises and bring greater benefits to enterprises. Therefore, the safety concept will run through all aspects of the enterprise, including equipment management. With the help of effective equipment management and maintenance, enterprises can practice safe production. If the management is not in place and the maintenance is not timely, it will bury security risks for the production operation, which will reduce the output and cause safety accidents. Therefore, in order to implement the "safe production" in place, enterprises need to strengthen equipment management and maintenance.

### II. Analysis of the status quo of equipment management in state-owned enterprises

From the current point of view, most of the state-owned enterprises have learned lessons from the past management experience, effectively combined with the current equipment composition, production needs, etc., reform and innovation, so that the enterprise's equipment management is developing in a modern and scientific direction. However, at this stage, most of the state-owned enterprises are in the exploratory stage of reform and practice, and there are still some deficiencies in management measures and maintenance means.



From the overall situation of the current state-owned enterprise equipment, many equipment have strong automation, continuity characteristics, if can not take timely and effective management measures, it is easy to have a negative impact on the production of enterprises, and even cause environmental pollution, safety accidents and so on. In addition, with the continuous upgrading of production equipment, the scale continues to expand, its complexity, large-scale and precision more and more prominent, although it can adapt to more complex environment, but also to the equipment management work has brought new challenges.

In the updating of new and old equipment, some state-owned enterprises will put the faulty equipment on hold or idling, if it is repaired, it will cost a lot of manpower and material resources. From this problem, we can see that the management and maintenance means are not timely and scientific, and the hidden dangers are buried for the production of enterprises. In addition, in the process of old equipment management and maintenance, the staff need to use the previous data to analyze the causes of equipment failure and find more effective maintenance methods. However, in the actual work, due to personnel changes caused by information loss and data preservation problems caused by incomplete information, the same to equipment management and maintenance created difficulties.

# III. The innovation and practical strategy of state-owned enterprise equipment management in the new era

#### 1. Sublimation of management concept

Consciousness determines behavior, so in the process of innovating enterprise equipment management mode, it is necessary to adjust from the ideological concept level, and replace the concept that is not applicable to the current state-owned enterprise equipment maintenance concept with a more scientific and advanced concept. For example, in terms of the life cycle of equipment use, there is a close relationship between it and the stability of the equipment, the higher the stability, the lower the frequency of development failure, the higher the production quality and efficiency of the product. In addition, once the stability of the equipment is problematic, the frequency of failure in the later stage will be significantly increased, which requires enterprises to invest a lot of manpower and financial resources for maintenance and management, and there are more security risks. Therefore, in the equipment management, enterprises can not blindly pursue the service cycle of equipment, need to abandon the longer the service life, the higher the maintenance level of the wrong concept, the service cycle, equipment stability combined, comprehensive measurement of equipment maintenance, management and use value. The correct maintenance and management method is to set the economic life and safety life coefficient of the equipment reasonably, so that the economic value of the equipment is maximized. Under normal circumstances, the determination of this balance coefficient is related to the size of the risk that the enterprise can bear and the comprehensive strength of the enterprise. For ordinary level enterprises or production units, you can refer to the corresponding international and industry standards to determine the economic life and safety life of the equipment life cycle. In addition, in the management and maintenance link, the enterprise can carry out fine management of the maintenance work according to the previous experience, divide the common fault into several situations, and do specific problem specific anal

## 2. The introduction of new management models

An effective management mode is the key for state-owned enterprises to do a good job in equipment management. Therefore, in actual work, state-owned enterprises can introduce PDCA and TPM two equipment management modes according to the characteristics of their own production equipment.

PDCA cycle work mode is A continuous, continuous improvement of the management mode, by P (planning), D (execution), C (inspection) and A (processing) four stages, where P and A connect to form a cycle, interlocking work mode. From the current state-owned enterprise equipment management work, most enterprises are in the inspection stage, that is, according to the plan to carry out the inspection work, the summary, the improvement of the link to give the degree of attention is not high enough. Therefore, in the context of innovative equipment management mode, enterprises can improve the fourth stage according to this circular work mode, pay attention to summing up the experience and lessons of maintenance and management work, formulate management and maintenance standards, improve the corresponding procedures and systems, and overcome the exposed shortcomings while consolidating the management effect.

TPM (full production maintenance) equipment management mode is to ensure the normal production of the enterprise on the basis of prevention and maintenance as a whole, for each link of production management and maintenance, through modern, advanced science and technology, to maximize the frequency of equipment failure. In the actual management, the enterprise can according to the production level, from the enterprise level, layer by layer into the workshop, the group, while combining the monthly inspection of the enterprise, the weekly inspection of the workshop, the daily inspection of the person in charge and the regular inspection of the post, to ensure that the equipment inspection work can be launched by the whole staff, and into the whole process. In addition, the introduction of information management system is not only conducive to the realization of full production maintenance, but also can adapt to the current development trend of automation in state-owned enterprises. State-owned enterprises need to create a perfect database and make a comprehensive and detailed record of the relevant information of the equipment, so as to share the equipment fault information and maintenance data information under the LAN.

#### 3. Establish a management responsibility system

Under the background of the new era, the equipment and scale of state-owned enterprises have undergone great changes, and a more scientific and systematic internal management structure is needed to escort the transformation and upgrading of enterprises. Therefore, in terms of equipment management, enterprises need to further play the role of the responsibility system, fine management for the scale of enterprise equipment, such as the machine, electricity, instrument as three modules, take the classified management mode, the corresponding

work objectives, work content and work responsibilities assigned to different responsible personnel. In this way, through the elaboration of job responsibilities, urge each group of equipment management and maintenance personnel to take responsibility, strictly abide by rules and regulations, and regularly check the equipment, lines and instruments. In addition, in order to avoid the occurrence of equipment failure, there is the problem of mutual evasion, enterprises can require managers to have a higher comprehensive ability, and take a shift system to ensure that in the process of maintenance, overhaul to be comprehensive and thorough. After each overhaul and repair, it is necessary to analyze the maintenance of the equipment according to the production and operation status of the equipment, organize and summarize the operation of the equipment and the fault problems, and provide experience for the future equipment management work. In this way, with the clear responsibility for equipment management and maintenance, not only can equipment management measures be put in place, but also can ensure the accuracy of equipment maintenance data.

4. Improve the comprehensive ability of personnel

Doing a good job in equipment maintenance and management can ensure that the equipment has efficient and stable performance in the production process of the enterprise, ensure the smooth progress of various production activities in the enterprise, and ultimately promote the development of enterprise equipment management in the direction of high efficiency, science and modernization. With the continuous upgrading of petroleum enterprises and related technologies, production equipment continues to upgrade, with the continuous improvement of functions, structural complexity continues to improve, the comprehensive ability of equipment management personnel also put forward higher requirements. In order to adapt to the development and changes of state-owned enterprises in the new era, enterprises need to strengthen the comprehensive ability of equipment management personnel, and constantly strengthen the theoretical education and skill training of management personnel, so that equipment management personnel have a strong enough comprehensive strength to solve various equipment failure problems and cope with various working environments. In this way, so that the equipment management staff system and fully grasp a variety of new equipment, so as to ensure that they have a strong maintenance and elimination ability, and in the operation of equipment has a high technical level, to deal with the various failures in the equipment.

In improving the comprehensive ability of the staff, the enterprise can introduce competitive factors, through the way of reward and incentive, urge the equipment management personnel to continue to learn and constantly overcome the problems in the professional field.

# **Epilogue**

In summary, entering the new period, it is particularly important for state-owned enterprises to do a good job in equipment management, which is not only related to the development of the enterprise itself, but also affects the development of China's manufacturing industry to a certain extent. To this end, enterprises need to update the management concept, innovative management system and do a good job in personnel training according to their own actual situation, to achieve the comprehensive management of enterprise equipment, to ensure that enterprises have enough hardware support in the production process, and ultimately to promote the healthy and sustainable development of enterprises.

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