Abstract: The realization of lean production is a process of determination to pursue perfection as well as excellence. For many small and medium-sized manufacturing enterprises in China, where to start and how to apply lean production have become a major problem. Small and medium-sized manufacturing enterprises can learn from the experience of lean production management of famous manufacturing enterprises and promote lean production management step by step in combination with the actual situation of enterprises.

Keywords: Small and Medium-Sized Manufacturing Enterprises, Lean Production, Production Management.

1. Introduction

Lean production management is a kind of production management mode that drives enterprise production management from customer demand, with the purpose of eliminating waste and constantly improving various processes, so that enterprises can obtain production and management costs and operational benefits with the least input [1].

Achieving lean production is a process of determination to pursue perfection and excellence. It is a spiritual force that supports the life of individuals and enterprises, and also a state of self-satisfaction in the endless learning process. Its goal is to strive for perfection and perfection, and to pursue the ultimate goal of seven zeros endlessly.

2. Current Situation of Lean Production Management in Chinese Enterprises

For many small and medium-sized manufacturing enterprises in China, where to start and how to apply lean production has become a big problem. Among the enterprises that apply lean production, Haier is one of the more successful enterprises. Haier's success mainly benefits from its unique management mode and innovative practices.

2.1. Haier's main methods of implementing lean production management

OEC management and management informatization is the management basis for Haier to implement lean production. OEC controls and cleans up everything for everyone every day.

SBU is Haier's human resource foundation for lean production, which emphasizes the role of people and gives full play to their potential.

Market chain business process reengineering is the organizational and process basis for Haier to implement lean production. The innovation of OEC, process reengineering, SBU and Haier's management model (Haier calls it "creative destruction") has been continuing.

2.2. Specific embodiment of Haier's lean production management

Production site operation management: 6S on-site management, Production plan management, implement the production operation concept of taking orders as the center, and organically combine pull JIT production mode with ERP information means; Haier Lean Logistics and Inventory Management; Haier's total production maintenance TPM, equipment management process transformation, and promotion of "zero failure" of equipment; TQM.

The stone from other mountains can be used for reference. China's famous manufacturing enterprises all carry out lean production management, and there are many experiences that can be used for reference by small and medium-sized manufacturing enterprises [2].


3.1. Change employees' thinking and attach great importance to "people" as the key production factor

"People" is the key production factor to implement lean production management. Small and medium-sized manufacturing enterprises need to change their employees' ideas and build excellent teams. The implementation of Lean starts with leaders, some people call it the "top project". In addition, it also needs to cultivate the initiative of employees to pursue lean production from bottom to top. It needs to build a team of high-quality and excellent teams, with people of the same mind and relatively stable team members. Lean production management is not so much a transformation of production and management processes, but rather a transformation of people's thinking. The implementation of lean production management is a slow and painful process, which tests the patience and perseverance of leaders and employees.

Small and medium-sized manufacturing enterprises can start from training to let employees understand the correct concept and method of lean production management. In addition, enterprises should also enhance the innovation
awarement of employees and improve their reactivity. For example, Galanz Group's approach is training+innovation. It imparts the "JIT" concept to all employees through various trainings and through the words and deeds of middle and senior cadres, just like preachers preaching, in popular language, so that employees with lower educational levels can understand the truth.

Many enterprises are very energetic in implementing lean management at the beginning, and have invited consulting companies to promote it together. Many enterprise practices are promoted from top to bottom, basically promoting lean production at the level of department heads. However, the department heads themselves do not have a good understanding of lean production, which is just a task. The main reason for this is that the enterprise has not instilled the essence of lean production, that is, all employees should participate. The concept of lean production involving all staff has not been established, nor has it been transmitted that lean production affects the survival of the enterprise and thus relates to the value of individuals in the enterprise.

Enterprises should act as a force, publicize from all aspects, and instill the concept of lean production. Most of the slogans hanging in the workshops of some enterprises are about safety production and 5S, which is obviously not enough. Enterprises should regularly promote lean production from workshop slogans, bulletin boards, enterprise websites, internal publicity materials, morning meetings and weekly meetings of various meetings, teams and departments, and combine lean production training to bombard people with information, so that the concept of lean production goes deep into people's hearts. Only when every employee has the awareness of lean production can they take action. After the employees' awareness of lean production is established, the key is how to effectively carry out it, which is guided and guided by training, team leaders or project leaders of lean implementation.

3.2. Do a good job of "5S and standardization" foundation

Small and medium-sized manufacturing enterprises need to do a good job in the foundation of "5S and standardization". Without this foundation, lean production will be abandoned halfway. Small and medium-sized manufacturing enterprises can adopt the following approaches.

(1) Strengthening the foundation is the key to improve the overall management level of the enterprise, and carrying out the standardization construction of production and management is the starting point. Standardization and process are the weaknesses of many enterprises. Some enterprises implement proposal improvement, focusing on the number of proposals, but not on whether the problem has been solved. If the problem has been solved, they have not given institutionalized and procedural fixed talk, nor promoted it to other parts of the enterprise. After two months, it returns to the original situation, which is a major taboo of lean production. Many process improvements of the enterprise are ostensibly vigorous, and many problems have been solved at various meetings of the enterprise. After a while, the minutes of the meeting could not be found. In case of wrangling between departments, the relevant departments have to hold a new meeting to communicate again. The cost is very high and the efficiency is low. This is related to the working habits of some employees of the enterprise, who prefer to use the minutes of meetings or work around leaders. Enterprises should start from small details, solidify the improvement process of proposals one by one, and take a small step forward when solving a small problem and getting permanent improvement.

(2) Improve 5S on-site management. Many enterprises have been implementing 5S for a long time, but it often returns. The main reason is that the implementation of 5S in the enterprise is only done by the workshop team leader, and the employees have no 5S awareness and have not really implemented it. When the enterprise carried out the 5S inspection, the team leader informed the employees to focus on the rectification of the site and hide the messy things. The main thing was to cope with the inspection. Second, there was no substantial improvement. 5S on-site management is the basis of lean production. How can 5S activities not be carried out in place? It is a long way to implement lean production [3].

3.3. Select pilot units and gradually expand from point to area

Enterprises can learn from the practices of benchmarking enterprises, and select departments, workshops or teams with good management foundation in the enterprise to start the pilot, and implement step by step to replace the surface. Small and medium-sized manufacturing enterprises should pay attention not to carry out lean production management step too far and not to carry out it in the whole company at once, so that the pilot units can be successful and become typical, and can be promoted in the whole company after obtaining certain experience [4].

3.4. Implementing information management is a necessary step

The advanced enterprise experience is worthy of learning and reference for small and medium-sized manufacturing enterprises. The informatization of small and medium-sized enterprises has just started, and the quality of personnel cannot meet the requirements of informatization [5]. Each enterprise implements some modules in ERP. For example, the production plan only controls the plan, but does not control each process. The equipment management is not combined with the production plan, and the production plan is not detailed to teams and personnel. There is still a long way to go for enterprises to realize informatization, and the implementation of management informatization can also solidify many processes of enterprises.

3.5. Adherence to lean production management

The reason why Toyota is Toyota is that they have persisted for 30 years. The improvement should benefit the employees, so that the lean production can last for a long time and will not return. From material reward to spiritual encouragement, certain rewards will be given for achievements. Enterprises can give innovative names to employees or train and promote experience to other personnel on the stage, so as to encourage employees who have achieved remarkable results in lean production. In addition, enterprises can also consider building a lean production monument wall to hang the photos, names and deeds of employees who have made outstanding contributions to lean production on the wall, which will become a permanent monument of the company.
3.6. Transformation from refined management to lean management

Refined management is to abandon the traditional extensive management mode and infiltrate specific and clear quantitative standards into all aspects of management. Lean management is the promotion of refined management, which pays more attention to results and effectiveness. Fine production starts with details, and starts with small details. At present, many small and medium-sized manufacturing enterprises are not well managed. Employees can complete their tasks without being criticized by their superiors. In the final analysis, it is still a problem for many employees to have a sense of responsibility for their work.

3.7. Combine the products of the enterprise and its position in the market competition

Enterprises must pursue speed to remain invincible in the market competition. Many companies' products are homogeneous compared with their competitors, without uniqueness and excessive surplus profits. Only faster than competitors, enterprises can win in homogeneous competition. An enterprise can only succeed if it creates user resources with speed, turns the enterprise into a fast flowing river, meets the requirements of users, and helps customers succeed. Create user value with innovation, and then realize the value of enterprises and individuals.

4. Conclusions

Small and medium-sized manufacturing enterprises implement lean production management and constantly carry out all staff training to improve the innovation awareness of employees. In the implementation, they should push forward the whole process and the whole process. There is no other better way. When the enterprise cannot do anything, it will seek solutions. The big environment drives the small environment, the leaders take the lead, push forward step by step in facing the challenges, and have a strong will. This should be the best embodiment for small and medium-sized manufacturing enterprises to promote and learn from Toyota's lean spirit.

References


