

Feihe (Longjiang) Dairy Co., Ltd. Company Profile

I. Company and plant overview

Founded in 1962, China Feihe started in Zhao Guang farm and developed in Qiqihar city, which is one of the earliest milk powder enterprises in China. The company has been focusing on the research of Chinese baby's health and breast milk nutrition for 60 years, leading the industry to create a variety of technologies, formulas and processes to improve the adaptability of milk powder to the Chinese body. It is the relentless pursuit of Feihe to develop high quality milk powder that is "fresher and more suitable". Feihe has 600,000 acres of exclusive farms, cultivating nutritional rations for cows, with a stock of more than 80,000 cows, creating a new model of ecological dairy production in northern China.

Feihe (Longjiang) Dairy Co., Ltd. is one of the production plants under the Production Division of Feihe Group, mainly engaged in the production of infant formula. It is currently one of the largest single production plants for infant formula milk powder in the world. Feihe (Longjiang) Dairy Co., Ltd. covers an area of 200,000 square meters and started production in 2014. The plant adopts the general manager's responsibility system and has production department, technical engineering department, quality department, finance department, HR department, administration department, inventory and transportation department, EHS, TPM and process R&D department. The products of the plant are mainly infant formula powder, and the main processes including: milk collection, pasteurization, dosing, homogenization, concentration, drying and packaging. The main products of the plant are Premium Zhenai Feifan, Premium Jingcui Yijia, Xingjie Youhu. The plant decided to implement TPM activities to achieve the best quality, highest efficiency and lowest cost in view of the rapid changes in domestic and international markets.

II. Milestones in the process of conducting TPM activities

The milestones events in the process of TPM activities are divided into the following four stages:

- 1) In preparation phase: TPM activities were introduced on July 4, 2017, the TPM steering committee was established, systematic training was started, and we conducted data collection related to OEE, dry matter utilization rate,

moisture, water consumption per ton powder, electricity consumption per ton powder, steam consumption per ton powder, package material loss rate, etc. for the powder making line and packaging line.

- 2) In pilot phase: We selected the packaging line 62 as the pilot line. Through the various improvement activities on the pilot line, significant line performance was achieved and we also mastered the professional TPM analysis techniques and improvement tools. Then we proceeded to conduct plant wide OEE and 16 major loss identification.
- 3) In expansion phase: in April 2018, we successfully held a TPM expansion workshop and started to launch pillars. We launched FI, AM, PM, E&T, EHS and QM. A TPM training room was built. Meanwhile, AM and PM activities entered a comprehensive expansion phase, while strengthening the education and training of multi-talented workers and maintenance skill sergeants in cooperation with E&T, laying the cornerstone for solid TPM results.
- 4) In stabilization phase, the activities of each pillar have advanced in order. The TPM concept has integrated into the daily management of our plant as the pillars running effectively. We have forged a culture of continuous improvement and pursuit of excellence.

III. Benefits gained from conducting TPM activities

The TPM activities have brought significant improvements to the plant's performance and created a positive corporate culture.

TPM as a strategy for the whole company, has been deeply integrated in our daily work. At the same time, employees' participation in TPM has raised their awareness, greatly improved their ability to identify, eliminate and prevent losses, formed a stronger teamwork spirit.

With the implementation of TPM, the cooperation among pillars and functional departments has reached a new height, which formed a great momentum for the continuous development of the company.

IV. The key to carry out TPM activities

TPM activities have been carried out in Feihe (Longjiang) Dairy Co., Ltd. for more than five years. The keys to TPM activities are:

- 1) Management commitment: The strong support from the top leaders of the company for the promotion of TPM and the commitment of the managers are the key factors for the success of TPM. In-depth understanding of the methodology: better awareness of loss identification, loss elimination and loss prevention.
- 2) Full participation: the understanding of the employees and their full participation. All the pillars are working together in great synergy