# Award for TPM Excellence, Category A CPF (Thailand) Public Company Limited Khon Kaen Feedmill



### 1. Organization profile

Charoen Pokphand Group (C.P. Group) operates a diverse business across its 8 business lines, including: Agro-industry and food business, Retail and distribution business, Media and telecommunications business, E-Commerce and digital business, Property development business, Automotive and industrial products business, Pharmaceuticals business, and Finance and Investment business.

Charoen Pokphand Foods (CPF) public company limited is a part of the companies in C.P. group. CPF operates a diverse business across its 3 business lines, including: 1) Feed business – production and distribution of animal feed. 2) Farm business – animal breeding, farming and primary meat processing. 3) Food business – production of semi-cooked and cooked products, ready-to-eat meals and food distribution channels, including restaurants.

CPF (Thailand) Public Company Limited, Khon Kaen Feedmill (KKF) was established in 2014 as a part of CPF agro-feed business, which has established 14 plants throughout Thailand. KKF is located in the part of northeast region of Thailand, which is the high potential business area, closed to farms and sources of raw materials. KKF was built from accumulated experience of feed manufacturing in combination with advanced technology application and in consideration of quality feed production to serve customers' needs and expectations. KKF's customers are CPF farms and contracted farms.

KKF has been focusing on food safety, therefore the design of plant layout, facility, production process and machines in compliance with the regulation and customers' standard. The production process starts from raw material receiving and collect them in closed storage bins, which perfectly prevent the pest entry and maintain the freshness and good quality of raw material. KKF also invests in modern technology and machines for quality control of raw material. Moreover, the entire production processes are controlled with automatic systems to ensure consistent quality of the final products. All products are heat treated and then stored in closed silo bins, which make them hygienic and safe. The safety in workplace is considered as the most important part, so all working areas have been designed and improved to be safe and healthy.



#### Khon Kaen Feedmill

Location: Mittraphap Road, Thapra District, Khon Kaen, Thailand.

Started operation: December 2014.

Products: Swine feed, Layer feed, Broiler feed and Duck feed.

Total area: 137,600 sq.m.

Certification: ISO9001, GHPs&HACCP, ISO14001, CPF-SHE&En,

ISO27001, TLS8001, CSR-DIW.

#### 2. Milestones on the Journey to Manufacturing Excellence

Even though KKF has been implemented the standard systems, but there several problems still occur or maybe occur. For example, the breakdown on machine, causing overdue delivery to customers. The product quality claims trend to be increasing. Employees lack of skills in maintenance and analysis. There is risk of Accident from unsafe actions and conditions. And also, ineffective works are performed, especially in complicated and waste tasks. All these problems increase production cost in factory.

Therefore, executives have announced a policy to apply TPM to solve these problems and improve the company efficiency. The policy was widely informed to all employees. As well as, all management executives and support team have continually followed TPM activity performance and realized that TPM implementation in KKF has been successful and should submitted for evaluation of the TPM Excellence Award - Category A.

#### 3. Benefits achieved

Since TPM activities have been implemented, there are noticeable changes of employees' behavior. The objective of the collaborative work is clear. Employees have embraced the change and prompt for learning. Also, the analysis process is more systematic. The employees also have been confident on taking part in the work improvement and autonomous maintenance, which leads to the trust among them and creates teamwork. As a result, the problems in factory, which are breakdown, defect, accident and losses that affect the production cost have been declined. As well as, the intangible results can be concluded as following:

- Employees have good attitude to maintain basic condition of their machine.
- Create a happiness learning organization with safety workplace and environment-friendly.
- Everyone in the organization cooperates towards the same goal.

All these are the results of TPM adoption as management tool, which create the continuous improvement along with the employee development and organization growth.

#### 4. TPM Award Assessment Achievement Sheet

Category	Index	Unit	Benchmark 2019	Actual Status 2023
S	Accident (Loss time injury)	Cases/ year	0	0
S	Accident (Non-loss time injury)	Cases/ year	0	0
P	Productivity	Ton/Person	3148	3941
P	OEE of Grinding	%	64	86
P	OEE of Mixing	%	68	85
P	OEE of Pelleting	%	65	84
P	OEE of Packing	%	68	85
С	Product cost	%	100	88
Q	Internal Defect	ppm	1240	103
Q	Customer Claim	Case/Month	1.8	0.2
D	Delivery performance (Bag)	%	67	96
D	Delivery performance (Bulk)	%	80	98
M	Accumulated Suggestion	Acc.Number	898	7920
M	Accumulated Kaizen	Acc.Number	432	4136
Е	Environmental Complaint	Case	0	0

## 5. Key of our Manufacturing Excellence

The cooperative culture and ownership of employee, together with strong leadership in every level of management team that supported their teams in term of workforce, time, budget, all necessary resources. Moreover, continuous learning and development system is also another key, which enhance staffs to be more capable on working.