Programmable Feed-Supplying System

- 1. Developing Staff Members : Programmable Feed-Supplying System
- 2. Developing Staff Members

Department	Name	Position
General Research	Yang Cheng-	Distinguished
Service Center	Huei	Research Fellow
General Research	Tsung-Che	Research
Service Center	Wu	Assistant
Vehicle	Chang-	Professor
Engineering	Hsien Tai	
Animal Science	Perng-Chih	Professor
	Shen	
Vehicle	Chin-Lung	Professor
Engineering	Chang	

3. Development Idea

Milk, meat, eggs and other livestock products are important sources of protein for Chinese people. The issue of animal husbandry feed management is directly related to industrial benefits, and it is also a national security issue that affects the health of the Chinese people. The present invention aims to develop a set of multi-functional feed feeding management system through the of innovative application technology, combined with novel and practical design, so as to realize automatic monitoring of feed barrel filling and unloading operations, and automatic feed measurement; data management information- The previous feeding data and control information are electronic; the system monitoring is mobile -

the system operation control and management (ta query and control parameter setting) re carried out through mobile phones and computers ; he operation interface is graphical - combined with the electronic map, and the relevant data can be inquired by touch; Graphical output - The evaluation results are output in a graph, which is easy to interpret and speed up decision-making.

4. Technological Competition and

Industrial Application

The software/hardware integration of information and communication technology not only makes the sensing data electronic and data storage cloud-based to extend the monitoring distance, but also has a stable measurement mechanism that eliminates the need for manpower and enables accurate monitoring and recording. Programmable early warning and monitoring settings to meet the flexible needs of different operating environments. Cooperate with the mobile app to carry out various operations to achieve the goal of action monitoring. Combined with satellite positioning and electronic maps, with an interactive touch operation interface, it is easy to learn and use. At present, there are no related products at home and abroad.

Industrial applications, including :

- (1) Livestock industry.
- (2) Poultry industry.
- (3) Aquaculture Industry.
- (4) Grain storage and processing.
- (5) Cement manufacturing industry/

5. Merchandise Statement of Achievement

- (1) Electronic feeding/control data, paperless storage (loud-based).
- (2) Remote real-time monitoring of the internal image of the feed bucket.
- (3) Feed barrel lack of material/full material, dual-mode (soft /hard) monitoring setting.
- (4) Feed barrel shortage/full material (warning) automatic notification.
- (5) Automatic stop / notification of unloading and conveying jammed materials.
- (6) Automatic measurement/report of the remaining material in the feed barrel.
- (7) Automatically record/statistic feeding amount.
- (8) Feeding operation monitoring automation/mobilization (mobile phone).
- (9) Programmable feeding time (amount) discharge monitoring.
- (10) Data, location, and electronic map are combined for easy control and management.
- (11) Touch operation and graphical output interface, easy to learn and use.
- (12) Programmable feed preservation warning notice.

- (13) Manual/automatic multi-stage (barrel wall) jam jet control.
- (14) Green energy storage/power supply to save energy.



Fig 1 : the monitoring box of the system.



Fig 2 : the bottom of the monitoring box.

