

iSmart Milk Analyzer

# Helps Sarhad Dairy to Achieve

Desired Milk Quality





#### **Executive Summary**

Prompt Equipments offers innovative equipment and software solutions to ensure that the purity of milk is retained at every step. Most of our products and solutions are Cloud, IoT and BI-enabled that facilitates transparency as well as traceability throughout the supply chain on a real-time basis. Sarhad Dairy wanted

to improve their quality of milk and other value-added milk products. Prompt suggested them to implement their smart and intelligent iSmart Ultrasonic Milk Analyzer which would accurately measure the Fat and SNF content to ascertain quality of milk.

### **About Sarhad Dairy**

Kutch District Cooperative Milk Producers Union Limited, which is widely known as Sarhad Dairy, was set up in Anjar (Gujarat) in the year 2009. Sarhad Dairy procures an average of 3.3 Lakh Liters milk Per Day from about 79,000 farmers, who are registered under Dairy's 720 village-level cooperative societies. It

is the only Dairy in the state which procures and sells camel milk. Being a member of Gujarat Cooperative Milk Marketing Federation Ltd (GCMMF), the Dairy sells milk and other value-added milk products under the brand name of Amul.

#### **Challenges**

Sarhad Dairy was operating on single mode of payment – by measuring Fat content for the milk poured. The existing machines were traditional handle-based machines which were not giving consistent and accurate Fat results. Also, the calibration of these machines was not secured – it was adjusted manually

by random persons leading to various malpractices. Sarhad Dairy was not able to maintain the quality of milk as desired and were also facing challenges related to milk adulteration. The Dairy was facing issues due to delayed after-sales services and spare parts unavailability in their existing machines.

## How Prompt's iSmart Milk Analyzer helped

Prompt approached Sarhad Dairy with their iSmart Ultrasonic Milk Analyzer to help them address their challenges. Sarhad Dairy started with two demo machines in their analytical laboratory where they tested about 130 milk samples daily for seven days. During this demo period, it was found that the accuracy of iSmart Milk Analyzer was comparable to accuracy of high-end machines like FT-1. After testing satisfactory performance, Sarhad Dairy installed Ultrasonic Milk Analyzers in two village-level cooperative societies. Here, also they found high accuracy in the results of Fat and SNF content. All the data of milk- Fat as well as SNF - was updated in real-time on the cloud. The calibration of the machine was secured and free from any manual intervention, and could be done by authorized persons only, through Bluetooth enabled mobile app or centrally. Impressed with the accurate results and good repeatability, Sarhad Dairy placed order of 800+ iSmart Ultrasonic Milk Analyzers with Prompt.



#### **Key Features of iSmart Milk Analyzer**

- High accuracy and good repeatability.
- Low operating and maintenance cost.
- Measuring time- 40 seconds.
- Secured calibration of machine through slope and intercept method by authorized persons, through mobile app or centrally through cloud.
- Milk Data log, Error Log and Calibration Data log is saved on the cloud and could be extracted through USB- which enables preventive maintenance.
- 100% indigenous product ensuring strong after-sales service support and availability of spare-parts.

#### **Outcomes**

All the information of Fat and SNF of milk collected from 720 cooperative societies could be monitored in real-time from a central location through the data saved on the cloud. By installing iSmart Ultrasonic Milk Analyzer, the Dairy could improve their milk quality with 0.2% improvement in SNF content which is significant. The accuracy of results of milk quality parameters comparable to high-end milk testing machines such as FT-1. The farmers were happy as their earnings increased due to accurate Fat and SNF readings. In fact, increased number of farmers started giving milk to Sarhad Dairy which led to increase in total quantity of milk collected, which in turn resulted in increased financial earnings. With SNF measurement, the adulteration reduced, resulting in the improvement of quality of milk and other value-added milk products. The new system implementation widely and was promptly accepted by the stakeholders - farmers, cooperative societies and Dairy – because it enabled transparency amongst all.