# prompt<sup>®</sup> **SMARTBOX**

smart monitoring for bulk milk coolers



A valuable Link in The Chain of Milk Management

### How do we keep it pure?

Prompt provides innovative solutions for an efficient dairy procurement supply chain. From farm management and milk collection to quality analysis and preservation, we have different equipment and software to ensure that the purity of milk is retained at every step. Our unique offering, the SmartBox maintains purity of the milk during chilling and maintains purity of the milk

during chilling and storage through real time monitoring of parameters such as Milk Volume, Temperature, CIP Status, Agitator On/Off Status, and Power Generator On/Off Status in the BMC. Real time App assisted alerts are sent out which support timely actions to maintain purity of milk.

## Our resourcein this pursuit – SmartBox

### A VALUABLE LINK IN THE CHAIN OF MILK MANAGEMENT

The bulk milk collection centers play an important role in the milk supply chain. Bulk milk collected here is monitored for quality, which affects the final value of milk at the production level. With SmartBox, bulk milk coolers are monitored in real-time and actionable alerts are sent to stakeholders in centers and dairy plants to preserve quality of milk. It uses highly advanced pressure sensor technology to measure the milk quantity in the tank, to attain the highest level of accuracy, and notifies the server through its GSM connectivity in case of any deviation.







Real-time monitoring and remote tracking



Measures Quantity, Temperature, Agitator & Power - for Mixing, Compressor, CIP



Multiple compressor and generator/power grid On/Off status



BMC capacities – 500/1000/ 3000/5000/10000 litres



Designated Mobile App for dairy plant managers and BMC operators for real time monitoring



Sends alerts via SMS, Mobile push notifications, and Email

#### WHAT ARE ITS BENEFITS?

#### **Makes BMC operationally efficient**

Real-time alerts, tracking and monitoring makes BMC operationally efficient. It helps the dairy in controlling the operational costs associated with running the BMC with the help of SmartBox.

#### Quality of milk is retained

With continual monitoring, the desired temperature of milk in the BMC is maintained, which prevents souring and spoiling of milk, thus preserving proper milk quality. Good quality of milk serves as a good raw-material for value added products manufactured by dairy.

#### Informed decision making

SmartBox is based on IoT technology with cloud connectivity, giving detailed data analytics on web application. This allows the dairy to make informed business decisions.

#### **Monitors quantity of milk**

Keeps the user updated about the quantity of the milk in the BMC and the quantity of milk when taken out of the tank after dispatch to the Chilling Centre. This helps in route planning and avoids any theft of milk.

#### **FEATURES:**

#### **Data Capture**

- ➤ Milk Quantity
- ➤ Milk Temperature
- ➤ Power Status (Generator/Grid)
- ➤ Multiple Compressor & Agitator ON/OFF Status
- ➤ The system offers web-supported SMS and Email alerts for the above data

#### Dispatch

- ➤ Dispatch is automatically detected
- ➤ Details like actual quantity, dispatch quantity, remaining quantity, temperature, dispatch duration, agitator status before dispatch are logged

#### **Data Monitoring**

- ➤ Any time data access through web & mobile application
- Dashboard shows BMC Milk Status for particular BMC, Milk Summary according to milk type and different types of alerts
- Live BMC Monitoring shows graph & records for milk quantity, temperature, agitator & compressor ON/OFF status for each BMC on the route

#### **Data Transfer**

➤To pen drive through the USB port ➤To remote server through GSM/GPRS

#### Cleaning in Process (CIP)

- ▶ Hot water CIP is automatically detected
- ➤ Max. Temperature and max. quantity of hot water, CIP duration and Agitator status during dispatch is logged

#### Reports

➤ Various reports generated in the system include milk data, offline BMC, dispatch, route wise milk dispatch, high temperature, usage, CIP, generator used, consumption, shift collection, gain & BMC reports

#### Security

➤ Role-based user login in a web & mobile application

#### **TECHNICAL SPECIFICATIONS:**

Controller	PIC32
Display	<ul> <li>Seven segment display</li> <li>LEDs for indication of low battery, external supply, sim network, mains power, generator, multiple agitators on/off and multiple compressors On/Off</li> </ul>
Storage/Media Type	Micro SD
Capacity	4 GB (In-Built) – expandable up to 8 GB
GSM Module	GSM/GPRS/Wifi
Keyboard	Six keys for user entry
Serial Ports	1 USB port for data transfer & 1 RS 232 for configuration
Clock	Built-in real time clock for date and time
Sensor Modules	For temperature  Sensor: PT100  Accuracy: ± 1° C  Range: 0°C To 70°C  For level measurement base system  Accuracy of volume: ±0.4%  of BMC capacity  Ip67 electrical connection  For the power consumption of BMC  Energy meter (optional)
Environment	➤ Operative temperature: 0 to 65°C (32°F To 149°F) ➤ Relative humidity: 5% to 85% RH non condensing
Power Supply	180 - 260 V AC, 50 Hz
Power Consumption	15 Watts
Battery Backup	5600mAh Li-lon battery which provides 5 hours battery backup



Our ideas and innovations are a part of the pursuit of maintaining the sanctity of milk so that the world's most ancient health drink can be appreciated as it truly is – untouched and unadulterated.



28+ states



350+ districts

Legacy of over

3 decades



68,000+ villages



10 patented products



900+ team members



24x7 support via mobile app



220+ serviceable locations



# Optimise your business with other related products

#### **AMCS**

AMCS (Automatic Milk Collection System) is a comprehensive solution which digitizes and tracks the real-time information of milk collection process being followed at milk collection centres. The cloud connectivity makes it possible to access the data from any location and BI Analytics Reports enable informed decision making.



#### **Logistic App**

Logistic App is an Android-based app which streamlines operational efficiencies of Milk Unions, by allowing route planning for trucks and digitizing transport management process in dairy supply chain. The app tracks transporters in real-time, stores images and data, and produces analytical reports.



#### MilkoScreen

MilkoScreen accurately measures Fat, SNF and protein based on proven FT-Infrared Technology. It also detects various adulterants such as added water, urea, sucrose, maltodextrin and ammonium sulphate present in the milk.



#### Prompt Equipments Pvt. Ltd.

7th Floor, Shaligram Corporates, C. J. Road, Iskon - Ambli Road, Ahmedabad Gujarat - 380058 (India) info@promptdairytech.com | www.promptdairytech.com
Ph: 02717 45 1111/6111 | Follow us on in 2 f