Case Study: Turnkey Liquid Management System – CNH Tractors Ltd.

Industries traditionally follow manual methods of operation which are prone to human errors and can have devastating results. Site professionals used to station themselves at the main tank premises and start a pump to send liquid to the tank in another area



As soon as liquid level in the tank increased, the man used to signal to the person to stop the pump. Many times, such arrangements have led to catastrophic failures such as-

- Pump failure due to wrong operation
- Poor safety precautions by site professionals
- Human error causing spillage of costly liquid
- Downtime and inability to meet deadlines
- Possibility of inflammable liquids igniting due to mobile phone signals

FLUIDYNE

Copyright 2020 Fluidyne Control Systems, P Ltd. – Do not distribute (physically, electronically or in any other media) without the express written permission of Fluidyne Control Systems P Ltd.



Following are the advantages of a closed-loop liquid dispensing and management system.

- This is a completely **automated** solution requiring no human intervention. Manual mode is available too
- Fiber optic communication ensures **99.99% uptime** in connected network
- The entire fiber optic line is run in a redundant two-way loop to avoid data loss in case of switch failure
- Each dispenser buffer tank has a flowmeter at the inlet. This is helpful during audits for consumption vs receival
- Data is carried to PLCs via Ethernet which is a de-facto standard in plant automation and is seamlessly scalable
- Accuracy at **±0.25% of reading** and **repeatability better than ±0.1%** of reading
- Range can be extended by adding more ethernet-fiber optic hubs in the future
- Dispensers are **portable** and can be moved to any site without data loss
- Troubleshooting is easy and does **not** require skilled personnel reducing OpEx
- Each PLC control panel is powered by highly reliable SMPS sources
- Data is accessed via master Fluidyne control panel with aesthetic HMI display

FLUIDYNE

Copyright 2020 Fluidyne Control Systems, P Ltd. – Do not distribute (physically, electronically or in any other media) without the express written permission of Fluidyne Control Systems P Ltd.