

DRIVING PRODUCTIVITY IN MZURI SWEETS FROM A DISTANCE



Mzuri Sweets Ltd is a major player in the confectionery industry in Kenya. The company manufactures high quality gumballs, bubble-gum, candy and lollipops, all under the signature brand, Mr. Berry's. The company's commitment towards quality has enabled it to thrive in a market previously dominated by both foreign and local confectionery multinationals.

In light of the pandemic-induced lockdown, Thermax helped Mzuri Sweets prepare for a proper shut down and safe restart. Thermax's technical intervention ensured continuous operation and productivity at the plant amidst the crisis.

THERMAX'S CHILLERS COOLING THE PLANT FLOORS

Mzuri Sweets is known for deploying advanced technologies in its manufacturing plant to achieve the best quality production. In line with its commitment towards quality, the company had sought Thermax's cooling solutions for comfort cooling its premises. Hence, Thermax had commissioned a double effect steam fired vapour absorption chiller at the manufacturing facility in early 2016. The chiller's performance has been good ever since the commissioning and the company was immensely satisfied with its operation.

TEMPORARY LOCKDOWN IN RESPONSE TO GOVERNMENT GUIDELINES

As the COVID-19 pandemic swept across the globe, the Kenyan government announced a 20-day lockdown across the country. The sudden announcement presented Mzuri Sweets with a significant operational challenge. The company was looking for ways to properly shut down the manufacturing plant – all the while preparing for a quick rebound after the 20 days of inactivity. The immediate crisis pushed the plant operators to quickly find ways of sustaining their operations while mitigating operational risks.

SERVICE VIA ROSS: RE-IMAGING CHILLER MONITORING AND CONTROL

In order to ensure a smooth start-up and avoid any mishaps in the future, the plant operator contacted Thermax for a proper shutdown of the chiller. The conventional way of shutting down the chiller would have been to visit the site, monitor the chiller parameters, and implement the shut-down procedures.

With travel restrictions and social distancing measures in place, visiting the plant was out of question. This is when Thermax's cloud-based chiller monitoring system – ROSS (Remote Online Service Support) proved useful in controlling the chiller while being far away from the site. The capability to remotely monitor the parameters, status, and usage of the chiller ultimately ensured a smooth shutdown and start-up at Mzuri Sweets.

IMPLEMENTING CHILLER SHUTDOWN PROCEDURES

Thermax's technical service expert after analysing the operational conditions of the chiller, communicated standardized shutdown procedures to the plant operator at Mzuri Sweets.

- Complete dilution of the chiller to bring LiBr to room temperature.
- Isolation of steam inlet and outlet valves to ensure maximum productivity once the plant operations are restarted.
- Breaking chiller vacuum
- Shutdown of diaphragm valves

ROSS' S ASSISTANCE IN REVIVING PLANT OPERATIONS

After the short-term inactivity, when the plant operations at Mzuri Sweets resumed, our service expert intervened again for a smooth rebound. As the operations began to normalize, Thermax's assistance towards achieving pre-shutdown productivity at Mzuri Sweets included the following recommendations.

- Maintenance of inlet cooling water temperature to prevent high scaling and generation of non-condensable gases.
- Regular scheduling cooling tower service
- Periodical cleaning of water strainers

SHUTDOWN AND REVIVAL SERVICE SUPPORT BENEFITS

By clearly analysing, communicating, and enforcing the best shutdown and revival practices, Thermax's service enabled Mzuri Sweets enjoy the following benefits:

- Access to the same expertise as on-site services
- Decreased amount of downtime
- No loss of production
- Achieve pre-lockdown productivity when the operations resumed
- Operational Enhancement by means of dilution and maintenance
- Increased chiller reliability

Combining chiller monitoring technology and service excellence, Thermax has ensured operational continuity at Mzuri Sweets. The thorough analysis and great co-ordination between the teams from Thermax and Mzuri kept the plant up and running, despite the unavailability of a chiller expert on premises. By leveraging ROSS, Thermax assures excellent service support for a continued productivity in industries even in situations of utmost uncertainty.