KL UNIVERSITY DEPARTMENT OF BIOTECHNOLOGY

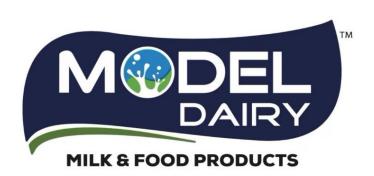
"REPORT ON INDUSTRIAL VISIT" MODEL DAIRY PVT LTD MILK & FOOD PRODUCTS

NIDAMANURU, VIJAYAWADA

DATED: 20/08/2024

UNDER ESTEEMED GUIDANCE OF

DR. R. GNANASEKHARAN
DR.G.KOTESWARREDDY
DR.NADEEM SIDDIQUE





KL UNIVERSITY

GREEN FIELDS, VADDESWARAM – 522302, GUNTUR DT., AP, INDIA



MODEL DAIRY

- Established in 1990, a milk processing and distribution unit in the city of Vijayawada.

It is a leading manufacturer and supplier of a wide range of milk products such as Milk, Curd, Ghee, Flavoured Milk, Lassi, Buttermilk, Sweets, Paneer, Butter etc.

The dairy industry operates daily with a multitude if complex procedures, all of which are upheld to high standards.



There are various machines and equipment used in the preparations of different type of food products. Each product type has its own dedicated area, equipped with specilized machines and laboratories. In the early morning hours, a tanker delivers milk to the factory. Accompanying the delivery is a set of instructions and detailed report that outline the specific contents and quality parameters of the milk being received.

Upon receiving the milk undergoes a thorough quality check. This includes verification of the accuracy and conducting additional test to ensure that the milk meets the stringent quality standards before it is accepted for further processing.

The milk undergoes checks for temperature, acidity, storage conditions, shelf life,

microbial content and other critical parameters. If any deviations detected, the milk is immediately pasteurized to ensure it meets the required standards.

If the milk significantly deviates from specified limits in the reports even after pasteurization, the entire tanker's content of received milk are disposed. T



content of received milk are disposed. This situation rarely occurs during summer, results in substantial losses.



In the testing lab, equipment such as butyrometers and lactometers are used to analyze milk composition, including enzyme levels, shelf life, and fat content. Based on these results, the milk is segregated into different batches for various

food production processes.

The factory produces approximately 300 kilograms of fresh ghee daily, the process usually takes around four hours. Evrything is prepared from scratch - start of the preparation till the packaging each is check and distributed into the markets.

The dairy company produces a variety of items, including savory foods and sweets.

The sugar solution prepared here, utilized in flavored milks, lassi, and other sweet products.

The salt is sued in fermenting batters, preparing buttermilk, making panner and producing various savory items.

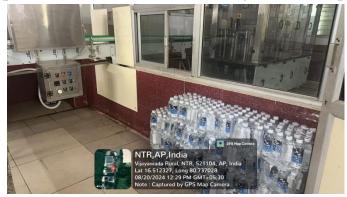
In addition to milk, butter and curd are among the most commonly produced

items in the factory.

Production of flavored milk in the factory have varieties, such as badam, kesar, chocolate, vanilla, involve different flavoring agents and are bottled in glass containers. These bottles have a shelf life of upto 6 months, compared to



three days for regular milk packets. The bottles are sterilized carefully as this process is crucial to ensuring the food quality and safety.

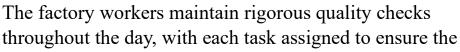


The factory prepares idli and dosa batters daily, providing a convenient, ready-to-use option for instant food preparation.

In addition to dairy products, the factory manages an extensive RO WATER

SUPPLY PLANT. This process involves steps including water treatment, mineral content, verification, and thorough quality checks.

The water is processed using advanced equpiment such as reverse osmosis machines, fillers and sealing machines. After filteration, the water is filled into bottles, securely sealed, and packaged for distribution. This complex procedure ensures a consistent and safe water supply which is made available to the public.





efficient food preparation and production taking place. Personnel adhere to strict hygiene guidelines and standards, wearing gloves, hairness and other protective gears to prevent contamination, All products are carefully packed, sealed and distributed, reflecting the factory's high level of organization and commitment to safety.

Gallery













CONCLUSION

The visit to "Model Dairy" provided valuable insights into the meticulous processes involved in dairy production. From the early morning milk deliveries and rigorous quality checks to the precise preparation of various food items, it was evident that the factory operates with a strong commitment to safety, hygiene, and efficiency. The attention to detail in every step—from testing and pasteurization to the final packaging—showcased the factory's dedication to maintaining high standards. Overall, the experience highlighted the impressive level of organization and care that goes into producing safe and quality dairy products.