INDUSTRIAL PLANTS

MILK STERILIZATION PILOT PLANT

DL CH21

The image is for reference only

DESCRIPTION

The **DL CH21** Pilot Milk Sterilization Plant is a didactic and industrial system specially designed for educational institutions and research centers. Its objective is to simulate at full scale the sterilization process of dairy products, allowing the study of critical parameters such as temperature, exposure time and feed flow. The equipment integrates advanced control technology (PID), precision instrumentation and supervision software for real-time and historical monitoring and analysis of the process. Its robust stainless steel construction guarantees durability, hygiene and compliance with industrial standards. Thanks to its structure mounted on wheels, the plant can be easily moved within the laboratory, facilitating its installation and operation.

MAIN CHARACTERISTICS

- Control of product quality by varying sterilization time and temperature.
- PID temperature control with microprocessor controller.
- Wheel-mounted structure.
- Cylindrical tank for feeding and collection of sterilized product, made of steel, 80 l.
- Pumps with electronic flow rate variator 20 l/h.
- Electronic frequency inverter for the feed pump.
- Feed flow meter, scale from 0 to 100 l/h, accuracy ±0.5%.
- Stainless Steel Milk Preheater.
- Sterilization chamber, stainless Steel.

- Vacuum chamber and liquid ring vacuum pump.
- Plate heat exchanger for milk cooling, made of stainless steel.
- Connection lines and valves in stainless steel 304 and 316.
- Sensors and valves essential for the operation of the equipment.
- Supervision software: works in the Windows operating environment and allows monitoring ON-OFF signals, analog signals coming from the controller, real-time trend and historical trend.
- Electrical panel in compliance with CE standards, IP55 protection, synoptic diagram of the plant and differential circuit breaker.

ACCESSORIES INCLUDED

- Hot water generator.
- Steam generator.
- Computer, cabinet, ergonomic chair.
- Detailed practical manual.

The system is powered by three-phase voltage from the grid with 3kW of power.