

# Uncompromised process accuracy with flexible solutions and modular designs.



# Dairy Industry

# Modular Systems and lines for

- Ambient UHT milk and Chilled pasteurized milk
- Yoghurt / Curd / Dahi Processing
- Ice Cream Mix Processing
- Paneer (fresh / sterilized & frozen varieties) Processing
- Butter & Ghee manufacturing
- Cheese (Mozzarella & Cheddar) Processing
- Milk Concentration by RO Processing

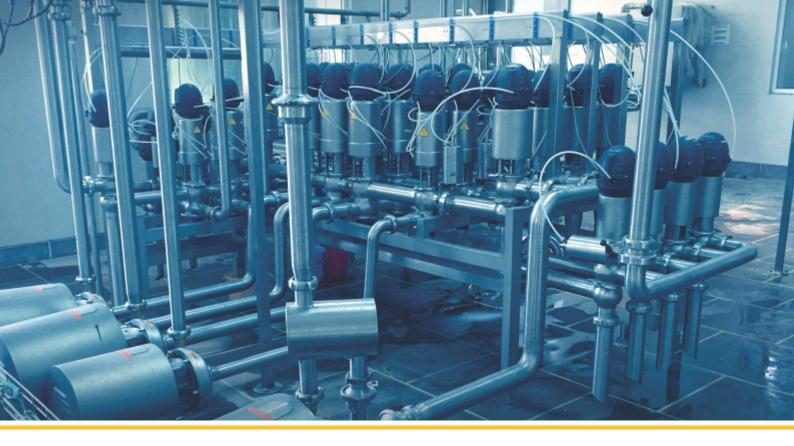
We are <u>dairy equipment & systems manufacturers</u>, and line solution providers. We undertake turnkey jobs for the design, supply, installation, and commissioning of complete dairy plants and their utilities. We design & take complete care of dairy automation. We also undertake project engineering consultancy, project process design, process economy and feasibility, utility design, and supply.

- Engineering Solutions for UHT & Pasteurized milk and all milk products of the Dairy Industry.
- Automation Design, PLC SCADA
- Process & Utilities Design
- Consultancy Services



## Pasteurization Module

- Fully automated & operator friendly. All required parameters can be accessed using a supervisory password. All parameters' reports generated
- Closed-loop hot water module with tubular heater helps in precise temperature control of the product.
- Closed Loop Hot Water chamber with Tubular Heat Exchangers ensures the accuracy of heat exchange & also improves the product quality.
- Various optional features like self CIP system, variable flow, attachment to other equipment like a separator, homogenizer, etc. makes this most suitable for replacing existing old pasteurizers.
- Optional Pressure Monitoring System
- Modular design ensures quick installation.
- Reliable components used to build the unit, makes it highly reliable.



# **Modules & Equipment Supplies**

- Milk & Cream Pasteurizers
- UHT Sterilizers
- Aseptic Storage Systems
- Modular CIP Systems
- Spiral Ice Cream Freezers
- Milk Standardization Unit
- Separators Skid
- Butter Melting Vats
- Powder Mixing units
- Storage Silos, Tanks, and Vessels
- Paneer & Cheese Equipment
- Tubular Heat Exchangers
- Hot Water Systems

#### automated CIP module

Our CIP module is factory tested & designed to suit the customer's requirements. All the CIP requirements like controlling the various parameters such as CIP flow, the temperature of media, contact time, and concentration of CIP solution are achieved by this equipment. The modular construction & proven technology helps for easy integration reducing installation and commissioning time.

- Improves the product quality, which results in fewer market complaints.
- Improves the equipment's performance.
- Operating Automated CIP is independent of operator skill.
- All critical parameters' reports generated
- Reduces environmental load.
- Electricity saving, water-saving, and manpower saving.





### Aseptic Storage Tank

The <u>Aseptic tank</u> acts as the intermediate storage device between the Aseptic sterilizer & Aseptic filling machines. The aseptic valve cluster module maintains the sterility of the system. It encloses sanitary valves with a steam barrier, a sterile air system with micron filters, instrumentation, a control panel, control system, and touch screen HMI.



# our system advantages

- Improves product quality & production time efficiency.
- Sterile air for the tank automatically controls the feed pressure required by the filling machine.
- Aseptic valve cluster maintains asepticity of the system.
- Critical Control parameters are monitored & controlled through an automated system.
- Meets the hygiene requirement in the food industry. Use of reliable components.
- Easy for operation & independent of operator skills.
- Modular design helps the quick installation & fast commissioning.
- Can integrate and work for all makes of UHT Sterilizers and Aseptic Filling Machines
- Customized for all UHT milk, creams, and Flavored Milk/shakes





# Features

- Process Automation development as per function description & customer-specific process, confirming global S88 standards.
- Standardized MIS reports & SCADA development.
- Complete Hardware supply solutions.
- Competent team for development & commissioning.

#### **Automation Software Features**

- Queuing Function
- Product recovery by water push
- Interlocks
- Errors
- Password levels
- Equipment status memory (flag)
- Event Log
- Alarm handling



# **Automation Engineering**

We provide automation solutions to the food & dairy processing industry. We also undertake revamping & modernization of the existing food processing plants to a suitable automation level.





# Separators Skid

We are a <u>Dairy Separator Supplier</u> who builds modular units in our factory having separator for all applications like clarification, separation, bactofugation, and others.





Also, these Separators are available for efficient integration of the following dairy processes :

- Hot Milk Separation H Models
- Cold Milk Separation C Models
- Whey Separation W Models
- Milk & Whey Clarification D Models
- Anhydrous Milk Fat Separation A Models
- Solid Bowl Separation & Clarification



# Milk Standardization Unit

Neologic Engineers have developed a locally engineered and manufactured Milk Standardization unit, which can achieve the required accuracy of 0.05% or lower of fat in pasteurized milk. Being an indigenous unit, it not only meets the industry requirements in terms of reliability and guarantees but also meets the producer's needs of being friendly by way of attractive investment cost.





# Some features of the Neologic Fat Standardization unit

- Accuracy in line with the best in the industry
- Compatible to be installed with all makes of self-cleaning Milk Separators
- Suitable for capacities from 5,000 l/h to 30,000 l/h
- Required Fat in Pasteurized Milk to be 1.5% to 4%
- Standardized fat in Pasteurized Milk to be a minimum of 0.5% lower than incoming milk fat%



# Spiral Ice Cream Freezers

Our Spiral Solutions cover a complete range of applications from Spiral Water Cooler, Spiral Pasteurizer, Spiral Air Pasteurizers, Coolers and Freezers.

We can deliver Spiral Ice Cream Freezers, which are designed and engineered by FENCO, Italy and locally manufactured, factory tested, site installed and Commissioned by Neologic Engineers.



# Some features of the Neologic's Spiral Ice Cream Freezers

- Fully customized to meet your specific requirements for cooling, heating or Hardening
- Patented moisture catching system, allows for long production time between defrosts.
- Single top mounted drive, ensures smooth operation, with varying capacities
- Unique belt tensioning monitoring & control system ensures continuous operation without belt breakages
- Options of branded and industry proven range of Stainless Steel or Plastic belts depending on the application and first cost
- Makes of drive, belts Instruments and controls are the industry's best and most reliable.



# UHT Sterilizer Module

### **Applications**

White Milk	Flavored Milk
Milk Shakes	Soya Milk
Cream (20% Fat)	Buttermilk/Lassi

Designed and fabricated by Neologic Engineers, The <u>UHT sterilizer module</u> is tubular heat exchanger based, operating with variable speed to suit different flow rate. It features a system of heat recovery by a loop of sterile water. The tubular heat exchanger of Hipex make, is a 'polytube' or shell and tube heat exchanger. It is rugged and flexible to suit sterilizing application with bellows.



# Benefits

- I Minimal loss of nutrition
- I Shelf life increases by 3 months without refrigeration
- I No preservative needed
- I Tamper free packaging
- I No refrigeration needed

# Features

- I Regeneration efficiency up to 80%
- I Precise temperature control within +/-1 deg C
- I Safety against intermixing of sterilized milk with raw milk & utilities
- I Flexible production capacities
- I Variable capacities from 1000 l/hr to 15000 l/hr



# Butter Melting Vats designed for the dairy industry.

Temperature control for hot water and melted butter. Uniform heating to avoid burning of product. Hot water coil structure for easy cleaning. Butter design operation helps to dose measured quantity.

# Tanks & Silos

Various types of tanks in SS material are manufactured with the required finish and quality. We use specially manufactured laser-welded jackets for tanks.

#### Various type of tanks

- Insulated tanks
- Jacketed tanks.

#### Outdoor silos

We have manufactured tanks from 100 liters to 150,000 liters capacity tanks





# **Powder Mixing Systems** are designed for the Dairy and Food industry.

The shear pump is the heart of the powder mixing unit. A specially designed shear pump along with Ventury suction of powder and dumping funnel are the main components in a skid.

- Sugar dissolving
- Skim milk powder reconstitution
- Various Ice cream mixes
- Cocoa powder mixing
- Pectin dissolving
- Starch, Xanthan gum, and other composites

# Reception Module

designed for dairy industry.

Normally the raw milk from the tank contains a lot of air entrapped in it. It creates a heating problem in the processing of such milk. The reception module eliminates the air entrapped in it & ensures the complete emptying of the tanker. It also measures the milk quantity received per tanker.



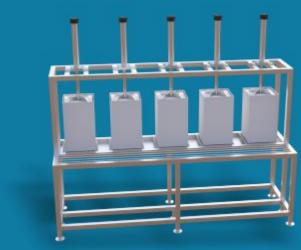


# Ice Cream Mix Processing Lines

Whether you are making conventional Ice Cream products, Frozen Desserts, Ice Candy (Water Ice), the traditional Kulfi, or Natural Ice cream, being amongst the most responsible Dairy Equipment Manufacturers, we understand your product needs first and then offer our Mix Processing lines that will be fully customized. These line solutions would also be optimized to balance the need for process Automation and Investment required.

# Paneer & Cheese Processing Lines

Our Paneer processing equipment has been tried and tested based on quality standards demanded by the industry and product quality requirements. The cheese processing equipment is made from total hygienic grade stainless steel materials and hygienic, cleanable designs that operate at a preferred temperature and deliver final products that are both superior in quality and taste.





# Yogurt (Stirred & Set), Greek Yogurt Processing Plants

We understand your end product requirements and can offer you a customized line solution for these niche Fermented milk by-products. These lines can be batch or continuous processing, depending on the capacity. Our solutions can ensure the right product quality and meet the local industry norms.

# White Butter and Ghee Manufacturing Plants

Normally the raw milk from the tank contains a lot of air entrapped in it. It creates a heating problem in the processing of such milk. The reception module eliminates the air entrapped in it & ensures the complete emptying of the tanker. It also measures the milk quantity received per tanker.







# Some of Our Esteemed Clients



# **Complete Care of Process & Automation**

Dairy | Food | Fruits & Vegetables | Beverages | Cosmetics | Allied Industry

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