

Complete Design, Supply, Installation and **Commissioning of Fully Automatic Milk Processing** Plant and its Bi-Products

> **INFORMATION BROCHURE**





ABOUT NVS



r Vishnu Agarwal, chairperson of NVS Industry, has served the dairy industry for more than 30 years in various capacity such as providing milk parts and equipment. Later the second generation took over and established NVS INDUSTRIES in 2006. The firm in its initial years revolutionized the milk processing by providing superior quality and robust build of myriad milk equipment. It started with executing turnkey projects with designing some of the milk processing parts and using stainless steel for longevity of equipment.

Now with the third generation joining the firm, it has expanded its market throughout India and has diversified the target industry to include chemical, brewery, pharmaceutical, alcohol, household and oil industries.

The first thing we do at NVS, is assess the customer's need. Then we layout a detailed process to execute the project, honouring the demands of the customer and sticking to the deadline to meet it. We pride ourselves in after sales services and spare parts management system that ensures the smooth operation of the plant.

Additionally, we provide a brilliant sales and servicing team who are trained to provide the best customer satisfaction. Our top management is easily accessible and directly gets involved in any kind of customer's help. Our personalized and tailored assistance to each customer ensures that you get a feasible and ergonomic product from us.



We are here to create trust not money. Our customers are our salesmen. **



VS Industries sets up large-scale plants for Liquid Milk Processing, which includes reception, homogenization, pasteurization, storage and packaging sections.

We have custom-built plants for processing of various dairy products such as Ice Cream, Cheese, Clarified Butter/Ghee, Yoghurt, Flavoured Milk, Shrikhand/ Khoa etc. that are packaged according to the requirements. Several other customized packaging options such as pouches, tubs, bricks, cups, cones, and bottles are also offered.

Along the years, NVS has adopted and integrated withthe latest technology and has collaborated with key international players in the market to bring the state-of-the-art technology to our customers at a very economical price with increased reliability and enhanced customer valued service.



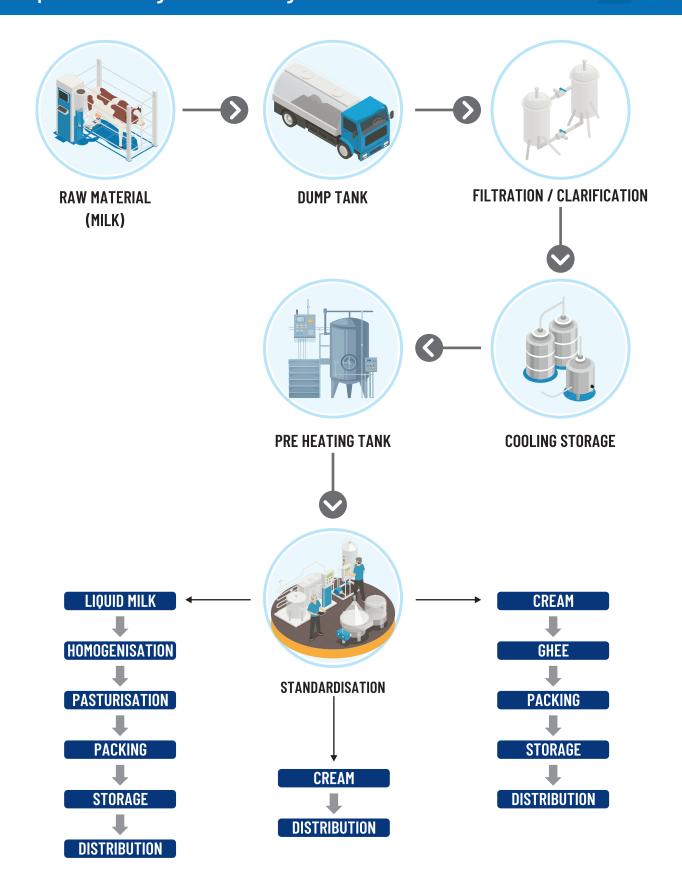


n the dairy, raw milk passes through several stages of treatment in various types of processing equipment's before reaching the consumer in the form of a finished, refined product. Production usually takes place continuously in a closed process, where the main components are connected by a system of pipes. The type of treatment involved, and the design of the process depend on the product.





All the stages needed to produce milk is explained through the flow diagram attached:







EQUIPMENT LIST

We supply following equipment's in a milk processing plant:

■ RECEPTION SECTION

- Can Roller Conveyor
- Can Tip Bar
- Electronic Weigh scale Stainless Steel Weigh Bowl
- Stainless Steel Dump Tank
- Disc Filter
- Can Drip Saver
- Stainless Steel Can Scrubber
- Stainless Steel Milk Pump

UTILITIES SECTION

- Cold Room
- Steam Boiler
- Compressor
- Soft water- R0 system
- Electrical
- E.T.P

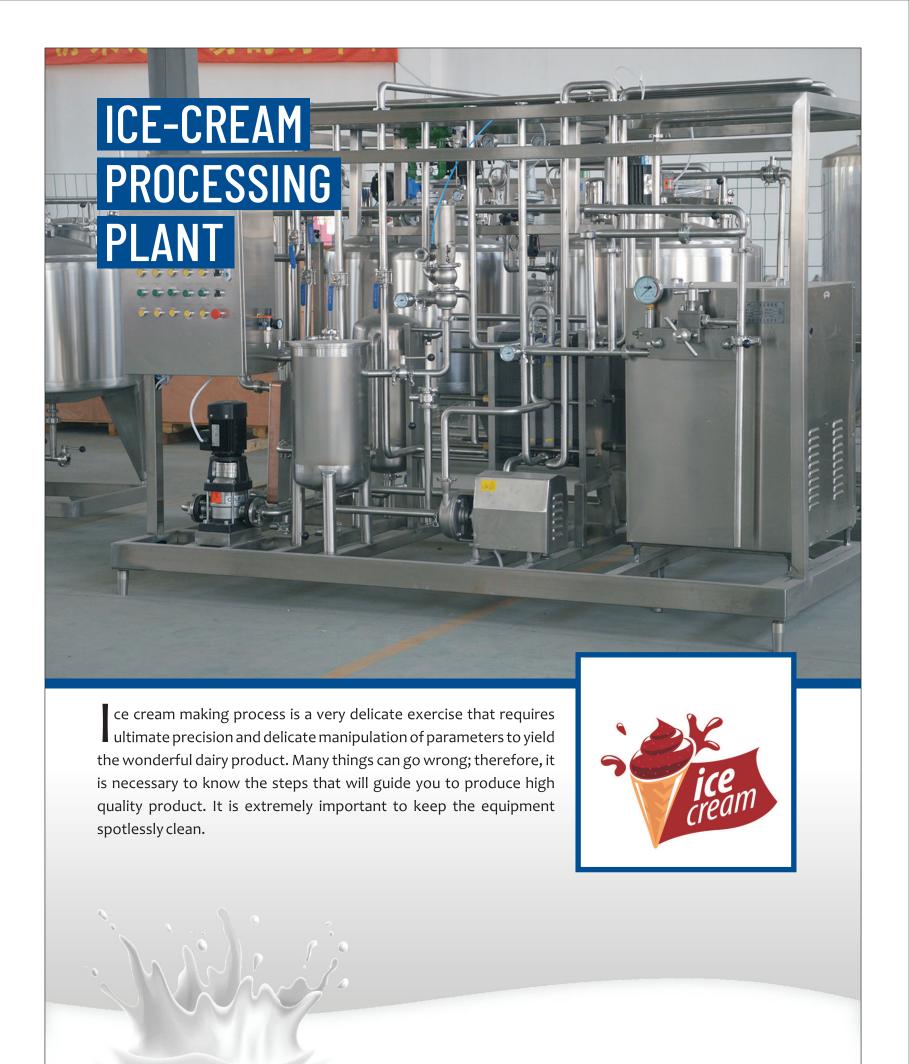
NVS Industries provide complete DESIGN, SUPPLY, INSTALLATION and COMMISSIONING of Fully Automatic Milk Processing Plant up to 7 LLPD.

PROCESS SECTION

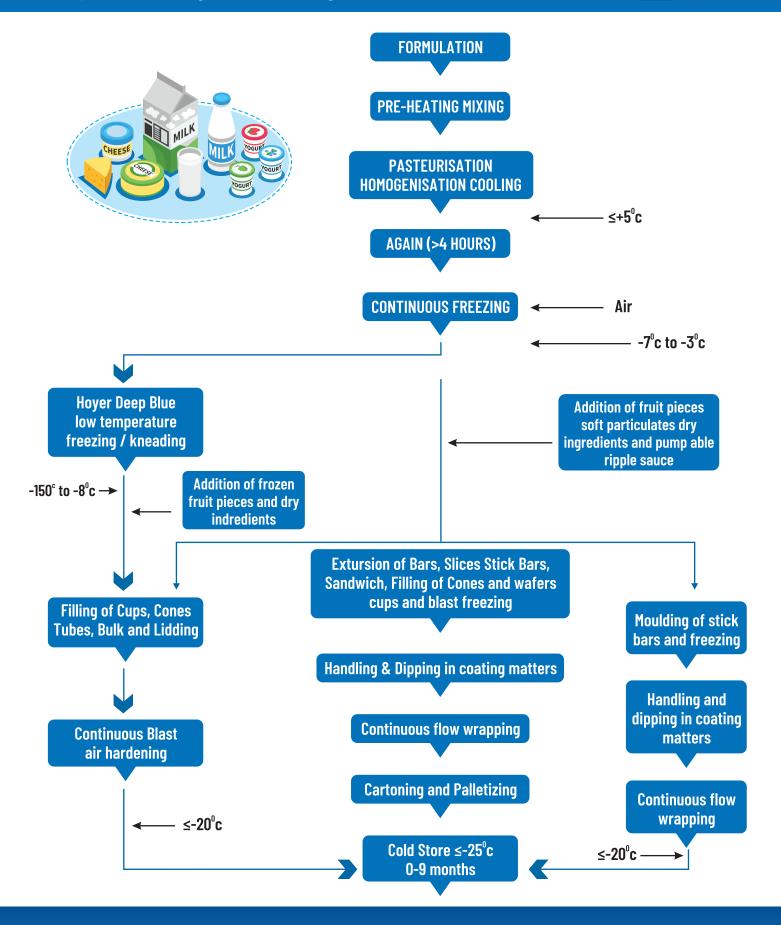
- Stainless Steel Balance tank with Float
- Stainless Steel Milk Pump
- Stainless Steel Milk Chiller
- Stainless Steel Flow Control Valve
- Milk Pasteuriser
- Homogenizer
- Cream Separator

STORAGE & PACKING SECTION.

- H.M.S.T or V.M.S.T
- Milk Silos
- Stainless Steel Milk Pump
- Pouch Packing Machine
- Stainless Steel Overhead Tank
- Stabilizer for Packing Machine.



All the stages needed to produce ice cream is explained through the flow diagram attached:







ICE CREAM EQUIPMENT LIST

We supply following equipment's in a ICE CREAM processing plant

MAX PREPARATION SECTION

- Mix Preparation Turbo Blender, Butter Melting VAT
- Ice Cream Mix Pasteurizer
- High Pressure Mix Homogenizer
- Mix Ageing Vat
- Flavour Preparation Tank

FREEZING SECTION

- Continuous Ice Cream Freezer
- Automatic Ingredients, Fruit and Nuts Feeder

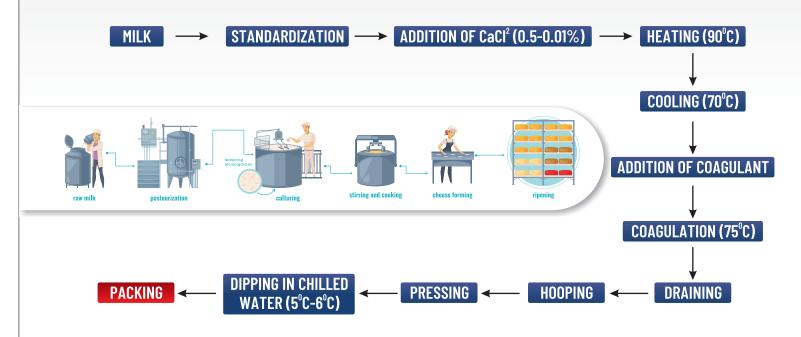
NVS Industries has installed complete ice cream plants from mix preparation to packaging. We supply highly precise ice cream equipment with a unique designed and proven technology to meet industry demand.

PACKING SECTION

- Ice Cream Cup/Cone Filling Machine Rotary & Linear
- Candy Making and Wrapping Machine Rotary & Linear
- Ice Cream Extrusion
- Hardening Tunnel Tray, Spiral
- Chocolate Preparation and Dosing System
- Ripple Preparation System



Traditionally, paneer is made from cow and buffalo milk in India. However, buffalo milk is preferred in the production processbecause of high solid content which results in a better final product. In the processing, standardized milk is heated to 90 °C and then cooled to 76 °C to coagulate the milk. Then, the contents of the vessels are poured over a Muslim cloth to separate the coagulum from whey. The coagulum so obtained after straining is then lightly pressed to facilitate formation of paneer block. Later, the pressed block is further deepened in the cold water followed by vacuum sealing and packing. All the stages needed to produce Paneer is explained through the flow diagram attached:







PANEER & KHOYA PLANT EQUIPMENT LIST

We supply following equipment's in a PANEER processing plant

PANEER MANUFACTURING SECTION

- Paneer Milk Heating Module
- Paneer Coagulation Vat
- Citric Acid Dosing System
- Paneer Hoops and Pressing System
- Paneer Cooling System

NVS Industries has installed complete Paneer plants from preparation to packaging. We supply highly precise Paneer equipment with a unique designed and proven technology to meet industry demand.

PANEER PACKING SECTION

- Paneer Block Cutting Machine
- Vacuum Packing Machine
- Paneer Pouch Sterilization System
- Whey Handling System

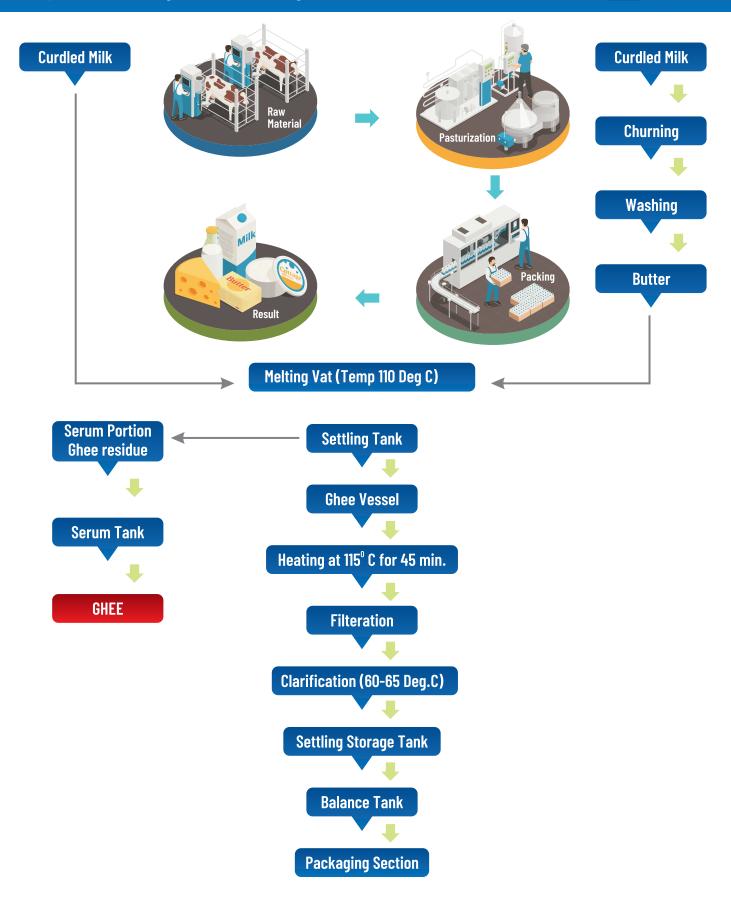
KHOYA PREPARATION SECTION

Khoya Pan



ethods of ghee manufacture vary with respect to the material used (milk, Cream, butter) the intermediate treatment of raw materials, and the handling of the semi-finished or fully formed ghee. In Ghee manufacturing process initially, the temperature is gradually raised to about the boiling point of water while stirring to control frothing. In the second stage, most of the free water evaporates which requires a considerable amount of heat. As most of the water evaporates, the rate of heating is controlled and maintained at about 103°C to prevent the charring of SNF so as not to develop bitter flavours and/or a brown colour. Finally, the temperature is raised to between105 and 118 °C with constant agitation in order to remove the water bound to the SNF and to develop the characteristic flavour.

All the stages needed to produce GHEE is explained through the flow diagram attached :







BUTTER & GHEE PLANT EQUIPMENT LIST

We supply following equipment's in a GHEE & BUTTER processing plant

■ GHEE PREPARATION SECTION

- Ghee Boiler
- Ghee Settling Tank
- Ghee Clarifier
- Ghee Storage Tank
- Ghee Pouch Filling Machine

NVS Industries has installed complete Ghee and Butter plants from preparation to packaging. We supply highly precise Butter & Ghee equipment with a unique designed and proven technology to meet industry demand.

BUTTER PREPARATION SECTION

- Cream Separator
- Continuous Butter Making Machine
- Butter Homogenizer
- Butter Churn
- Bulk Butter Packing Machine
- Butter Re-worker System
- Butter Cutting Machine
- Butter Trolley
- Butter Silo
- Automatic Blister Packing Machine (FFS)
- Butter Filling, Forming and Wrapping Machine

C.I.P. PLANT

NVS Industries is a reputed CIP System Manufacturer in India. We provide high quality and technically sound process equipment catering to the needs of the CIP Systems Plant. Our CIP systems offer cleaning/sterilizing the interior surfaces of vessels, equipment, filters, pipes and fittings without the need to disassemble. As CIP System Manufacturer in India, we ensure that our systems help in attaining the desired level of hygiene and sanitization.



BENEFITS OF OUR SYSTEMS ::

- Fast payback of investment.
- Reliable components.
- Modular design and easy integration with the existing system.
- PLC based fully automated CIP station.
- Controls of all essential parameters like time.
- Temperature, flow, concentration.

- Lye, acid, water steam consumption is optimized.
- Meets the hygiene requirement in the food industry.
- Easy for operation and independent of operator skills.
- Flexible for expansion and connectivity with a various automation systems.
- CIP of Aseptic equipment



STAINLESS STEEL STORAGE TANK

NVS Industries are the prominent manufacturer of stainless steel and mild steel storage Silos, Tanks and Road Tankers.

NVS Industries provides complete storage solution to dairy industry, irrigation industry, liquor industry, Food & beverage industry, chemical industry and pharmaceutical industry.



KEY FEATURES ::

- Stainless Steel Silo's Capacity ranging between 10 KL to 150 KL
- Stainless Steel Tank's Capacity ranging between 200 Litres to 30 KL
- Stainless Steel Road Tankers ranging between 1 KL to 20 KL
- Mild Steel Storage Tanks ranging between 1 KL to 1,000 KL

MOLASSES STORAGE TANK

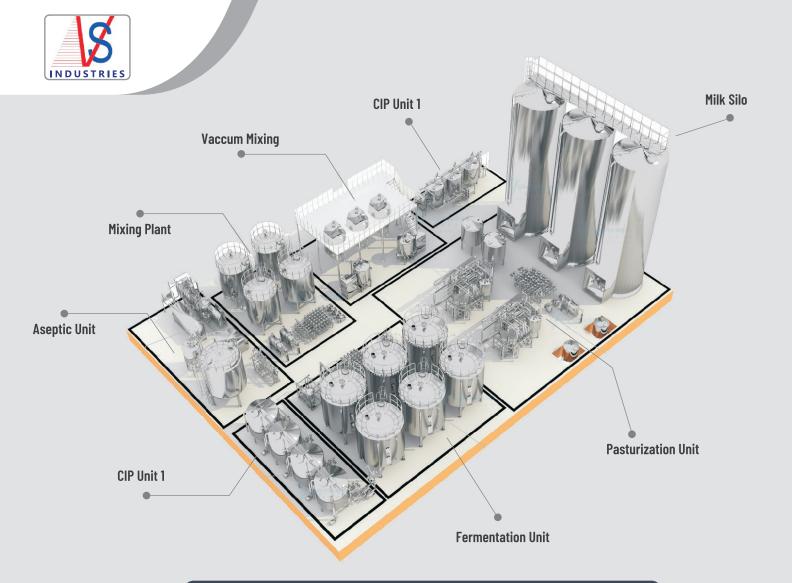


Molasses is a thick, dark brown liquid obtained from raw sugar during the refining process and is used as a vital ingredient in animal feed. Molasses often has a Specific gravity of 1.45. This means that 1.4 kg of molasses is 1 litre of tank capacity. This can vary and we recommend consulting your molasses supplier before deciding on the size of your tank. Molasses storage tanks are ideal for commercial and agricultural use and are used in a various type of industries. For instance, Cattle Feed Industry, Sugar Industry, Liquor industry etc.

NVS Industries are the prominent manufacturer of Molasses Storage Tank across India with tank capacity ranging from 100 Metric Tons to 5000 Metric Tons along with civil foundation.

KEY FEATURES ::

- Premium finish through sand blasting
- Enhance attractiveness using epoxy paint
- Computer simulated structural design
- Robust built caused by using prominent brands for raw material



NVS Industries provide best in class 3D and 2D design service to help our customers for converting their ideas into print-ready models.

OUR CLIENT





























NVS INDUSTRIES

Plant & **Corporate Office:**



Plot No: 171, Barhi Industrial Estate, Phase 1, HSIIDC, Sonipat, Haryana-131101

- sales@nvsindustries.com / nvssales@gmail.com