

# MGT PROCESS

DAIRIES





## **PASTEURIZED & FLAVOURED MILK**

Pasteurized Milk has a shelf-life of 10-12 days. Using the ESL technology (Extended Shelf Life) milk shelf life can be extended up to 25 days.

The high technological milk processing systems supplied by MGT Process, give benefits to the consumer.

Pasteurized fluid milk can be produced as: Whole homogenized milk, Skimmed milk, Flavored milk and others.

Pasteurized milk is produced in: Pouches, Bottles or Cartons.



## **HARD & SEMI HARD CHEESES**

Most hard cheeses are pressed during production to remove moisture. As they age, they become firmer, more pungent and crumbly.

Semi hard cheeses pass through a short process and are delivered fresh.

Most of these cheeses are great for snacks and sandwiches, and many can be cooked without becoming rubbery or oily.

Hard cheeses tend to have a longer shelf life than softer cheeses.

The cheese is packed in slices, or as a block in vacuumed plastic wrappings.



## **YOGHURT**

Yoghurt is a fermented milk product, with nutritional benefits beyond those of milk. Yoghurt is processed in three different methods: Stirred, Set and Drinkable. It can be Plain (natural) or with Fruits or added Flavours.

MGT Process can provide various yogurt processing systems and packaging: Cups with aluminium foils or poly-lead, PET or glass bottles & Cartons.



## **SPREADABLE CHEESE**

Soft fresh cheeses that have a creamy smooth texture allow the cheese to be easily spread on bread or crackers, or mixed with fruits or vegetables.

Packaging comes in plastic cups or tubs.



## **ICE CREAM**

Ice cream is a rich, sweet, creamy frozen milk product, made from variously flavoured cream and milk, churned or stirred to a smooth consistency during the freezing process and often contains gelatin, eggs, fruits, nuts, etc.

The mixture must be suitably heated before freezing. The ice cream should contain no less than 10% milk fat, 3.5% protein, and 36% total solids.

The ice cream is packaged in plastic containers.

## MGT PROCESS - DAIRIES

**MGT-PROCESS** is a division of the MGT Liquid & Process Systems group of companies, specializing in planning, designing and construction of small & medium size dairies and food processing plants.

**MGT-PROCESS offers a turnkey solution for dairies and food processing plants:**

- Initial survey ▪ Planning ▪ Comprehensive Design ▪ In house manufacturing of dairy components ▪ Installation and Commissioning
- Training (Technical, Technological) ▪ After Sales Support

**MGT-PROCESS provides solutions for a wide range of dairy processes including:**

- Whole and Skimmed milk ▪ ESL Milk ▪ Flavoured milk ▪ Yoghurt (Stirred and Set, Flavoured) ▪ Soft cheeses ▪ Hard cheeses
- Cream and butter ▪ Ice cream

**A typical MGT-PROCESS dairy will include:**

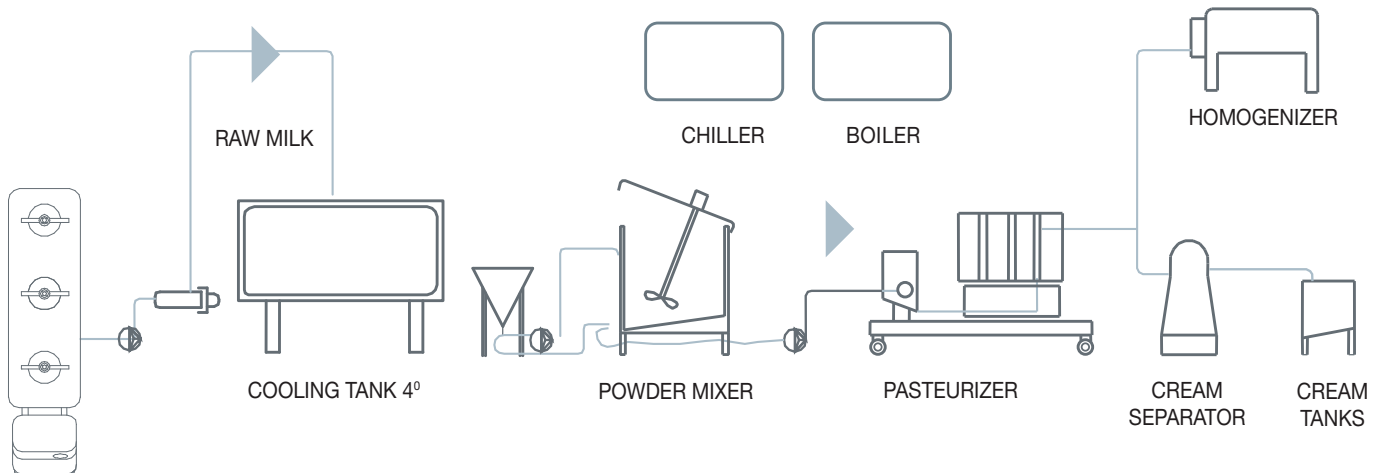
- Cooling and processing tanks ▪ Mixing systems ▪ Pasteurizers ▪ Cream separators ▪ Homogenizers
- Filling Machines ▪ Processing equipment ▪ Cheese vats ▪ Cheese presses ▪ Cheese mixers ▪ Yoghurt fermentation tanks
- Ice cream freezers ▪ Dairy Laboratory equipment and devices.

By combining more than 40 years of experience supplying food processing plants worldwide and by utilizing state of the art technology, MGT-PROCESS provides its customers with superior solutions adapted to their unique requirements.

### PROCESS BLOCK DIAGRAM

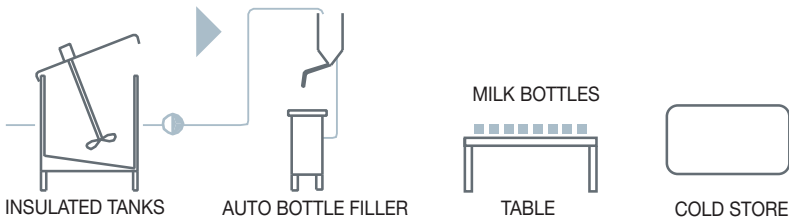


### MILK RECEPTION

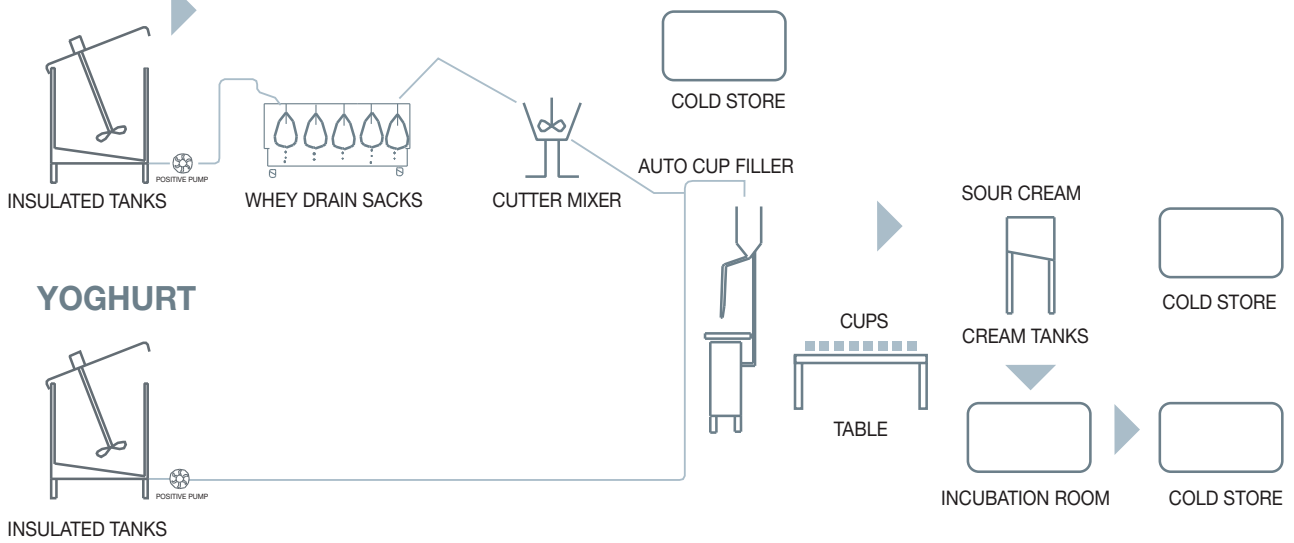




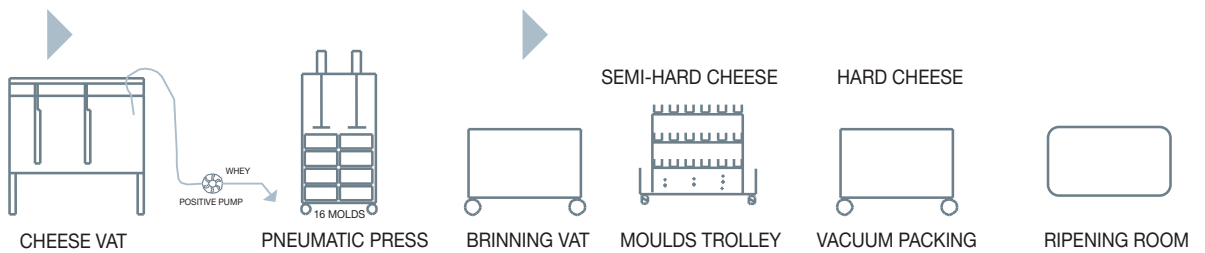
## PASTEURIZED MILK



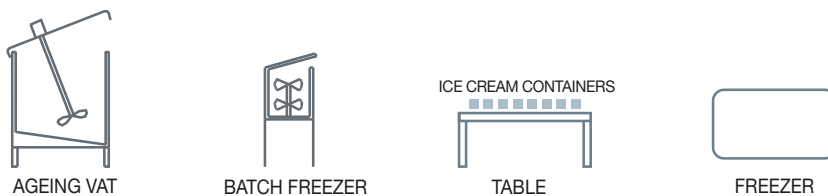
## SOFT CHEESE / YOGHURT



## HARD & SEMI-HARD CHEESES



## ICE CREAM



### ▶ Cooling & storage tank



Designed for fast cooling of milk immediately after milking, in accordance with international standards. Available in volumes from 500 liters - 40,000 liters.

### ▶ Powder mixer



Used for mixing powder such as milk, cocoa, sugar and stabilizers with milk or water, for the process of: reconstructed milk, flavoured milk, yoghurts, ice cream and others. Available in sizes of 500, 1,000 & 2,000 liters.

### ▶ Pasteurizer



Type PHE (Plate Heat Exchanger) is the most important system for the milk processing. MGT pasteurizers from 300 L/H up to 10,000 L/H heated by electricity or boiler.

### ▶ Cream Separator



Used for separating the cream from the Whole Milk. This allows controlling the fat in milk products. MGT Separators types and sizes. From 300 L/H up to 1,500 L/H open or closed type. From 2,000 L/H-10,000 L/H separators will be automatically discharged.

### ▶ Homogenizer



Used to prevent cream separation, by separating the cream globules into very small particles. MGT homogenizers can be with single or double homogenization stages, dampers and pneumatic by-pass valves. Sizes are from 300 up to 10,000 L/H.

### ▶ Insulated tanks



For pasteurized milk storage, yoghurt and sour cream fermentation, cheese coagulation and ice cream ageing. The tanks are with an insulated layer and can have a double jacket for heating or cooling, agitator with gear-motor and drain butterfly valve. Sizes are from 400 up to 5,000 liters

### ▶ Bottle Filling Machines



For filling liquid products into bottles such as Milk, Yoghurt, Juice and Water. MGT supply semi & fully automatic filling machines for different bottle shapes and sizes. Capacity range from 600 up to 3,000 Bottles/H. Including cap feeder, cap closer and date printing system.

### ▶ Cup filling machines



For filling liquid and semi-liquid products into cups. MGT supply semi & fully automatic cup filling and sealing machines for different cup sizes. Capacity range from 600 up to 4,000 Cups/H. Including piston filler system, foil feeder, hot sealing system and date printing system.

### ▶ Ice cream freezer



For processing & freezing the Ice Cream to the desired temperatures. MGT Ice Cream Freezers sizes are from 20 up to 80 L/H.

### ▶ Batch pasteurizer



Used to pasteurize small quantities of milk, for cheeses and yogurts. Includes heating system, agitator with gear-motor and control board. MGT batch pasteurizers come in sizes from 400 up to 2000 liters.

### ▶ Ripening room



For Hard Cheese storage at the desired temperatures.

### ▶ Butter churn



Processing Butter from the cream. MGT butter churn sizes are from 12 or 32 L.

## TRAINING AND KNOW-HOW

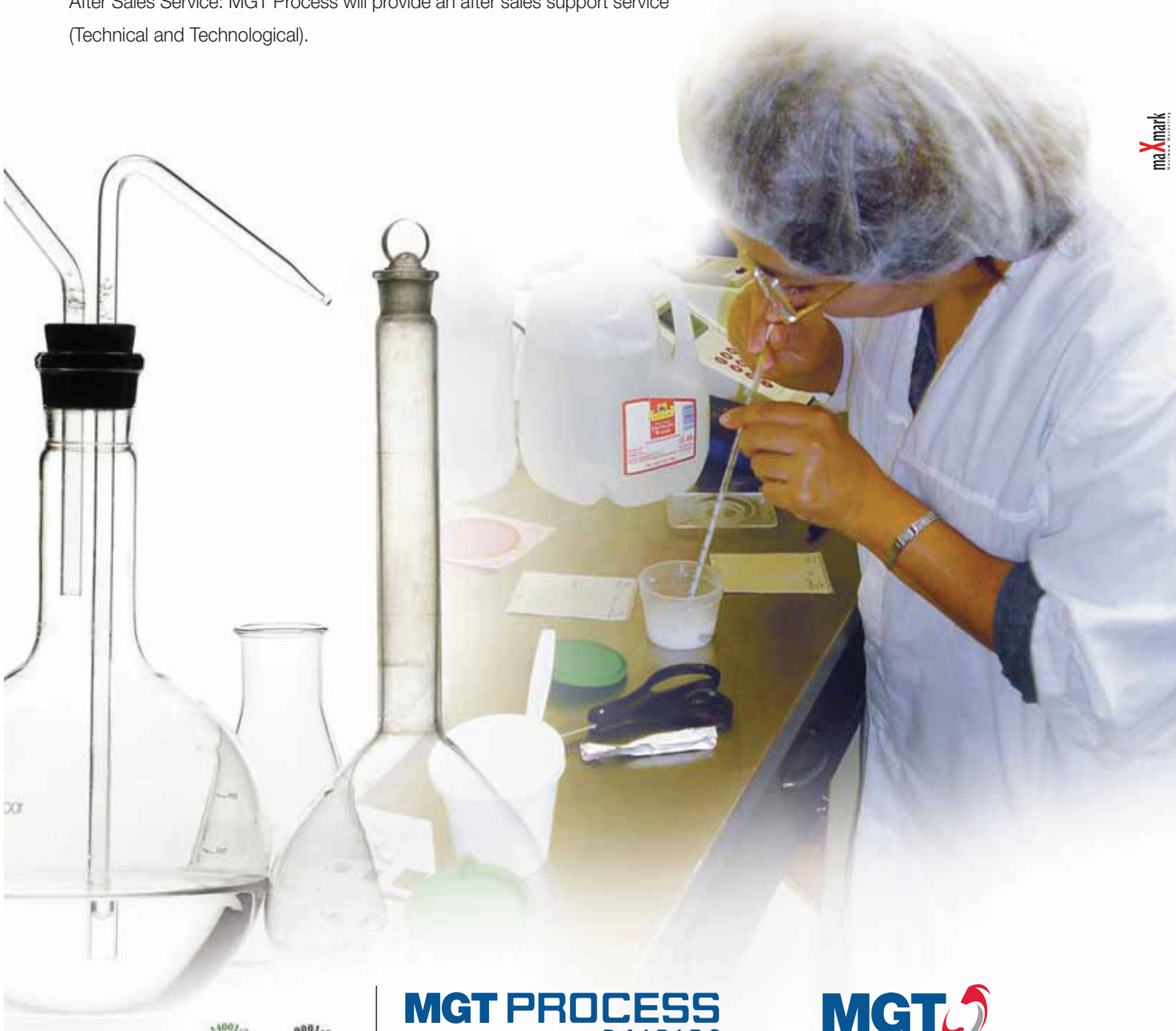
Technical Training: MGT Process will provide Full Engineering, Technical, Maintenance training. Includes drawings for review, technical documentation technical data, operation and maintenance of individual machines, rinsing and cleaning procedures, spare parts inventory and more.

MGT Chief-Engineer will accompany the local team, in a step by step process and will carry out a complete training program covering all dairy operations.

Technological Know How: MGT Process will provide Full Technological and Laboratory training. It will provide raw milk and milk products laboratory tests, product recipes, sanitary required systems, milk industry processing systems and more.

MGT Chief-Technologist will accompany the local team, and step by step will make complete training covering all product types; Preparation, Processing, Packaging, Storage, Lab test and Hygienic systems.

After Sales Service: MGT Process will provide an after sales support service (Technical and Technological).



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MARKETING & PROMOTION



**MGT PROCESS**  
DAIRIES

**MGT**  
LIQUID & PROCESS SYSTEMS

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