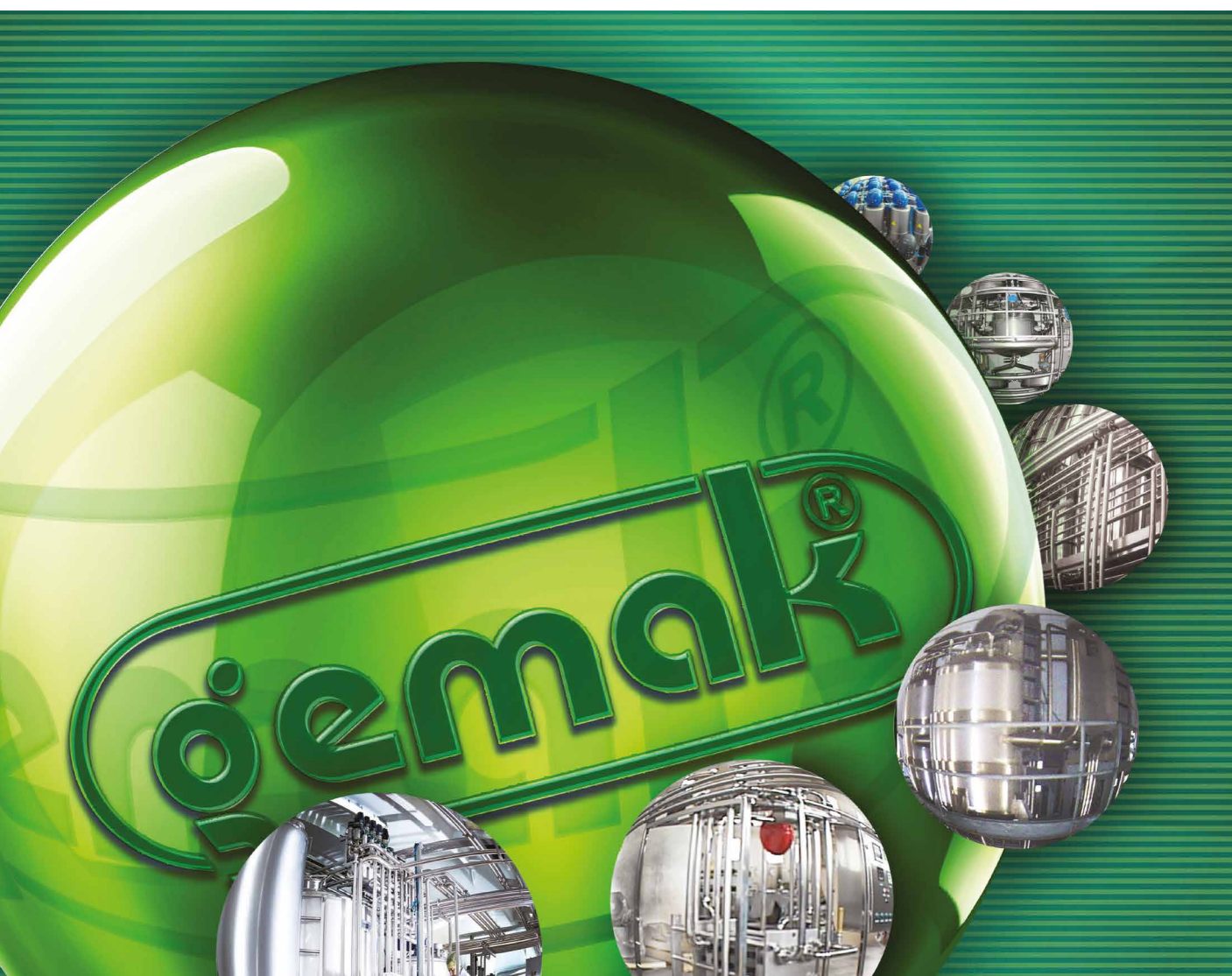




FOOD INDUSTRY MACHINERY



INTEGRATED SERVICES

EVERYTHING YOU NEED FOR FOOD, CHEMICAL,
COSMETIC AND PHARMACEUTICAL INDUSTRIES



In food industry and particularly in dairy production plants, GEMAK is a leading company for equipment production, provision and turnkey plant assembly in Turkey, and in many countries of the world. The foundation of GEMAK was first laid in the year of 1969. At the beginning, GEMAK was working for the total construction and mechanical installation of the dairy plants, and finally by the year of 1986, Gemak JSC started to make machinery production for the food industry plants and still continue its facilities with much more professional and successful manner.

In its modern and new factory located in Ankara 2nd Organized Industry Region, Turkey within a total area of 15.000 m², Gemak JSC is establishing turn-key plants for the dairy industry: complete lines for milk collecting and cooling centers, milk transportation trucks, lines for milk reception, pasteurization and standardization, lines for UHT and pasteurized drinking milk, production lines for white cheese, goat's cheese, khaskaval, tongue and braid cheese, edam and gouda cheese, lines for yoghurt and drinkable yoghurt (ayran), clotted cream and butter, lines for milk powder and whey powder, lines for ice-cream and desserts with milk, turn-key plants for fruit juice industry: lines for fruit juice, fruit nectar and fruit flavored drinks and CIP units, storage systems, membrane systems, complete laboratory equipment. Gemak JSC serves modern, hygienic, automatic and technological plants to its customers.

Gemak JSC is not only establishing turn-key plants for the dairy and the fruit juice plants, and also producing new technologies and solutions by providing special equipment for the food industry such as beverages, chocolate, margarine, carbonated drinks, tomato paste, marmalade, jam and fermented products and special equipment for chemical, pharmaceutical and defense industries.





With our slogan "farm to fork", GEMAK JSC. is a leading company for manufacturing stainless steel machinery and equipment, supply and assembly of turn-key production plants for particularly dairy industry by creating unique engineering solutions. GEMAK JSC. continues their facilities in total of eight areas including research and development, design, manufacturing, assembly, start-up and commissioning, sales and after sales services. Our main aim is to serve the best quality equipment with the extended guarantee period and best service quality to our customers.

Our scope of activity is;

- engineering, design, and R&D facilities,
- installation of machinery and equipment in plants,
- start-up facilities for turn-key project,
- testing, training, logistical and operational support of turn-key projects,
- steam, air, water and ice water piping and insulation,
- electrical cable tray , brackets and cable assembly,
- unit-based and full plant automation facilities,
- manufacturing and installation of ventilation and air conditioning units,
- facilities for laboratory and starter culture applications,
- after sales service and spare parts facilities.



Your Reliable Partner

GEMAK JSC. has gained its experience and expertise from customers in Turkey and around the world, with an approach of excellent quality, engineering and high levels of standards, it offers systems with endurance and hygiene.

STAINLESS STEEL PUMPS

CENTRIFUGAL AND SELF PRIMING PUMPS



Description

Capacity: 5.000 lt/h-35.000 lt/h
Total Head: 1 bar-3.2 bar
Inlet Diameter: DN32-DN65
Outlet Diameter: DN32-DN50
High efficiency, easy maintenance, special design for protection of milk texture.
Product wetted parts are made of AISI 316 stainless steel.
Coupling connection between electric motor and rotor.
Sanitary design for food applications.
Robust structure.
Electric motor Cover, adjustable legs.
Self-priming centrifugal pump is specially designed for pumping liquids containing air or gas without losing its pumping ability.

Application Areas:

- Dairy Industry,
- Fruit Juice,
- Liquid Foods,
- Oil,
- Drinking Water,
- Tap Water,
- Chemistry,
- Pharmaceutical Industry.

LOBE PUMPS



Description

Capacity: 100 lt/h-20.000 lt/h
Total Head: 1 bar-8 bar
Inlet Diameter: DN25-DN80
Outlet Diameter: DN32-DN50
High efficiency, easy maintenance, special design for protection of milk texture.
Product wetted parts are made of AISI 316 stainless steel.
Adapter connection between electric motor and rotor.
Sanitary design for food applications.
Robust structure.
AISI 304 stainless steel electric motor cover,
Adjustable legs.

Application Areas:

- Dairy Industry,
- Fruit Juice,
- Liquid Foods,
- Chemistry Industry
- Pharmaceutical Industry.

HEAT EXCHANGERS

SCRAPED SURFACE HEAT EXCHANGERS



Description

Capacity: 500 lt/h-10.000 lt/h
Scraped surface heat exchangers are designed as vertical, horizontal, single or multi tube in accordance with product feature and temperature and are made of AISI 304 or AISI 316 stainless steel.
Hot water preparation system or ice water system can be added as option according to application of heating or cooling.
Scraped blades are made of food grade material. Sealing is maintained by mechanical seals.
And movement drive is maintained by electric motor and gearbox.

Application Areas:

- Caramel, Soft Candies,
- Hazelnut, Peanut Butter,
- Pudding,
- Sauces,
- Fruit,
- Egg,
- Cheese,
- Cream,
- Cheese,
- Marshmallow,
- Starch, Gelatin,
- Chocolate.

PLATE HEAT EXCHANGERS



Description

Capacity: 500 lt/h-60.000 lt/h in various capacities.
Heat exchanger frame body is made of stainless steel and it is cut by using water jet without any heat treatment and polished with glass balls. Plates are ALFA LAVAL brand and made of special stainless steel ALLOY or titanium material. Plates may vary in properties of depth, angle, and thickness and the type of heating or cooling agent/fluid.
Gaskets are ALFA LAVAL and may be provided as Nitrile or EPDM. Design and calculations are made in accordance with fluid heating and cooling characteristics using ALFA LAVAL CAS program.

Application Areas:

- In Every Application Where Heating and Cooling Of Fluid Is Necessary.

HEAT EXCHANGERS

TUBULAR HEAT EXCHANGERS



Description

Capacity: 100 lt/h-45.000 lt/h
Made of AISI 304-316 stainless steel pipe bundles according to fluid feature as single or multi tubes.
Calculations are made in accordance with fluid heating and cooling by using ALFA LAVAL CAS program.
Pipe welding is made using TIG method.
Inlet and outlets can be manufactured with unions, clamps or flanges.
According to fluid characteristic, it can be insulated with rock wool or polyurethane.
Outer cladding is AISI 304 stainless steel.

Application Areas:

- In Heating and Cooling Applications,
- Heat Recovery,
- Pasteurization,
- Cip Applications,
- Uht, Pasteurizer; Hot Water Preparation Unit

STAINLESS STEEL TANKS

SILO TANKS



Description

Capacity: 80.000 lt to 250.000 lt
Product wetted parts are made of AISI 304-316 stainless steel.
Can be insulated with polyurethane or rock wool.
Top and side mounted agitators can be mounted in various forms as optional.
It is manufactured by TIG or automatic plasma welding. 2B finish for stainless steel material according to food application and sanitary rules.
Can be manufactured with manhole cover or openable lid.
Gaskets are ALFA LAVAL branded.
Welding points are tested by %100 penetrant tests.
Mechanical, Digital Thermometer, Pressure Transmitter, Load cells, pH probes, level sensors and other instruments can be added as optional.

Application Areas:

- Dairy Industry,
- Liquid Foods,
- Olive Oil,
- Alkali, Acid,
- Water,
- Fruit Juice.

STORAGE TANKS



Description

Volume: 100 lt – 250.000 lt
Made of AISI 304 or AISI316 stainless steel material,
Atmospheric or pressurized, vertical or horizontal, with or without legs, or with lugs on frame.
Top or side agitator can be mounted as optional.
With adjustable leg design.
It is manufactured by TIG or automatic plasma welding. 2B finish for stainless steel material according to food application and sanitary rules.
Can be manufactured with manhole cover or openable lid.
Gaskets are ALFA LAVAL branded.
Welding points are tested by %100 penetrant tests.
Mechanical, Digital Thermometer, Pressure Transmitter, Load cells, pH probes, level sensors and other instruments can be added as optional.

Application Areas:

- Dairy Industry,
- Liquid Foods,
- Olive Oil,
- Alkali, Acid,
- Water,
- Fruit Juice.

INSULATED STORAGE TANKS



Description

Capacity: 100 lt – 250.000 lt
Product wetted parts are made of AISI 304-316 stainless steel.
Can be insulated with polyurethane or rock wool.
Top and side mounted agitators can be mounted in various forms as optional.
It is manufactured by TIG or automatic plasma welding. 2B finish for stainless steel material according to food application and sanitary rules.
Can be manufactured with manhole cover or openable lid.
Gaskets are ALFA LAVAL branded.
Welding points are tested by %100 penetrant tests.
Mechanical, Digital Thermometer, Pressure Transmitter, Load cells, pH probes, level sensors and other instruments can be added as optional.

Application Areas:

- Dairy Industry,
- Liquid Foods,
- Olive Oil,
- Alkali, Acid,
- Water,
- Fruit Juice.

STAINLESS STEEL TANKS

PROCESS TANKS



Description

Capacity: 100 lt-20.000 lt
Product wetted parts are made of AISI 304-316 stainless steel. Heating or cooling jacket applications are done in various forms as dimple, roll bond, U serpentine. Heating and Cooling Jacket connections can be insulated with polyurethane or rock wool. Top or side mounted agitators can be mounted in various forms as optional. It is manufactured by TIG or automatic Plasma welding. 2B finish for stainless steel material according to food application and sanitary rules. Can be manufactured with manhole cover or openable lid. Gaskets are ALFA LAVAL branded. Welding points are %100 penetrant tested. Mechanical, Digital Thermometer, Pressure Transmitter, Load cells, pH probes, level sensors and other instruments can be added as optional.

Application Areas:

- Dairy Industry,
- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,

ULTRACLEAN/ASEPTIC TANK



Description

Capacity: 100 lt - 20.000 lt
Product wetted parts are made of AISI 316 stainless steel. Agitator in various forms alternatively positioned at the top and side surfaces of the tank. Manufactured by applying TIG and plasma welding techniques. Produced under UC Aseptic Tank Standards. Welding points are %100 penetrant tested. PED certificate in ASME and DIN norms is supplied upon request.

Application Areas:

- Dairy Industry,
- Fruit Juice,
- Liquid Food,
- Pharmaceutical Industry,
- Viscous Products.

MOBILE TANKS



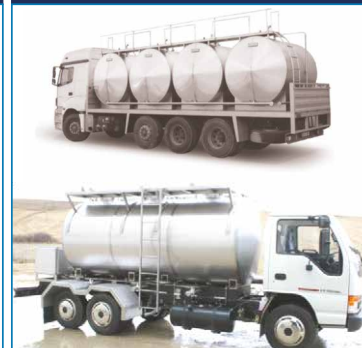
Description

Capacity: 70 lt-1.000 lt
Product wetted parts are made of AISI 304-316 stainless steel. It is manufactured by TIG or automatic plasma welding. 2B finish for stainless steel material according to food application and sanitary rules. Heating or cooling jacket and insulation applications are optional. Aseptic model is available. PED certificate in ASME and DIN norms is supplied upon request.

Application Areas:

- Dairy Industry,
- Fruit Juice,
- Liquid Food,
- Pharmaceutical Industries
- Viscous Products with Pulp.

TRANSPORTATION TANKERS



Description

Capacity: 200 lt-20.000 lt
Made of AISI 304 stainless steel and insulated. Can be produced as adjacent or compartment forms according to type and capacity of vehicle. Each section is equipped with CIP head, manhole cover, air vent, filling and discharge pipes, platform and ladder. Tank connection frame is completely made of AISI 304 stainless steel. It is manufactured by TIG or automatic Plasma welding. 2B finish for stainless steel material according to food application and sanitary regulations.

Application Areas:

- Dairy Industry,
- Liquid Food,
- Fruit Juice,
- Cream,
- Whey,
- Chocolate,
- Liquid Sugar,
- Pharmaceutical Industry,
- Potable and Process Water.

PASTEURIZERS

STANDARDIZER

DEAERATORS

PLATE TYPE PASTEURIZER

TUBULAR TYPE PASTEURIZERS

MILK AND CREAM
STANDARDIZATION UNIT

DEAERATORS



Description

Description

Description

Description

Capacity: 500 lt/h-60.000 lt/h
Inlet Temperature: +4°C/+40°C
Separator Outlet : +45°C/+55°C
Homogenizer Outlet: +65°/+70°C
Pasteurization Temperature: +67°C/+110°C
Incubation Temperature: +32°C/+45°C
Storage Temperature: +4°C
Manufactured in accordance with customer demands and type of fluid. Mounted on a AISI 304 stainless steel frame. ALFA LAVAL plates are used and they are made of 316 ALLOY or Titanium. They are in form of herringbone and patented chocolate pattern. Clip on gaskets are used. Press plates are made of AISI 304 stainless steel. Balance tanks are made with 100, 200, 300, 500 lt capacities. AISI 316 balance pump included. Flow equipment are supplied from ALFA LAVAL and TIG welding method is used in 11850 norm. Alfa Laval CB type brazed heat exchangers are used in hot water preparation unit. Control and automation panels are made of SIEMENS equipment and control system can be provided as PID or PLC control.

Capacity: 500 lt/h-60.000 lt/h
Inlet Temperature: +4°C/+40°C
Separator Outlet: +45°C/+55°C
Homogenizer Outlet: +65°C/+70°C
Pasteurization Temperature: +67°C/+110°C
Incubation Temperature: +32°C/+45°C
Storage Temperature: +4°C
Manufactured in accordance with customer demands and type of fluid. Mounted on a AISI 304 stainless steel frame. Pipes are made of AISI 316 stainless steel. Press plates are made of AISI 304 stainless steel. Balance tanks are made with 100, 200, 300, 500 lt capacities. AISI 316 balance pump included. Flow equipment are supplied from ALFA LAVAL and TIG welding method is used in 11850 norm. Alfa Laval CB type brazed heat exchangers are used in hot water preparation unit. Control and electrical panels are made of SIEMENS equipment and control system can be provided with PID or PLC control.

Capacity: 3.000 l/h – 45.000 l/h
GEMAK automatic in-line standardization units are for standardization of the fat, protein, total solids and solids-non-fat in milk and cream directly after a cream separator. It can work continuously with pasteurizer, cream separator and homogenizer synchronically. The fat content can be adjusted according to the requested value of the recipe. The control of the unit can be done separately with the unit's own control cabinet or it can be controlled via pasteurizer's control unit. High sensitivity recipe application by use of Siemens PLC, proportional valve, Mass and Electromagnetic Flowmeters. System is equipped with stainless steel control panel including Siemens PLC.

Capacity: 500 lt/h -60.000 lt/h
It is used for removing undesired odors, gas and air in fluids under vacuum. The plant operates continuously and is usually the last unit in a production line. Unit is designed to prevent oxidative modifications such as discoloration, alteration in flavor and aroma occurring especially in fat and oil. It ensures a regular glossy product surface and enhances long-time stability reached by deaeration. Deaerator is composed of deaeration tank, product pump that can work under vacuum, vacuum pump, tubular or plated type condensation heat exchanger, PT100, vacuum meter, regulation valves and electromagnetic flowmeter. The automation system of the deaerator can be provided with PID or PLC control.

Application Areas:

- Dairy Industry,
- Fruit Juice, Flavored and Carbonated Beverages,
- Honey, Molasses,
- Cream,
- Ice Cream Mix,
- Brine,
- Margarine,
- Egg,
- Ketchup, Mayonnaise,
- Sugar Syrup,
- Water, Fermented Carrot Juice Drink.

Application Areas:

- Dairy Industry,
- Fruit Juice, Flavoured and Carbonated Beverages,
- Honey, Molasses,
- Cream,
- Ice Cream Mix,
- Brine,
- Margarine,
- Egg,
- Ketchup, Mayonnaise,
- Sugar Syrupe,
- Water, Fermented Carrot Juice Drink.

Application Areas:

- Dairy Industry,
- Uht Milk,
- Esl Milk.

Application Areas:

- Dairy Industry,
- Cream,
- Fruit Juice,
- Honey.

EVAPORATORS

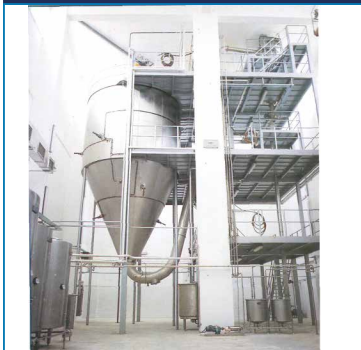
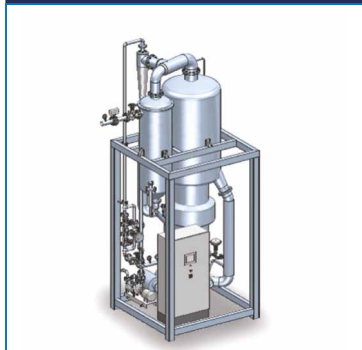
DRYING SYSTEM

PLATE TYPE EVAPORATORS

FALLING FILM TYPE EVAPORATORS

FORCED CIRCULATION TYPE EVAPORATOR

SPRAY DRYER



Description

Description

Description

Description

Capacity: 500 lt/h-7.500 lt/h
Evaporates the water from liquid. Designed as 2 graded for easy operation, energy saving and suitable for CIP cleaning. After evaporator completed the regime, water molecules inside the milk is evaporated in single pass and milk is concentrated. Evaporator can work for 20 hour in continuous production. Heat exchanger body frames are made of full AISI 304. Plates and gaskets are original ALFA LAVAL. Milk pumps, expansion vessels, pipe, valve and fittings are made of AISI 304 stainless steel. Evaporator group is mounted on a stainless steel platform. Electric, electronic devices and equipment are mounted in stainless steel panel. Milk inlet temperature may vary: 4 - 25°C 60 kg vapor is used to remove 100 kg water automatic brix controlled.

Capacity: 3.000 lt/h-40.000 lt/h
Evaporates the water inside the liquid. Designed for easy operation, energy saving and suitable for CIP cleaning. After evaporator completed the regime, water molecules inside the milk is evaporated in single pass and milk is concentrated in single pass, evaporator can work for 20 hour continuous production. System can be provided in numbers of 2-3-5 stage and with thermo compressor. Calandrias are made of AISI 304-316 stainless steel. Pumps are ALFA LAVAL. Product pump, expansion vessels, pipes, valves and fittings are made of AISI 304-316 stainless steel. Evaporator group is mounted on a stainless steel platform. Group includes a ladder and service platform. Electronic devices and equipment is mounted in stainless steel panel. Milk inlet temperature may vary between 4-25 °C 60 kg vapor is consumed to remove 100 kg water for evaporation. Automatically brix is controlled.

Capacity: 300 kg/h-9.000 kg/h
system is designed as single pass, thermo-compressor, integrated separator in one body, semi barometric condenser and fully automatic. Made of AISI 304-316 stainless steel with vertical shape. System is controlled by PLC from single electrical panel made of stainless steel. Product is transferred when the requested concentration has been reached. System is ready to use on a stainless steel frame with pump piping, steam inlet, control panel. Piping is done in accordance with DN 11850 norm using TIG welding method.

Capacity: 50kg/h – 2.000kg/h
Whey, milk powder, detergent powder drying systems are designed and produced according to the request of the customer. Depending on the product, the system can be equipped with rotary atomizer or nozzle atomizer. Special designed air distribution system is provided as optional to increase the yield. The system may include instant product production unit, internal and external fluid beds, lecitation. Also special filtered air intake unit, fire protection unit and heat recovery unit can be added to the dryer system upon request.

Application Areas:

- Milk,
- Whey,
- Fruit Juice.

Application Areas:

- Milk,
- Whey,
- Fruit Juice.

Application Areas:

- Dairy Industry,
- Whey,
- Fruit Juice,
- Fruit Puree,
- Tomato Puree.

Application Areas;

- Dairy Industry,
- Milk,
- Whey,
- Chemical Industry,
- Detergents.

CLEANING SYSTEMS

STAINLESS STEEL PRODUCTS

CIP (CLEAN-IN-PLACE) UNITS



Description

Capacity: 10.000 lt/h - 60.000 lt/h
CIP unit is an advanced automatic cleaning-in-place system used for cleaning process equipment such as tanks, filling machines, pasteurizers, sanitary pipes, aseptic tanks, plate heat exchanger and other process equipment. They are compact units that provide a wide range of flexible solutions with capacities with capacities and options for every customer. The fully automated CIP units can be designed up to 5 pressure lines with separate PLC control and all of the system. CIP units automatically control the cleaning time, detergent temperature, flow and concentration. The control of detergent concentration and sorting of liquids in CIP unit is done using a conductivity transmitter. Mobile CIP units are also available.

Application Areas:

- Dairy Industry,
- Liquid Food,
- Industrial Plants
- Chemical Industry
- Pharmaceutical Industry,
- Potable and Process Water.

PREMIX PREPARATION UNIT



Description

Premix preparation unit is composed of high speed shredder that mixes even the hard duty powders, fat, cacao etc. homogeneously and prevents the mix get lump and a control panel. Mixers are specially designed and produced from solid material. Controlling the speed with frequency inverter is optional.

Application Areas:

- Food Industry;
- Chocolate,
- Biscuit,
- Cake .

JAM AND CARAMEL PREPARATION UNIT



Description

Unit includes preparation, cooking and holding-cooling parts.
Products are weighed, transferred and mixed according to recipe in the preparation stage.
Prepared mix is transferred to the tank underneath the preparation unit.
Mix is cooked under pressure, brix and temperature is controlled, if the mix is in requested condition, it is transferred to holding-cooling tank underneath this section.
Products are cooled to required temperature and then transferred to storage tank. System works with full automation.
Manufactured on one frame which made of AISI 304-316 stainless steel.

Application Areas:

- Jam, Marmalade, Similar Products,
- Marshmallow,
- Invert Syrup,
- Caramel,
- Puddings.

JAM AND CARAMEL PREPARATION UNIT



Description

The system is composed of preparation, cooker, holder and cooling units. According to the recipe, the products are automatically received and mixed. The prepared mix is cooked under vacuum, the brix and the temperature control is done and transferred to the holder/cooling section. Mix is cooled down to the set temperature and transferred to the storage tanks. Fully automated system is equipped with PLC control unit.

Application Areas:

- Jam, Marmalade, Similar Products,
- Marshmallow,
- Invert Syrup,
- Caramel,
- Puddings.

STAINLESS STEEL PRODUCTS

PUDDING, JELLY, MARMALADE,
DOUGH PREPARATION SYSTEM

Description

System is specially designed for production of different types of products. It has the cooker with steam. The cooling is done by ice water or chiller. It can cook or cool under vacuum. It has a homogenizing head and sterilized product discharge valve. Different types of mixing solutions are possible with wide range of scraping mixers and mixing heads. Fully automated system is equipped with PLC control unit.

Application Areas:

- Dairy Industry,
- Food Industry,
- Cake,
- Cream,
- Pudding,
- Mayonnaise,
- Sauces,
- Jam,
- Marmela

PUDDING AND MARMALADE
PREPARATION UNIT

Description

System is specially designed for production of different types of products. It has the cooker and the aeration system. It decreases the density. Cooling is done by ice water or chiller. It can cook or cool under vacuum. It has a homogenizing head and sterilized product discharge valve. Fully automated system is equipped with PLC control unit.

Application Areas:

- Dairy Industry,
- Food Industry,
- Cake,
- Cream,
- Pudding,
- Mayonnaise,
- Sauces,
- Jam,
- Marmelade.

ICE-CREAM MIX PREPARATION
UNIT (HTST)

Description

Capacity: 600 Lt/h – 10.000 Lt/h
HTST (high temperature/short time) ice-cream mix preparation units are skid mounted and ideal for preparation of high quality ice-cream mixture. It is designed to include all the process equipment that is necessary for the preparation of ice cream mix. With the plug and play concept, HTST units are ready to start-up after connection to the utilities. This system includes hot water preparation unit, ice-cream mix preparation tanks, circulation pump, and powder mixer, feeding pump, line filter, CIP pump, pasteurization unit and homogenizer.

Application Areas:

- Dairy Industry,
- Food Industry.

COUNTER SYSTEMS



Description

Capacity: 3.000 lt/h -35.000 lt/h
Product wetted parts are made of AISI 304-316 stainless steel. It is manufactured by TIG or automatic Plasma welding of certificated, 2B finish stainless steel material according to food application and sanitary rules. 100% penetrant tests are applied to welded parts. System includes intake/suction pump, filter, mechanical deaerator, electromagnetic flowmeter with %0,3 accuracy. Flow sensor is PLC controlled. Control panel is manufactured as set on stainless steel skid. It can be provided with it temperature sensor, automatic sampling valve and printer as optional.

Application Areas:

- Milk,
- liquid food,
- fruit juice,
- whey.

STAINLESS STEEL PRODUCTS

BUNKER



Description

Manufactured from AISI 304-316 quality stainless steel with 1-4 compartment alternatives. Bunkers are composed of cylindrical or prismatic top and conical bottom side. According to the characteristics of the assembly area, bunkers can be manufactured as brazed or screwed connection types.

Application Areas:

- Food Industry,
- Chemical Industry,
- Civil Explosives,
- Industrial Plants.

CONVEYOR



Description

Belt conveyor, roller conveyor, return-belt conveyor, modular conveyor, chain conveyor and pan conveyor are designed and manufactured according to the requirements of the plants.

Application Areas:

- Food Industry,
- Pharmaceutical Industry,
- Civil Explosives Industry,
- Metal Industry.

LIQUID – POWDER MIXERS



Description

Capacity: 20 % powder in single pass
4.000 kg/h powder dissolving capacity in milk powder applications
Motor Power: 7.5-15 kW
Feeding Hopper Capacity: 100 lt
It can make a homogenous mixture by dissolving and mixing liquid and powder for food and fermented products. Made of AISI 304-316 stainless steel plates and profiles.
Made by using TIG welding method applicable to DIN 11850 norm.

Application Areas:

- For Mixing Liquid And Powders,
- Milk Powder,
- Whey Powder,
- Sugar,
- Cacao,
- Pectin.

BLENDER



Description

Capacity: 300lt – 3.000lt
It is used to mix powder/powder, powder/liquid, liquid/liquid products homogeneously. It mixes the products with the special designed mixer without damaging the structure of the product. Blender is made of AISI 304 or AISI 316 stainless steel.

Application Areas:

- Dairy Industry,
- Food Industry,
- Labne Cheese
- Fruit Yoghurt
- Civil Explosives Industry

OUR PRODUCTIONS

LIQUID AND MILK COOLING SYSTEMS

MILK COOLING TANKS



Description

Capacity: 100 lt-10.000 lt.
Milk is cooled from 32°C to 4°C.
Includes hygienic manhole cover and ALFA LAVAL rotary CIP heads for cleaning.
Provides easy maintenance with hermetic compressor package type cooling system.
Roll bond technology is used in evaporation.
Energy saving is provided by polyurethane insulation.
Solid type, worm gearbox is used for agitators to minimize oscillation.
Mounted on single skid, ready for transportation and to use.

Application Areas:

- Dairy Industry.

ICE-WATER UNIT



Description

Capacity: 5.000 lt/h-50.000 lt/h
Water tank capacity
Cooling Capacity: 100.000 kcal/day-2.000.000 kcal/ day
Tank can be manufactured monoblock or split on demand.
Cooling group and circulation pump are mounted on a single skid. Ethylene glycol is cooled down to -5°C and ethylene glycol is circulated down jacketed pipes that are placed inside the tank and ice is obtained around the jacketed pipes. ALFA LAVAL AC plated heat exchanger is used for heat recovery. R407C-404 gas are used as cooling agent.
Compressor group is package type and placed in cabin. Ice water tank insulation is provided with 50 mm foam board and covered by +60 mm polyurethane/ polyurethane panel. AISI 304 stainless steel jacketed pipes (serpentines) are used for ice production. Tank is made of AISI 304 stainless steel. Saving great amount of energy as it does not include agitator.

Application Areas:

- Cold Rooms and Cold Chain Warehouses,
- Dairy Industry,
- Meat Industry,
- Food Industry,
- Frozen Food Industry,
- Pharmaceutical Industry.

FILTRATION AND WATER SOFTENING SYSTEMS

GRIT ARRESTOR AND WATER SOFTENING



Description

Capacity: 100lt/h-150.000 lt/h
Made of AISI 316 stainless steel body or HST, FRP body.
To remove, organismal compounds that produce undesired odors and taste, to remove chlorine compounds, detergent, industrial wastes and asbestos from water utilized by absorption feature of active carbon.
Iron and manganese levels in water can be increased up to 5 ppm using a special mineral and hydrogen sulfite, methane, free carbondioxide and organic wastes in high concentrations are removed from water. Water softening system is designed with maximum flexibility and higher efficiency to fulfill all requirements and can be provide as single tank system, tandem and multi tank with 40 different models and 3 different control systems. Works with ion exchange method. Can provide automatic regeneration from 1 day to 12 days in intended periods. Hardness control and regeneration time can be adjusted with flow rate and time.

Application Areas:

- Any Kind of Processing Plant.

COLD ROOM STORAGE AND COOLING SYSTEMS

ESTABLISHING TURN-KEY SYSTEMS



Description

In every phase of project and mechanical installation processes, we provide service with our expert engineers and technical staff. We start the project with field survey on site of cold stores where it will be located, and then entering collected data to digital media, determining the cooling capacity using CAD programs, detailing the projects and cold store installation is submitted in working condition to customer as turn-key.

Application Areas:

- Industrial Plants,
- Dairy Industry,
- Food Industry.

PROJECT FACILITIES

AUTOMATION



Description

Gemak JSC. provides automation solutions in accordance with system requirements with ALFA LAVAL and SIEMENS equipment. Gemak JSC. automation systems composed of several modules, user interface, process control, reporting of production, tracking and traceability, production planning and application. Gemak JSC. provides automation solutions specific for machine, line or complete plant.

Application Areas:

- Dairy Industry,
- Food Industry,
- Industrial Plants.

PROCESS



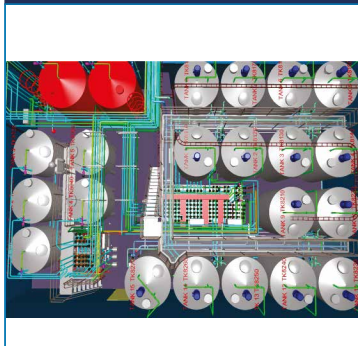
Description

Engineering, project management, drawing, equipment and system manufacturing and supplying, installation and piping on site, commissioning and training services are provided for dairy, food, cosmetics, pharmaceutical industries. Machine and equipment installation, steam, air, ice water, condensate lines installation and piping, air ventilation and conditioning ducts and pipes production and installation are also done. Building of turn-key plants for food and chemistry Industries with commissioning and start up services.

Application Areas:

- Dairy Industry,
- Food Industry,
- Industrial Plants.

MECHANICAL WORKS



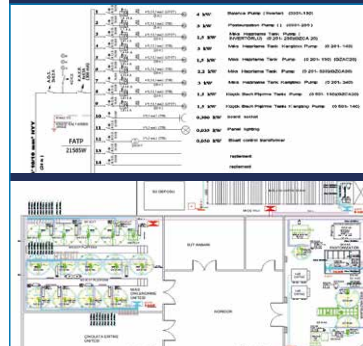
Description

With our expert engineer and technical staff, Gemak JSC. provides all kind of project works using design software programs regarding customer demands. Stainless steel, carbon steel, PE utility line installation, piping and insulation services are provided.

Application Areas:

- Dairy Industry,
- Food Industry,
- Industrial Plants.

ELECTRICAL WORKS



Description

Medium Voltage, low current and signal cabling, cable tray installation, power calculations, e-plan projects, assembling, determination of equipment, drawing of electrical power and control projects, panel design, installation on site, remote control and access, profinet communication and project services are provided.

Application Areas:

- Dairy Industry,
- Food Industry,
- Industrial Plants.

PROCESS AUTOMATION

PROJECT AND INSTALLATION FACILITIES

VALVE CLUSTERS



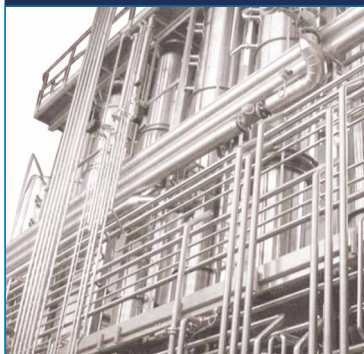
Description

Skid mounted Valve Cluster units are providing pre-built valve matrices customized to meet individual requirements with Alfa Laval technology. Valve cluster units guarantee the most efficient flow management, using as few components as possible and dealing effectively with key issues that include thermal cycling, cleanability, drainability and flow control. They are designed according to the specifications and requirements of your plant by specialized GEMAK JSC engineers, assembled carefully in factory and installed to your plant by specially trained GEMAK JSC installation teams followed by all of the hygienic design rules. Valve Clusters offer multiple valve control top options, position indicators; proximity switches, micro-switches, and externally mounted options, and can have built in interface and connector options and solenoid valves. All the processing plants are designed in 3D before their construction, giving to our customers the possibility of selecting the most ergonomic solution. Valve clusters can be supplied pre-assembled and pre-tested as well as fully wired and with the necessary control panel pre-connected.

Application Areas:

- Dairy Industry,
- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Industrial Plants.

STAINLESS STEEL PIPING



Description

Turn-key mechanical installation, commissioning and training services are provided by Gemak JSC. European norms by using 1st class ALFA LAVAL equipment and materials with high quality workmanship. After delivery of completed equipment and machines, mechanical team start mechanical works and mechanical installation is completed coordinately with customer. Engineers who are responsible from commissioning complete commissioning works and deliver plant to customer. For effective operation of plant, training is given to customer.

Application Areas:

- Dairy Industry,
- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Industrial Plants.

INDUSTRIAL PIPING



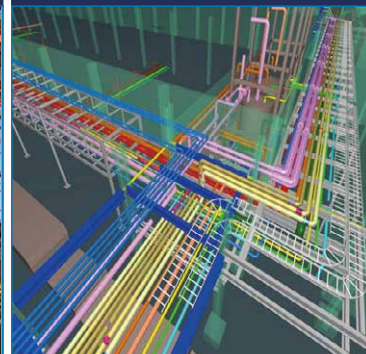
Description

Project preparation, layout and 3D drawing of industrial pipe lines and assembling of various types like stainless steel, galvanized steel, copper, PVC. Preparation of pipe routing plans, isometric drawings, capacity calculation, manufacturing, assembly and installation, testing and commissioning services are provided.

Application Areas:

- Dairy Industry,
- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Industrial Plants.

ELECTRICAL INSTALLATION



Description

Assembling of HV, MV, and low current control panels, connections and commissioning necessary cable works and installation of cable trays and cable connections between equipment and electrical cabinets, connection and cabling of field instruments, control panels, valves, sensors, and electrical works of utility lines (water demineralization systems, water cooling systems etc.) services are provided.

Application Areas:

- Dairy Industry,
- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Industrial Plants.

OUR PRODUCTIONS

DISTRIBUTED PRODUCTS

FLOWELL WASTE WATER SYSTEMS

BERTOLI

FLOOR DRAINS

GUTTER CHANNELS

HOMOGENIZERS

PISTON PUMPS



Description

Description

Description

Description

Available in AISI 304-316 stainless steel.
Simple design for optimum hygiene.
Shortest maintenance and cleaning time.
Suitable for sanitary applications like food industry plants.
Various types for different applications and usage areas.
Fully glass blasted.
Available for ceramic floor tiles.
Models for heavy and light traffic loads.
Insulated models provides sanitary by retain gutter gas to environment.

Available in AISI 304-316 stainless steel.
Simple design for optimum hygiene.
Shortest maintenance and cleaning time.
Sanitary for food plants.
Feasible dimension and types for your needs.
Fully glass blasted.
Available for ceramic floor tiles.
Flowell gutter series designed and manufactured for your request by our specialized engineers.

Capacities:
Michelangelo series: 25-400 bar, 3-15kW, 130-3200lt/h
Rafaello series : 25-400bar, 2-132kW, 2000-21.500lt/h
Leonardo series: 25-400bar, 30-400kW, 6.100-70.400lt/h
R&D Homogenizers:
Atomo serie: 3kW, 20lt/h, 600-2000bar
Molecola serie: 3kW, 120lt/h, 600-1200bar
Quark serie: 3kW, 40-130lt/h, 25-400bar
Mago serie: 3kW, 4-130lt/h, 25-400 bar

Complete range for high pressure homogenizers for various industries and R&D centers.

Capacities:
Giotto PX series: 4-30kW, 1.000-24.000lt/h, 25-80bar
Giotto TP series: 11-22kW, 6.000-14.000lt/h, 10-15 bar
Shear Pomp: 30-37kW, 4-6 poles.

High pressure pumps with 3 or 5 pistons for various applications.

Application Areas:

- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Dairy Industry,
- Meat Industry,
- Industrial Plants,
- Buildings,
- Offices,
- Hotels,
- Hospitals.

Application Areas:

- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Dairy Industry,
- Meat Industry,
- Industrial Plants,
- Buildings,
- Offices,
- Hotels,
- Hospitals.

Application Areas:

- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Dairy Industry,
- Meat Industry.

Application Areas:

- Food Industry,
- Chemical Industry,
- Pharmaceutical Industry,
- Dairy Industry.

ALFA LAVAL PRODUCTS

BRAZED HEAT EXCHANGERS



Description

Capacity: between 0,5-600 kW. Compact and durable design with consistently high quality. Equalancer system provides a substantial saving in heat transfer surface compared to BHEs with traditional distribution system. Cost efficient, space savings due to the compact design of BHEs compared to shell-and-tube heat exchangers. Every BHE is pressured and leak is tested before delivery, ensuring top quality products. First-class manufacturing facilities of ALFA LAVAL, global presence and high product availability. Pressure vessel codes are available as standard.

Application Areas:

- Hydraulic Oil Cooling,
- Heating/Cooling Systems,
- Heating/Cooling Systems, Which Have Corrosion Risk.

PLATE HEAT EXCHANGERS



Description

Flowrate: 0,5m³/h - 2.000.000 m³/h. Wide range of heating and cooling duties. DN25-DN350 diameter range facilities heat exchangers. Between 6 bar-40 bar Frame pressure category. Plate pressure depths may vary according the applications. More efficiency with less m² by ALFA LAVAL patented plates design. Long-life gasket equipment has full protection for leaking by its geometry and chemical structure. ALFA LAVAL patented chocolate pattern on the plates ensures the fluids to reach to most far corners through the channels and the heat transfer surface of the plate to be used at maximum level.

Application Areas:

- Water Heating,
- Cooling,
- Centralized Building Heating,
- Oil Cooling,
- Heating Recovery Systems,
- Food Industry,
- Pharmaceutical Sector,
- Industrial Plants,
- Chemical Sector,
- Marine Sector,
- Hvac.

SEMI WELDED AND LASER WELDED HEAT EXCHANGERS



Description

Capacity: 0,5m³ - 300m³. Laser welded heat exchangers are used for definitely avoiding intermingle of two fluids. They have optimum performance for high temperature applications which are not suitable for usage of gaskets.

Application Areas:

- Oil Cooling,
- Partial/Centralized Heating Systems.

STAINLESS STEEL FRAME HEAT EXCHANGERS



Description

Capacity: Between 8.000 l/h - 130.000 l/h. The ALFA LAVAL Front Line range is the premier choice for hygienic processes that require optimized performance, gentle product treatment, long operating times and superior cleanability. The ALFA LAVAL Front Line series consists of four models- Front 6, 8, 10 and 15 that feature plate ports and connections from 5,08 cm to 15,24 cm in diameter. Mechanical design pressures of up to 21 bar (290 psi) are possible. Operating temperature is 150 °C.

Application Areas:

- Milk and Cheese Pasteurization,
- High Temperature Sterilization,
- Soft Drinks, Juices and Energy Drinks Pasteurization,
- Heating/Cooling of Fermented Drinks,
- Liquid Egg Process,
- Bottled Water Purification,
- Soups, Dressings, Sauces, Ketchups, Mustard,
- Biotechnological Cultures/ Bouillons Sterilization,
- Wfi (Pharma Injection Water).

ALFA LAVAL PRODUCTS

STAINLESS STEEL PUMPS



Description

Capacity: Between 0,5m³/h-230m³/h.
Maximum head: 190 mSS.
The SolidC centrifugal pump is a standard duty pump for basic transport duties in hygienic applications. It provides reliable, low-maintenance operation. With its hygienic design, cost effective operation and quick, easy maintenance, the SolidC offers excellent value for money. For more demanding duties, ALFA LAVAL offers the premium LKH centrifugal pump.,

Application Areas:

- Food Industry,
- Chemical Industry.

HYGIENIC FLOW EQUIPMENT



Description

ALFA LAVAL supplies wide range of pipe and fittings equipment with maximum hygiene which uses for connection of equipment and lines where sanitary is essential. Provides dimension standards of DIN 11850, ISO 2037, BS 4825, JIS G 3447 and ASME. Matt, raw, bright and polished surface endings, Ra <0.8-1.6 μ m hardness.

Application Areas:

- Food Industry,
- Chemical Industry.

MEMBRANE SYSTEMS



Description

ALFA LAVAL sanitary membrane housing, appropriately designed and manufactured with snug spiral filtration elements. ALFA LAVAL clamp fittings are designed to operate at maximum working pressures of up to 64 bar at 80 °C. Due to totally fault free and high tolerance production, the housings have low energy consumption and absolute minimum bypass, microfiltration, ultrafiltration flow qualifications. Microfiltration, ultrafiltration, nanofiltration and reverse osmosis lines can be designed.

Application Areas:

- Casein Standardization.
- Removal of Bacteria.
- Using Whey Protein Concentrate,
- Partial Demineralization,
- Water Decomposition,
- All Concentration Processes.

AUTOMATION EQUIPMENT



Description

ALFA LAVAL brand hygienic electromagnetic flowmeter, pressure transmitter, level sensor, voltmeter level transmitter, rotachek, loadcell, thermometer, conductivity meter, on-off valve, AS-i control valves are supplied according to the project.

Application Areas:

- Sanitary Processes,
- Food Industry,
- Chemical Industry,
- Milk,
- Pharmaceutical Industry,
- Fruit Juice Industry.

ANDRITZ PRODUCTS

CLARIFICATOR



Description

Manuel Model:
Flowrate: 1.500 lt/h-9.000 lt/h
Gear Drive Model:
Flowrate: 7.500 lt/h-30.000 lt/h
Belt Drive Model:
Flowrate: 1.500 lt/h – 70.000 lt/h
Bowl is manufactured from duplex and super duplex special stainless steel durable to mechanical stress and corrosion; other parts that are in contact with product are manufactured from AISI 304 stainless steel. The study of optimum geometrical features, applied to liquid / liquid and solid/liquid centrifugal separation, has made it possible to obtain large-volume bowls and sludge chambers, so that the interval between one sludge evacuation and the next may be increased, thus reducing the number of discharges per unit of time. The main elements of the bowls, made of special stainless steel, are obtained by press-forging, all in one piece. Each of these components is subjected to accurate mechanical tests and laboratory examinations such as ultrasound controls and micrographic examinations.

Application Areas:

- Dairy Industry,
- Food Industry,
- Fruit Juice,
- Egg,
- Oil,
- Fermented Products,
- Beer.

CREAM SEPERATOR



Description

Manuel Model:
Flowrate: 1.500 lt/h-7.500 lt/h
Gear Drive Model:
Flowrate: 5.000 lt/h-30.000 lt/h
Belt Drive Model:
Flowrate: 1.500 lt/h – 55.000 lt/h
Bowl is manufactured from duplex and super duplex special stainless steel durable to mechanical stress and corrosion; other parts that are in contact with product are manufactured from AISI 304 stainless steel. The study of optimum geometrical features, applied to liquid / liquid and solid/ liquid centrifugal separation, has made it possible to obtain large-volume bowls and sludge chambers, so that the interval between one sludge evacuation and the next may be increased, thus reducing the number of discharges per unit of time. The main elements of the bowls, made of special stainless steel, are obtained by press-forging, all in one piece. Each of these components is subjected to accurate mechanical tests and laboratory examinations such as ultrasound controls and micrographic examinations. Efficiency <%0,054.

Application Areas:

- Dairy Industry,
- Whey.

CREAM CONCENTRATOR



Description

Flowrate: 800 lt/h-4.000 lt/h
The system works with belt drive, self-cleaning system. Cream concentrator raises 30-35% concentration cream at 70oC to 80% concentration. DIN 11851 clamp connection is used. It is donated with manual compression valve. The unit is suitable for automatic CIP. It is mounted on stainless stain frame and includes PLC controlled stainless steel panel.

Application Areas:

- Butter,
- Margarine.

BACTAFUGA SEPERATOR



Description

Gear Drive Model:
Flowrate: 4.000 lt/h-25.000 lt/h
Belt Drive Model:
Flowrate: 4.000 lt/h-40.000 lt/h
Two models are available: Belt Drive and Gear Drive. Separates out 99-99,5 % bacteria of milk. The unit is suitable for automatic CIP. It is mounted on stainless stain frame and includes PLC controlled stainless steel panel.

Application Areas:

- Milk.

ANDRITZ PRODUCTS

GRUNDFOS PRODUCTS

BEVERAGE SEPERATOR



Description

Flowrate: 7.500lt/h-90.000lt/h
Two Models Are Available: Belt Drive and Gear Drive.
Bowl is manufactured from duplex and super duplex special stainless steel durable to mechanical stress and corrosion; other parts that are in contact with product are manufactured from AISI 304 stainless steel. The study of optimum geometrical features, applied to liquid/liquid and solid/liquid centrifugal separation, has made it possible to obtain large-volume bowls and sludge chambers, so that the interval between one sludge evacuation and the next may be increased, thus reducing the number of discharges per unit of time. The main elements of the bowls, made of special stainless steel, are obtained by press-forging, all in one piece. Each of these components is subjected to accurate mechanical tests and laboratory examinations such as ultrasound controls and micrographic examinations.

Application Areas:

- Purification of Fermented Drinks,
- To Decrease Ntu Degree in Fruit Juice/ Fruit Juice Production,
- Clarification,
- Purification,
- Shell Oil.

DECANTER



Description

The ANDRITZ decanter centrifuge is composed of a rotating assembly, driven by electrical motors, supported by two pillow blocks on a base frame. The rotating assembly includes a cylindrical and conical bowl, a scroll conveyor and a gear box, which creates the differential speed between the scroll conveyor and the bowl. The Andritz decanter is designed for a continuous attention-free operation, through a specific electronic system. The shutdown of the decanter can be programmed outside of the operators' working hours on site and an operating 24 hours a day is of course possible. The wetted parts are manufactured from AISI 316L stainless steel material and the replaceable solid discharge ports are manufactured from tungsten carbide. It is suitable for CIP cleaning.

Application Areas:

- Vegetable Juice,
- Water,
- Orange Juice,
- Tea,
- Apple Juice,
- Grape Juice.

CIRCULATION PUMPS



Description

Flowrate: 0,5m³/h – 200m³/h
Maximum Head: 1,2m-170m
Liquid Temp: -25oC - +150oC
Working Pressure: 10 Bar-25 Bar
Low energy consumption, maintenance-free. Available with types of wet and dry rotor with block type frequency convertor. Single or twin types. Pump types are ALPHA2, COMFORT PM, MAGNA1, MAGNA3, TP.

Application Areas:

- Heating Systems,
- Domestic Hot Water Systems,
- Cooling and Conditioning Systems,
- Geothermal and Solar Energy Systems,
- Centralized and Local Heating Systems.

CENTRIFUGAL PUMPS



Description

Flowrate: 4m³/h - 4600 m³/h
Capacity
Total Head: 4m - 160m
Temperature: -25 °C - 140 °C
Working Pressure: 16 bar - 25bar
Low Energy Consumption
Easy integration to existing working conditions
Easy assembly
Ease of control from multiple points
With mechanical seal
Single Stage
Standard and Frequency Controlled, Single or gradual stage.
Types: TPE 2000 serie, TPE 1000 serie, NBG, NE, NBGE, and HS series.

Application Areas:

- Heating Systems,
- Partial/Central Heating Systems,
- Water Procurement,
- Washing Systems,
- Cooling and Ventilation Systems,
- Sprinkler System,
- Fire Protection System,
- Other Industrial Systems.

GRUNDFOS PRODUCTS

BOOSTER



Description

Flowrate: Max. 1080 m³/h
Total Head: 155m.
Parallel processing availability up to 6 pumps.
Pump frame is produced by cast or stainless steel AISI 304 - AISI 316. Pump jacket and impeller are in stainless steel AISI 304 - 316.

Application Areas:

- Water Providing Systems,
- Industrial Plants,
- Irrigation Systems,
- Commercial Buildings.

TEKNOICE PRODUCTS

FREEZERS



Description

Capacity: 300 lt/h - 400 lt/h - 600 lt/h - 800 lt/h - 1200 lt/h - 1600 lt/h
High production flexibility. Special care in choosing materials, which are all top quality, to guarantee robustness, corrosion resistance and durability. A tubular condenser that can be opened for manual and chemical cleaning. Refrigerator compressor with an built-in semi sealed piston (if there should be a malfunction, can be opened and adjusted), which is more reliable and efficient than a sealed compressor. Automatic freezer barrel pressure adjustment. Use of a dual-piston pump (patented). All models are set-up to be connected with a C.I.P. cleaning unit with a program incorporated into the freezer controls. High-performance refrigeration system. Production of especially firm, consistent ice cream, reaching temperature levels up to -9°C. Energy saving. All our products are designed to obtain maximum energy saving and the best production capacity/energy consumption ratio.

Application Areas:

- Industrial Production of Ice Cream,
- Traditional Turkish Production of Ice Cream: "Kahramanmaraş Type Ice-cream".

FRUIT FEEDER



Description

Capacity: 200lt/h – 3.000 lt/h ice-cream
Fruit feeder is used with the ice cream continuous freezer line, to blend solid and small pieces of ingredients (such as hazelnut grains, chocolate chips, dried or candied fruits etc.) in the ice-cream flow in order to obtain ice-cream with inclusions. The machine can be directly connected to a cup, cone, container and tub filling machine.

Application Areas:

- Ice-cream,
- Chocolate.

FILLING MACHINES



Description

Cup Filling : 600 unit/h –3.000 unit/h
Stick Type: 6.000 unit/h –20.000 unit/h
Cone: 5.000 unit/h –20.000 unit/h
Tub: 300 unit/h –1.500 unit/h
Automatic linear and rotary filling machines for cups, cones, containers and tubs. The automatic filling line that Teknoice offers its clients is able to fulfil all production requirements, from filling cups of various capacities to the production of different-sized cones, to filling tubs and buckets with customized decorations and types of finishes. With linear or rotary versions, there is always a model suited to the space available in the factory. What distinguishes this machines is its versatility, production efficiency, care in detail, focus on hygiene and easy maintenance.

Application Areas:

- Ice-cream,
- Chocolate,
- Cake,
- Biscuit,
- Chocolate Wafers.

TEKNOICE PRODUCTS

LAIEF PRODUCTS

PACKINT PRODUCTS

FILLING MACHINE
FOR CUPS AND CONES

Description

Capacity: 1.500pc./h – .000pc./h
It is entirely made of stainless steel. The rotary plate is made of a single piece of metal and its smooth activation is ensured by a speed-controller and a lifelong lubricated indexing drive. All basic machine movements are mechanically synchronized by means of cams, while secondary movements are pneumatically activated. The standard machine is furnished with 700 mm rotary working table and 12 easily accessible working stations. It is composed of the following stations:

- Cups positioning
- Cones positioning
- Cone paper calibration
- Chocolate spraying
- 1-2 colour ice cream dosing
- Chocolate topping dosing
- Dry topping distribution
- Lid positioning
- Lid sealing/crimping
- Final product ejection

Application Areas:

- Ice-cream.

EXTRUSION AND
HARDENING LINES

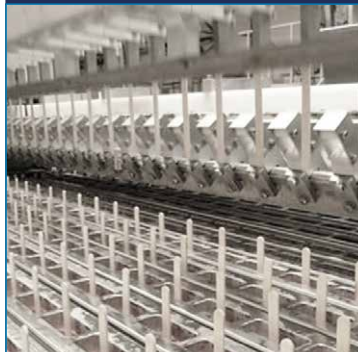
Description

Ice cream capacity from 4,000 to 36,000 pieces per hour.
A compact line composed of an insulated box with an evaporator and mechanical trays conveyor unit, work table with extrusion and/or timed dosing stations, cut and positioning of the stick, pincers pick-up system, flow pack wrapper unit and freon or ammonia cooling unit.

Application Areas:

- Ice-cream,
- Biscuits,
- Chocolate
- Dairy Industry,
- Marmalade .

ICE-CREAM MACHINES



Description

Stick type ice-cream machines
cake type ice-cream machines
sandwich type ice-cream
machines packaging machines are produced.

Application Areas:

- Ice-cream.

LIQUID CHOCOLATE LINES



Description

Liquid chocolate lines
single bar and filled type
chocolate lines.
Candy, confectionery, ice-cream
technologies and for all kinds of
chocolate production lines.

Application Areas:

- Ice-cream,
- Confectionary,
- Chocolate,
- Biscuit.

BERTUZZI

FRESH FRUIT AND VEGETABLE
JUICE PRODUCTION PLANTS

Description

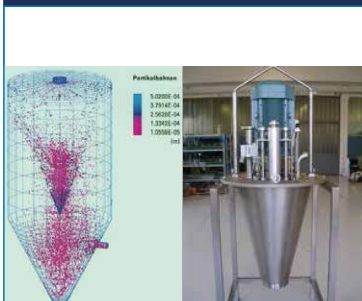
Bertuzzi is focused on developing innovative technologies for fruit and vegetable processing. In particular, Bertuzzi designs, manufactures, and supplies plants and machines to transform any type of fruit into juices (clear, cloudy, pulpy), concentrates, nectars, baby food, jams, ready-made drinks, and in general any fruit/vegetable base products including ketchup, tomato paste, sauces, basis for yoghurt, milk condensate, etc. Unique and innovative technologies and dedicated extraction machines have been developed by Bertuzzi to process tropical fruits (pineapple, mango, guava, passion fruit), pomegranate, citrus fruits (orange, lemon, grapefruit) and vegetables (tomato and carrot). Bertuzzi has also developed extensive experience in supplying multi fruit processing plants designed to maximize yield and quality of each product. Bertuzzi's plants meet the most stringent food standard specifications and have a high degree of automation that substantially reduces operating costs.

Application Areas:

- Clear Fruit Juice
- Cloudy Fruit Juice,
- Pulpy Fruit Juice,
- Concentrates,
- Marmalade,
- Sauce,
- Baby Food.

HANS. G. WERNER

DRYING SYSTEMS



Description

Project development and modernization services for increasing the yield of the spray dryers.

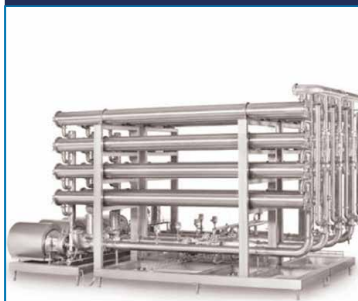
- To increase the product capacity
- Addition of heat recovery units
- Decreasing the energy expenditure
- Systems for increasing the product quality
- Atomizer and nozzle production
- Air distributing system production

Application Areas:

- Milk Powder,
- Whey Powder,
- Chemical Powder,
- Detergent,
- Pharmaceutical Industry.

ALIMA-BIS

MEMBRANE SYSTEMS



Description

Capacity: 1.000 lt/h - 60.000 lt/h
Membrane filtration is the separation of liquid product in the level of molecules and ions. Generally, according to the pore diameter of polymer filter, while allowing the penetration of required substances (permeate), retentant is separated from the liquid.

RO (Reverse Osmosis)
10 bar - 100 bar
NF (Nano Filtration)
UF (Ultra Filtration)
1 μ m - 10 μ m
MF (Micro Filtration)
10 μ m - 50 μ m.

Application Areas:

- Microfiltration,
- Concentration of Milk Protein,
- Concentration of Whey,
- Brine,
- Ultrafiltration,
- Productions of Quark and Feta Cheeses,
- Fruit Juice Clarification,
- Standardizations of Milk & Casein,
- Nanofiltration,
- Process Water Recovery,
- Reverse Osmosis,
- Ro Polishing,
- Whey Concentrating .

MARTEC PRODUCTS

PIGGING



Description

Hygienic pigging which work in concert with CIP as low-waste clean-in-place solutions. Work ranges from low cost process upgrades to enhance productivity and clean-ability through CIP sets. Patented Marplug central product recovery system. The Marplug introduced into the line via a ® Launch Station and, depending on the client's process, the product recovery sequence operated through to a Receive station and controlled manually, semi or fully automatically. Fully automated systems provide a reliable and repeatable process with minimal operator involvement consolidating best practice process design.

The Marplug is fully cleaned without manual handling and hygienically stored ready for subsequent use.

Application Areas:

- Chocolate,
- Dough,
- Sauce,
- Labne Cheese
- Condensed Milk
- Cream.



SERVICE, SUPPORT AND SPARE PARTS

HIGH QUALITY SERVICE	PROFESSIONEL SERVICE	TRAINING	SPARE PARTS
<p>Choosing Gemak JSC. means, choosing the best equipment on the market.</p> <p>The design and engineering of our products ensure the highest standards of reliability and durability. We are serving the best quality and professional service to our best quality equipment and processes.</p> <p>As Gemak, our slogan is to maintain service in 24 hours to all of the cities of Turkey and 36 hours to all over the world.</p>	<p>Our service department is composed of professional service engineers, technicians and workmen. Our team is always ready to solve your problems 7 days/24 hours.</p>	<p>In all of the commissioning facilities whether it is a single unit or a complete system, to make sure that our customers can obtain the optimum benefit of their machines and systems, we give comprehensive trainings. These trainings are realized on site with the customers and their operating staff. We also provide detailed and ease of use documentation.</p>	<ul style="list-style-type: none"> • Spare parts stock for every unit and system manufactured and distributed (25.000 different type of parts in stock) • Instant delivery from the stock • Spare parts catalogue number tracking in electronic media • Spare parts and service tracking in terms of customers and units (lot tracking) in electronic media • Repair of spare parts when needed • Service with guarantee



GEMAK GIDA ENDÜSTRİ MAKİNALARI ve TİCARET A.Ş.

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