





# **Applications**



**Milk & Dairy Products** 



**Chocolate & Confectionery** 



Wine



Juice



Chemistry



**Biochemistry** 



**Cosmetics & Hygiene** 



Whey



Sauces



**Olive & Olive Oil** 



**Beverages** 



Oils & Fats



Medicine



**Drinking Water & Treatment** 



**Biochemistry** 



Energy

# **Stainless Tanks**



#### **Process Tanks**

Designed to respond to the requirements of the process, process tanks are manufactured with mixers, heating-cooling jackets, insulation of various characteristics in compliance with the rules of hygiene.

Various stages or processes in industries usually have such special requirements as time, pressure, temperature, mixture and other operating conditions.

Process tanks ensure the necessary operating conditions to be properly controlled by means of digital sensors at each and every step until the desired product is obtained.



## **Storage Tanks**

They are manufactured with any necessary equipment in compliance with the rules of hygiene so that they may be protected without losing their properties.

Storage tanks may be manufactured with mixers, heating-cooling jackets and insulation.

Manufactured of certified AISI 304L or AISI 316L stainless steel using the Automated TIG Robotic Welding system, tanks are designed in compliance with the international standards.

Tanks are manufactured with volumes between 500L and 250.000L.





### **Fermentation Tanks**

Specially designed for the food products requiring fermentation, tanks are manufactured to allow for the control of the temperature values during the process.

Fermentation tanks may be manufactured with mixers, heating-cooling jackets and insulation.

Tanks are manufactured with volumes between 500L and 30.000L.



### **Mobil Tanks**

Tanks designed for the transportation of liquid food products under hygienic conditions are made of stainless steel certificated with first class quality.

Mobile tanks are produced with single wall, heating-cooling jacket, self-electric heating, insulated and in accordance with hygiene rules and in various capacities.

It is produced in a minimum volume of 500 L. It can be produced in high volume capacities according to demand.



# **Stainless Tanks**



### **Ultraclean Tanks**

Liquid food products, which should be stored in high hygienic conditions, has the necessary technical equipment and is manufactured in accordance with hygiene rules in order to protect products without losing their properties.

Ultraclean tanks are manufactured with various properties (mixer, heating-cooling jacket, insulation etc.)

The surface roughness at all points in contact with the product is brought to the desired values and the air entering the tank is filtered through the vent filters on the tank.

The product is manufactured in volumes from 500 to 30,000 Liters



### Mixers

Designed specifically for the products to be mixed, mixers are manufactured with multiple mixer options with various features.

Mixers may be manufactured with heating-cooling jackets and insulation.

They are used for chocolate, various dressings, confectionary fillings, milk desserts and cosmetic industries.

Capacity Range: 250-3.000L





### **Industrial Tanks**

Designed in accordance with the requirements of the chemical and cosmetic industries, tanks are manufactured with mixers of various features, heating-cooling jackets and insulation in compliance with the rules of hygiene.

They may be manufactured of AISI 304L or AISI 316L stainless steel depending on the chemical properties of the product.

Tanks are manufactured with volumes between 500L and 30.000L.



# **High Volume Silo Tanks**

Silo tanks with a maximum volume of 250.000L and various features are manufactured in areas requiring high-capacity storage.

Silo tanks are manufactured with mixers, heating-cooling jackets and insulation.

Tanks by means of 2- and 3-dimensional designing programmers prepared in computer-aided media are manufactured of first class certified stainless steel.



# **Machines**



### **Pasteuriser**

Our plate pasteurisation and sterilisation systems are designed in a manner which you can safely use in the pasteurisation processes of such products as Milk, Fruit Juice, Ice Cream Mix, Sugar Syrup, Cream, Water, Fermented Drinks, Brine, Egg, Honey, Molasses, which are designated as liquid food group.

Such basic parameters as proper temperature, correct choice of plate, optimum heat transfer area are determined for each and every product in the most accurate manner with engineering calculations made and tanks are presented to you for use at maximum efficiency.

Capacity Range: 500-30.000 L/H



## Fermenter - Bioreactor

The Fermenter - Bioreactor system is manufactured to meet all microbial fermentation needs from biopharmaceutical production, which allows working on a industrial production scale.

With the integration of process analytical technology into our systems, it maximizes efficiency in production optimization processes.

- ▶ Mammalian Cell Cultures
- Microbial Fermentation
- ▶ Biopharmaceutical Manufacturing
- ▶ Vaccine Production





### **CIP Systems**

CIP units are an advanced automatic washing system for liquid food and industrial products, where equipment such as storage tanks, process tanks, plate pasteurizers, tubular pasteurizers, product lines, filling machines and mobile tanks are sanitized and disinfected.

In accordance with the process requirement; At the desired temperature values, with the desired chemical applications, adjustable time settings can be made. Ease of application is provided by the prescriptions that have been prepared.

- ▶ Chemical-Water Recovery
- ▶ Saves Electricity, Water, Steam, and Air
- ▶ PLC Automatic Controlled



## **Multi-Functional Mixers**

They are used in various food production processes such as cream and melted cheese, chocolate, salad dressing, baby food, cream, confectionary fillings, almond butter, mayonnaise ketchup.

They have a wide variety of important functions such as mixing, heating, cooling, dispersion and homogenisation, emulsifying, downsizing, vacuum-cooking and deodorisation.

Capacity Range: 50-100-200-400-800 L



# **Machines**



#### **Plate Filters**

It is used for polishing (fine filtration) of products such as olive oil, wine, juice, water, soda, vinegar, sugar syrup, beer.

It can be produced with manual or automatic shutdown according to demand, with 20-30-40-50-60-80-100 plates according to capacity.

According to the product, the capacity can range from 250 to 5,000 LT/H.



### **Kieselguhr Filters**

It is used for filtering products (coarse filtration) such as olive oil, wine, juice, water, vinegar, beer.

It can be produced with manual or automatic unloading according to demand, with 2-3-5-8-10-20 m2 according to capacity.

According to the product, the capacity can range from 500 to 10,000 LT/H.



## **Filling Machines**

They are designed to carry out the filling operation of liquid food and industrial products with various package options under hygienic conditions.

- ▶ Full Automatic PET Bottle Filling Machines
- ▶ Full Automatic Can Filling Machines
- ▶ Semi-Automatic Filling Machines
- Monoblock Filling Machines
- ▶ Boutique Filling Machines (Single and Double Nozzle)
- ▶ Post-Filling Equipment (Cap Closing, Labelling, Date Encoding)

Milk and dairy products, oils, ketchup and mayonnaise, turnip juice, lemon juice, etc.





**Centrifugal Pumps** 



**Lobe Pumps** 



Mono Pumps



**Liquid Transfer Pumps** 



**Piston Pumps** 



Diaphragm Pumps

# **Key-Turn Facilities**



### **Milk Processing Facilities**

We install facilities with technological and modern features for the dairy industry on key-turn basis.

We provide complete services at the engineering and process, production and procurement of machines and finally commissioning stages design of the facilities.

- ▶ Milk Receipt and Storage Units
- ▶ Milk Standardisation and Pasteurisation Unit
- ▶ Yoghurt, Ayran, Labneh Cheese Production
- ▶ Spreadable and Semi-Firm Cheese Production
- ▶ Ice Cream and Dressing Lines
- ▶ CIP Cleaning Systems



## **Olive Oil Production Facility**

We materialise the processes of

- ▶ Fully automated production of olive oil from the bunkers to the separators by continuous systems;
- ▶ Its subsaequent cleaning by hygienic filters and storage in stainless oil storage tanks;
- ▶ Packaging by filling machines and making ready for consumption on key-turn basis thanks to our experience of many years.





### **Sauce Production Lines**

We provide services with the manufacture of equipment for aromatised dressing production lines in order to be able to obtain high-quality products of ideal consistency with our experience on key-turn dressing production lines.

#### **Basic Dressings:**

- ▶ Ketchup, Mayonnaise and Mustard,
- ▶ Caramel Dressing,
- ▶ Topping,
- ▶ Chocolate Dressings,
- ▶ Cream Fillings.



## **Chocolate Processing**

We serve the chocolate industry with various process tanks, storage tanks, processing machines, mixers, mobile tanks, oil preparation systems, transfer pumps and jacketed pipelines.

Equipment are equipped with automation systems and ensured to operate efficiently and technologically at the facilities.



# **Key-Turn Facilities**



### **Fruit Juice Processing**

We serve the fruit juice industry with various process tanks, storage tanks, pasteurisation units, filters, mixers, mobile tanks, transfer pumps and CIP systems.

We offer key-turn solutions by capacity and scale in the production of fruit juices and aromatised drinks.



## **AdBlue Production Facility**

New generation AdBlue is a water-based urea solution used in Diesel vehicles.

We provide key-turn services by supplying any other necessary equipment besides AdBlue preparation and storage tanks.

We provide the most ideal solution in accordance with the requirements, budgets and growth plans of the investors in the projects we undertake.





## **Ice Cream Production Facility**

Ice cream is a product obtained by processing dairy products in a freezer by adding air to a mixture consisting of sweeteners, stabilizers, emulsifiers, flavors, colors, and seasonings.

Flow chart of ice cream production:

- ▶ Raw material Inputs
- ▶ Weighing, Preparation of Raw Materials
- ▶ Mixing, Preheating
- ▶ Pasteurization, Homogenization
- ▶ Ripening, Freezing
- ▶ Filling, Packaging



## **Cheese Production Facility**

Our equipment designed for the cheese industry can provide services in the production of Cheddar cheese, Toast cheese, Classic and Cultured Feta cheese, Mozzarella cheese, Cream cheese, Labneh and Curd.



# **Our Services**



### **Servicing & Spare Parts**

We strive to provide aftersales services for the tanks and machines we manufacture in the same quality approach within the shortest possible time. We aim at optimising the superior performance of our equipment through any necessary maintenance and servicing.

You can easily reach us whenever you need assistance thanks to the possibility of remote connection and our fast on-site service.



## **Installation & Commissioning**

Our well-trained and specialised team ensures the process to materialise just as planned through fast and complete installation service.

- ▶ Stainless Pipe Manufacturing
- ▶ Tank and Machine Installation
- ▶ Mechanical and Electrical Commissioning
- ▶ Testing and Training
- ▶ Electrical Installation, Pan and Cable Installation



### **Automation & Software**

We prepare automation projects and provide services to make facilities easily manageable and to enhance efficiency with the experienced automation team employed in our organisation and our specialised business partners who are leaders in their own respective fields.

We supply optimal control systems for unit- and system-based automation which will control the process lines and the production from a single point.



## **Projection & Consultancy**

We prepare, implement and support the materialisation of projects compliant with different requirements and needs in your investments in production facilities and equipment in the food industry. In line with the requirements, budgets and growth plans of our customers, we design the most ideal solution and asses the alternatives together.

# **About Us**

Operating in the Turkish stainless steel industry, ENDÜLÜS KROM Makina started to provide services in the manufacture of stainless steel tanks and food machinery of various features with its broad machine pool at its facilities designed to specific production in İzmir in 2006.



The company provides services in stainless steel storage and process tanks, stainless steel food and industrial machinery, fully automated key-turn food facilities automation panels and software systems as modern, hygienic and state-of-the-art technological products.

The company was established with 100% national capital, has earned the respect and confidence of its customers so far and is taking firm steps in being one of the leading companies of the industry in terms of quality. Enhancing its product range by the requirements from the industry, ENDÜLÜS KROM Makina uses the automatic robotic TIG welding system which offers high quality and efficient operating opportunities in its production. Products of ENDÜLÜS KROM Makina have become a sought-for brand thanks to their quality, varieties and confidence in the domestic and foreign markets in the present day.

The company concentrates on its R&D studies in order to manufacture its tanks and machines with high-level workmanship and provide high efficiency and visual excellence as well as ensuring that the products will be of the same quality and robustness by the methods employed during the manufacturing process.

ENDÜLÜS KROM has not only sold the products manufactured by them in the domestic market but also exported them to a total of 25 countries including but not limited to Italy, United Kingdom, Germany, Ukraine, Albania, United States of America, Bulgaria, United Arab Emirates, Saudi Arabia, Qatar, Libya, Palestine, Senegal, Jordan, Morocco, Algeria, Tunisia, Uzbekistan and Georgia. It continues its operations through international trade air organisations and its overseas dealer network.













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