# LABORATORY EQUIPMENTS AND AUXILIARY PRODUCTS



# LABORATORY TYPE DISSOLVER MACHINES



These mixers, designed for laboratories. They have a very practical and compact design, as well as design with an extremely strong structure with their own table as a standard, so they can easily perform extremely homogeneous mixing and dispersion as well as crushing to a certain level. They have variable-speed adjustment with frequency inverter technology. Time adjustment mixing available as standard feature. Different types of mixing apparatus, the property of lifting up and down on its own body with an electro-hydraulic system, moveable edge and base scraper system, automatic vacuum system, double suction disc, a scraper system movable on the edge and base, automatic vacuum system, double-deck vane, temperature measurement system, the ex-proof design in ATEX Zone 1 EEX dIIB T4 standards, recipe controlled semi-automatic or fully automatic PC / PLC control systems features are offered as optional.

### LABORATORY TYPE BASKET-MILL MACHINES



This type of basket-mill machines designed for laboratories. The milling basket with a superior wet milling feature used in the machine is designed to ensure a high milling efficiency product. Thanks to its high-efficiency product flow the disc which acts as a pump which is located under the milling. basket and contributes to dispersion has the ability to complete the operation effectively in a short time. Both the milling basket and the jacket of the vessel provide effective temperature control. All surfaces in a contact with product are made of stainless steel. The milling beads in the basket play a huge role in this machine. They have variable speed adjustment with frequency inverter technology. Time adjustment mixing and temperature measurement as standard feature. The property of electro-hydraulic moving up and down system, automatic vacuum system, ex-proof design in Atex Zone 1 EEX dllB T4 standards, recipe controlled semi automatic or fully automatic PC/PLC control systems features are offered as optional

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## LABORATORY TYPE ZET-MIXER MACHINES

This type of Zet-Kneader machines designed for laboratories. Used for pilot production and products development stages of products having high viscosity prior to their entry to main production. By means of the Laboratory Mixer Machine, some errors may be minimized at the pilot production stage and probable high production cost errors are avoided. The machine has three separate mixing volumes and it offers the most suitable option for laboratory production. Easy mounting and assembly, machine cleaning and practicality are its important features. The external lateral walls of the Zet Mixer Machine of 600 ml. having the smallest mixture volume can be practically dismounted and the products inside the boiler can be taken outside manually. The other 3 and 5 liter models have also product discharge, extruder and vessel revolving features based on the options requested. Mixing palettes which can be operated in both ways, the discharge operation can be performed guicker. Ex-proof design in Atex Zone 1 EEX dllB T4 standards, automatic vacuum system, double jacket vessel system for cooling and heating purposes, stainless steel pallets, frequency inverter technology for pallets and extruder and recipe controlled semi automatic or fully automatic PC/PLC control systems features are offered as optional.

# DIN CUP VISCOSITY CONTAINERS

Din cups are manufactured from aluminum material in accordance with DIN 5321 1 standards precisely in CNC machining center. The hole orifice made of stainless steel is placed in the Din Cup exit hole with a precision of ±0.02 mm. Viscosity containers, whose internal and external surfaces are completely polished, also minimize time loss in terms of cleaning. The viscosity of any liquid to be measured is expressed as the time to flow from a certain hole diameter to a Din Cup with a volume of 100 ml. The internal geometry and structure of the containers are kept the same and those having 2,3,4,6,8 mm output hole diameter can be manufactured as standard. The flow time is measured with the help of a stopwatch. The tripod carrier on which Din Cup will be placed, the handle property to be used by dipping like coffee pot handle are optional.

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## MIXING VESSELS

There are two different types of mixing vessel. The mobile vessel are generally preferred up to 2000 liters. The models with capacities above 2000 liters are used with bottom dished, fixed foot, placed on the base or mounted on to the platform. The output is placed at the point in which the vessel's bottom and side wall are integrated for wheeled type and for platform models of vessel's output is placed at the centre of bottom swage. There are arms to be able to run the vessel in the side walls of wheeled vessels. The capacity of vessel is manufactured from 1 liter to 10.000 liters for being used in manufacturing process, from 1.000 liters to 40.000 liters for being used in stocking process. It is also used in any preferred capacity for the silos of raw materials. It is possible to choose different materials for the vessels. Currently they manufactured of stainless-steel at the standard of AISI 304 in accordance with the chemical structure of the product. The design of the vessels may vary according to the manufacturing process. The vessels may be made as double jacket for being used as cooler and heater. Special valves may be placed over the outlet coupling of the vessel. The vessel may be manufactures in a manner holding the vacuum. The wheels of the vessel may be made of different material.

# MIXING PROPELLERS

The most functional feature is that the dispenser mixer machine propellers reach homogeneous mixture in a short time without increasing the temperature of the product to be mixed thanks to the special wing structure. The special structure of the wing angles has also been developed to minimize the dispersion process. Ø 40 mm to Ø 900 mm in the desired dimensions, 2 mm to 4 mm in various thicknesses as standard AISI 304-L quality stainless steel material is produced as balanced. The propellers that are produced are delivered ready to assemble by opening connection holes upon request. The choice of propeller diameter is proportional to the motor power of the mixer, the maximum mixing speed and the diameter of the production vessel. An improperly selected propeller leads to loss of dispersion and prolongation of the manufacturing process. The mixing propellers can be made of AISI 316 quality stainless steel as an option and the fins can be diamond-tipped. Diamond tip propellers reduce the wear time of the wings to minimum. Double-decker turbo propeller and window type special propeller production can also be made as an option.

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# **BOX CLOSING UNITS**

They are widely used in the areas where there is a process of filling the products into the capped containers, and then closing the caps. It can be used widely in chemical industry productions so as to close the caps of boxes of various sizes especially in paint production industry. Box cap closing unit was designed to close the caps of plastic and tin boxes. By means of its adjustable features, it allows operation with boxes of various sizes. The unit which operates on pneumatic driven basis needs 6 Bars of pressurized air. Based on the dimensions of the boxes, there is an adjustment mechanism which provides the up-down movement of the closing cylinder group. Also it is equipped with a braking system which stabilizes the closing cylinder group at the desired elevation. It is possible to adjust the air with the air adjuster it is equipped with. The system is operated by foot pedal or two hand safety button. It moves up and down by a closing table and closes the cap. When the foot brake or button is released, the table moves up again and the unit is ready again.

"The values that define Sözer Machinery..."





SÖZER MAKINA exports approximately 70% of its annual production today. As of the end of 2019, it shares its manufacturing technology and services with contacts in 52 different countries worldwide as well as distinguished Turkish firms. Our specialized engineers and technicians perfectly provide design and project design, production after-sale services.

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