

**SAY-END ENDÜSTRİYEL MAKİNA
SANAYİ TİCARET LIMITED ŞİRKETİ
PRODUCT CATALOGUE**



Contact Details of Manufacturer and Seller

- > SAY-END ENDÜSTRİYEL MAKİNA SANAYİ TİCARET LIMITED ŞİRKETİ
- > Birlik Sanayi, 1. Cd. No: 78 Sitesi I, 34520 Beylikdüzü Osb/Beylikdüzü/İstanbul
- > (+90) 850 885 0 886
- > www.say-end.com
- > info@say-lab.com.tr



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About Us

- **SAY-END**, which has been developing rapidly since its establishment and has proven itself in domestic machinery production and exports by prioritising quality and customer satisfaction, acts with a sense of responsibility that covers every activity on the road from design to manufacturing, from manufacturing to installation with our professional team in its wide range of machines and all turnkey projects consisting of the principle of innovative production. As **SAY-END**, which has guaranteed to produce "Quality and Economic" machines to the business partners it has worked and will work with until today, we help you with both our independent machine solutions and turnkey projects for your industrial needs.

YOUR INDUSTRIAL SOLUTION PARTNER "**SAY-END**"

Vision and Mission

- To reach the markets in the domestic and foreign sectors by keeping customer satisfaction at the highest level in fast and high quality production. To contribute to the development of machine technology in this period and to be a leader in the world in mixing, packaging and assembly by pioneering.

Our Principles and Directives

- **SAY-END** Family: Together with our company employees, we aim to be a company open to innovation that gives the material and moral value that employees deserve for a happy and peaceful life in accordance with business ethics and honest working principles. As a rapidly developing **SAY-END** family; we especially give young people the opportunity to develop with us and aim to maximise their talents and strengths with our talented employees.
- "Quality, Reliable, Fast, Economical and Innovative" We aim to be the solution partner of your needs for our customers, who are our beneficiaries, together with our directions, we want to help you continuously before and after working with us and we strive for this.



DISSOLVER MIKSER

DISSOLVER MIXER**Dissolver Mixer
(SAY-SM-DM)**

- It is a multi-purpose mixer designed for various mixing processes of pharmaceutical, chemical, cosmetic and similar sectors.

According to the characteristics of the product to be mixed, the size and / or power may vary.

The number of agitators of this machine, which has a minimum of 2 agitators, can be increased to 4 according to the product to be mixed.

With the special bearing system, the top cover is separated from the tank with the upper head lifting mechanism.

In addition, thanks to this system, the cleaning of the machine has been made simple.

Boiler Volume is 1000 Litres.

According to the type of product to be produced from the bottom of the tank, different types and speeds of homogeniser can be added.

Optionally PLC Controlled and Touch Screen

- Process control can be done (Vacuum, Speed, Pressure, Temperature Controls)

1000 Lt

37 Kw 1400 Engine

4 Kw Hydraulic Unit

4 Kw Mixer Motor (Dual)

50x60x2000 Panel

Speed Control Unit

Control Panel on the Side

Hydraulic section will be closed

The machine will not work when it is up

Lighting Lamp

Loading Door 350x500 Mm

Dual Propeller

The second propeller will be adjustable

SAY-SM-DM

UNIVERSAL MIKSER

UNIVERSAL MIXER**Universal Mixer
(SAY-SM-UM)**

- They are high speed mixers/shredders designed for all kinds of mixing and pre-dispersion/dispersion processes of solids in liquids in a wide viscosity range. They have very high efficiency and productivity with various motor powers and optimum construction parameters designed for moving vessels and tanks of various volumes in a wide range. With the model variety and rich options of Universal Mixers, excellent results can be obtained for any application. Complete stainless steel machine main shaft that can operate without vibration even at idle thanks to its rigid body construction. Electro-hydraulically controlled upper body descent and ascent. Rigid fixing wedge for upper body guiding.
- Easy-to-use speed control system (with frequency converter)
Powerful and reliable hydraulic clamping system (standard on all our Dissolvers with boiler clamping safety device)
Adjustable vessel resting-centring system
Electrical safety equipment ensuring the safety of the machine operator during operation.
Push-button controlled analogue operator panel with TFT-LCD display on the electrical panel.
All machine parts in contact with the product are stainless steel.

(SAY-SM-UM)

PLANET MIKSER

PLANETARY MIXSER**Planetary Mixer
(SAY-SM-PM)**

- > Multifunctional Planetary Mixers are machines used in Patisserie, Dining Hall, Restaurant and Hotel Kitchens thanks to their interchangeable apparatus that can perform Whisking, Mixing and Kneading Operations. Boiler and replaceable apparatus are made of AISI 304 Stainless Steel. The whisk apparatus is used for the preparation of materials such as liquid cream and eggs. The Mixing Apparatus is used in the preparation of Solid Soft Dough, Pastry Dough, Sauce Types, Meat and Mashed Potato. With the kneading apparatus, bread, puff pastry, buns and unleavened dough can be kneaded.
- > **Application Areas**
It is used for homogenous mixing of high viscosity liquid or liquid-powder mixtures in high viscosity range and under vacuum in a short time. It is widely used in all kinds of adhesive manufacturing, in the food industry and in areas that require the mixing of materials such as paint paste, chemical pastes.

Speed	Capacity
Multiplication: 2-3	25lt/120 Pieces Egg
Mixing: 1 - 2	Mayonnaise 10lt Dense Sauce Batter
Kneading: 1	8kg Meat Paste 6kg flour

> **Other Features**

There is a Vacuum Unit Design to Prevent Air Bubbles Formed in the Mixing Process. During the mixing process, thanks to an observation window and lighting system, the mixing process can be monitored from inside the closed boiler.

During the mixing process, the boiler is stabilised by holding the boiler with a pneumatic holding mechanism.

(SAY-SM-PM)

BASKET MILL MIKSER

BASKET SHAFT MIXER**Basket Shaft Mixer
(SAY-SM-BM)**

- Basket Mill Mixers are designed to meet the needs arising from today's modern wet grinding processes. The main purpose is to simplify wet grinding processes, to eliminate the need for extra boiler pumps, hoses, pipe systems, etc., which are difficult to clean, and to obtain a narrower particle distribution in a shorter time.
- **Working Principle:**
The high-speed disc under the basket suctions and pulls the product to be crushed from the top of the basket into the conical mouth grinding chamber. Other rotating discs in the grinding chamber perform the grinding/crushing process by giving the necessary energy and movement to the crushing/grinding balls in the chamber. There is a large and high permeability sieve system under the basket. While this sieve allows the product passing through the grinding chamber to return to the boiler, it keeps the crusher/grinder balls in the grinding chamber. The product, which is crushed and passes through the sieve, is thrown towards the walls of the bowl by means of the centrifugal force created by the high-speed disc under the basket, with the help of the conical structure of the bottom of the bowl, the product re-enters the grinding chamber from the top and circulation is provided.
- **Advantages:**
Basket Mill Mixers have very high efficiency. Since more circulation is provided per unit time, crushing times are shortened and energy consumption is reduced. Since the products to be processed are processed in a single vessel from the beginning to the end of the process, the needs such as extra vessels, pumps, hoses and pipe systems are eliminated and pre-dispersion / pre-mixing times are also shortened. Both the walls of the product preparation vessels and the grinding chambers of Basket Mill Mixers have an effective cooling system thanks to water jackets. In this way, the product temperature can be optimally controlled during the process.
If changes occur in the product structure during the process, the necessary binder, solvent or other additives can be easily added without stopping the process.
- Cleaning of the grinding chamber and internal parts, crusher/grinder balls is also very fast and practical.
- **General Features:**
Moving parts made of high strength materials.
In order to shorten the cleaning time, the main shaft, basket system, support shafts, lower turbine disc, etc., which are in direct contact with the product, are made of complete stainless steel with high surface quality.
Electro-hydraulic controlled upper body landing and take-off.
Main shaft speed control with frequency converter.
Powerful and reliable hydraulic clamping system with electro-hydraulic control (with boiler clamping safety device).
Boiler centring system that ensures that the boiler to be processed can be placed exactly in the shaft centre.
Standard, pneumatically controlled, manhole, ventilation flanged, illuminated aluminium boiler cover.
Standard electrical safety equipment (to ensure the safety of the machine operator during operation).
Body mounted, functional, button controlled control panel with LCD display.
Possibility to use various crusher/grinder balls for optimum crushing results.

BASKET MILL MIKSER
BASKET SHAFT MIXER

(SAY-SM-BM)



Boiler Discharge Presse (SAY-BP-K)

> These machines are used for discharging high viscosity products that do not have the ability to flow spontaneously from the boiler in which they are prepared. They are especially designed for use with Vacuum Type Dissolvers, Butterfly Dissolvers and Planetary Type mixers. It is widely used to take products with high viscosity in various properties out of the production vessels or to fill them with the dosing unit. The machine, which is generally used in the construction chemicals production sector, performs the filling or discharging process by pressing even very dense products out of the boiler in a serial manner without difficulty thanks to its structure and working system.

> **General Features:**

The base of the press is embedded in the ground so that it is zero to the ground.

The wheeled boiler to be discharged is brought under the press and placed on the lift mechanism.

The hydraulic system first lifts the boiler upwards so that the wheels are cut off the ground and the boiler sits on the base of the boiler.

With the locking system, the boiler is fixed so that it remains suspended in the air and on its base.

The hydraulic press descends downwards and discharges the product in the boiler through the outlet valve at the bottom of the boiler and suspends the boiler again.

The emptied boiler is lowered to the ground and pulled out from under the press.

> Hidrolik Boşaltma Presleri tamamen boşaltılacak kazana ve çalışılacak ürünün kimyasal özelliklerine göre dizayn edilmektedirler.

Kazan içerisine giren pres kapağı, kazanın kenarlarını tam sıyırarak ölçüde ve sızdırmazlık contalıdır. Boşaltma esnasında kapak ve kazan arasından herhangi bir sızdırma olmamaktadır. (Çalışılacak kazanların da içlerinin mutlaka tornalanmış olması gerekmektedir.)

Motor gücü, hidrolik sistem basıncı, hidrolik silindir ölçüleri, makina gövde ebatları vb. parametreler tamamen kazan ebatlarına, ürün miktarına ve ürün özelliklerine göre hesaplanır ve makina buna göre dizayn edilir.

KAZAN BOŞALTIMA PRESİ

BOILER DISCHARGE PRESSE

(SAY-BP-K)

Machine Type	SAY-MP-1000 LT
Main Motor Power	(Kw) 4
Pressure	(Max Bar) 180
Hydraulic Stroke	(Mm) 1000
Printing Plevt Diameter	(Mm) 1000
Discharge Volume	(Lt) 1000



Barrel Discharge Presse (SAY-BP-V)

- > These machines are used for discharging high viscosity products that do not have the ability to flow spontaneously from the boiler in which they are prepared. They are especially designed for use with Vacuum Type Dissolvers, Butterfly Dissolvers and Planetary Type mixers. It is widely used to take products with high viscosity in various properties out of the production vessels or to fill them with the dosing unit. The machine, which is generally used in the construction chemicals production sector, performs the filling or discharging process by pressing even very dense products out of the boiler in a serial manner without difficulty thanks to its structure and working system.
- > **General Features:**

The base of the press is embedded in the ground so that it is zero to the ground.

The wheeled boiler to be discharged is brought under the press and placed on the lift mechanism.

The hydraulic system first lifts the boiler upwards so that the wheels are cut off the ground and the boiler sits on the base of the boiler.

With the locking system, the boiler is fixed so that it remains suspended in the air and on its base.

The hydraulic press descends downwards and discharges the product in the boiler through the outlet valve at the bottom of the boiler and suspends the boiler again.

The emptied boiler is lowered to the ground and pulled out from under the press.
- > Hidrolik Boşaltma Presleri tamamen boşaltılacak kazana ve çalışılacak ürünün kimyasal özelliklerine göre dizayn edilmektedirler. Kazan içerisine giren pres kapağı, kazanın kenarlarını tam sıyırarak ölçüde ve sızdırmazlık contalıdır. Boşaltma esnasında kapak ve kazan arasından herhangi bir sızdırma olmamaktadır. (Çalışılacak kazanların da içlerinin mutlaka tornalanmış olması gerekmektedir.) Motor gücü, hidrolik sistem basıncı, hidrolik silindir ölçüleri, makina gövde ebatları vb. parametreler tamamen kazan ebatlarına, ürün miktarına ve ürün özelliklerine göre hesaplanır ve makina buna göre dizayn edilir.

VARİL BOŞALTIMA PRESİ

BARREL DISCHARGE PRESSE

(SAY-BP-V)

Machine Type	SAY-MP-190 LT
Main Motor Power	(Kw) 7.5
Pressure	(Max Bar) 180
Hydraulic Stroke	(Mm) 1000
Printing Plevt Diameter	(Mm) 900
Discharge Volume	(Lt) 500



LINEAR MANUAL FILLING MACHINE**Linear Manual Filling Machine
(SAY-SD-LO)**

- 3 kg to 25 kg paint or similar liquid / semi-liquid products are automatic filling and capping machines that fill and close with high precision with weight measurement system.
The buckets fed manually by the operator on the conveyor move step by step to the filling station. The product is fed to the machine with a single filling head with free flow from the stock tank or pressurised by the appropriate pump.
Filling is done here with a nozzle operating at double speed with a pneumatic system without dripping. The caps on the filled packages on the conveyor are closed by the operator.
The performance of the machines varies depending on the number of filling heads, the characteristics of the product to be filled and the packaging form.
- **Specifications:**
The chassis of the machine with AISI 304 quality stainless steel table, equipped with technical plastic conveyor components, step conveyor designed according to the packaging, epoxy painted.
Since it works with weight measurement system, it works with high precision without being affected by the temperature, humidity, material and viscosity changes of the product to be filled.
Low / high viscosity, granular, liquid / semi-liquid products can be filled successfully with different materials, filling heads and nozzles manufactured in different designs.
Net / Gross filling selection is made from the control panel.
The amount of product to be dosed into the packages can be adjusted precisely and there is no dripping problem after filling.
The machine does not fill if there is no packaging under the nozzles.
In the capping group located after the filling group in the machine, there is a capping unit made according to the type of cap to be closed. Thanks to the interchangeable capping heads/systems, different screw, hammering or plastering caps can be closed.
The caps on the filled packages are closed by the operator.
- The caps fed onto the packaging are controlled by the cap presence/absence control photocell.
Cleaning takes a short time due to the simplified filling head design and high surface quality machined parts. Product does not accumulate in the corners and bottom points and contamination does not occur on the surfaces.
Product contact parts of the filling machine are made of AISI 304 SS and Technical Plastic materials. Cleaning in the transition from colour to colour is done in a short time and without the need to disassemble parts by passing the cleaning liquid through the filling head.
The machine is designed in such a way that all settings are simple and easy to make. There is no complexity to make the operator labour and no complex structure requiring high technical knowledge.
Settings for working in different packages are made quickly and easily with minimum tool use.
The number of personnel to work on the machine varies according to the options to be added to the machine.
All functions of the machine with PLC, which complies with CE and can operate smoothly in wet places, are controlled from the operator panel. In case of possible problems, with user-friendly and guiding screen commands (input / output blockages, etc.), the machine first gives a written warning + light alarm and then stops.
With standardised and stocked spare parts support, the machine operates for many years without any problems and without the need for external service.

LINEER MANUAL DOLUM MAKINASI

LINEAR MANUAL FILLING MACHINE

- Machine modelling: SAY-OLD-01
Filling Range: 3-25 kg
Capacity 160
Filling accuracy: 0.2
- Number of filling heads: 1
Working pressure (bar): 6 (incomplete)
Electricity consumption: 0.55 KW/S

SAY-SD-LM



LINEER OTOMATİK DOLUM MAKİNASI

LINEAR AUTOMATIC FILLING MACHINE**Linear Automatic Filling Machine
(SAY-SD-LO)**

- It is generally used to automatically fill materials such as liquid, viscous or granular into a container, bottle or package. This machine is designed to perform the product filling process in a fast, precise and repeatable way. It volumetrically fills various shapes of tin, can, quex, pvc, glass, bottle etc... by means of precise weight-adjustable dosing pumps with electro-pneumatic system. Nitrogenation and odour absorbing aspiration systems are also optionally available. One of the main components of the machine is filling stations. Filling stations are used to fill the product with a certain amount. They can control the filling process very precisely. This ensures that the product is filled into the packaging in the correct quantities and in a leak-proof manner. This protects the quality of the product and consumer safety. It includes bottle or packaging holders that ensure that

- the packaging remains in a stable position during the filling process. This ensures that the filling process takes place smoothly and without errors. Linear automatic filling machines are widely used industrial equipment to improve efficiency on the production line, minimise human error and maintain product quality.

Filling Products:

Suitable for liquid and semi-liquid products such as medicine, cologne, shampoo, glass wipe, liquid agricultural, pesticides, herbal, mineral oils, cleaning products.

SAY-SD-LO

Machine Model	SAY-OLD-01
Filling Range	(Kg) 3 - 25
Capacity	160
Filling Accuracy	0.2%
Number of Filling Head	1
Working Pressure	(Bar) 6 Elektrik
Consumption	(Kw/S) 0.55



DİKEY ETİKET MAKİNASI

VERTICAL LABEL MACHINE**Vertical Label Machine
(SAY-E-DE)**

- Automatic wrap-around labelling machine is used to apply partial or full wrap-around labels to cylindrical, conical, hexagonal or quadrilateral shaped bottles, jars, cans and similar products fed on the conveyor belt or coming from the filling line.
For high speed and precise labelling, the conveyor belt, product spacing system and label wrapping belt are driven by speed-adjustable independent motors. Transparent label microswitch, coding unit for printing information such as production date / serial number, two-axis conical product micrometric angle adjustment system, product feeding and collecting rotary tray, safety cabinet with interlock lock system, camera control are optional extra attachments that can be adapted to the labelling machine. Labelling modules of Italian ALTECH company are used in all models.
Depending on the nature of the labelled product, conveyor belts with plastic belts or pallet conveyor belts of different sizes and qualities are used. Hexagonal or square jars can be labelled with special attachments of the roll labelling machines.
- **Simple Settings:**
All settings on the wrap-around labelling machine are made by means of hand flywheels. Thus, different products can be easily adjusted in a few minutes.
- **Wrapping Tape:**
The wrapping band, which is used to wrap the label on the product by turning the product, is independent motor-reducer driven and has inverter speed adjustment. The wrapping tape is of different types in each application depending on the nature of the product and the type of the label and there are dozens of different engraved tape types. This guarantees wrinkle-free and bubble-free labelling for products of different qualities.
- **Product Spacing Systems:**
In order for the products to be labelled properly, the products must be spaced before they come to the labelling section. Depending on the product type and the desired capacity, different product spacing systems, each with a unique SAY design, are used in wrap-around labelling machines.
- Spacing systems are in the form of independent motor-reducer driven inverter speed-adjustable spacer wheel, side belt, spiral or pneumatic piston.
- **Main Frame:**
The main structure of the wrapping labelling machine consists of AISI 304 quality stainless steel and anodised aluminium. It complies with GMP with its long-lasting materials and hygienic design.
- **User Friendly Control:**
The control console of the rewinder labelling machine is ergonomically placed. Since all settings of the labelling machine are made from the control console, there are no difficult mechanical settings in other labelling machines.
- **Quality:**
Every top labelling machine manufactured at SAY is tested for compliance with CE standards and safety regulations and design and production records are kept in SAY archives.
- **Technical Specifications**
Label Width:
Max: 100mm (E,S) / 200mm (EM,M) / 300mm (L)
Conveyor Belt Widths:
40mm, 80mm (standard), 150mm, 250mm (belt)
83mm (standard), 114mm, 152mm, 191mm (crawler)
Convenient Belt Lengths:
2000mm (standard), 2500mm, 3000mm
Kumanda:
Microprocessor with touch screen: 40 types of memory (ALritma)
Microprocessor with LCD display (ALstep)



DİKEY ETİKET MAKİNASI

VERTICAL LABEL MACHINE

- **Standard Alarms:**
 - End of roll / Label broken
- Labelled Product Counter:**
 - Standard
- Label Roll Diameter:**
 - 300mm max (41/76mm Core Diameter) standard
 - 400mm max (76mm Hub Diameter) optional
- Coding Unit (Hot Foil or Thermal Transfer):**
 - Optional
- Max Labelling Speed:**
 - 15-90 mt/min (depending on labelling module)
- Label Positioning:**
 - Electronic (mm)
- Missing Label Disposal System:**
 - Standard
- **Transparent Label Sensor:**
 - Optional
- End of Roll Warning Device:**
 - Optional
- Speed Synchronisation with encoder:**
 - Optional
- Safety Cabinet**
 - Optional
- Power Consumption:**
 - 800 W
- Electricity Supply:**
 - 240V - 50Hz - single phase
 - (ECO model 380V - 50Hz - three-phase)

SAY-E-DE



YATAY ETİKET MAKİNASI

HORIZONTAL LABEL MACHINE**Horizontal Label Machine
(SAY-E-YE)**

- Automatic wrap-around labelling machine is used to apply partial or full wrap-around labels to cylindrical, conical, hexagonal or quadrilateral shaped bottles, jars, cans and similar products fed on the conveyor belt or coming from the filling line.
For high speed and precise labelling, the conveyor belt, product spacing system and label wrapping belt are driven by speed-adjustable independent motors. Transparent label microswitch, coding unit for printing information such as production date/serial number, two-axis conical product micrometric angle adjustment system, product feeding and collecting rotary tray, safety cabinet with interlock lock system, camera control are optional extra attachments that can be adapted to the labelling machine. Labelling modules of Italian ALTECH company are used in all models.
Depending on the nature of the labelled product, conveyor belts with plastic belts or pallet conveyor belts of different sizes and qualities are used. Hexagonal or square jars can be labelled with special attachments of the roll labelling machines.
- **Simple Settings:**
All settings on the wrap-around labelling machine are made by means of hand flywheels. Thus, different products can be easily adjusted in a few minutes.
- **Wrapping Tape:**
The wrapping band, which is used to wrap the label on the product by turning the product, is independent motor-reducer driven and has inverter speed adjustment. The wrapping tape is of different types in each application depending on the nature of the product and the type of the label and there are dozens of different engraved tape types. This guarantees wrinkle-free and bubble-free labelling for products of different qualities.
- **Product Spacing Systems:**
In order for the products to be labelled properly, the products must be spaced before they come to the labelling section. Depending on the product type and desired capacity, different product spacing systems, each with a unique SAY design, are used in wrap-around labelling machines. Spacing systems are in the form of independent motor-reducer driven inverter speed-

- adjustable spacer wheel, side belt, spiral or pneumatic piston.

Main Frame:

The main structure of the wrapping labelling machine consists of AISI 304 quality stainless steel and anodised aluminium. It complies with GMP with its long-lasting materials and hygienic design.

-

User Friendly Control:

The control console of the rewinder labelling machine is ergonomically placed. Since all settings of the labelling machine are made from the control console, there are no difficult mechanical settings in other labelling machines.

-

Quality:

Every top labelling machine manufactured at SAY is tested for compliance with CE standards and safety regulations and design and production records are kept in SAY archives.

-

Technical Specifications

Label Width:

Max:

100mm(E,S)/200mm(EM,M)/300mm(L)

Conveyor Belt Widths:

40mm, 80mm (standard), 150mm,

250mm (belt)

83mm (standard), 114mm, 152mm,

191mm (crawler)

Convenient Belt Lengths:

2000mm (standard), 2500mm, 3000mm

Kumand a:

Microprocessor with touch screen: 40

types of memory (ALritma)

Microprocessor with LCD display

(ALstep)

Standard Alarms:

End of roll / Label broken



YATAY ETİKET MAKİNASI

HORIZONTAL LABEL MACHINE

- > Labelled Product Counter:
Standard
- Label Roll Diameter:
300mm max (41/76mm Core Diameter) standard
400mm max (76mm Hub Diameter) optional
- Coding Unit (Hot Foil or Thermal Transfer):
Optional
- Max Labelling Speed:
15-90 mt/min (depending on labelling module)
- Label Positioning:
Electronic (mm)
- Missing Label Disposal System:
Standard
- > Transparent Label Sensor:
Optional
- End of Roll Warning Device:
Optional
- Speed Synchronisation with encoder:
Optional
- Safety Cabinet
Optional
- Power Consumption:
800 W
- Electricity Supply:
240V - 50Hz - single phase
(ECO model 380V - 50Hz - three-phase)

SAY-E-YE

Rotary Liquid Filling Machine (SAY-SD-RL)

- Rotary table filling machine is generally designed to meet the needs of the customer with 1 or 2 nozzles. It is generally preferred in cosmetics, food, chemical, medical sectors.
Automatic volumetric liquid filling machines are designed to fill liquid / semi-liquid products with high precision and performance.
Empty bottles left on the linear flow conveyor automatically come under the filling nozzles.
The product to be filled is fed to the filling nozzles from the stock tank or from the level-controlled intermediate balance tank mounted on the machine.
The machine fills the product into the bottles at the set speed. When the filled bottles go to the capping machine for capping operation, they are automatically replaced by new empty bottles.
The number of filling heads of the machine varies according to the targeted capacity, depending on the characteristics of the product to be filled and the packaging form.
Low / high viscosity, granular, liquid / semi-liquid products can be filled successfully with different materials, filling heads and nozzles manufactured in different designs.
The amount of product to be dosed into the packages can be precisely adjusted and there is no dripping problem after filling in the machine.
- If there is no packaging under the nozzles, the machine does not fill. The operator in charge of empty packaging feeding can easily intervene the machine setting buttons from the control panel.
Cleaning in the machine is done in a short time and without the need to disassemble parts by passing the cleaning liquid through the filling head with high surface quality machined parts.
All functions of the machine with PLC, which complies with CE and can operate smoothly in wet areas, are controlled from the operator panel. In case of possible problems, with user-friendly and guiding screen commands (input / output blockages, etc.), the machine first gives a written warning light alarm and then stops.
With standardised and stocked spare parts support, the machine operates for many years without any problems and without the need for external service.



ROTARY LİKİT DOLUM MAKİNASI

ROTARY LIQUID FILLING MACHINE

SAY-SD-RL



Machine Model	SAY-SD-RL
Filling Accuracy	(+-) %0.3 ML
Filling Quantity	10cc-250cc / 50cc-500cc / 100cc-200cc
Filling Capacity	1000 ADET / SAAT
Total Power	2 KW



Rotary Cartridge Filling Machine (SAY-SD-RK)

- It is an equipment used in industrial production processes and is generally used to fill cakes, creams, yoghurts, medicines and similar products into packaging such as cartridges or tubes. This machine is designed to perform the product filling process automatically, precisely and with high efficiency. It uses special dosing systems and sensors to precisely adjust and control the filling quantity. This ensures that the product is filled in the desired quantity and consistently. It includes a control panel where operators can adjust filling parameters. This panel is used to easily set filling speed, filling quantity and other process parameters. It automates production processes and has data monitoring capabilities. This makes it easy to monitor product quantity and productivity and can improve production efficiency. It is designed to facilitate cleaning and maintenance operations. This is important to meet hygiene requirements and ensure the long life of the machine. All surfaces in contact with the product; AISI 304 stainless steel, machine main frame; AISI 304L stainless steel. The machine is controlled by PLC system. The machines are easy to operate, clean and maintain.
- Electricity and water consumption is minimum.
- **Filling**
The filling process is volumetrically controlled by filling with flowmeter. Sterile environment is provided thanks to the filters in the machine. When the covers of the machine are opened, the machine stops automatically and sterile air flow continues.
- **Shutdown**
Automatic feeding, electronic lid control is available. There is an anti-dust system in the capping section. There is absolutely no deformation of the bottles during the capping process. There is a safety device to prevent breakage and deterioration of the bottles in case the bottles are blocked.



ROTARY KARTUŞ DOLUM MAKİNASI

ROTARY CARTRIDGE FILLING MACHINE

SAY-SD-RK



YATAY TOZ MİKSERİ (YARIM AÇILIR)

HORIZONTAL POWDER MIXER (HALF OPENING)

Horizontal Powder Mixer (Half Opening) (SAY-TM-YA)

- Horizontal powder mixers are machines designed to perform mixing or blending operations, often used in many industrial processes. These machines provide homogenous mixing of solid powder materials or granules. The term "half-opening" is probably a design feature used to facilitate access to the mixer and to provide easier access to the materials inside. It usually operates in a cylindrical bowl. A mixing shaft inside the bowl rotates to mix the ingredients. The lid design is used to make it easier to add or remove materials inside the mixer. This improves access during operation and simplifies maintenance operations. Industrial horizontal powder mixers enable the user to adjust the mixing speed and time according to his needs. This adapts to the different mixing requirements of different materials. They are available in various sizes and capacities to meet different industrial needs. From large mixers used in large plants to smaller models used in small businesses or laboratories, there are many options available.
- It is critical to ensure the quality and homogeneity of industrial products. These machines speed up material mixing operations and minimise human intervention, thus making production processes more efficient.
- **Technical Specifications**
 - Volume : 2500 litres
 - 30 KW 87 rpm reducer
 - Body 10 mm side sheets 15 mm thickness
 - Pallet Type Mixer with Side Scraper
 - Bottom Cover Surface Zero Pneumatic System
 - Sampling apparatus
 - Heavy duty air bearing system
 - ST37 material



YATAY TOZ MİKSERİ (YARIM AÇILIR)

HORIZONTAL POWDER MIXER (HALF OPENING)

SAY-TM-YA



HAVALI DOLUM MAKİNASI

AIR FILLING MACHINE

Air Filling Machine (SAY-TD-H)

- It is an equipment used in industrial production processes to automatically fill liquid, viscous or other filling products into a container, bottle or packaging. This type of filling machines is designed to perform particularly delicate and precise filling operations. It offers the most suitable solution for the packaging of fine and milled products with medium and high density flowability. The product, which is taken into the machine chamber with the help of a valve, is controlled by the level sensor and the filling is realised by transferring it into the ventilated bag with the help of a blower.
- **Used Products:**
Granules are used for cement, cement, cement sand, chemical mixtures, fuga, gypsum, gypsum plaster, barite and various chemical materials. Machine filling speed varies depending on the density and fluidity of the product. Filling is done electronically with loadcells and indicators as fast-slow and precise filling.

SAY-TD-H



HELEZONLU DOLUM

HELIX AIR FILLING MACHINE

Helix Air Filling Machine (SAY-TD-HZ)

- It offers the most suitable solution for the packaging of medium and high density granule, powder, fine powder and ground products. After the product is filled up to the level sensor in the machine hopper, the upper flap of the hopper is closed, the product lubricated by the air duct is then filled into the bag by giving low pressure air from the upper part. Single, double and triple filling nozzle models are available according to the capacity requirement.
- Electronic, 'Load-Cell' weighing unit and fast and slow filling system ensures continuous precise weighing. Air type ventilated bag packing machine, which works on the basis of gross weighing, performs the weighing process while filling.

SAY-TD-HZ



TÜRBİN DOLUM MAKİNASI

HELIX AIR FILLING MACHINE

Helix Air Filling Machine (SAY-TD-T)

- It offers the most suitable solution for the packaging of medium and high density granule, powder, fine powder and ground products. After the product is filled up to the level sensor in the machine hopper, the upper flap of the hopper is closed, the product lubricated by the air duct is then filled into the bag by giving low pressure air from the upper part. Single, double and triple filling nozzle models are available according to the capacity requirement.
- Electronic, 'Load-Cell' weighing unit and fast and slow filling system ensures continuous precise weighing. The bag packaging machine with air type valve, which works on the basis of gross weighing, performs the weighing process while filling.

SAY-TD -T



Rotary Packer Filling Machine (SAY-TD-RTR-PKR-6)

- Rotary package filling machine is an industrial equipment generally used for automatic filling of powdery or granular products into bags or packages. Such machines are used for packaging many different products such as cement, chemicals, grain, flour, sugar, sand, soil.
The rotary package filling machine performs the filling of the product into bags or packages in certain quantities. This can be done using precise weighing or volume measurement.
The machine derives its name from "rotary" pack filling because the filling process usually takes place on a turntable or conveyor system. This allows a continuous filling process.
The packaging materials (usually bags or jars) used to fill the products are fed into the machine. These materials are usually placed via a conveyor system or manually.
After the filling process, the mouth of the bags is tightly sealed or capped. This is usually done using heating or ultrasonic sealing technologies.
It has complex control systems that allow the filling process to be controlled automatically. These systems are used to adjust the filling quantity, speed and other parameters.

- It speeds up production processes, reduces labour costs and ensures the precision of the filling process. Different models and capacities can be available depending on the type of your product and packaging needs. The use of these machines ensures efficient packaging of products and maintains the quality of the products.

Technical Specifications:

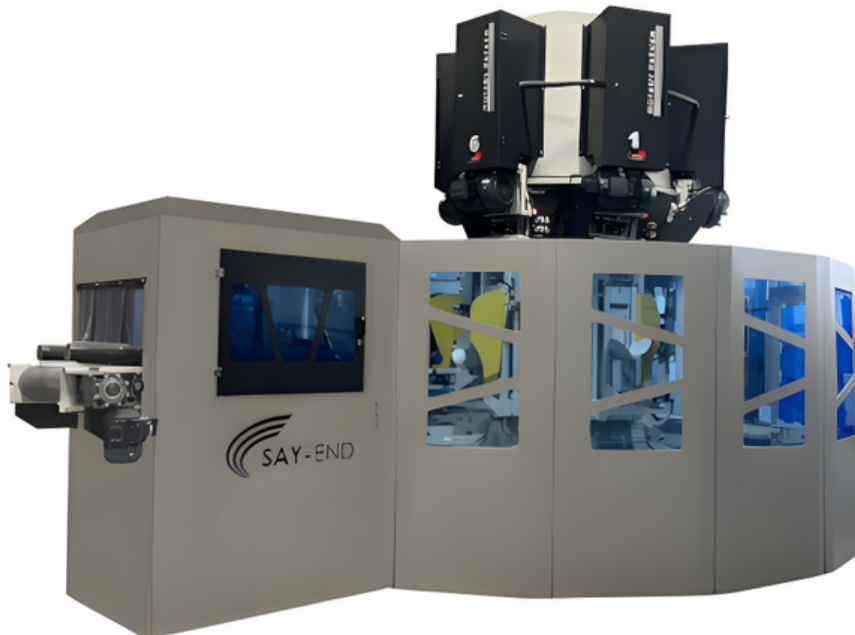
Motor : 6 X 5,5 Kw,
Sensitivity : +/- 1,
Electronic Weighing System,
Heavy Duty Body,
10-50 Kg Filling Range,
Nozzle Cleaning System,
Plc Control Unit,
Hardox Turbine Blades,
Dust Extraction Manifold.



6'LI DÖNER DOLUM MAKİNASI

ROTARY PACKER FILLING MACHINE

SAY-TD-RTR-PKR-6

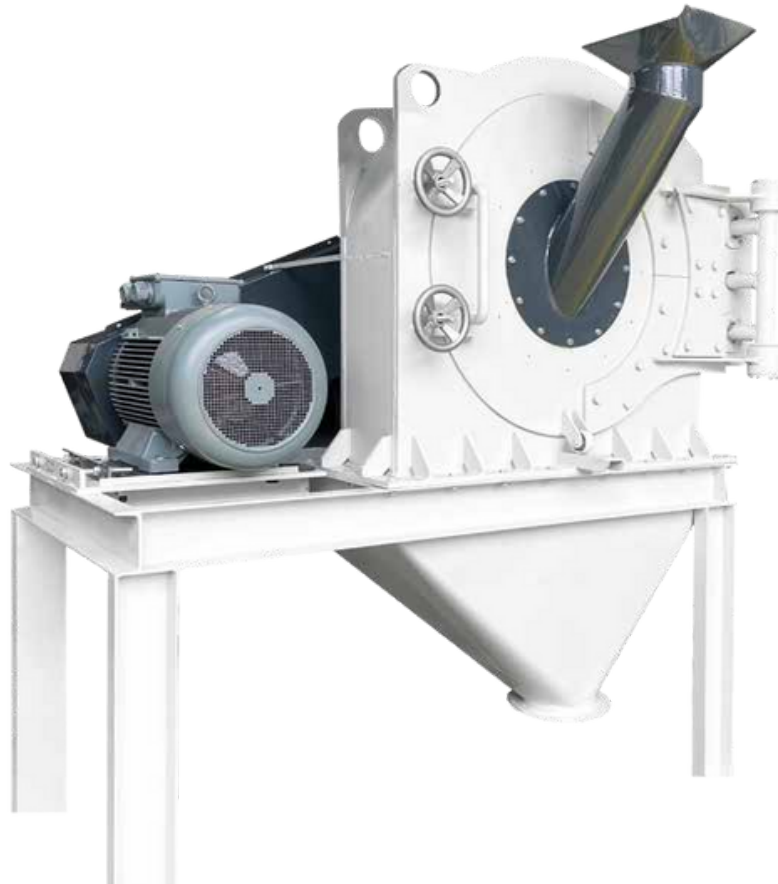


PİMLİ DEĞİRMEN
PIN MILL

Pin Mill (SAY-K-PD)

- It is a kind of industrial equipment used for grinding process. This device is used to pulverise, crush or grind materials into fine powder or powder. Needle mill is usually used in food, chemical, pharmaceutical, mining, and other industrial applications. It can be finely adjusted for the grinding process and helps the materials to reach the desired particle sizes. This is important for improving the quality and performance of industrial products. It can also prevent unwanted heating during the process by reducing the temperature sensitivity of materials and optimising energy consumption. Therefore, pin mill is an important equipment in industrial production and is used in many industries.
- It can grind materials quickly, which increases efficiency in production processes. Pin Mill is used to grind crystalline and brittle materials. It can change the output fineness by changing the filtering screen and adjusting the rotor speed. Grinding disc can be changed according to demand. It is an easy to clean machine. It is widely used in the production of pulverised products, which is the basis of products that can be used in various applications.

SAY-K-PD

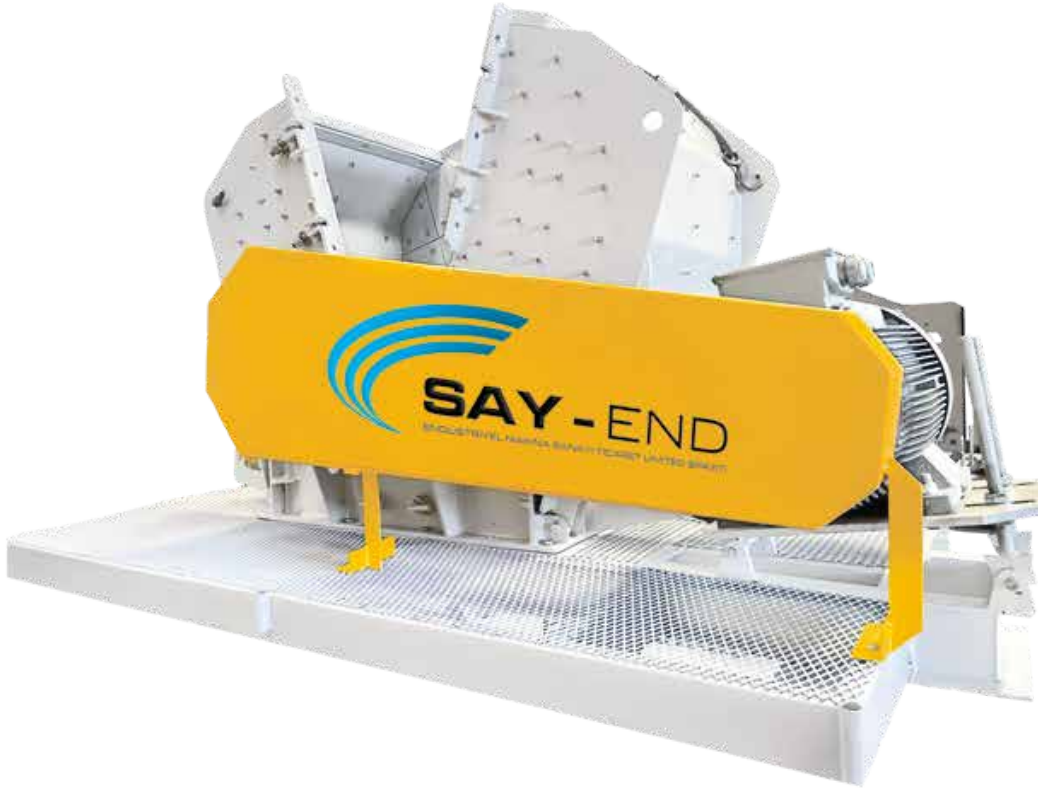


HAMMER MILL ÇEKİÇLİ DEĞİRMEN HAMMER MILL

Hammer Mill (SAY-K-CD)

- It is an industrial grinding equipment used for grinding or crushing of materials. These mills are commonly used to grind grain, corn, wheat, flour, feed, wood, coal, plastics, chemicals, minerals and various other materials. Its function is based on the principle that large hammers or rods fall on the material inside a rotating drum and reduce it in size by striking or crushing it. Factors such as the speed of the tractions, the number of tractions, the diameter of the drum and the feed rate of the material affect the performance of the hammer mill and the grinding result.
- These parameters can be adjusted to achieve the desired size and consistency of the material being ground. Tractions break and crush the material by striking it, so the force and impact of the traction on the material determines the efficiency of the grinding process. This equipment is used for food, agriculture, mining, recycling, power generation and many other industrial applications.

SAY-K-CD



SISTEM FILTRESI
SYSTEM FILTER

System Filter

- > In industrial enterprises, it is critical to improve air quality, protect production processes, protect air quality, ensure worker health, safety, optimise production processes, protect production processes and ensure environmental compliance. These filters are designed to remove harmful particles, dust, chemicals or other contaminants from the atmosphere. They are used in air circulation systems and clean room applications.
- > Industrial areas where it is used; ceramic industry, metal, iron and steel, food, automotive, casting, cement, mining, wood, defence industry, etc. It is a filter used to keep dust and particles coming out of production in a closed system.

System Filter



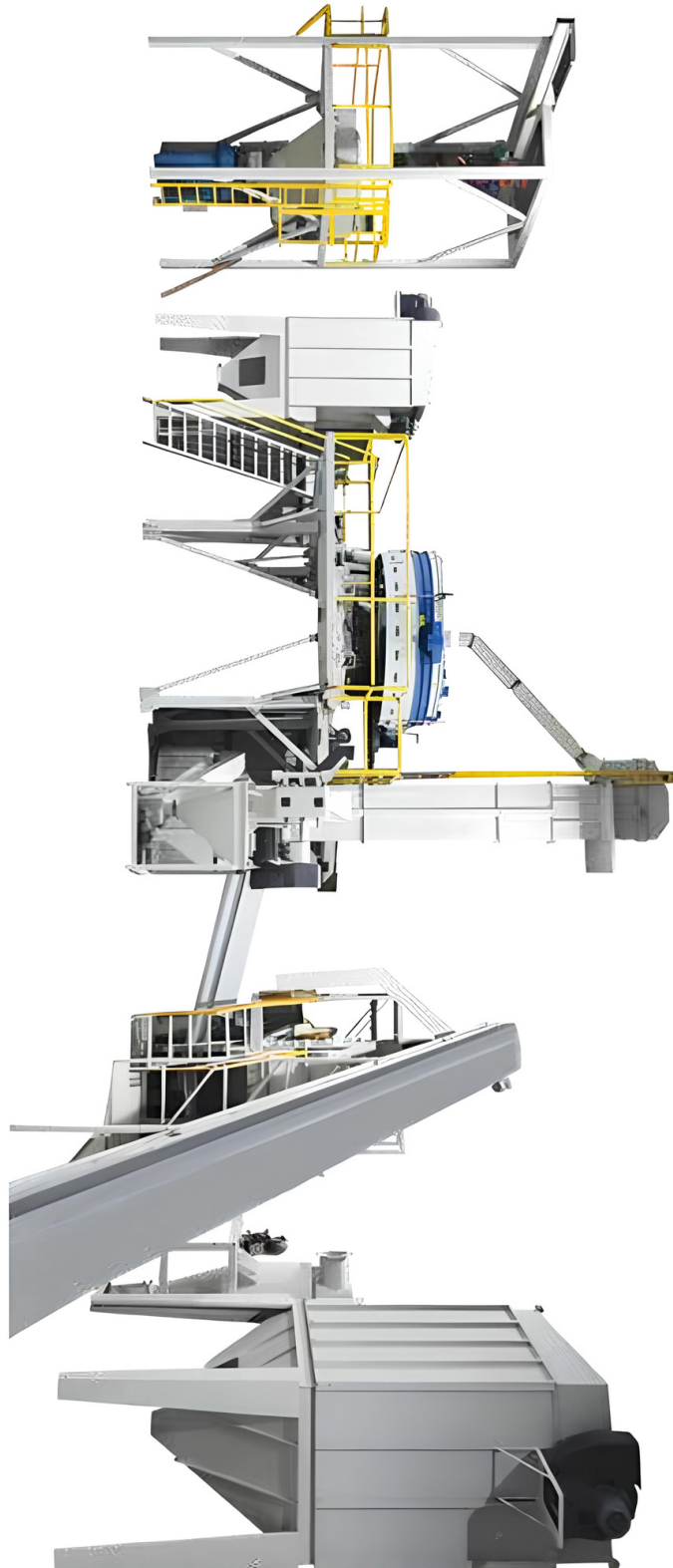
SISTEM FILTRESI
SYSTEM FILTER

Dry Mix and Packaging Plant



SISTEM FILTRESI
SYSTEM FILTER

Crushing and Screening Plant



Powder Group Turnkey Projects

