

# **SAY-LAB** LABORATUVAR Ekipman ve cihazlari A.Ş. **Product catalogue**

say-lab.com

#### ÜRÜN KATALOĞU PRODUCT CATALOGUE





### Contact Details of Manufacturer and Seller

- > SAY-LAB LABORATUVAR EKİPMAN VE CİHAZLARI A.Ş
- > Birlik Sanayi, 1. Cd. No: 78 Sitesi I, 34520 Beylikdüzü Osb/Beylikdüzü/İstanbul
- > (+90) 850 885 0 886
- > www.say-lab.com
- info@say-lab.com.tr

### KILAVUZ İÇERİĞİ **GUIDE CONTENT**

### **Guide Content**

>	About Us	4
>	Filling Machinery	5
>	Labelling Machines	6
>	Assembly Machines	7
>	Vibratory Screening Device Aqueous Type	8
>	Vibratory Screener	9
>	Vacuum Screener	10
>	Reporting Module	11
>	High Performance Cyclone	12
>	Analysis Sieves	13
>	Precision Balance	14
>	Moisture Determination Device	15
>	Vacuum Vacuum Cleaner	16
>	Tensile Rupture Tester	17
>	Universal Tensile Rupture Tester	18
>	Laboratory Powder Mixer	19
>	Laboratory Liquid Mixer	20
>	Laboratory Concrete Mixer	21
>	Abrasion Test Machine	22
>	Manual Press	23
>	Pull-off Tester	24
>	Test Device	25
>	Cement Spreading Table	26
>	Muffle Furnaces	27
>	Ultrasonic Bath	28

### KILAVUZ İÇERİĞİ **GUIDE CONTENT**

>	Rinsing Water Bath	29
>	Fume Hood	30
>	Gerber Centrifuge	31
>	Incubator	32
>	Microbiological Safety Cabinet	33
>	Water Bath	34
>	Test Cabinets	35
>	ETUV	36
>	Curing Tank	37
>	Laboratory Basket Mill Mixer	38
>	Cement Shaking Table	39
>	Cement Prism Cube Mould	40
>	Cement Prism Mould	41
>	Vikat Device	42
>	Laboratory Shovel	43
>	Table Type Thermometer	44
>	Stopwatch	45
>	Thermometer	46
>	Beaker	47
>	Lab Glass Balloon Joje	48
>	Aluminium Weighing Cup	49
>	Porcelain Mortar	50
>	Spatula	51
>	Pictometer	52
>	Sample Tray	53



### About Us

SAY-LAB laboratory, where we undertake our duty as a manufacturer and supplier of laboratory test equipment that we define as Turkey's gap, we carry out our production in our facility in Istanbul / Beylikdüzü. We export our products to many countries of the world. SAY-LAB is committed to providing high quality products and services in accordance with international quality standards, with an understanding that prioritises customer satisfaction in the design and production of materials testing equipment. SAY-LAB continues to add new products to our products by feeling responsible at every point with an understanding that aims 100% customer satisfaction with product development and fast after-sales support. SAY-LAB has adopted the principle of providing the best service at every stage without compromising quality, responsible for customer expectations, constantly improving itself, aiming for excellence in all business processes.

### Vision and Mission

- It is one of our company values to produce advanced technological devices that meet customer needs without sacrificing quality in accordance with the standards in the building materials, food and test equipment sector, and to help ensure quality control control and continuity.
- To increase product diversity in accordance with customer needs and demands.
   To maintain and sustain customer satisfaction.
   To expand the customer portfolio we serve.
   To maintain the principle of environmentally sensitive and socially respectful management in its production and processes.
  - To provide customer-oriented production and service.

## DOLUM MAKINALARI

#### **Filling Machinery**

- Filling machines are automatic or semi-automatic devices generally used in industrial or commercial enterprises. These machines are designed to fill products such as liquids or powders into packages in a controlled manner. Filling machines provide fast, precise and efficient packaging of products and keep human intervention to a minimum.
- Filling machines have a wide range of applications and are widely used in food, pharmaceutical, cosmetic, chemical, automotive and other industries.

#### **Filling Machinery**



## ETİKETLEME MAKİNALARI **LABELLING MACHINES**

#### Labelling Machines

Automation systems for adding or printing labels, barcodes or other identifying information on products or packaging. Such machines are used in the production line to speed up processes, increase traceability and minimise errors.

Labelling machines are used to attach information labels or barcodes on products. This is important for tracking, storing and selling products.

labelling machines are used to stick or write labels on boxes, bags or packaging materials. This enables products to be identified and packaging to be orientated correctly.

By printing barcodes on products or their packaging, it is used for automated stock management and sales transactions.

It is used to attach self-adhesive labels to products or packaging.

 Such labelling machines are often used in the food, pharmaceutical or cosmetics industries.

It is an important tool to improve automation and data monitoring processes. These machines perform fast and precise labelling operations, increasing work efficiency and reducing human error. They also increase the traceability of products and ensure that products are correctly orientated and distributed. This is an important factor in industrial production, especially in sectors such as food, pharmaceuticals, automotive and logistics.

**Labelling Machines** 



#### MONTAJ MAKİNALARI ASSEMBLY MACHINERY

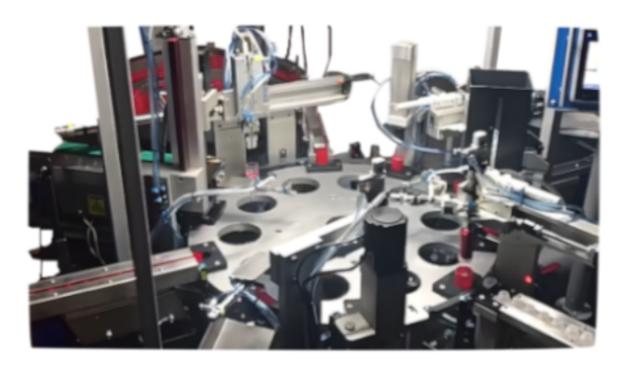
#### **Assembly Machinery**

They are special machines used to automate and speed up the assembly process of products or components. These machines aim to accurately assemble parts or components on the production line, speed up the assembly process and minimise human error. They are usually integrated with robotic systems and automation technologies. In this way, complex assembly operations can be performed automatically and the need for human labour on the production line can be reduced.

is designed to suit the assembly process of a specific product or component. Each assembly machine is specially configured according to the characteristics and requirements of the assembly process. has packaging units suitable for different types of packaging. These units hold and fill bottles, bags, boxes or other types of packaging during the filling process.

Their areas of use are quite wide and they are widely used in food, pharmaceutical, cosmetic, chemical, automotive and other industries. For example, in the beverage industry, filling machines are used for bottling fruit juice, milk, soda and alcoholic beverages. In the pharmaceutical industry, they are used to fill medicines from tablets into bottles or blister packs.

**Assembly Machinery** 



#### SV-200 VIBRASYONLU ELEME CIHAZI (SULU TIP) SV-200 VIBRATING SIEVING DEVICE (WATERY TYPE)

### Vibrating Sieving Device (Watery Type) (SV-200)

- Say-Lab SV-200 vibratory sieving device and sieve shaking device/machine is used for separating grainsized products from each other and reporting them according to standards.
  - It is produced to analyse sand, gravel, cement, calcite, gypsum, food products faster.
  - Sieving with 200mm and 203mm diameter sieves. Ability to analyse products with grain size from 40 microns to 30mm.
  - Ability to analyse between maximum 1 to 10 sieves. Sieve clamping mechanism has two different options as screw and special scissors.
  - Time setting is done digitally.
  - Vibration is done with severe digital indicators.
  - The vibration part has the ability to rotate up and down with a special magnetic field.
  - Calibrated sieves are used.
  - Recording feature with prescription mode.
  - Thanks to the reporting module, features such as time, vibration intensity, prescription can be entered from the external panel.

 Vacuum model is available with specially designed sieve vacuum table. Sieving time is shortened by 70% with vacuum model. Vacuum adjustment is available and the vacuum value is analocally read from the indicator.
 Different brands of sieves can be used with interchangeable adapters.

Power: 220V/110/50/60Hz. Weight: 42kg. Sieving Range: 40Mikron 30mm Analysis Range: 0.1 to 2000gr Screening Time: 0.10sec. to 99 hours Dimension: Width 350mm, Width 400mm, Height 200mm

#### SV-200 (Watery Type)

#### Vibrating Sieving Device (Water Type) (Professional)





### SV-200 VİBRASYONLU ELEME CİHAZI SV-200 VIBRATING SIEVING DEVICE

### Vibrating Sieving Device (SV-200)

 Sieving with 200 mm and 203 mm diameter sieves. Analysing products with grain size from 40 microns to 30 mm.

Ability to analyse between maximum 1 to 10 sieves. Time setting is done digitally.

- Vibration intensity digital indicators are made.
- The vibration part has the ability to rotate up and down with a special magnetic field.
- Calibrated sieves are used.

Recording feature with prescription mode.

Thanks to the reporting module, features such as time, vibration intensity, prescription can be entered from the external panel.

Vacuum model is available with specially designed sieve vacuum table. Sieving time is shortened by 70% with vacuum model. Vacuum setting is available and analogue vacuum value is read from the display. > Different brands of sieves can be used with interchangeable adapters.

Power: 220V/110/50/60Hz. Sieving range: 40micron/30mm Analysis range: 0.1/2000 Screening time: 0.10sec/99hours

W x H x D: 400x200x350mm Weight: 42kg

SV-200

#### Vibrating Sieving Device (Professional)







#### SL-200 VAKUMLU ELEME CİHAZI SL-200 VACUUM SİEVING DEVİCE

#### Vacuum Sieving Device (Air Jet Alpin Sieving Device) (SL-200)

- Fast analysis evaluation. Manual sieving under adjustable pressure.
   7" touch screen operator panel.
   Simple and convenient menu structure.
   Direct connection to a compatible scale via interface.
   RS-232C Ethernet data units standard.
   Vacuum pressure adjustable.
   Provides communication with Snowrex EJ-600.
   Printout from the specified printer.
   Recording to panel and USB.
   Analysis range: 10µm-4mm
   Height resolution: Ø200-203
- Touch screen: 7" Power cable 1m Low pressure 12000Pa Air flow rate 25-125m<sup>3</sup>/h Speed 30rpm Protection class: 54IP

>

W x H x D: 350x460x400mm Weight 18kg

SL-200



#### RAPORLAMA MODÜLÜ REPORTİNG MODULE

#### **Reporting Module**

Recipe is prepared and sieve selection is made. The tare of the selected sieves is placed on the scale on the reporting module and the taring process is performed from small to large. It is automatically memorised.

The product to be analysed is placed on the sieves and saved.

If the reporting device is connected to the SV-200 vibratory sieving device, sieving is done by entering the press, vibration and time from the panel.

If there is an external sieving device, sieving can also be done there.

The sieved material is placed on the scales with the sieves in order with the biggest one on top and the recording process is done automatically.

After placing the last sieve on the balance and recording, the fragment and AFS between the sieves are calculated by pressing the report button. The report is printed via USB or printer. A graph is drawn accordingly. Panel: 7" touch screen.

W x H x D: 450x220x220mm Weight: 2.2kg

**Reporting Module** 



#### YÜKSEK PERFORMANSLI SİKLON HIGH PERFOMANCE CYCLONE

### HIgh Perfomance Cyclone (SAY-150)

 Recovers the product.
 Prevents contamination of the filter and prolongs the life of the filter. The previous product and the other product do not mix with each other.
 It can stock 0.5It material.
 Washable feature in stainless option. W x H x D: 250x50x750mm Weight: 42kg

#### SAY-150



#### ANALIZ ELEKLERİ ANALYSIS SIEVING

#### **Analysis Sieving**

The demands placed on particle size analysis reflect the requirements of standard ISO 3310. To adapt the sieve to these requirements, RETSCH has developed a unique product. In different sizes (200x50mm, 200x25mm, 203x50mm (8 "x2"), 203x25mm (8 "x1"). The developed sieves record each material used in the logistics production system. Application examples; cement clinker, chemicals, coffee, building materials, ...

Due to the high alloy stainless steel, they are corrosion resistant and easy to clean. When working with more than one sieve, the gasket used when mounting the sieves on each other ensures stability. Traceability via serial number on the sieves with laser technology. Applications: Separation, fractionation, particle size determination.
 Field of application: Agriculture, biology, chemistry/plastics, ...
 Feed material: Powders, bulk material, suspensions.
 Frame diameter: ø 200mm/203mm
 Surface type: Wire gauze
 Mesh sizes: 125mm-20µm
 Standards ISO 3310-1/ASTM E11

**Analysis Sieving** 



## HASSAS TERAZI

#### **Precision Scales**

Laboratory Balance SNOWREX EJ-600, vacuumabsorbed particles pass through the cyclone, ensuring 98% recycling. Snowrex EJ-600, high precision laboratory balance with quality plastic body 600g capacity.

Snowrex EJ-600, quality plastic body 600g capacity. High precision laboratory balance. 600g capacity. 0.01 g division 160x160cm with bail Built-in battery. LCD display with backlight. Standard RS232 output.

>

W x H x D: 280x180x90mm

**Precision Scales** 



#### NEM TAYINI CIHAZI MOISTURE ANALYZER

#### **Moisture Analyzer**

Moisture analyzer for measuring the moisture of all kinds of raw materials, agricultural products and dry food.

Heating system: infrared/halogen/dark Heating range: 30-230°C Heating time range: 0-99,9min. Weighing capacity: 124gr Weighing accuracy 1mg. Minimum sample weight: 0.2gr. Display type: fluorescent display with green light. . Moisture detection: 0.01% (1/10000) Sample parameter memory: 20 Special digital protection against draught and vibration. Calibratable, reliable construction. External intelligent calibration.  Advanced technological protection against overload and air flow. ntegrated applications. Anti-theft (anti-theft).

> PRECISA 330 XM series moisture analysers are a group of devices developed by the brand especially for routine operations such as production, product inspection and acceptance. It meets all expectations of businesses with its easy operation, precise measurement results and resistance to harsh industrial environments. XM 60 moisture analyser 330 is the MASTER class device of the XM series.

**Moisture Analyzer** 



## VAKUM SÜPÜRGESİ VACUUM CLEANER

### Vacuum Cleaner

 Karcher WD 3 Premium Home Multipurpose Vacuum Cleaner.

(Air Watt) 200 Energy use (W) 1000 Container capacity: (I) 17 Material of the hopper: Stainless steel. ID accessory: (mm) 35 Maximum motor power: (W) 1000 Power supply: (V/Hz) 220/240/50/60 Weight without accessories: (kg) 5.8 Dimensions: (LxWxH) (mm) 388x340x525

Vacuum Cleaner



#### CEKME KOPMA TEST CİHAZI TENSILE BREAKOUT TESTER

#### Tensile Breakout Tester (STU-1-200KN)

- It is a model made with servo motor.
   It provides high precision and efficiency.
   Jaw types suitable for the sample provide convenience to the user.
   It provides the result of whether the materials produced are within the standard values or not.
  - All test results can be reported and stored in a written form suitable for the device.
  - It applies to a wide range of materials for tensile, compression, bending, shear and low-speed testing. Used for products such as metal, rubber, plastic, welding, textile.
- Max load 200kn-20,000kgf High sensitivity: <+ - 0.5% Load range: 0.2%-100 Load resolution: 0.01 Test speed: 0.05/500mm/min Tensile area 700mm Pressing area 700mm Test width 600mm Electricity: 220/3/50

W x H x D: 900x1800x500mm Weight: 320kg

#### STU-1-200KN



## Universal Tensile Breakout Tester (STU-T-500N)

STU-T-500 N Universal Computerised Electronic Tensile Testing Machine is manufactured in accordance with ASTM, ISO, DIN, GB and other international standards. It is used for tensile, compression, bending and shear tests in metal, rubber, plastic, textile and construction industries. It is also used in related industrial enterprises, research and development centres, testing institutes and training centres.

Model: STU-T-500N Max. Load 25kN 2500kg Load range: 0.2 to 100 Load Sensitivity: >%0,5 Test speed: 0.05/500 mm/min Precision: 0.01mm Traction area 600mm Breaking area 600 mm Test width 350 mm Dimensions: 350X600X1300mm Power input: 380 VAC 50 Hz. Weight (kg): 123 kg Load resolution: 1/500.000

#### **STU-T-500N**





## LABORATUVAR TOZ MİKSERİ LABORATORY POWDER MIXER

### Laboratory Powder Mixer (SAY-DVM-1-10LT)

Laboratory type powder and granule mixer is generally produced for test product preparation, new product development, R&D and small scale productions. The paddle structure is designed the same as the large mixing mixer.

Inverter controlled. Special hopper for feeding. Manual locked bottom cover. Bottom cover with manual lock (surface zero). Feed hopper with grating.  18 litre capacity. Anchor type mixer. Temperature controlled. Double wall air heating and cooling (option). Easy to clean feature. Time and speed entry panel. Single side bearing system.

#### SAY-DVM-1-10LT



## LABORATUVAR SIVI MİKSERİ LABORATORY LIQUID MIXER

### Laboratory Liquid Mixer (SAY-SM-1-10LT)

 Laboratory type liquid mixer is generally produced for test product preparation, new product development, R&D and small scale productions for practical and fast purposes.

Adjustable clamping mechanism for different boilers. Easy to change the mixing blade.

Up and down automatic mode. Inverter controlled operation between 0 and 1500 dld. Material contacting surfaces 304 stainless steel. st 37 parts static powder coating. 10 litre boiler.
 0,75 kw motor.
 220wold

En: 400mm Length: 450mm Load 1100mm

#### SAY-SM-1-10LT



## LABORATORY CONCRETE MIXER

## Laboratory Concrete Mixer (SAY-DVS-1-10LT)

- SM 10 Asphalt Mixer with Heater is designed to be used for mechanical tests such as compaction and Marshall tests designed for mixing soil and asphalt samples. The mixing speed is 62 rpm in the mixing bowl orbit and 140 rpm around its axis at low speed and 125 rpm in the mixing bowl orbit and 285 rpm around its axis at high speed. The rotation speed can be adjusted between the given values using the control knob placed on the front panel. Asphalt Mixer is supplied with Isomantle heater which is equipped with digital thermostatic control and can be easily mounted on the mixing vessel. The bituminous mixture must be prepared at the temperature stipulated in most standards. To meet this requirement, the SM 10 mixer can be equipped with a thermostat-controlled asphalt mixer bottom heater.
- The digital thermostat-controlled asphalt mixer heater with thermal insulation jacket and PT100 temperature sensor is compatible with the SM 10 mixing vessel. The Laboratory Mixer is supplied with the following.

Mixing Bowl: stainless steel 10L Mixing blade. Dimensions: 390x425x675mm Weight: 60kg Power: 220 V 50/60 Hz 550 W

#### SAY-DVS-1-10LT



#### AŞINDIRMA TEST CİHAZI ABRASION TESTER

#### Abrasion Tester (SAY-TAP-R-100)

- The Say-Tab abrasion tester is used to determine the resistance to abrasion of fabric, paper, paint, plywood, eeri, floor tiles, glass and natural rubber. The test is performed by abrading the specimen by holding it against an abrasive wheel. Say-Tab abrasion device is manufactured as two heads and single head and the dust in the environment is collected by means of adjustable vacuum. The device has a 7" touch panel. Easy operation is done with the trajectories on the panel. Say-Tab device works at two speeds. According to the norms 60d / d to 72d / d, you can enter the number of rounds as 750-1000-1200 from the panel, you can run the vacuum intensity at the value you set.
- Load: 250g, 750g, 1000g
   Rotation speed: 60rpm, 72rpm
   Counter: 0-9999
   Power: AC220V, 50/60Hz, 3A

Width 28cm Depth 41cm Height 26cm Weight: 18.5kg

#### SAY-TAP-R-100



Abrasion Tester (Group)





## MANUEL PRES

### Manuel Press

They are mechanical devices that are manually operated by the user and usually perform operations such as pressing, shaping or cutting.

It transfers a large force with a small application of manpower using mechanical advantage. This works on the principle of leverage. As the user moves the press arm, this force is transmitted to the machining surface or mould.

Manual press machines are machines that require attention in terms of safety. It is important that users do not place their hands, clothing or other objects in dangerous areas during the process. In addition, during the pressing process, it must be ensured that the device is placed on a stable surface and that the device is working properly. They are often preferred in many areas due to their simple structure and ease of use.

**Manuel Press** 



#### PULL-OFF TEST CİHAZI PULL-OFF TESTER

#### Pull-off Tester

The pull-off tester device is portable and easy to carry and is produced for quick application on vertical walls on the table in the field and laboratories. It is used to measure the breaking strength between two different products in glued applications for testing. ST-3000 device is mounted on the materials to be tested. It is adjusted with manual buttons to attach the adapter, after the apparatus is attached, the device is started, the device goes up to the breaking point with 10 rpm, the last value it breaks is printed on the screen and the value remains written until the next test.

Easy to use menu. Maximum movement range of 01 to 40 mm. 3000 newton  Easy adapter replacement. Application to material on table and vertical surface. Rechargeable feature.
 2 hours including application on a full charge.

> Power: 24volt/watt Pulling distance: 01-40mm Analysis range: 0.01/3000Nm Dimensions and weight: WxHxD: 120x400x240mm Weight: 4.2kg

**Pull-off Tester** 



#### TEST CİHAZI TESTER

### Tester (ST-500)

It is often used to determine the quality and durability of closures. Such machines provide manufacturers or professionals in the packaging industry with important data to improve their products and ensure quality control.

These machines are fitted with specially designed sensors to measure the force applied to the bottle caps. The machine's control unit processes and analyses the data from the sensors. This data is used to measure the resistance of the caps. The control unit also processes the measured resistance values and presents the results in visual or numerical format.

It can evaluate many different parameters to measure the resistance of the caps. These parameters can include opening or closing resistance, sealing, torque values and other mechanical properties. In industrial production, such machines are often automated so that they can perform fast and precise measurements on a continuous production line. This type of machine is used in the packaging industry, food and beverage production, pharmaceutical industry and many other industrial sectors. Accurately measuring the resistance of bottle caps is important for improving product quality, ensuring consumer safety and optimising quality control processes where necessary.

ST-500





## CEMENT SPREADING TABLE

## Cement Spreading Table (SY-300)

It is based on the principle of determining the fresh consistency of mortar containing mineral binder and dense aggregate or light aggregate immediately after mixing by determining the spreading value. It is made of stainless steel or brass. It has two alternatives as motorised and manual. Manual spreading table is used by turning by hand. In the Motorised Spreading Table, the number of drops can be adjusted and stops automatically when the number of drops is completed. The motor rotates 1 revolution per second.

Electricity Unit: 220 V, 50-60 Hz, ph Power Unit: 180 W

SY-300



#### KÜL FIRINI ASH OVEN

### Ash Oven

 Five different volumes: 6,812.16,22 Litres Temperature operating range: Room temperature +5 °C to 1200 °C

Thanks to the heaters on the side surface of the cell, optimum heat distribution and fast heating feature is provided.

Muffle furnace heat treatment, ash determination, food, ceramics, etc. They are general purpose furnaces that have found use in quality laboratories in many sectors such as quality laboratories and university research laboratories.

Microprocessor control system.

Easy control panel with six line LCD display.

Programmable temperature, delay time setting, alarm. Easy programming with push and turn button.  Fume discharge chimney that may occur during operation.
 Thanks to the programmable PID microprocessor control system, the set temperature values can be stored in memory.

Cell made of firebrick. Very good temperature distribution and fast heating. Air cavity insulation minimising the external surface temperature. Easy to open lid sideways or upwards. Safety feature that switches off the heating when the lid is opened.





## ULTRASONIK BANYO

#### **Ultrasonic Bath**

Ultrasonic Bath is used for cleaning (technical glassware such as burettes, pipettes, petri dishes), medical instruments, all kinds of metal parts, electronic parts, degassing of liquids for concentration determination, acceleration of dilution processes, simultaneous cleaning and disinfection, emulation preparation, sample preparation for analysis.

Provides deep cleaning of glassware, metal products, electronic components and various apparatus. The robust one-piece vibration tank and body are made of stainless steel.

The continuous and effective ultrasonic wavelength guarantees precise and accurate cleaning on all surfaces.

The control unit provides temperature and time control.
It displays the set and actual values in

It displays the set and actual values in parallel.

The memory function stores the stored values and can be activated immediately if required.

The temperature inside the bath can be set between ambient temperature and 90°C.

Time control can be set between 1-60 minutes.

**Ultrasonic Bath** 



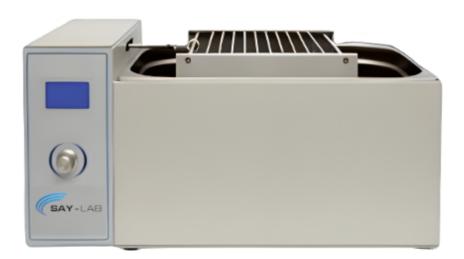
## CALKALAMALI SU BANYOSU SHAKING WATER BATH

### Shaking Water Bath

>	Two different volumes: 30, 45 litres Temperature operating range: Room temperature +5°C to 99°C
	Special design for many applications in food,
	microbiology, fermentation, bacterial incubation
	research and industrial laboratories.
	Microprocessor control system.
	Easy programming with push and turn key.
	Easy control panel with six line LCD display.
	Very good liquid temperature control for stable and
	saleable temperatures.
	Ideal platform for different volumes of glass thanks to
	spring-loaded holders.
	Optional plexiglass and stainless steel cover options.

 Programmable; agitation speed, temperature, stop in case of power failure, time, delayed start (between 1min.-99,9 hours), timed operation feature, LED indicator.
 Programmable agitation speed between 10-300rpm.
 Easy cleaning thanks to its monolithic structure made of stainless steel.
 Stable temperature distribution with strong insulation.

**Shaking Water Bath** 



## CEKER OCAK

#### Fume Hood

- Four models with different worktop widths: 90cm, 120cm, 150cm, 180cm
   All external metal parts of the device are electrostatic oven painted.
   It can be mounted on metal legs or special cabinet or it can be placed on the laboratory bench.
   Cabinet illumination is provided by fluorescent lamp.
   There are two sockets on the front panel (220V, 50Hz)
- The cabin windscreen is made of tempered glass, framed guillotine type. The internal structure is PVC coated and resistant to acids, the working surface is compact laminate. The speed of the PP fan is adjustable and resistant to acids.

#### **Fume Hood**



## GERBER SANTRIFÜJ

### Gerber Centrifuge

- Maximum Capacity: 8x butyrimotre Maximum Speed: 1400rpm Maximum Temperature: 99°C RFC: 350g±50g It is used for fat determination in milk and dairy products. Used for fat determination in meat and meat products. Easy programming with push and turn button. Digital LED display, time, speed and temperature settings. Cover lock and protection against excessive acceleration.
- Lid can be opened manually or automatically.
   Automatically heats up to 65°C during operation.
   Stainless steel case.
   The internal structure is PVC coated and resistant to acids, the working surface is compact laminate.
   The speed of the PP fan is adjustable and resistant to acids.

#### Gerber Centrifuge



## INKÜBATÖRLER

#### Incubators

- Üç farklı hacim: 55, 120 ve 250 litre Sıcaklık çalışma aralığı: Ortam sıcaklığı +5,0°C ile 80°C En uygun inkübasyon Şartları ile kurutma ve ısıtma işlemleri için idealdizayn. Geniş kullanım alanı: Gıda, biyoteknoloji, biyoloji, mikrobiyoloji laboratuvarlarında, tıp ve veterinerlik, ilaç sanayinde kalite kontrol ve araştırma çalışmalarında. Mikroişlemcili kontrol sistemi.
   6 satır LCD ekran, Sıcaklık ve zaman için LED göstergeli. Bas çevir tuşu sayesinde kolay programlama. Programlanabilir; sıcaklık, alarm, gecikmeli başlatma, elektrik kesildiğinde durma özellikleri kolay kontrol paneli.
- Birçok kimyasala dayanıklı ve kolay temizlenebilir paslanmaz çelik hücre. Üçlü izolasyon mükemmel sıcaklık dağılımı ve kararlılığı. Çift cidarlı özel hücre ile homojen sıcaklık dağılımı. Ayarlanabilir havalandırma klepesi ile homojen sıcaklık dağılımı. Inkübatör içerisinde sıcaklık değişimine sebep olmadan numunelerin gözlenmesini sağlayan cam kapı. Emniyet termostatı.

#### Incubators



### Microbiological Security Cabin

Three models with different worktop widths: 90cm, 120cm, 150cm
Ture II: conjugate and high level protection for upor

Type II; accurate and high level protection for user, environment and product.

Microprocessor control system with air flow rate digitally displayed on Liquid Crystal Display (LCD). Main and exhaust HEPA filter with 99.999% efficiency for 0.3m particles.

Alarms for power failure, open window, low and high airflow rate.

Perfect air tightness thanks to automatic window. Comfort of use for the user with silent fan motor and optimal light intensity.  Convenient handling and easy cleaning thanks to smooth stainless steel cabinet surface and rounded corners.
 Extended HEPA filter lifetime by recirculating 70%mm of the air passing through the HEPA filter.
 Total operating time/life of the UV lamp and countdown timing.
 Total working time, time counter and HEPA filter life display.

#### Microbiological Security Cabin



## SU BANYOSU

#### Water Bath

- Three different volumes: 15, 30, 45 litres Temperature operating range: Room temperature +5°C to 99°C
   Special design for many applications in food, microbiology, research and industrial laboratories.
   Microprocessor control system.
   Easy programming with push and turn button.
   Easy control panel with six line LCD display.
   Very good liquid temperature control for consistent and stable temperatures.
   Optional plexiglass and stainless steel cover options.
- Programmable; temperature, alarm, delayed start.
   Easy cleaning thanks to the monolithic structure made of stainless steel.
   Stable temperature distribution with strong insulation.
   Optional internal or external powerful circulation pump for homogenous temperature.

Water Bath



#### TEST KABINLERI TEST CABINS

#### **Test Cabins**

Ideal design for shelf life and stability tests in automotive and automotive sub-industry, chemical, plastics, electrical/electronic, textile, pharmaceutical, pharmaceutical, food industries; for plant growth and germination studies in agriculture and biology; for laboratories where durability, quality control, stability, aging, storage and storage under conditioned conditions, shelf life and R&D tests of semi-finished or finished products produced in industry and research laboratories of universities.

Five different volumes: 120, 250, 500, 600, 1000 litres Temperature operating range: -20 °C / 100 °C Humidity operating range: 20 % RH - 95 % RH (between 10 C /60 9C)

Powerful lighting (models with lighting). Ideal design for simulating real climatic conditions by creating temperature, humidity and lighting conditions.

Optional computerised data control software.

Step operation and 9 programme memories.

> Internal glass door. Very good temperature and humidity distribution and stability with strong air circulation. Automatic water supply system as standard. CFC-free refrigerant and insulation material. Delayed start-up feature. Stainless steel cell resistant to corrosion and many chemical vapours. Programmable PID microprocessor control system. Liquid crystal display (LCD) for temperature/time, easy-to-use onebutton control panel Easy-to-use programmable microprocessor control system.

#### **Test Cabins**



ETÜV ETUV

# ETUV

 120 litres capacity Laboratory Etuve; It operates with a sensitivity of 2°C between ambient temperature and 250°C.
 The devices are double walled and heat insulated

between the walls.

Air ducts and circulation fans for homogenous temperature distribution.

Digital setting and control panel.

 Stainless steel inside and electrostatic oven painted outside.
 According to the capacity of the oven, 2, 3, 4 shelves are supplied as standard.

220V, 50-60Hz, 1ph Internal dimensions. W x H x D: 60cmx45cmx44cm

#### ETUV



## KÜR TANKI CURING TANK

# Curing Tank

- 120 litres capacity Laboratory Etuve; It operates with a sensitivity of 2°C between ambient temperature and 250°C.
   The devices are double walled and heat insulated between the walls.
   Air ducts and circulation fans for homogenous temperature distribution.
   Digital setting and control panel.
   According to the capacity of the oven, 2, 3, 4 shelves are supplied as standard.
- Stainless steel inside and electrostatic oven painted outside.

220V, 50-60Hz, 1ph Internal dimensions. W x H x D: 60cmx45cmx44cm

#### **Curing Tank**



# LABORATUVAR BASKET MILL MIKSER

### Laboratory Basket Mill Mixer (SAY-SMM-L)

Laboratory Basket Mill Mixer is an integrated device that combines grinding and dispersing to reduce particle size for paint, coating, ink and pigment dispersion applications. Very small particle size distribution can be achieved with the Basket Mill. The hopper is easily replaceable and easy to clean.

Motor parameter: 220V 50H Rotation speed: 0-2.880 r.p.m  Processing capacity: 0.8-20L Control method: Stepless speed control, digital speed display. Medium size (mm): 1.8 - 2.5 mm The part in contact with the material is 304 quality stainless steel. Lifting system: Manual for 550w, automatically for 750w or more electric lifting.

#### SAY-SMM-L



# CIMENTO SARSMA MASASI

# Cement Shake Table

- The shock table is used for compaction of 40x40x160mm cement specimens in the mould. The table moves at a speed of 60 cycles/min, specified in the standard, and the table drop height is 15.0mm. It has an electronic counter and stops automatically when it reaches the preset number of strokes. The device conforms to all weight and size dimensions required by EN 196-1 standard. The mould can be easily placed on the table and can be
  - centred and clamped.
- Power: 220V, 50-60Hz.
   Drop Height: 15mm.
   Speed: 60rpm.
   Power 250W

W x H x D: 255x285x1000mm Weight: 55 Kg

#### **Cement Shake Table**



## Cement Prise Cube Mold

It is a type of mould used for laboratory testing and quality control purposes of concrete samples. This mould helps to prepare samples for the purpose of determining the durability and strength of cement, concrete or other building materials. Metal moulds are durable and can be used for a long

time.

The dimensions of the moulds are determined in accordance with standards and test requirements. For example, cube moulds are usually 50x50x50 mm, 100x100x100 mm or 150x150x150 mm.

The concrete sample is placed in the mould and compacted.

 Then, the specimen is allowed to harden for a certain period of time.
 After the specimen has hardened, the mould is carefully removed and the specimen is ready for testing.
 Cement prism and cube moulds are used in many test methods to measure the resistance of concrete to pressure and shrinkage. These tests help determine the quality of construction projects and materials.

**Cement Prise Cube Mold** 



# CEMENT PRISM MOLD

### Cement Prism Mold

It is a type of mould used in the construction and concrete industry and is often used for laboratory testing of concrete specimens or for field applications. Prism moulds are a system of moulds that help concrete specimens to be sectioned in the shape of a prism.

Cement prism moulds are designed for cutting and testing concrete specimens into a prism shape. This prism shape is useful for determining the tensile and compressive strength of the specimen.

After the specimen has hardened, the prism mould is carefully removed and the specimen is ready for testing.

Manufactured from steel with a grip greater than HV400. Anti-corrosion oil is applied. All parts are numbered.

Metal moulds are durable and suitable for long-term use.

The dimensions of prism moulds are usually designed in accordance with standards and test requirements. These dimensions should correspond to the cross-sectional dimensions of the specimen to be used for specific tests. The inner surface of the prism moulds should be smooth to ensure that the concrete is properly placed in the mould and that the specimen is of the required dimensions.

> The concrete specimen is placed in the mould and compacted. The specimen is then allowed to harden for a certain period of time.

#### **Cement Prism Mold**



## VİKAT CİHAZI VIKAT DEVICE

### Vikat Device

Fully automatic vikat tester (3a laboratory).
 "VICATRON X".
 New generation bluetooth system.
 Standards: EN 196/3, D.M. 3/6/68, ASTM C191

DIN 1164,1168, BS 4550, UNE 80102, NF P15-414, P15-431,6

Standard: EN 196-3, 480-2; ASTM C187, C191; AASHTO T129, T131

It is used to determine the freezing and setting time of cement.

In accordance with standard EN 196-3, the movable arm for determining the start-finish and consistency of cement is used in a fixed holder mounted on the arm plate.  Suitable for connecting different types of tips.

(Start needle, End needle, Test bar). Place the necessary additional weights on the top.

Adjustable ruler is used to set to zero with zero adjustment.

0-50mm scale vikat apparatus is supplied as a complex set with 70-60C 40mm glass plate, vikat needle set, glass thermometer / 0C-50C 10mm diameter vikat mould / according to EN Standard.

#### Vikat Device



# LABORATUVAR KÜREĞİ

### Laboratory Shovel

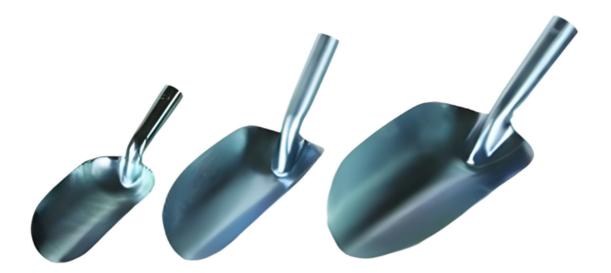
It is a laboratory equipment used to precisely measure and transport chemicals, powders or other materials in a laboratory environment.

Round-tipped paddles are used to move powders or liquids more easily, while pointed paddles are ideal for picking up or measuring smaller quantities of materials. Laboratory paddles need to be easily cleaned and disinfected. Therefore, the choice of material used and the design is considered to facilitate cleaning operations.

This equipment plays an important role in various laboratory experiments and studies to mix chemical substances, collect, measure, transfer and process samples.  It is widely used in chemistry, biology, medicine and other laboratory disciplines.

> 245X80X120 mm / 0.1kg 335X120X120 mm / 0.2kg 380X140X140 mm / 0.3kg 420X160X150 mm / 0.4kg 1300X300X250 mm / 0.5kg

Laboratory Shovel



# MASA TİPİ TERMOMETRE TABLE THERMOMETER

# Table Thermometer

Temperature measurement range: -50, +70c For outdoor environment: -50, +60c Sensitivity: + -2 Resolution: 0.1c LCD display. 1.5 V AA powered.
 W x H x D: 110x95x20mm
 Weight: 0.18kg

**Table Thermometer** 



## KRONOMETRE CHRONOMETER

## Chronometer

 3 line 100 lap professional stopwatch Accuracy: 1/1000 second Time and calendar display Double alarm function 00 lap memory Countdown Metronome Hand athletics counter

Chronometer



## TERMOMETRE THERMOMETER

# Thermometer

 Digital Thermometer. Immersion Type.
 50, +150C

Thermometer





## BEHER BEHER

# Beher

> 100 ML 250 ML 500 ML 1000 ML





# LAB CAM BALON JOJE

## Lab Glass Balloon Joje

- A balloon flask is a volumetric laboratory material used for preparing and storing solutions. Thanks to its lid, the prepared solution can be stored for a long time. The most important feature is that it is volumetrically very precise. If it is prepared up to the line on the liquid level, perfect solutions are obtained.
- > 100 ML 250 ML 500 ML 1000 ML

#### Lab Glass Balloon Joje



# ALUMINUM TARTI KABI

# Aluminum Weighing Bowl

- Isolab Aluminium Weighing Containers; It is made of high quality, oil-free, light but robust aluminium. It is used in moisture determination devices by placing the sample inside.
   Dimensions: 100x8mm (Ø x Y)
   Packaging: 50 Pieces
   Specifications: Used in moisture determination devices.
- Fully compatible with device pans. Also used as weighing container.
   Conical body designs can be stacked on top of each other to save storage space.

**Aluminum Weighing Bowl** 



# PORSELEN HAVAN PORCELAIN MORTAR

# Porcelain Mortar

30 Mm Mallet
 DIAMETER 130 MM

**Porcelain Mortar** 



### SPATULA SPATULA

## Spatula

Spatula 200 mm blade length 100 mm, stainless steel, plastic handle, autoclavable.
 Spatula 260 mm blade length 150 mm, stainless steel, plastic handle, autoclavable.
 Spatula 240 mm blade length 130 mm, stainless steel, plastic handle, autoclavable.
 Spatula 160 mm blade length 75 mm, stainless steel, platic handle, autoclavable.

#### Spatula



### PİKNOMETRE PICNOMETER

#### Picnometer

This glass material is brought to a constant weight so that no moisture remains in it and stored in a desiccator. When empty, its mass is measured on a precision balance.

Then, it is filled with the relevant liquid to the top and the excess volume is discharged by closing the overflow lid over it. Then the top is dried with a paper towel so that no wetness remains.

Then, the gross mass is measured again with a precision balance.

Net= gross - tare formulation is used to calculate the net liquid mass. The density of the liquid at a certain temperature is calculated with the density = mass / volume formulation.

Picnometer



### NUMUNE TEPSISI SAMPLE TRAY

## Sample Tray

Tray Stainless Steel 20x20x5cm Tray Stainless Steel 30x30x5cm Tray Stainless Steel 40x40x5 cm Tray Stainless Steel 50x50x5 cm Tray Stainless Steel 60x60x5 cm Tray Stainless Steel 100x100x5 cm Tray N0:5 27x46x4 cm Tray N0:4 26x41x4 cm Tray N0:3 25x36x4 cm Tray N0:2 23x33x4 cm Tray N0:1 17x27x4 cm

Sample Tray

