



MarkoomTech is an innovative company.
that manufactures Tahini Production Machines,
Food Industries and Color Sorting Machines

A-Z Products

www.markoom.com

About us

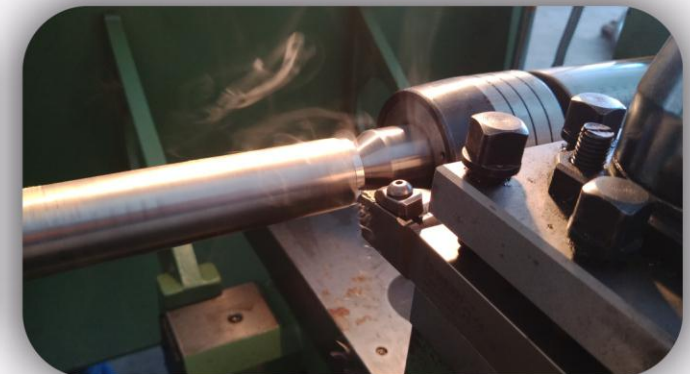


MarkoomTech is an innovative company, that manufactures tahini producing machines and food industry in a modern European way and color sorting machines. MarkoomTech offers Method of sesame seed handling machines by using today's technology. MarkoomTech is a registered brand under MarkoomTech Makina Gıda İth. İhr. Dış Tic. San Ltd. Şti. MarkoomTech developed the traditional ways of producing Tahini by adopting the modern technology. with the experts of its staff, MarkoomTech has succeeded in enhancing new machines for producing tahini. So far, MarkoomTech has developed machines sesame seed peeling drying machine washing machine roasting machine grinding machine and new conveying system, with this new equipment MarkoomTech added new value to the way of producing tahini and hence meets the customer needs. MarkoomTech crosses the old method by new solutions and, thus provides an industrial process with modern technology food industry. MarkoomTech helps the manufacturers to produce and serve safe and healthy food to your table. MarkoomTech is obsessed with R&D research and works hard in search for new solutions.





Products





Automatic Sesame Peeling

Sesame seed has a thin shell or husk which need to be removed in a process known as (Dehulling). This process is achieved in two ways known as Wet Dehulling Process and Dry Dehulling Process.

MarkoomTech has developed its own way continues dry type sesame system designed by a special engineering and high technology after years of experience and many tests.

This new dehulling system consists of continues dry peeling machine, separating the husk from kernels after the hulling process and other developed equipment provided as per your customized needs and goals. It has proven high-efficiency, low maintenance, and energy and power saving.

MarkoomTech dry dehulling process has canceled the use of salt, water pools, salt's tanks, and of the other traditional ways of peeling sesame. **MarkoomTech** renewed peeling machine applies the use of cylindrical units for the peeling process instead.

The renewed peeling machine helps us to:

- Peel sesame instantly and produce consistent peeling with high quality.
- Completely eliminate the need for the old traditional ways (salt's tank, water pool) and saved a large amount of space.
- Cancelled wasted product.
- Save a lot of time and effort.
- Reduce the use of manual labor cost.

MarkoomTech has designed this new peeling machine for the easy removal of the husk from sesame seed, and developed this new peeling system for an easy and accurate processing and get the best results when peeling sesame using the modern technology.

Automatic Sesame Peeling Line



Output



Input

Dry Type Peeling

Tahini Production Line

Tahini, also called tahina in some countries, is a paste produced from the finest sesame seeds. MarkoomTech developed the traditional way of producing Tahini with modern technology.

The process of turning sesame seeds into tahini first begins with feeding clean sesame into an automatic sesame peeling machine dry type. Then the seeds are passed for husk removing process by MarkoomTech special husk removing system by the mean of aspiration the husk is separated automatically. Next sesame is moved into a Rotary Washing and Soaking Machine for soaking and excellent washing. After soaking and washing process comes to the process drying with MarkoomTech continuous dry machine to ensure fixed moisture in order to obtain roasting with fixed standards. After that and with MarkoomTech special conveying system the product is moved for the roasting process Continual Cylindrical Type. Finally, the seeds are ground into a paste and that's the end of the process for tahini production.



Tahini Factory

Automatic Tahini Production Line



Input



Output

Tahini Line

Sesame Peeling Machine

Advanced Sesame Hulling Technology.

Innovative Peeling System.

Remove the Hull Easily and Successfully.

models :
Mt-500 / mt-850 / mt-1700

Sesame Peeling Machines

MarkoomTech Sesame hulling machine commingles the advanced technology significantly enhance sesame hulling systems. This unprecedented system has abolished the traditional methods, reduced the amount of the used water, and avoided the use of chemicals and salt in the treatment of the seeds. Sesame hulling machine provides a very high-quality product keeping its natural properties intact.



Raw Sesame



Hulled sesame



Automatic Sesame Peeling Machine

Operational Manner:

MarkoomTech sesame hulling machine is designed to hull the sesame seed automatically. The machine consists of cylinders, the number of these cylinders are indifferent as per the models. These cylinders are vertically connected. The first cylinder in all of the models is for misting and humidifying. The next cylinders are for hulling, the hull will be removed from the kernel by the relative friction between the sesame seed inside the hulling machine.

Components:

- Pre-storage hopper.
- screw feeding.
- Misting cylinder.
- Hulling cylinders.
- Supported structure
- Water Systme

Models:

In order to meet the needs and requirements of all of the clients and to satisfy all productive capacities, MarkoomTech has designed and manufactured several models of sesame hulling machines for every client and every production rate of a sesame processing plant.

MarkoomTech developed models:

- Medium Sesame Hulling Machine.
- Large Sesame Hulling Machine.
- XL Sesame Hulling Machine.



Developed Models

Medium Type Sesame Peeling Machine

MTSP-500

450 – 500 kg/h

Medium Sesame Hulling Machine:

MarkoomTech sesame hulling machine basically consists of two cylinders, the primary cylinder is mainly applied as a pre-hulling process while the last cylinder is implemented for the hulling process. The hulling process right starts when the sesame is fed into the pre-hulling cylinder where it is moisturized with water continuously in order to soften the pigments of sesame seeds to facilitate the hulling process. In the last cylinder, an intensive hulling takes place and the exfoliation of sesame occurs by the mean of friction of sesame seeds with each other insider. This model is specially designed to meet the requirement of both small and medium sesame hulling facilities and tahini production facilities.

An Ideal Capacity: 450 – 500 kg





Model : MTSP500

Large Type Sesame Peeling Machine

MTSP-850

750 – 850 kg/h

large sesame hulling machine:

MarkoomTech large model sesame hulling machine Was exclusively determined for the standard tahini and sesame peeling facilities. MarkoomTech sesame peeling machine consists of three applied cylinders fixed together on a heavy supporting structure. As in the medium type sesame peeling machine, the first cylinder acts as a pre-peeling cylinder and moisturizes sesame while the second and third cylinders are used for the hulling process. The friction technique begins in the second cylinder and starts peeling. Same friction technique continues in the third cylinder, so higher capacities more than medium type are being processed and as in the medium type, sesame peeling machine optimum and high-quality results are obtained. This sesame peeling machine is designed to serve standard sesame and tahini processing plants. An Ideal Capacity: 750 – 850 kg.





Input



Output

Model : MTSP850



X-Large Type Sesame Peeling Machine

MTSP-1700

1500 – 1700 kg/h

X-large sesame hulling machine:

MarkoomTech has designed this special XL model to meet the pressing needs of professional sesame peeling facilities and their will to process big quantities.

MarkoomTech has designed two large type sesame peeling machine in a single structure.

These two machines work together separately and thus achieve higher capacities.

The first cylinders of each side are for misting and humidifying of sesame to start the hulling process, while the second and third cylinder is for the hulling process.

The right-side machine synergy with the left side to process higher production capacity at the same time.

An Ideal Capacity: 1500 – 1700kg.





Input



Output

Model : MTSP1700



Rotary Air Classifier MTRC

The right solution
for light products
separation.

The correct manner
for separating hulled
sesame and its husks.

Appropriate husks
removing in the
tahini processing
plant.

Rotary Air Classifier

is a special cleaning system
applied to clean the husk from hulled sesame.
It has an excellent ability to handle various types
of materials as well.

The working principle of rotary air classifier
is based on the basic role of centrifugal, gravity,
and flow forces that bring about the
classification in elements of materials
of different sizes and densities.

The rotary air classifier has no screen,
it is a system with light parts suction.

Rotary air classifier provides the most effective
and efficient means for separating light impurities.

Operational Manner:

MarkoomTech rotary air classifier is specially designed in such a way
to give extremely good results for the cleaning of sesame husks inside
the tahini producing facilities and to satisfy the needs of sesame seed
traders who are looking for serving high qualities products (white sesame).
Classifiers are basically centrifugal separators, it consists of an upper
cylindrical part referred to as the barrel and a lower conical part referred
to as a cone, with a ventilator rotor disc incorporated in-between barrel
and cone and combining the classifying area. The side of the barrel
(the upper cylindrical part) of the classifier is designed with an absorbed
chute suitable for the aspirator suction. When the materials fall into the
classifying area, the light materials are caught by an aspirator suction
which carries these lighter particles through the ventilator rotor disc
and from there, they are carried to cyclones. During classifying process,
heavy particles are not caught by the air flow but fall into the cone to
continue the process.



Hulled sesame



Input



Removed Husks

Cleaned Sesame



Output

MTRC 500-1700

Rotary Air Classifier MTRC

The right solution
for light products
separation.

The correct manner
for separating hulled
sesame and its husks.

Appropriate husks
removing in the
tahini processing
plant.

Distinguish features

Made for ease of use, longevity, and accuracy.

- Accurate separation for light materials.
- Improved productivity of operations.
- Reduced utilization of horsepower.
- Strong construction of mechanism and casing ensures long-lasting.
- Use of cyclone separator leads to less dusting on the output side.
- Easy maintenance.

Benefits

Rotary Air Classifier use the combination of air for weighing for separation and provides extremely good results in cleaning sesame husks from hulled sesame in sesame peeling facilities and tahini producing factories as well. Likewise, rotary air separator can sort any dry granular and free-flowing material according to particle density.

It does not damage the material during the process of cleaning and enables the continual process.



**Rotary Air Classifier
Unit**



Hulled sesame



Input




Removed Husks

Cleaned Sesame



Output

MTRC 500-1700



Rotary Washing and Soaking Machines

**Continuous
rinsing machine.**

**An advanced design
brings high
cleaning performance.**

Rotary Washing and Soaking Machine:

MarkoomTech rotary washing and soaking machine is specially designed for a continuous cleaning of sesame. This process prepares the seed for its subsequent drying or roasting process in the tahini producing plants. Rotary washing and soaking machine are ideal for the continuous sesame rinsing process. The machine applies the traditional principles of sesame rising by keeping the product inside the water during the process which allow water get inside the kernels of the seed and prepare the seed for a better roasting and grinding results afterneath.

Operational Manner

MarkoomTech high-efficiency rotary washing and soaking machine is specially designed for sesame seed washing to be used in sesame handling plants.

The washing is basically a long rotating drum with an internal helix tumble and conveys sesame seed forwards inside the washing drum with water spray nozzles.

The product is continuously fed via a screw feeder at the front of the washing machine, the flow rate is controlled via a manual gate.

The water spray nozzle system creates a powerful cleaning action in the immersion zone (water pool).

The product stays in the water pool enough until it goes out from the washer in a process and gives give extremely good results in washing and soaking inside tahini producing factories.

Components:

- Rotary Drums.
- Screw feeder.
- Internal helix.
- Water pumps.
- Spray or Immersion.
- Stainless Steel Construction.

Distinguish features

- Continuous drum assembly with internal helix.
- Soaking section or water pool for immersion cleaning.
- Perforated drum sections for draining and drying
- Removable spray piping and adjustable sprays
- Continuous operation.
- High efficiency.
- Total drum access.



Rotary Washing and Soaking Machine



MTWS 500-1700



Continuous Dry Machine

MTD

**Advanced
Drying for sesame.**

**Continuous
Drying System.**

**Efficient
Drying Process.**

Continuous Dry Machine:

MarkoomTech continuous drying machine is a unique system that has been developed for sesame drying after sesame husk removing process in the sesame hulling line. In the new sesame peeling system, we reduce the amount of used water compared with other traditional sesame peeling methods. In order to store your product (hulled sesame) safely, you should obtain the normal humidity level as it was before treatment. Our continuous drying machine provides an ideal solution for drying sesame in the sesame hulling line. Like the toasting process, the drying process is carried out by direct contact with the hot surface inside the drying chambers (auger system) consistently.

Operational Manner

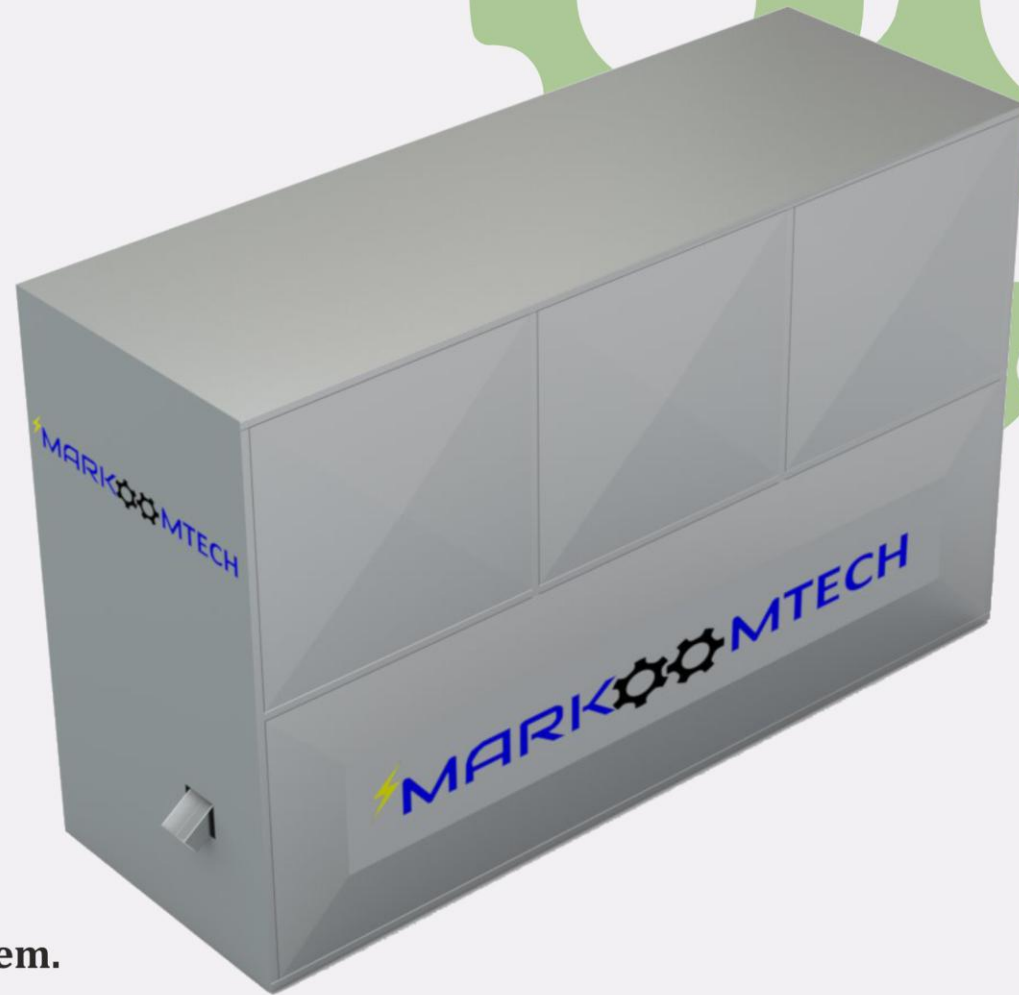
MarkoomTech sesame drying machine was designed for sesame drying constantly. The machine consists of a semi-circle open chambers with a double bottom for roasting process. Each drying chamber is a U-shaped spiral conveyor equipped with stirring wings which transfer sesame inside the spiral conveyor. These flexible drying tubes help sesame transporting inside and from chamber to chamber. The number of these drying chambers depends on the required capacity. Each drying chamber is with double jackets covered heated by oil where sesame is passed in for roasting processing via direct contact with the hot surface.

Components:

- Strong frame.
- U-shaped drying chambers.
- Internal auger screw for sesame transport.
- Sesame mixing arms.

Distinguish features

- Perfect results.
- Store hulled sesame safely.
- Constant drying process.
- Continuous operation.
- Accurate blanching and Drying.
- Possibility for upgrading it into a roasting system.



MTD 500-1700

Roasting Machine

Advanced Roasting Technology.

Continuous Roasting Technology.

Efficient Roasting Process.

Specially Designed for Sesame Roasting.

Roasting Machine

MarkoomTech sesame continual roasting machine has been designed for sesame roasting by the utilization of advanced technology. This advanced technology has been developed in accordance with the traditional sesame roasting principles in a continuous way for the needs of modern tahini production plants. The roasting process is carried out by direct contact with the hot surface inside the roasting chambers (cylinders) quietly, smoothly, and constantly. This continual roasting machine provides homogenize product for the production of tahini paste.



Operational Manner

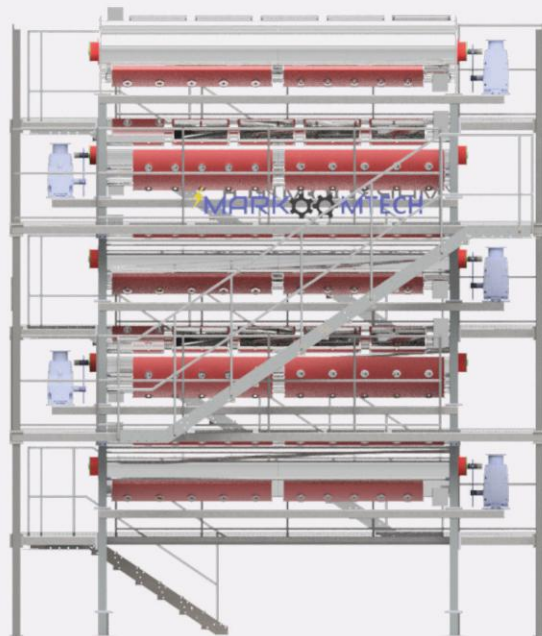
MarkoomTech sesame roasting machine was designed for sesame roasting continuously. The machine consists of a series of cylinders to applied for the roasting process. The number of these cylinders are indifferent as per production rate. The applied roasting cylinders are vertically connected. Each cylinder is with double jackets covered heated by steam where sesame is passed for roasting via direct contact with the hot surface.

Components:

- Applied roasting chambers made of AISI-304.
- Massive roasting shafts with mixing arms.
- Service platform with stairs.

Distinguish features

- High production efficiency and perfect results.
- Constant roasting process.
- Continuous processing system.
- Simple working principle.
- Continuous operation.
- Accurate Blanching and Drying.
- Temperatures can accurately be controlled.
- Can be used for drying, pasteurizing and roasting.



MTRM 500-1700



Tahini Grinding Machine

Advanced Grinding Technology.

Perfect Sesame Grinding.

Tahini Grinding Machine

MarkoomTech Grinding Machine is used for sesame seeds grinding to produce tahini paste. The grinding process is done with two stones the top element is known as rotor while the bottom one is called stator. The rotor turns against the fixed stator, the product is ground between these stone discs. All milling tools are interchangeable.

Depending on the market's needs MarkoomTech Produces both traditional sesame grinding machines which are well-known as tahini stone mill and has also developed MarkoomTech distinguish automatic sesame milling machine.

Tahini Stone Mill

The traditional stone grinding machine is the best machine for tahini milling of small quantity. It is the best solution for small tahini producing plants. The grinding process is done by the means of two pairs of natural stone to produce tahini. This old traditional stone grinding system grinds sesame slowly and smoothly at low temperature and the result is the best quality ever.

Automatic Sesame Grinding Machine

MarkoomTech automatic sesame grinding machine is an advanced solution for sesame seed milling.

This new automatic grinding system allows strong high throughput performance via new corundum stone mills which offer the right grinding tools for sesame milling. In the process, the grinding gap of corundum stone mills can be adapted manually with a handwheel or automatically with an automatic gap adjustment to guarantee high productivity and fine product.

Pre-Storage Hopper

- Grinding Units
- Grinding Stone
- Water Cooling System
- Pump
- Electrical Motor

Benefits

- Advanced grinding technology.
- Outstandingly hygienic system.
- High throughput in minimal space compared with the traditional system.
- Special brand MarkoomTech corundum stone




Input



Output

Stone Mill



Tahini Grinding Machine Models

Tahini Grinding Machine Models

In order to meet the needs and requirements of all tahini factories and to satisfy all productive capacities, MarkoomTech has designed and manufactured several models of tahini grinding machines :

1-Automatic Sesame Grinding Machine - Two Heads Model

2-Automatic Sesame Grinding Machine - Three Heads Model

3-Automatic Sesame Grinding Machine - Five Heads Model

Automatic Sesame Grinding Machine - Two Heads

This model has been produced to sever the needs of small tahini producers to facilitate their process.

Standard production is with two heads. Each head is constituted with two grinding corundum stones.

These two heads have two grinding chambers for producing tahini via two stages. The top head is allocated for the initial grinding and then the product moves down to the bottom head for fine grinding in order to get fine tahini.



Input



Output

2 Heads Grinder

Tahini Grinding Machine Models

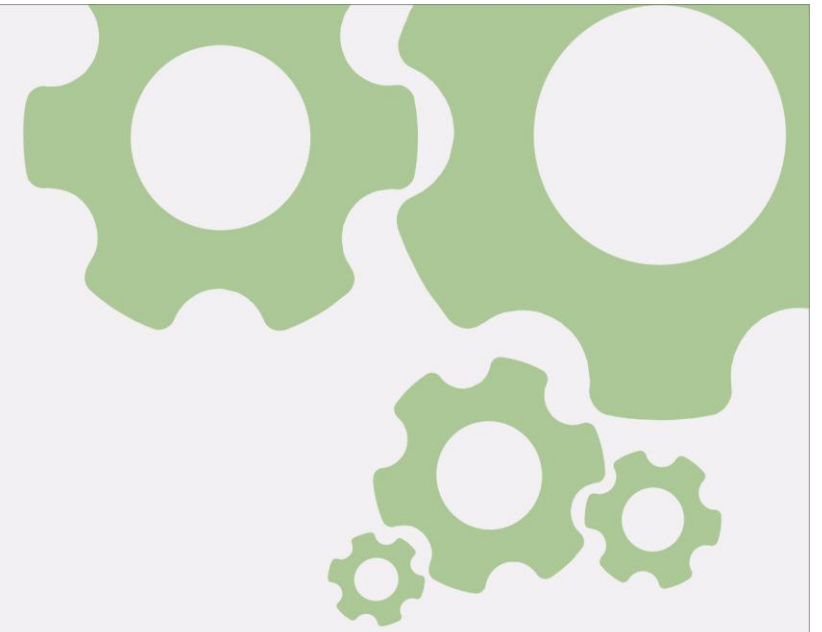
Automatic Sesame Grinding Machine – Three Heads

This model has been produced to sever the needs of standard tahini factories. Standard production is with three heads. Each head is constituted with two grinding corundum stones, six stones in total. These three heads have three grinding chambers for producing tahini in two stages allocated to two grinding stages, one head on top allocated for the initial grinding stage and then the product moves down to the last two heads for fine grinding in order to get fine tahini.





Input



Output

3 Heads Grinder

Tahini Grinding Machine Models

Automatic Sesame Grinding Machine – Five Heads

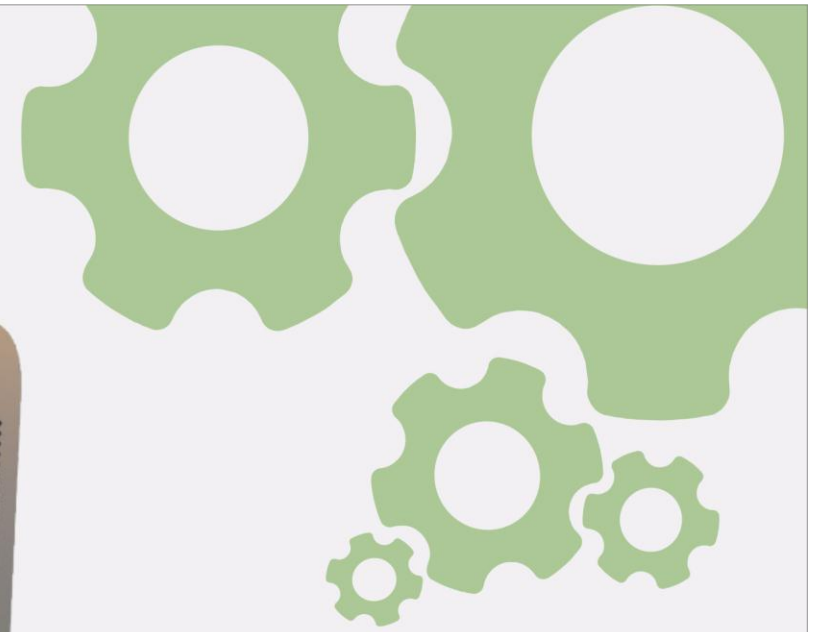
This model has been produced to sever the needs of standard tahini factories. Standard production with five heads.

Each head is constituted with two grinding corundum stones, ten stones in total. These five heads have five grinding chambers for producing tahini in two stages allocated to two grinding stages, first two heads are allocated for the initial grinding stage and then the product moves down to the last three heads for fine grinding in order to get fine tahini.





Input



Output

3 Heads Grinder



Tahini Storage Tank

Tahini Storage Tank:

Tahini storage tanks are used as a waiting station at the end of the tahini processing line and before the packaging. The grinding tahini is pumped from the sesame assembly tank in front of the sesame milling machine in the sesame production line into the sesame storage tank either for storing or for next processing.

Distinguish Features

- Standard manufacture from AISI 304 stainless steel and AISI 316 stainless steel is also produced on request.
- Manufactured with argon welding and therefore do not rust.
- Manufactured with hydrophore connection, discharge outputs, level indicator, and outputs.
- Manufactured as horizontal cylindrical, vertical cylindrical and prismatic.
- On-site installation is possible.
- Standard capacities 1 – 4 tons.
Bigger storage tanks are produced on request as well.
- Manufactured with stairs.
- Manufactured with mixer.
- Complies with food regulations.

Technical Details

- Chassis: stainless steel AISI 304.
- Body: stainless steel AISI 304.
- Electricity: 380 V – 50 Hz.
- Gamak brand motor.
- Level indicator.



Tahini Tanks : MTST



Tubular Disc Conveyor

**Excellent solution
for the transport
of sensitive products,
and wet products.**

**An ideal way
to move materials
in a safe,
clean and
efficient manner.**

Tubular Disc Conveyor:

The Tubular Disc Conveyor is a fully enclosed conveying system. It is mechanically driven conveyors that drag bulk and legume materials inside a stainless-steel tube.

The system consists of polyethylene disc attached to stainless-steel cable inside an enclosed conduit. The system operation is totally dust free.

Tubular disc conveyor is specially designed for a superfine conveying of the wet sesame seed. It is also designed for gentle materials handling. It carries materials between the discs within an enclosed conduit design to move materials in a safe and gentle way without friction or stress in the outlet boxes and inside the tube from the inlet or inlets to the discharge or discharges.

Operational Manner

A cable with discs spaced along its length and its ends connected to each other inside the conduit in order to shape an endless loop. The discs and cable are driven by a sprocket-wheel pulled by a motor engine. Changes in direction are facilitated by bends in the tubing. Input and discharge of the product are through outlet boxes. This flexible design allows single or multiple inlets and outlets, and the conveying tube is easy routing vertically, horizontally, to the front or backward, to the right or the to the left or at any angle.



Models : mt-1700



Tubular Disc Conveyor

**Excellent solution
for the transport
of sensitive products,
and wet products.**

**An ideal way
to move materials
in a safe,
clean and
efficient manner.**

Distinguished Features:

- Gentle conveying of friable materials (does not affect product – Minimize waste).
- Easy transfer of material from single or multiple feeding points (inlets) to single or multiple discharge points (outlets) (ideal for silos and packaging lines).
- flexible routing: its modular components allow easy changing of conveyor direction, length, and the number and position of feeding and discharge points (inlets and outlets).
- Closed system: dust-free, contamination-free handling.
- Reduce power consumption.
- Always clean: no product resides in the inlet or inlets.
- Easy to clean and available with CIP (Clean in Place) features.
- Easy assembly, low maintenance ease of use.

Available types

- Horizontal tubular disc conveyor.
- Vertical tubular disc conveyor.
- Upright tubular disc conveyor.
- C Type tubular disc conveyor.
- Z type tubular disc conveyor.

Applications

Almonds – Walnuts – Pistachios – Cashews – Hazelnuts – Peanuts

Pine – Chestnuts – Filberts - Pecans – Macadamia...

Seeds:

Sesame seed – Quinoa - Cotton Seed – Rice – Wheat – Barely – Rice - Sunflower Seeds

Watermelon seed - Mustard seed – Corn – Oats - Birdseed - Flax seed – Rape Seed...

Grains:

Beans – Peas – Chickpeas – Soybean - Lentils – Lupine – Cowpea – Coffees...

Spices:

Cumin - Ginger – Fennel – Anise - Caraway - Basil – Coriander – Pepper seed - Garlic – Nutmeg – Clove

Saffron- Cardamom – Cinnamon – Turmeric - Celery Seed - Rock Cherry – Fenugreek – Nigella – Poppy...

Herbs: Mint – Thyme – Oregano – Parsley - Juniper - Marjoram – Rosemary – Sage – Vanilla – Powder

Flour - Dried Fruits - Frozen Vegetables – Frozen...



Models : mt-1700



Air Cyclone

**Excellent
Dust Separator .**

**High Operating
Reliability .**

No Maintenance.

Air Cyclone

Air cyclones or cyclone are also known as dust collectors. They are widely used for the collection of medium-sized and coarse particles. Their relatively simple construction and absence of moving parts mean that the costs and maintenance are lower than other dust controlling devices, that are available in the particulate control industry. The inertial separators are usually used as pre-cleaners upstream of the other control devices to reduce the dust loading and to remove larger, abrasive particles.

Operational Manner:

The air cyclone wall is made up of a cylindrical upper section and a cone-shaped bottom section. For heavy-duty applications and in the presence of particularly abrasive dust particles, the inlet spout and the walls of the upper section are reinforced.

The general principle of inertial separation is that the particulate-laden gas is forced to change direction. As the gas changes direction, the inertia of the particles causes them to continue in the original direction and be separated from the gas stream.

Applications

Cyclones and centrifugal collectors are utilized in various industries and suitable for use with nearly any type of waste material including wood, drywall, concrete, gravel, clay/silica, bio-waste, and more! It is used to control dust inside processing facilities as:

- Seeds factory.
- Pulses factory.
- Feed factories
- Flour factories
- Chemical facilities

Distinguish Features

- Easy assembly, and low maintenance.
- Relaible separators.
- Wide range of applications.
- Wide range of models.



Models : mt-1700




 0090 324 999 68 19

 info@markoom.com

 0090 543 560 64 90

 www.markoom.com

 Özgürlük Mah. 139 Cad. C/1 ve C/2 Bloklar Apt.
No: 59/3 İç Kapı No:3/4 Akdeniz/MERSİN