



**Ali Tugbay TAVUKCU**

**Akyurek Technology**  
**International Sales & Project Coordinator**

Company Name: AKYUREK MAKINA SANAYI ve TICARET A.S.  
Address: No:37 65117 Street Karaduvar Avenue | City :Mersin |  
Post Code: 33020 | Country: Turkey  
Website: [akyurekltd.com](http://akyurekltd.com)

Mobile Phone : +90 530 342 45 03 WhatsApp /Viber  
Office Telephone: +90 444 62 59 | Fax: +90 324 234 47 07  
E-mail : [atugbay@akyurekltd.com](mailto:atugbay@akyurekltd.com)  
**Online Chat/talk | Skype : ali.tugbay.tavukcu**



# 42.000 Meter Square Production Facility and Head Office



The Company was founded at a fishing port at Karaduvar on 1973 and started its activities with the name of Akyürek Kardeşler. Seeds of Akyürek Kardeşler on those days grew until today. Akyürek Kardeşler made a strong impression with machineries they manufactured towards end of 70s and they were preferred due to their honest trade and after sales services.

1970

1980

2000

2004

2006

2019

In 2000s, innovation process started after the second generation was joined the system. New technological products were started to be manufactured. Factory capacity improved.

Attention given to abroad assembling works. Technological innovations were introduced to overseas countries. Exports started to more than 30 countries such as Russia, Sudan, Ethiopia, Casablanca, Madagascar, Bulgaria, Ukraine, America. The company shifted to in-factory full automation system and realized its own technological innovation.



During 1980s, the company moved to new factory on the Ataş Road. Despite difficulties during those days, they continued to manufacture screening – stringer machineries. Every machinery was manufactured by them. They draw and design on their own. They were testing their machineries for many nights. They continued manufacturing despite the Turkish internal market crisis during 1990s. They did not fear any difficulties and went to all around the country for assembling.

In 2004, foundation of new factory was laid within borders of Karaduvar. In the same year, ISO system and quality control certificates used in the factory. In 2005, the company moved to new factory. Total indoor area increased to 16,000 m2 and total area became 45,000 squaremeters.

In 2010, they became the only leader of Turkey in the market. They increased the market share to 95% and went from strength to strength. In the same year, they became the market leader both in Bulgaria and Ethiopia. Akyurek Kardeşler has also completely renewed its corporate identity and decided to continue its journey with "Akyürek Technology" brand. In 2015, they became a world brand exporting to 80 countries and a company that is primarily preferred by manufacturers. Akyürek Kardeşler continues to be the technological solution partner of dry food manufacturers in all over the world.

## SYSTEM SOLUTIONS

Consultation  
Pre-Engineering  
Project Management  
Logistics  
Installation & Startups  
Training  
Technical Supp

## PROJECT SOLUTIONS

Seed Conditioning Turn Key  
Projects (Food)  
Grain Seeds Cleaning Plants  
Pulse Seeds Cleaning Plants  
Oil Seeds Cleaning Plants  
Spice Seed Cleaning Plants  
Herb Cleaning Plants

Seed Milling Turn Key  
Projects (Food)  
Sesame Peeling Plant  
Tahini Peeling Plant  
Pulse Seeds Processing Plants  
Sunflower Seed Hulling Plants  
Peanut Shelling Plants  
Pistaschio Sheeling Plants

Seed Processing Turn Key  
Projects (Seed)  
Cereal Seed Processing Plants  
Pulse Seed Processing Plants  
Grass Seed Processing Plants  
Oil Seed Processing Plants  
Garden Seed Processing Plants

## SEED SOLUTIONS

Grain	Pulse	Oil Seeds	Spices	Garden Seeds	Grass Seeds	Herbs Leaves
Wheat	Dry Peas	Sesame Seeds	Cumin	Carrot	Alfa Alfa	Basil
Barley	Beans	Sunflower Seeds	Coriander	Chervil	Clover	Dill Tops
Buckwheat	Lentil	Cottonseed	Mustard Seeds	Chieve	Cocksfoot	Chamomile
Maize	Chickpea	Flax Seed	Caraway	Cress	Meadow Grass	Marjoram
Oats	Bambara	Grape Seed	Black Peper	Dil	Timothy	Peppermint
Rice	Dry Beans	Hazelnut	Rosemary	Leek	Peas	Chervil
Rye	Dry Broad	Pistachio	Turmeric	Lettuce	Potatoes	Parsley
Sorghum	Beans	Jojoba Seeds	Clovers	Melon	Poppy	Clantro / Coriander
Triticale	Dry Cowpea	Lin Seeds	Fennel Seed	Onion	Turnip	Mint
Others Grains	Garden Pea	Peanut Groundnut	Fenugreek Seeds	Parsley	Beetroot	
	Lupins	Pumpkin Seeds	Ginger	Parship	Cabbage	
	Pigeon Pea	Rape Seeds	Cinnamon	Radishes	Lin Seed	
	Vetch	Safflower Seeds	Cloves	Spinach	Others Grass	
	Cocoa Bean	Soybean	Ground Cumin	Tomato		
	Coffee Bean	Castor Oil Seeds	Ground Ginger	Vipers Grass		
	Others Pulse	Others Oil Seeds		Others Garden		





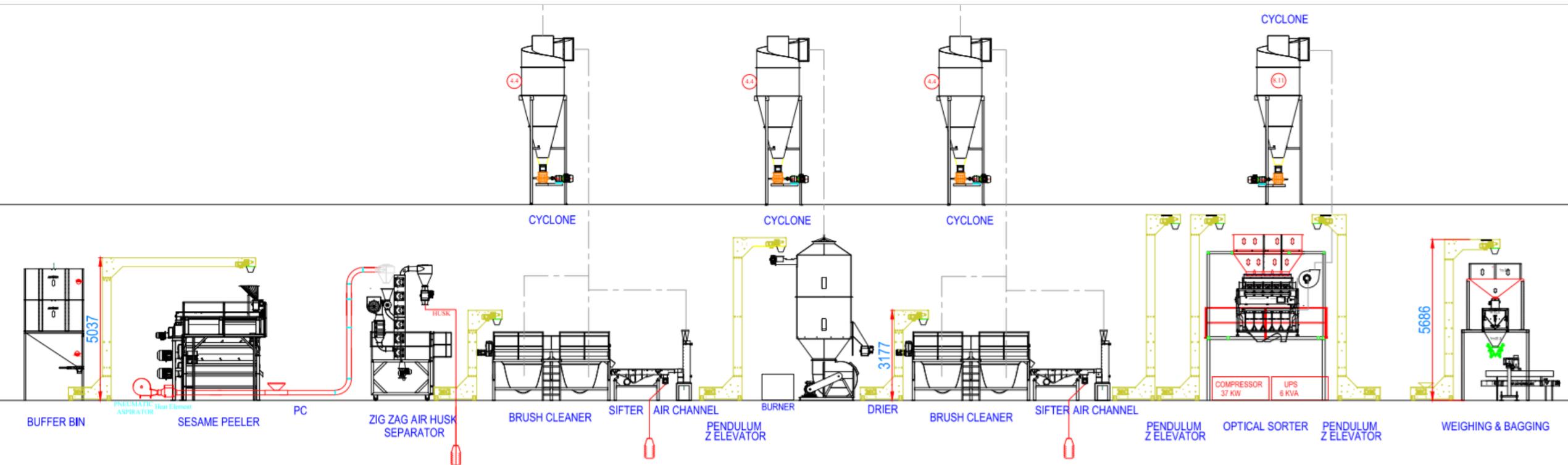






**1 tph Sesame Peeling line**  
**Render Visual**

# Section View & Diagram





# SESAME PEELER

Akyurek's Sesame Peeler SP-4000 Series is a precise and efficient friction type dehulling units applicable for processing all kinds and types of Sesame seed peeling.

Fully enclosed Hygienic Operation.

Minimized utility bills comparison to other traditional methods of peeling.

No chemical or salt used during Sesame Peeling Process.

High quality product without modifying Sesame's natural properties.

Improved peeling systems via Innovative technology.

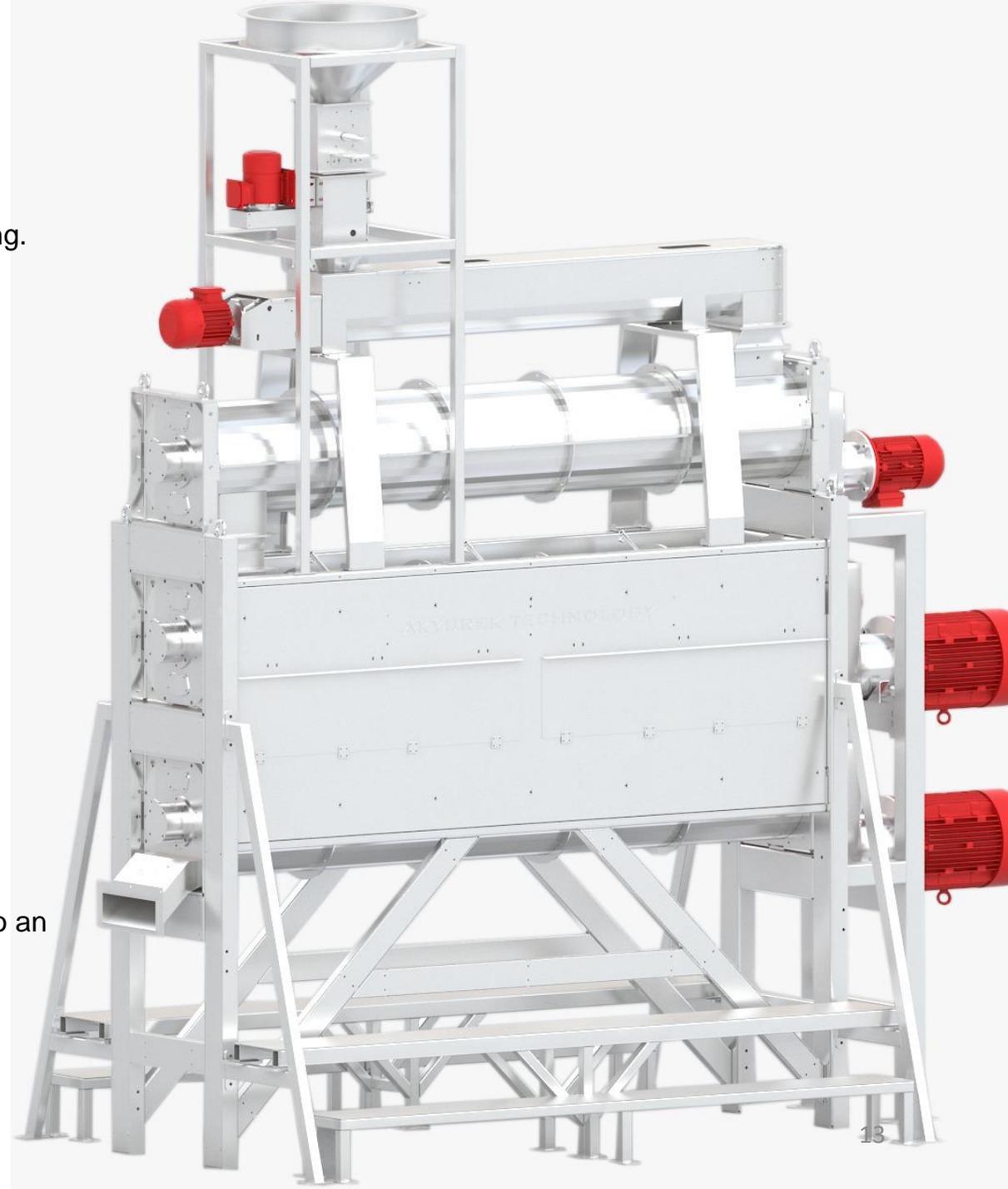
The peeling system is made of three cylinders.

For optimum and high yield peeling process the first cylinder mixes the seeds with water in a continual and homogeneous way.

For peeling process second cylinder creates friction between the seeds.

The third cylinder continues the friction process with the same friction technique, so an optimum and high quality result obtained with process repeat.

Regulation of input parameters control via on board PLC Panel.



# ZIG ZAG AIR HUSK SEPARATOR

## Peeled Sesame and Husk Separation

Sesame Peelers output feed to a Pneumatic Conveyor which conveys the product to First Cyclone Feeder Hopper.

Feeder hopper Cyclone with Rotary Feeder delivers the product (Husk and peeled Sesame) to 6 Counter Flow Zig Zag Air Channel equipped with Heat Resistances and 4 kW Aspirator.

The hot air which is pushed from bottom of Zig Zag Air Channel to the top, meets with gravity flow husk and peeled Sesame and this is where the husk is pushed up stream and separated from peeled sesame.



# SEED BRUSH CLEANER

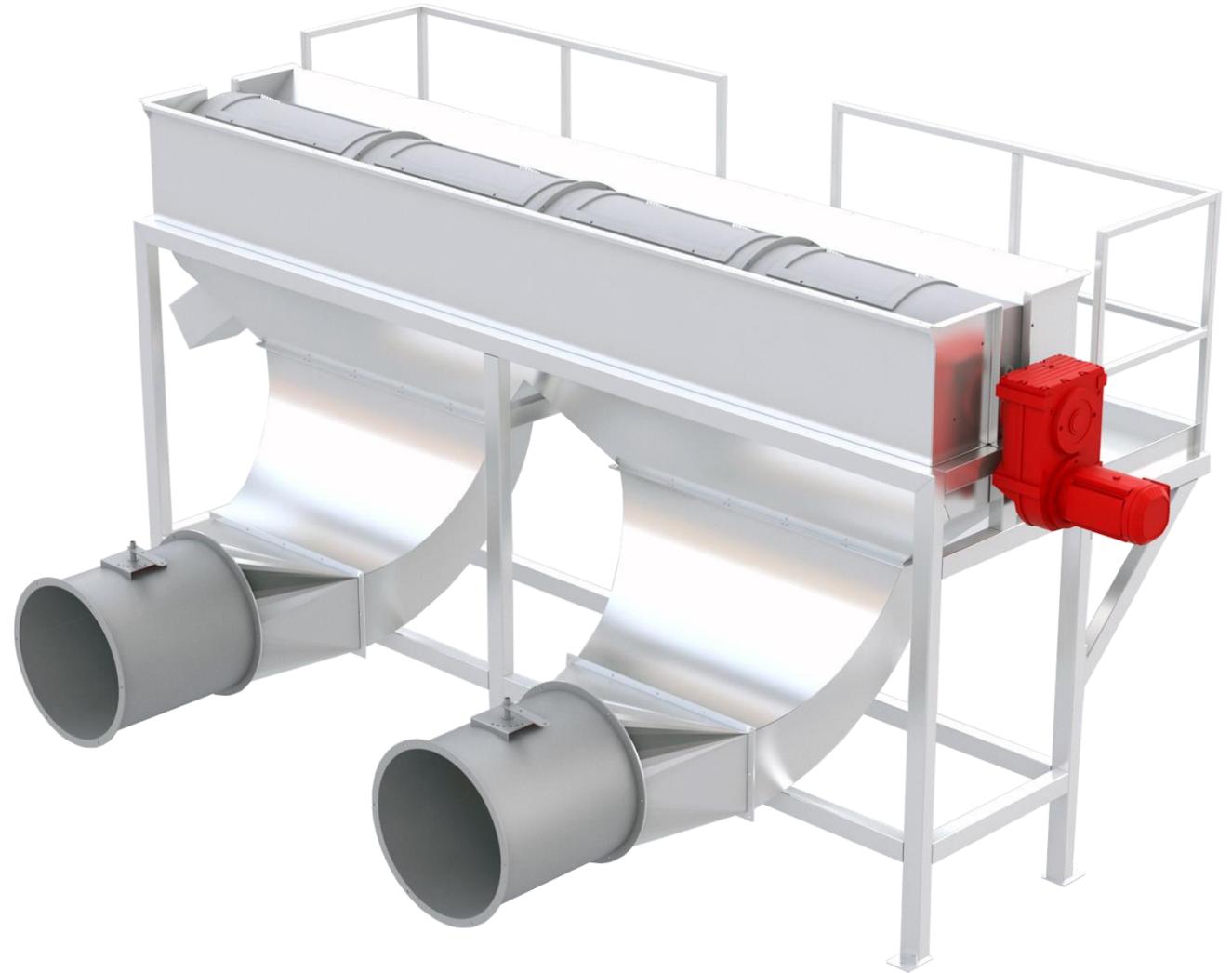
Seed Brusher is designed for many application;

- \*Removing the black spots of sesame seeds on the nose of the seed

- \*Continue hulling process for semi hulled sesame

- \*Cool down the previously treated product in the dryer to a room temperature

- \*Removing hull that has loosen in the drying or roasting process.



# VIBRATORY SIFTER SEPARATOR

The modern design of the Vibratory Sifter separator allows it to achieve high quality cleaning at required capacities, whilst having small overall dimensions and low power consumption.

Choice of model allows to separate over and or undersize impurities from peeled sesame.

The separator is offered with the choice of Aspiration separator systems.



# ASPIRATION AIR CHANNEL

**ASPIRATION AIR CHANNEL** is characterized by its excellent separating efficiency, which ensures a high degree of separation: The uniform distribution of the air across the entire width of the aspiration channel and the dually adjustable wall in the vertical aspiration channel ensure stable and reliable separation.



# SESAME SEED DRYER

Sesame is fed to the machine by means of supplied conveyor equipment; intake of Drier equipped with a short Screw Conveyor to feed the Drying Chamber. Hot air is supplied to chamber with fan and Sesame is exposed to hot air when enters to chamber. High moistures sesame remains on lower level of Chamber and as hot air applied to Sesame, the moisture evaporates from seed and Sesame starts to get lighter. With hot air blast from beneath the chamber lighter Sesame arise to a higher level in Chamber and directed to accept outlet chute where a short screw conveyor discharges seed to next process.



# SEED BRUSH CLEANER-for Cooling

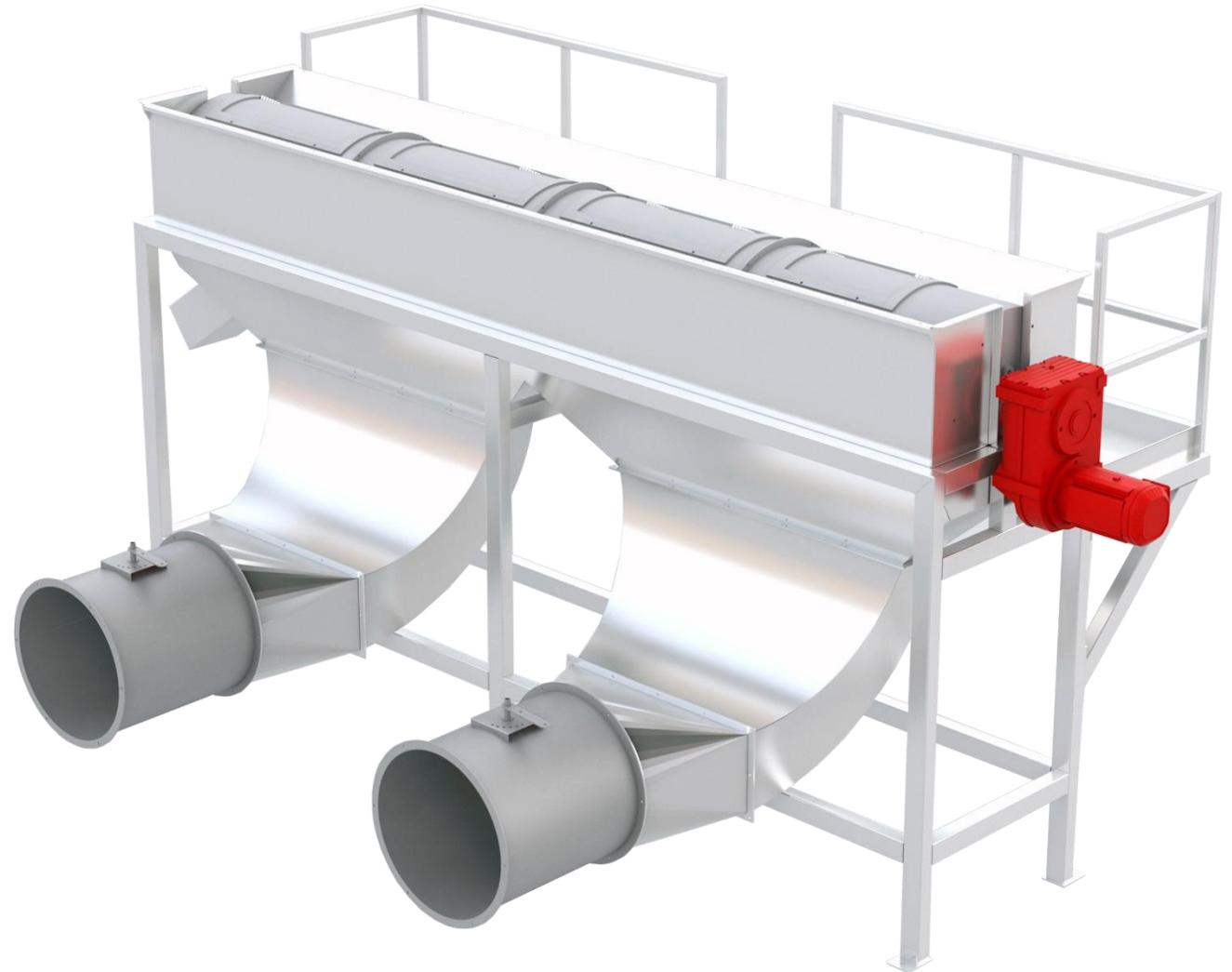
Seed Brusher is designed for many application;

\*Removing the black spots of sesame seeds on the nose of the seed

\*Continue hulling process for semi hulled sesame

\*Cool down the previously treated product in the dryer to a room temperature

\*Removing hull that has loosen in the drying or roasting process.



# VIBRATORY SIFTER SEPARATOR

The modern design of the Vibratory Sifter separator allows it to achieve high quality cleaning at required capacities, whilst having small overall dimensions and low power consumption.

Choice of model allows to separate over and or undersize impurities from peeled sesame.

The separator is offered with the choice of Aspiration separator systems.



# ASPIRATION AIR CHANNEL

**ASPIRATION AIR CHANNEL** is characterized by its excellent separating efficiency, which ensures a high degree of separation: The uniform distribution of the air across the entire width of the aspiration channel and the dually adjustable wall in the vertical aspiration channel ensure stable and reliable separation.



# OPTICAL COLOR SORTER

Ultimate: high resolution TRICHROMATIC FULL COLOR RGB sorter with integrated shape-sizing system.

Technological: image acquisition using HSI technology to see almost as a human eye.

Additional NIR cameras available (option)

Precise: SORTURK 'NEW GENERATION' software can recognize up to 16 families of defects. Optical resolution 0.1mm

Max Capacity: highest production capacity RGB trichromatic sorter with 1 to 10 chutes models

Flexible: Multichannel models divisible in 4 complete independent sections (4 sorters in 1)

Reliable: thanks to over 10 years' experience in electronic sorting

Unique: with airtight, conditioned and tilting optical boxes for their easy opening



# NET WEIGHER & BAGGING SCALES

Akyurek Semi-Automated Net Weigher & Bagging Scale Machines are used for Pre-bagging weighing and Bagging of 5 to 50 kg bulk product.

Akyurek Semi-Automated Net Weigher & Bagging Scale machines are with electronic and micro-processing control.

Feature of getting reports about sacked bags and weighing is available.

It can connect to electronic devices such as PLC or computer.

Our machine can be used for all grain seeds, granule products, salt, granule chemicals, residue, provender, cement, construction chemicals, coal and stone.

Operation starts with Operator feeding the sack to sack grip, scale weighs the batch in two stages with gross weighing and net weighing and delivers the seed in to sack. This process continuous in series action.

## APPLICATION INDUSTRY;

- Food
- Cement / Construction
- Chemistry / Petrochemistry
- Mining

## Features;

- Fast and Sensitive weighing
- Programmable number of bag to fill
- Configurable Max and Min Limits
- Warning at Out of tolerance weighing
- Level Check at Top Tank
- Weighing Memory



# PENDULUM BUCKET ELEVATOR

The P- EL and Z-EL elevator is suited for transportation of cereals, seeds, fertilizers, minerals, wood shavings, wood chips, granular products, and similar materials; also suitable for oleaginous seeds.

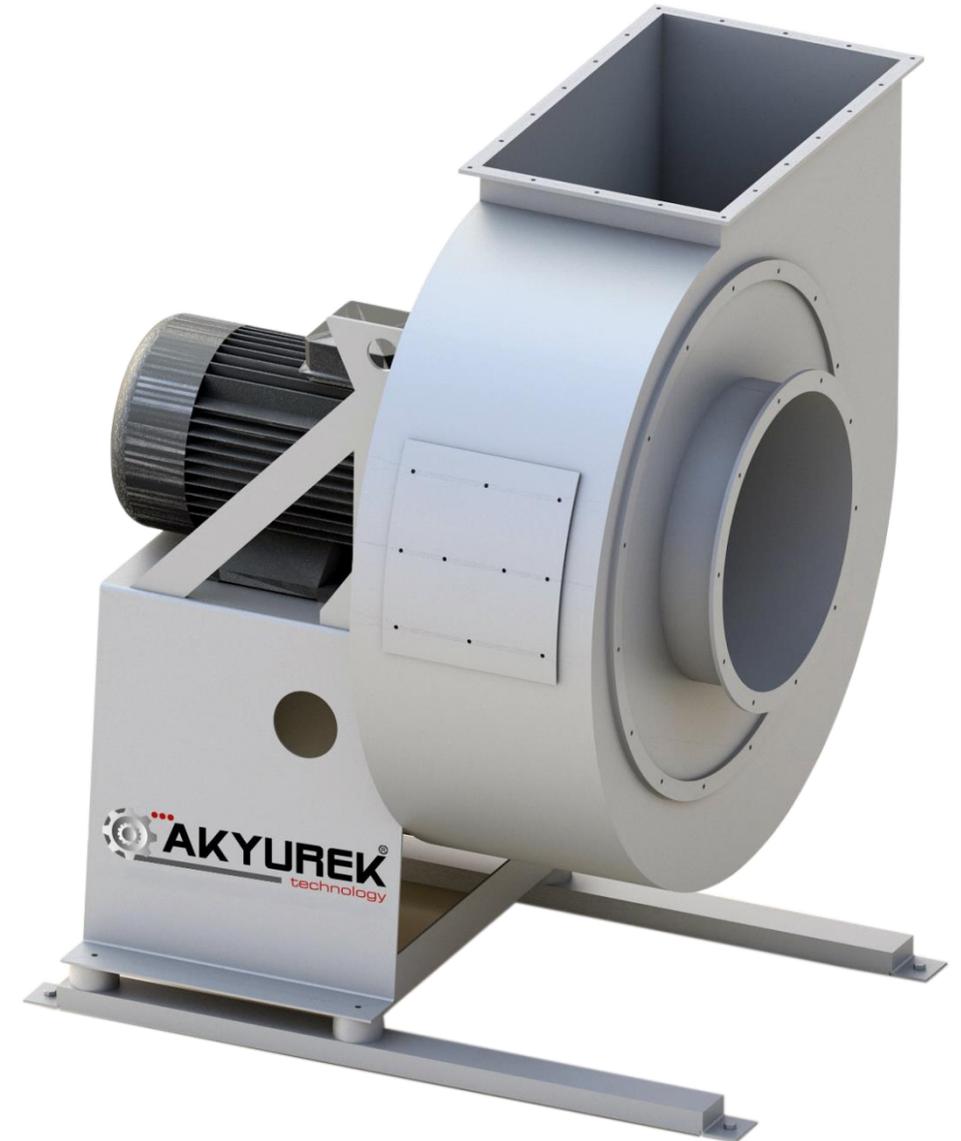
- Bucket Elevator
- Easy Dump Elevator
- Continuous Cup Bucket Elevator
- Continuous Cup Z Elevator
- Chain Conveyor
- Tripper Conveyor Belt
- Screw Conveyor
- Pendulum Bucket Z Elevator



# CENTRIFUGAL FAN

The Akyurek centrifugal fan type ACF is a medium pressure fan having backward curved steel blades manufactured in steel plate. The impeller is self-cleaning and dynamically balanced. The spiral housing is made of welded steel plate.

- Centrifugal Fan
- Blower Group
- Airlock Valve
- Jet Filters
- Cyclone Akyurek
- Modular Pipework Systems



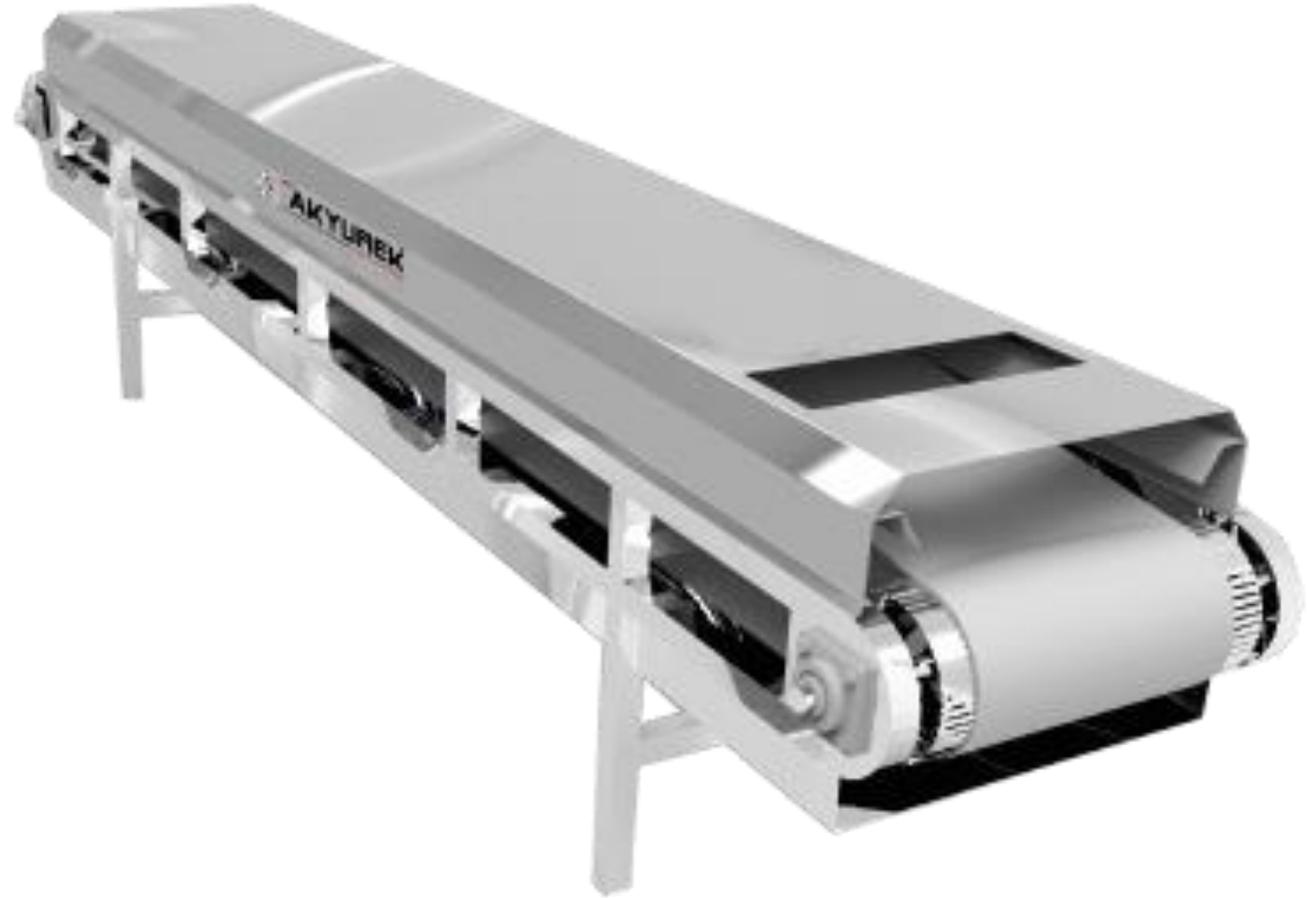
# CYCLONES

Akyurek Cyclonic separation is a method of removing particulates from an air without the use of filters, through vortex separation. Rotational effects and gravity used to separate mixtures of solids from air. Akyurek designs and offers most suitable model of cyclone for your needs. As for all our products stability, Functionality, Durability, Reliability applied to our Cyclones during designing processes.



# CONVEYOR BELT

Akyurek Belt conveyor type T.BELT-014 is made up of standard elements which, when correctly combined, can easily be fitted into any conveying installation. The Akyurek Belt Conveyor is manufactured in galvanized steel and or Painted and designed in a light and easy-to-assemble modular system. Type T.BELT-014 is designed with guide rollers which is quiet and have low power consumption in relation to their capacity. There is also a possibility for transport at an upward angle of up to 30° using carriers. The Belt conveyors is well-suited to safe and eective transportation of most materials.



# AUTOMATION & MMC

The highest capacity of Akyurek Technology equipment is achieved by automation. As a result of many years of experience we can advise the best automation level for controlling the processes. In this respect, Akyurek Technology obvious strength is that we have gathered our knowledge of processes, systems and automation into one organization and, by choosing Akyurek Technology as an automation partner, our customers get a properly dimensioned system based on modern technology and optimized functionality. The advantages of being a turnkey partner include design and execution, as well as subsequent servicing when the need arises.

