EQUIPMENT

Sifting & Security

- SIFT
- SEGREGATE
- SIEVE
- PROTECT

Palamatic PROCESS >>> machines • engineering

Powder Handling Solutions

CONTENT

Means that the equipment is available for testing at PALAMATIC PROCESS

Means that the equipment can be installed in ATEX zone

Means that design and options can be customised

PALAMATIC PROCESS reserves the right to make changes in the design of the facilities listed in this commercial documentation

Sieve Range

AVAILABLE CUSTOM MADE

PALAMATIC PROCESS HAS DEVELOPED A VIBRATORY AND CENTRIFUGAL SIEVES RANGE FOR CONTROLLING AND PROTECTING YOUR PRODUCTION LINE

Vibratory sieve

GSC 450 - GSC 600 - GSC 900

- The GYRATOR vibratory sieve controls and protects your production line

Page 4

Centrifugal sieve

RS 200 - RS 300 - RS 400

- The main goal of the ROTARY centrifugal sieve is to eliminate foreign bodies, reduce clogging and perform granulometric separation

Page 20

Comparison of 2 technologies

	Vibratory	Centrifugal
INDUSTRY SECTORS		
Food & Feed	X	X
Chemical	X	X
Fine Chemical	X	X
Mineral and building industries	X	
Water treatment and flue gas	X	X
CAPACITY*	Average up to 6.5 t./h.	High up to 70 t./h.
AVAILABLE OPTIONS	yes (cf page 14)	no

* These capacities are achieved with a screen of 2 mm.

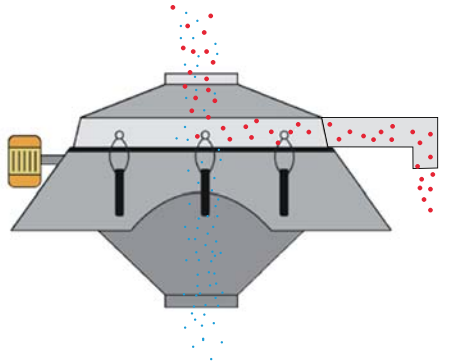
GOALS AND ADVANTAGES OF THE PALAMATIC PROCESS RANGE

- Machines protection
- Removal of foreign bodies
- Grain size separation of materials received in bulk or in sacks
- Clogging elimination
- Mild steel, 304L and 316L stainless steel manufacturing
- Capacities from 1kg to 70 t./h.

OPERATING MODE

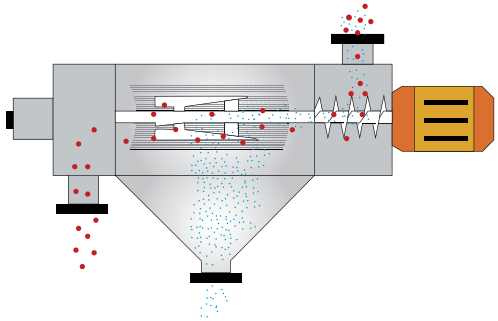
VIBRATORY SIEVE

The sieving operation is performed by one or two vibrating motors set up on the side of the machine.
The feeding is ensured by the superior central flange connected by the flexible fitting. In most cases, the product supply must be controlled to ensure correct sieving without clogging of the mesh.
The agglomerates are broken and the foreign bodies are eliminated.
The mesh screen is available in stainless steel or nylon and in wide range of sizes to suit the exact needs of the customer and each material specificity.



CENTRIFUGAL SIEVE

The internal screw of the centrifugal ensures the metering and the sending of the material into the cylindrical grid. Outside of this grid, a rotating shaft with blades spreads the product against its walls. Thanks to centrifugal force, the sieved material passes through the mesh and the existing foreign bodies are trapped by the mesh and conveyed towards the discharge spout. With the impact of the powder, the sieve grid vibrates to accelerate and reduce the risk of clogging.



Vibratory sieve

Range of Vibratory Sieves

AVAILABLE CUSTOM MADE

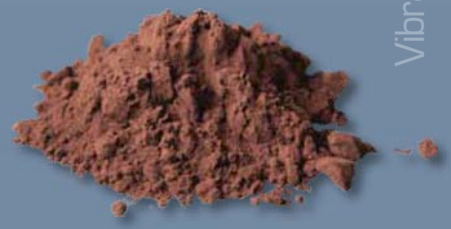
TO GUARANTEE HYGIENE AND PROCESS SECURITY

The powder screening provides a high level of protection of your machines by eliminating foreign bodies; it agglomerates and guarantees the quality of your production. The PALAMATIC PROCESS vibratory sieves eliminate wastes with precision and are perfect for a secured screening from the materials reception stage till the end of the manufacturing process. They can be implemented easily on a new or existing production line. Our screeners can be cleaned, assembled and dismantled with minimal effort by using the mounted quick-release clamps.

Equipment TEST CENTER Available

TECHNICAL SPECIFICATIONS

- **Hygienic design**
- **Clean In Place (CIP)**
- **Robust and high quality manufacturing**
- **Economic solution and durability**
- **Mild steel, 304L and 316L stainless steel**



GSC 450

GSC 600

GSC 900

Advantages

No retention area, easy cleaning for a minimal maintenance

Easy change of the mesh screen

Tool-free quick release clamping for fast and easy disassembly

Possibility to implant it on pneumatic conveying pipe

Models	GSC 450	GSC 600	GSC 900
Ø of the mesh in mm.	560	730	1,012
Height in mm.	371	537	676
Weight in kg	150	200	250
Electric power	2 x 0.16 kW	2 x 0.37 kW	2 x 0.6 kW

Hygiene of the final products is the main problematic for the industrial processes.
The treatment of the foreign bodies, at the beginning and at the end of the production process, has become a standard in all industries with high added value.
The vibratory sieve (GYRATOR) controls your **production line** by providing a clean material, without clods and foreign bodies and protects your process from potential mechanical damages.
These screeners are suitable for all sectors such as food, pharmaceutical, chemical and synthetic industries; and guarantee a **very high-quality final product**. It can feed directly a pneumatic conveying line or use gravity.

Size in mm.	Capacity in t./h.*		
	GSC 450	GSC 600	GSC 900
1	0.7	1.2	2.5
2	1.5	2	6.5
4	5	8	20

* These rates are achieved with flour type 55

Options

Ultrasonic system

Multi deck sifter

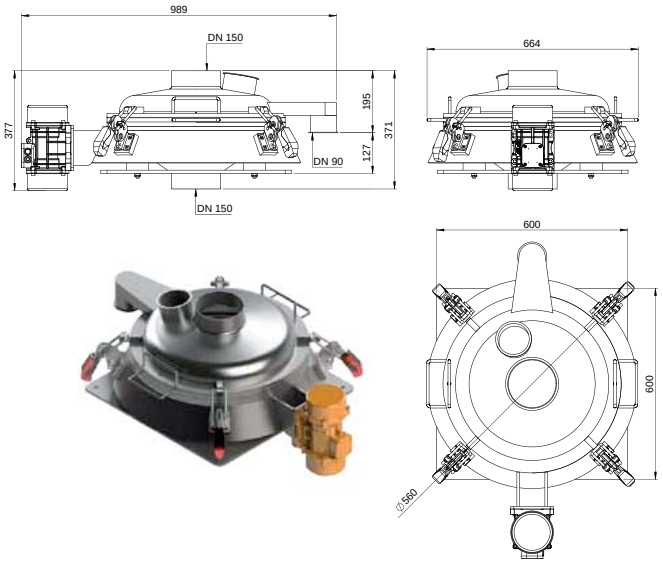
See all our options on pages 14 - 15

Vibratory sieve Layouts

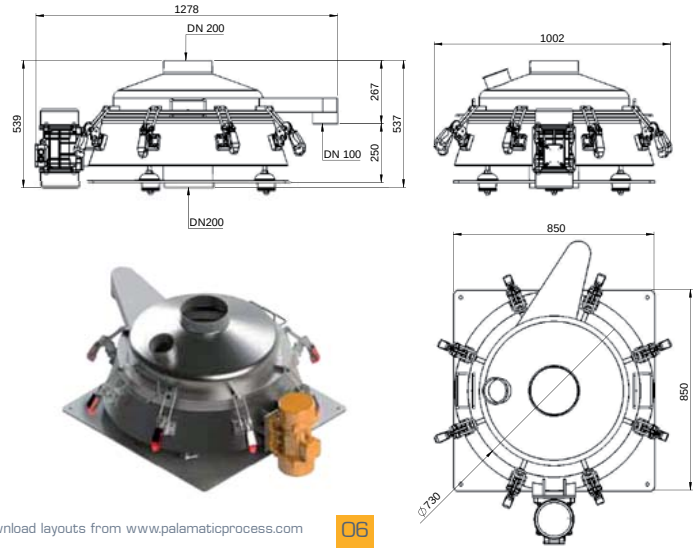
AVAILABLE CUSTOM MADE

3 Standard Models: GSC 450 - GSC 600 - GSC 900

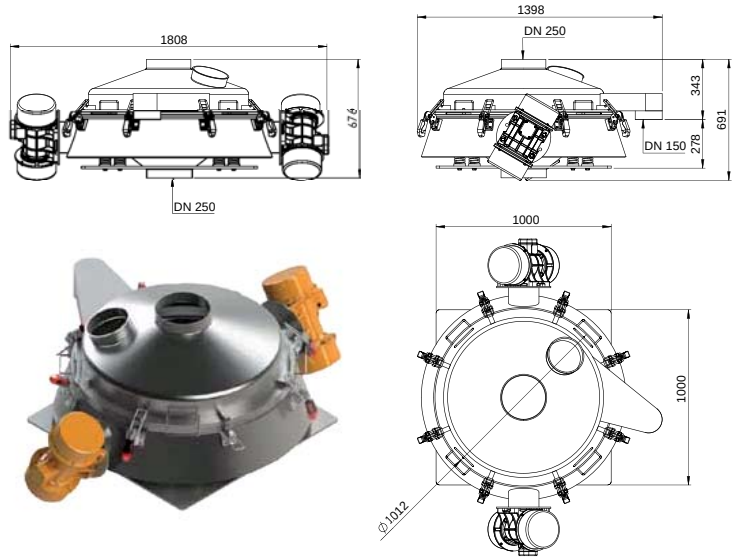
VIBRATORY SIEVE - GSC 450



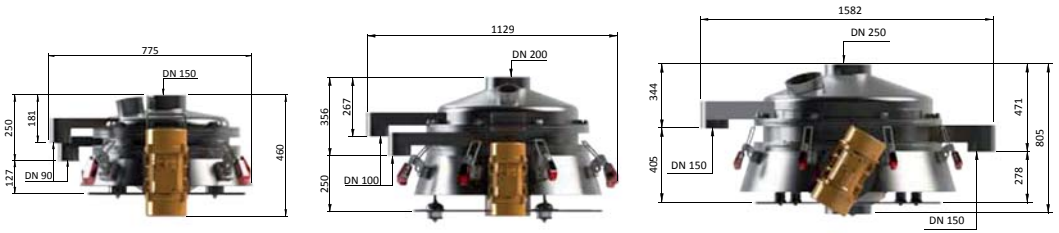
VIBRATORY SIEVE - GSC 600



VIBRATORY SIEVE - GSC 900



ALTERNATIVE: VIBRATORY SIEVE WITH DOUBLE DECK



GSC 450 DE GSC 600 DE GSC 900 DE

Vibratory Sieve

Ultrasonic System Declogging Rings and Balls

TO PREVENT CLOGGING AND BLOCKING OF THE MESH

Ultrasonic sieve unclogging system has revolutionized the way difficult powders are screened on sieve meshes by increasing the quality of the material and avoid breaks time. PALAMATIC PROCESS offers unclogging solutions to overcome the problems caused by those difficult materials.

ULTRASONIC SYSTEM

Its principle consists in the setting of microvibrations of the screen mesh wire. The use of the ultrasonic option eliminates material clogging and facilitates the passage of the material through the mesh screen.
The ultrasonic unclogging system allows greater sifting throughput when using low passing grid. It handles low density fine particles (40 - 60 µm) thanks to the setting up of a variable generator or rings for a dispersion of sound waves.




The ultrasonic device is specially designed for finer meshes < 200 µm.
Depending on the sifter dimensions (450, 600 or 900) two ultrasonic generators may be needed.

DEBLINDING BALLS AND SLIDERS




The balls are placed under the grid in compartments provided for this purpose. The balls bounce and amplify the vibration of the sieve.

The vibrations of the screener allows plastic rings to move continuously on the grid, scraping away grummy materials.

Quick Disassembly

The vibratory sieve design does not have any retention areas and improves the efficient treatment of the material with no loss of material.
The clamping system allows a simple and quick assembly, disassembly and cleaning of the entire machine.

DISASSEMBLY STEPS OF THE SIMPLE DECK SCREENER STAGE


Entire vibratory sieve with flexible connection spout


Vibratory sieve without cover plate


Double seal and welded mesh


Vibratory sieve without mesh screen


Vibratory sieve without internal cone

Hygienic design and quick-release clamps allow rapid removal of screens and tool-free disassembly of frames. PALAMATIC PROCESS screeners are suitable for numerous applications and industries where cleaning and cross contaminations are very important.

Vibratory Sieve online in Pneumatic Conveying Lines

Ex AVAILABLE CUSTOM MADE

TO OPTIMIZE THROUGHPUT WITHOUT ANY PRESSURE LOSS

The sieves can be used for direct inline installation in pneumatic conveying pipeline to guarantee a high-quality final product with a flexible and ergonomic feeding.
The robust and tight construction of the sieve enables this configuration and prevents the loss of the material.

Case Studies

With its design totally enclosed and its very low pressure loss (0,213 psi), the PALAMATIC PROCESS GSC sieve is ideal for being set up in pneumatic conveying lines.
The product arrival is performed facing the mesh screen sieve. This configuration improves the sieving thanks to the generated impact. The waste flanges are still possible with the setting up of controlled valves.
The sieve can be used on dense phase pressure or vacuum conveying system.

[+] Advantages

- Implantation at floor level
- Reduced size
- Optimized throughputs
- No product loss

DIAGRAM OF DENSE PHASE VACUUM CONVEYING SYSTEM

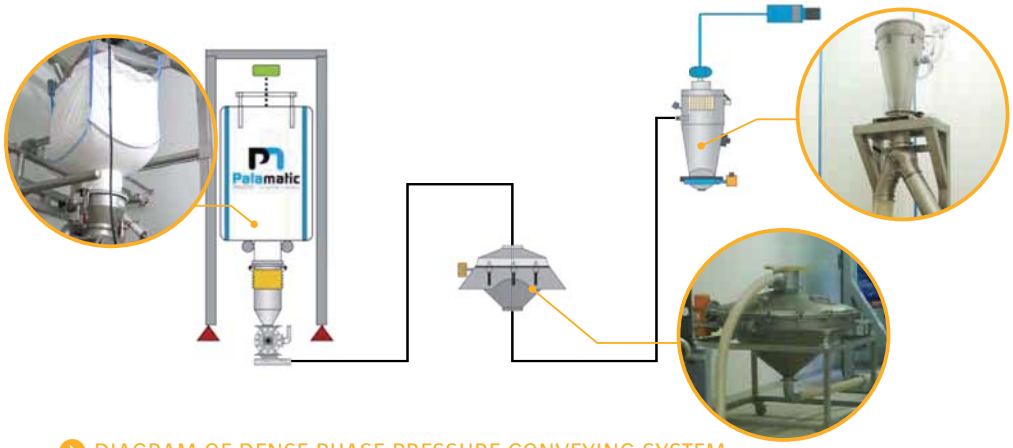
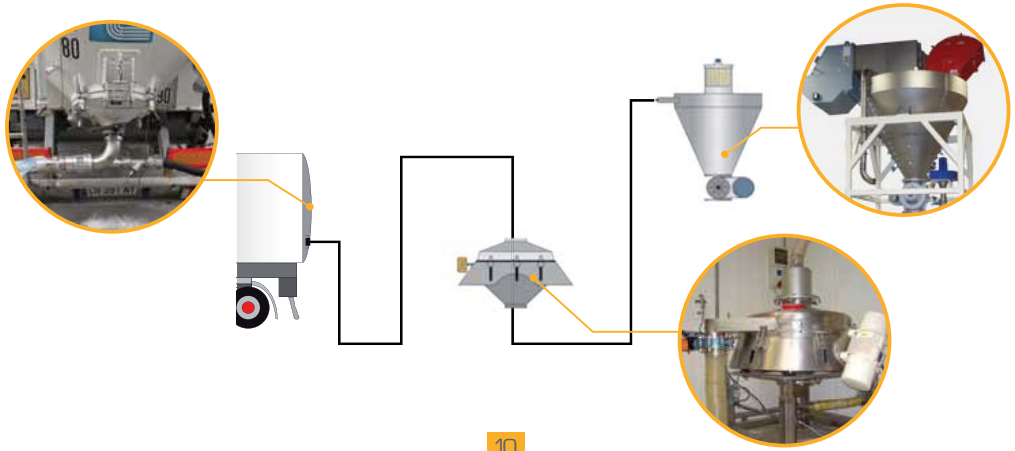


DIAGRAM OF DENSE PHASE PRESSURE CONVEYING SYSTEM



INGREDIENTS MANUFACTURER FOR PETFOOD INDUSTRY

The pneumatic conveying pipeline is directly installed upstream the filling machine of end-products and integrates a GSC 450 sieve to guarantee a product free of contaminants.
The PALAMATIC PROCESS big bag discharge station insures the feeding of the starting point of the pipeline.

MANUFACTURE OF SPICES AND VANILLA SUGAR

After having passed through the PALAMATIC PROCESS mixer, the materials are transferred to the vibratory sieve and the big bag loading station via a dense phase pressure conveying (VFlow® 03).
This configuration eliminates contaminants and cloggings from the production process which are formed during the liquid introduction phase.

TRUCK DISCHARGING TO FEED THE SILO

Once the tanker full of bulk materials is received, the operator connects the flexible spout on the vibratory sieve. This configuration controls the quality of the batch and fills the silo with a material free of foreign bodies.

DAIRY INDUSTRY

At the outlet of the atomizing tower, the vibratory sieve ensures the spray quality.
This configuration enables sieving of materials with high rates of fat (26%).

Examples of Implementations

AVAILABLE CUSTOM MADE

DISCHARGE OF FEED MIX

Customer: Specialist of aroma for petfood
Products: Appetence flour for animals
Goals: Design and implement a workshop to improve mixing and increase productivity while insuring an optimal containment.
PALAMATIC PROCESS equipment:
Big bag discharge stations, pneumatic conveying (10t./hr.), two mixers of 2,000 l., big bag loading stations with sieving and magnetic control.

AROMAS DECONDITIONING

Customer: Manufacturer of vanilla extracts, cocoas and coffee designed for a food industry
Product: Cocoa
Goals: To ensure reactor feeding.
PALAMATIC PROCESS equipment:
Automatic bag opening station MINISLIT®, conveying screw, vibratory sieve in ATEX 2/22 zone.

SIEVE INTEGRATED IN BAG DUMP UNIT

Customer: Company from the food industry manufacturing chocolates, confectionary products, condiments, seasonings
Products: Cacao powder
Goals: The company asked for a system to manually open and discharge sacks containing powder materials or granulates in a dust-free environment.
PALAMATIC PROCESS equipment:
Bag dump station integrating a sieving system, sack compactor, dust collector and pneumatic transfer cyclone.

BIG BAG UNLOADING UNIT TO FEED SILOS

Customer: Chemical industry
Products: Micronized catalytic converters
Goals: To ensure contamination-free end-product at the output of the automatic big bag discharge station.
Specifications: Capacity 80 t./h.
PALAMATIC PROCESS equipment:
A confined big bag discharge station ensures feeding of the vibratory sieve through a conveying screw.

CONFINED CONDITIONING LINE

Customer: Company specialized in beets, cane and cereals sugar processing
Product: Gluten
Goals: To package raw materials without any grain size damage with a flow rate reaching 25 t./hr. and to detect and remove foreign objects. The entire installation complies with ATEX 20/22 regulations.
PALAMATIC PROCESS equipment:
Conveyor and pallets unstacker, pneumatic conveying with explosive vent on cyclofilter, vibratory sieve and inline magnetic detector, weight-scaling with rotary airlock and FlowMatic®04 big bag load station.

PRE-DRUG MIXING PROCESS

Customer: Manufacturer of veterinary pharmaceutical preparations
Products: Pre-drug mixture
Goals: To improve the process productivity.
PALAMATIC PROCESS equipement:
Manual bag dump station, vibratory sieve, VFlow®05 pneumatic vacuum conveying system, big bag loading and unloading stations.

OPTIONS Vibratory Sieve

FLEXIBLE CONNECTION SPOUT

For a tight connection to the screener.
The flexible BFM fitting tightly connects the sieve, statically and dynamically, to the upstream piece of equipment. The sleeve can be mounted in-line, on an offset position or on oscillating parts.

INSPECTION HATCH

This opening enables inspection and cleaning of the screener.
The sieve is an integral part of the feeding hopper and is equipped with an inspection hatch for easy control and cleaning in a secured way.

ULTRASONIC ANTI-CLOGGING DEVICE

To avoid clogging of particles in the sieve meshes.
The ultrasonic system is an option allowing sifting of powders at high rates with no screen blocking.

MULTI-DECK

For unclogging balls use.
The sieve is composed of two decks with a superior and inferior mesh screen. The two screens are sufficiently apart to allow balls to bounce between them. The size of the inferior mesh screen is about 10 mm to sustain the balls.

LIFTING CRANK HANDLE

To facilitate the handling of the sieve.
The lifting crank optimizes the ergonomic and the handling of the sieve by a single operator.

SIEVE MESH SCREEN

To stop foreign bodies and eliminate cloggings.
The mesh screen of the sieve is available in steel, 304L and 316L stainless steel. The size of the meshes are adapted to the product and to the desired grain size.
The mounting of the mesh screen is easy due to the double sealed flanges. The rapid fixation is assured by clamps.

DECLOGGING BALLS AND RINGS

Mechanical anti-clogging system to free the screen from materials.
Anti-clogging devices are positioned on the grid of the sieve to promote the unclogging of the material to ease its passage through the grid.

MANUFACTURING MATERIALS

Manufacturing materials are adapted to specificities of your process and your materials: mild steel, stainless steel 304L and 316L.

CLEAN IN PLACE

Possibility to set up cleaning nozzles.
The mesh screen of the sieve can be dismantled for an easy cleaning process.

OUTLET FOR OVERSIZED PARTICLES

To collect foreign bodies or oversized particles

Sacktip® Hygienic: Manual Bag Dump Station

Standard Model SH 800
Possibility of customization

Rate: 4 to 6 sacks/min.
Objectives: Protection against foreign bodies

Equipment TEST CENTER Available

OBJECTIVES

. Protection of your process
. Prevent contamination
. Quality of your production

Integrated Sieve

AVAILABLE CUSTOM MADE

MANUFACTURING

Structure and parts in contact with the material: mild steel, 304L stainless steel, 316L stainless steel
Access door: plexiglass, antistatic lexan, tempered laminated glass
Sealing: EPDM, NBR, natural rubber
Finishes: customized RAL, peening, electropolishing

Solution for hygienical process

Advantages

Customized and inter-changeable screen mesh

Gas cylinder to optimize the ergonomics and to support the door

(1) Mirror polish finish - (2) Rounded corners

Vibratory motor to improve the amplitude and intensity of the screen. These settings are adjustable depending on the flowability of the material and the mesh

OPERATION

Integrated sieve: protection against foreign bodies for a production without any impurities.

EASY HANDLING

Easy access to the sifter including the screen mesh. Its design allows operators to clean and replace the screen mesh in seconds.

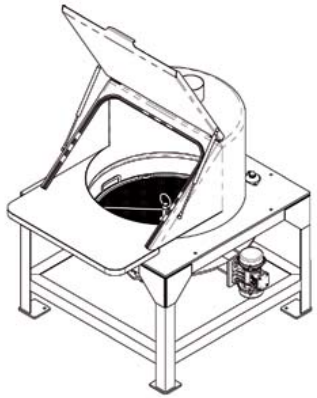
Options

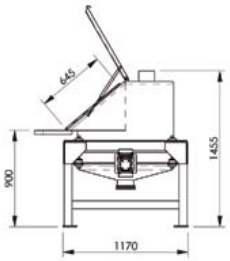
Gloves

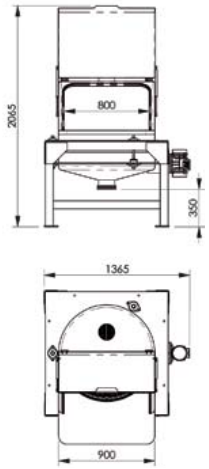
Vacuum sacks lifter

See all our options on pages 18-19

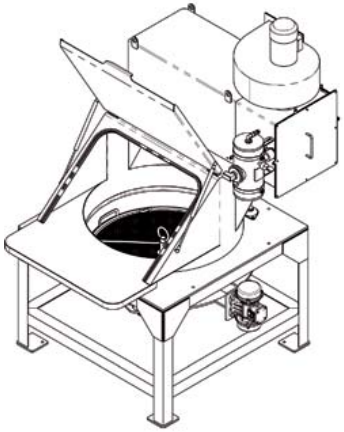
MANUAL BAG DUMP STATION - SH 800

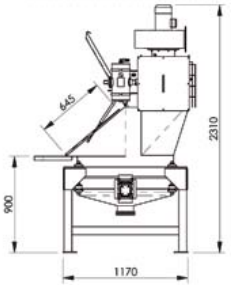


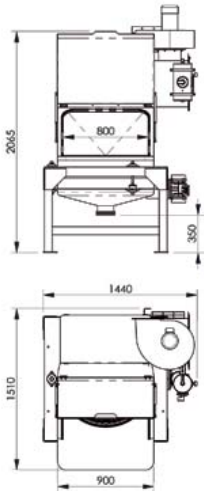




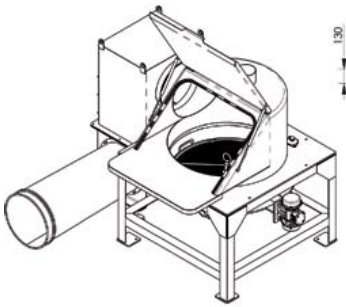
OPTION: DUST COLLECTOR - SHDEP 800

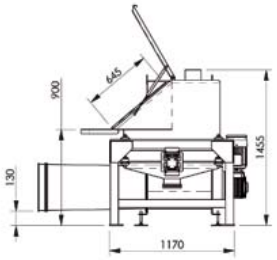


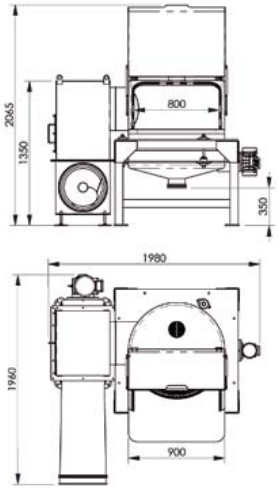




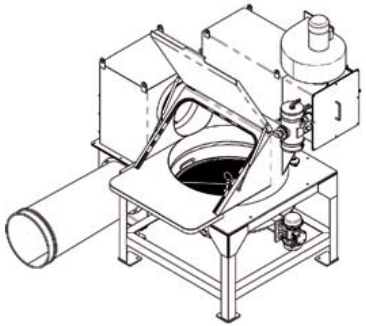
OPTION: COMPACTOR - SHCOMP 800

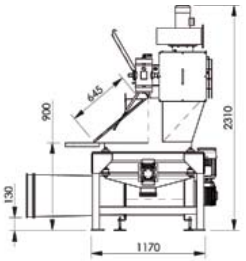


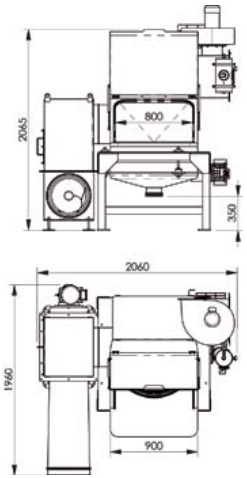




OPTIONS: COMPACTOR AND DUST COLLECTOR - SHCOMPDEP 800







Centrifugal Sieve

Centrifugal Sieve Range

TO CONTROL AND PROTECT YOUR PRODUCTION LINE

PALAMATIC PROCESS centrifugal sieve or rotary sifter enables the separation of foreign objects from powders and granulates. A paddle assembly rotates at high speed inside a stationary cylindrical screen and the material passes through the static screen by centrifugal action. The waste material is ejected toward the outlet located at the end of the screen basket. Our centrifugal sieves guarantee high sanitation standards and the respect of the quality of the handled materials.

Ex AVAILABLE CUSTOM MADE

SPECIFICATIONS

- **Completely tight**
- **Operates quietly, no vibration**
- **The mesh screen can be changed in less than two minutes**
- **High capacity**
- **Continuous operation**
- **Low energy consumption**
- **Online application on a process, possibility of implementation on the pneumatic conveying line**
- **Economic price**


RS 200


RS 300


RS 400

Advantages


Feeding screw under the inlet channel


Screen disassembly

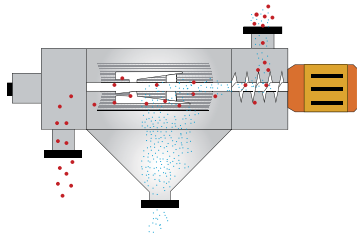

Compact design

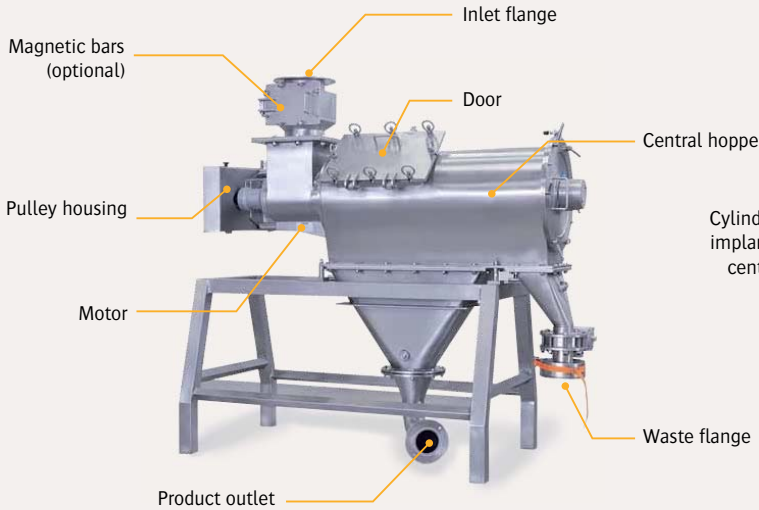

Access door

Models	RS 200	RS 300	RS 400
Ø of the mesh in mm.	200	300	400
Height in mm.	944	1,034	1,034
Weight in kg	170	270	350
Electric power in kW	2.2	3.7	5.5

The main objectives of the centrifugal sieve ROTARY® is to eliminate foreign objects, reduce cloggings and operate a granulometric separation of products received in sacks or in bulk.

The ROTARY® centrifugal sieve guarantees clean end products, without clogs and free of contaminants. It protects your production line from potential mechanical damages. This sieve is the perfect solution to obtain a high-quality final product and suitable for feed and food, pharmaceutical, chemical or even synthetic industries.






Inside view


Waste outlet setting

Size in mm.	Capacity in t./h.*		
	RS 200	RS 300	RS 400
0.2	1.6	2.67	3.57
0.4	4.4	7.35	9.81
0.6	8	13.36	17.84
0.8	11	18.37	24.53
1	15	25.05	33.45
1.4	20	33.4	44.60
2	24	40.08	53.52
3	27	45.09	60.21
4	29	48.43	64.67

* These capacities are achieved with type 55 flour

Options


Disassembly guide

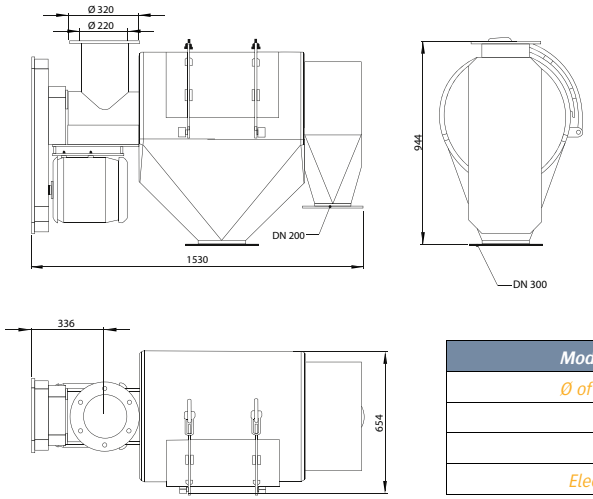

Mild steel, 304 L/316L stainless steel manufacturing

Centrifugal Sieve Layouts

AVAILABLE CUSTOM MADE

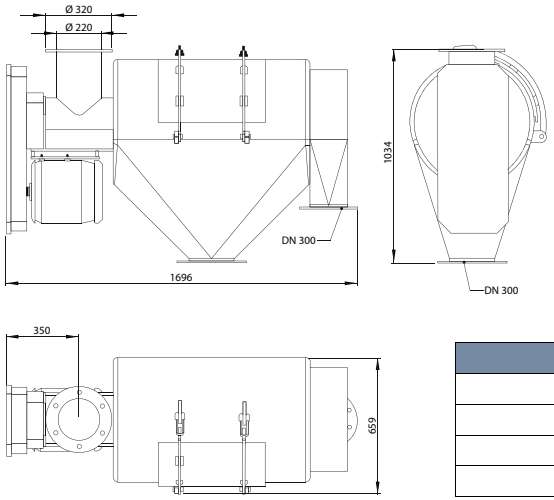
3 Standard Models: RS 200 - RS 300 - RS 400

CENTRIFUGAL SIEVE - RS 200



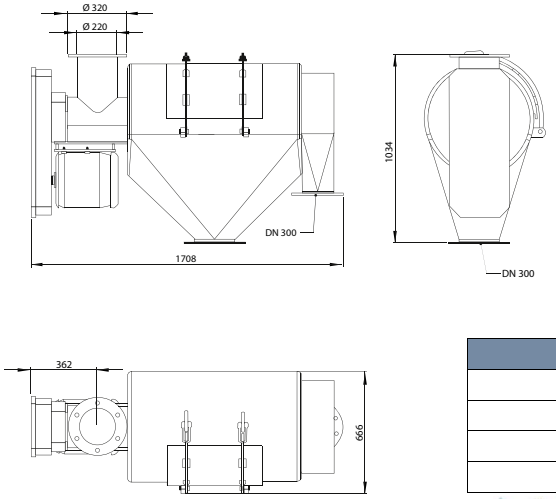
Models	RS 200
Ø of the mesh in mm.	200
Height in mm.	944
Weight in kg	170
Electric power in kW	2.2

CENTRIFUGAL SIEVE - RS 400



Models	RS 400
Ø of the mesh in mm.	400
Height in mm.	1,034
Weight in kg	350
Electric power in kW	5.5

CENTRIFUGAL SIEVE - RS 300



Models	RS 300
Ø of the mesh in mm.	300
Height in mm.	1,034
Weight in kg	270
Electric power in kW	3.7

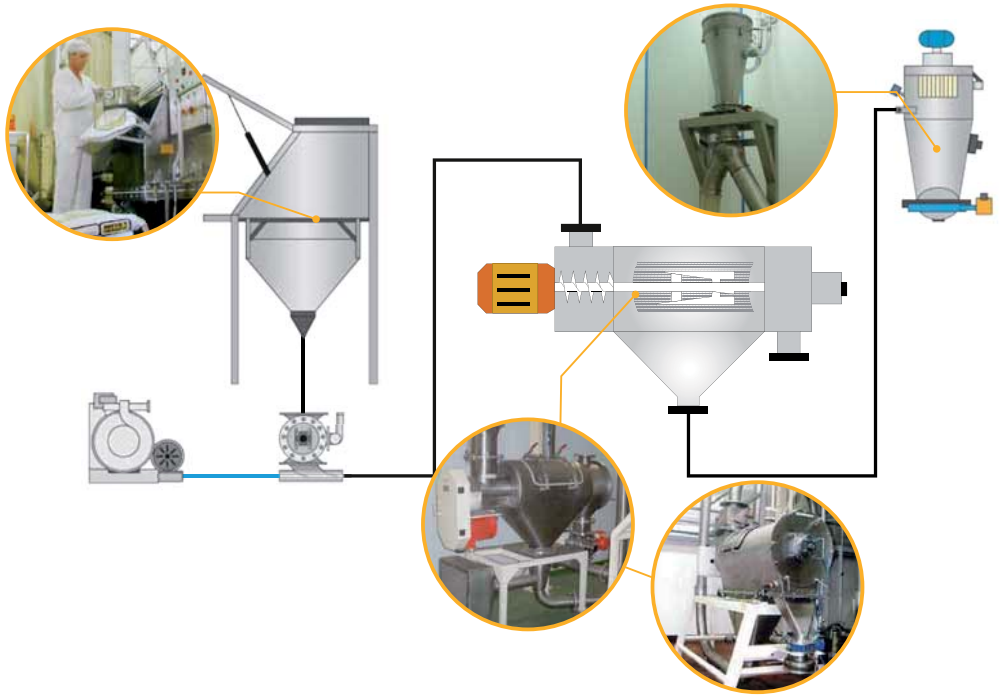
GUIDE RAIL FOR THE RS 400 SIEVE

The design of the machine has been developped for a quick and assisted disassembling for an easy access to the sieve screen. The integrated guide allows a daily inspection.

Centrifugal Sieve online in Pneumatic Conveying Lines

AVAILABLE CUSTOM MADE

INLINE PNEUMATIC CONVEYING DESIGN



The centrifugal sieve design is totally enclosed and resistant to the pressure of the pneumatic conveying.
The setting up of the screener on a conveying line involves very low pressure loss.
The horizontal centrifugal sifter construction can be mounted at floor level and insures an easy access to the equipment.

ACCESS TO THE MESH SCREEN AND CLEANING

The mesh is very easy to remove for cleaning or changing. The easy and quick access is crucial for operators in order to limit the time dedicated to cleaning and maintenance phases. PALAMATIC PROCESS sieve is highly ergonomic.

INTERIOR VIEWS OF THE CENTRIFUGAL SIEVE

EXAMPLES OF IMPLEMENTATIONS

Company: Energy sector
Product: Sawdust
Application: Sawdust sieving before introduction into the grinder to get a product free of contaminants.
Implementation: In the outlet of the big bag discharge station, the screener feeds the grinder loading screw.

Company: Spices
Products: Paprika, curry, pimento
Application: Sieving operation for security before conditioning.
Implementation: At the container outlet.

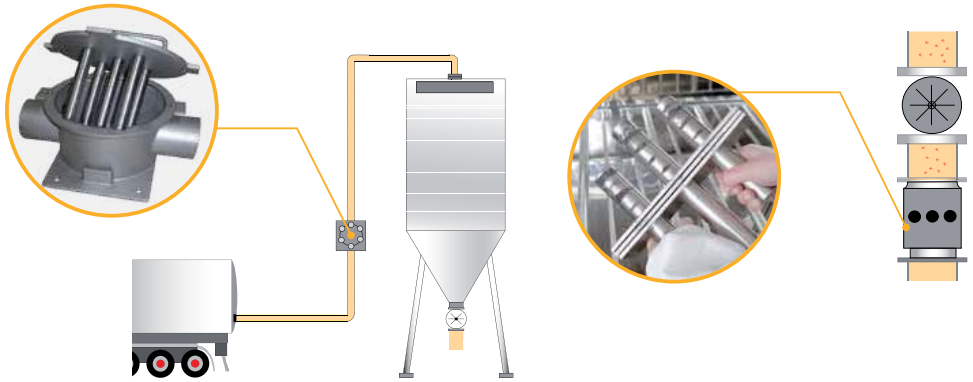
Company: Milling
Product: Flour
Application: To guarantee a product free of larvas. The end product is re-conditionned in sacks of 25 kg.
Implementation: Under the mill.

Company: Food sector
Products: Sugar, mesh screening 2 mm.
Application: RS 200 centrifugal sieve to feed the PALAMATIC PROCESS grinder (skid for icing sugar production).
Implementation: At the sack emptying unit outlet.

Magnetic Separator

TO ATTRACT AND ELIMINATE ALL THE FERROUS PARTICLES FROM YOUR MIXTURE TO PROTECT YOUR PRODUCTION LINE

The hygienic regulations require very high-quality rules. The magnetic separator system is ideal to attract instantly ferrous particles, weakly magnetized or of very fine size. It securely holds them on its bars, keeping unwanted material out of the final product.
The magnet positioned at the installation inlet and outlet has became a standard for numerous companies to protect the equipment and the production lines.



[+] Advantages

Detection and captation at the entry point to:
- qualify the suppliers and the raw materials at the reception of the material
- avoid foreign bodies during the manufacturing process and prevent from any damages of the machines

Detection at the output of the process line to:
- get a finish product of high quality

With Magnetic Bars

The magnetic bars helps to wipe out the problem of ferrous contamination improving product quality in numerous industries working with flour, powders, plastic granulates, sawdust etc... These bars are positioned amidst the product flow and firmly holds the ferrous particles on its bars.
Power from 6,000 to 10,000 Gauss.

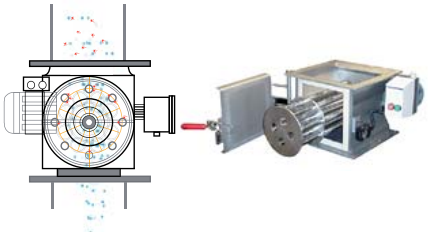
POSSIBLE DESIGNS

• Static (1 or 2 grids)

The magnetic single grid magnetic detector is designed to stop ferrous particles present in the material flow. It works by keeping the undesired material out of the final product. The quick-cleaning magnets are configured for an easy maintenance.
The section can be square or circular.
The stainless steel magnetic separator, made with two magnetic grids placed underneath each other, provides the same advantages as the single magnetic grid but it is more effective due to its special layout; it improves the material quality and limits a number of cleaning interventions.

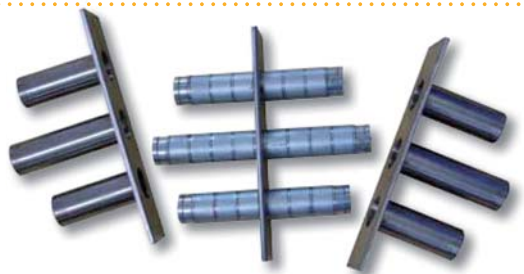
• Rotative grid

The rotative magnetic bars enable the detection of all types of metals to provide a clean product as well as protect your production line. The rods are arranged in a circle which rotates gently agitating the material and maintaining its flow.



• Inline magnetic bars

They guarantee (in dry phase) the purity of materials with optimum decontamination of particles from 20 µm and eliminates ferrous objects.
The magnetic bars are installed on the pneumatic conveying pipes.



CLEANING

The magnetic bars are mounted with scabbards for possible implementation on drawer for easy cleaning.

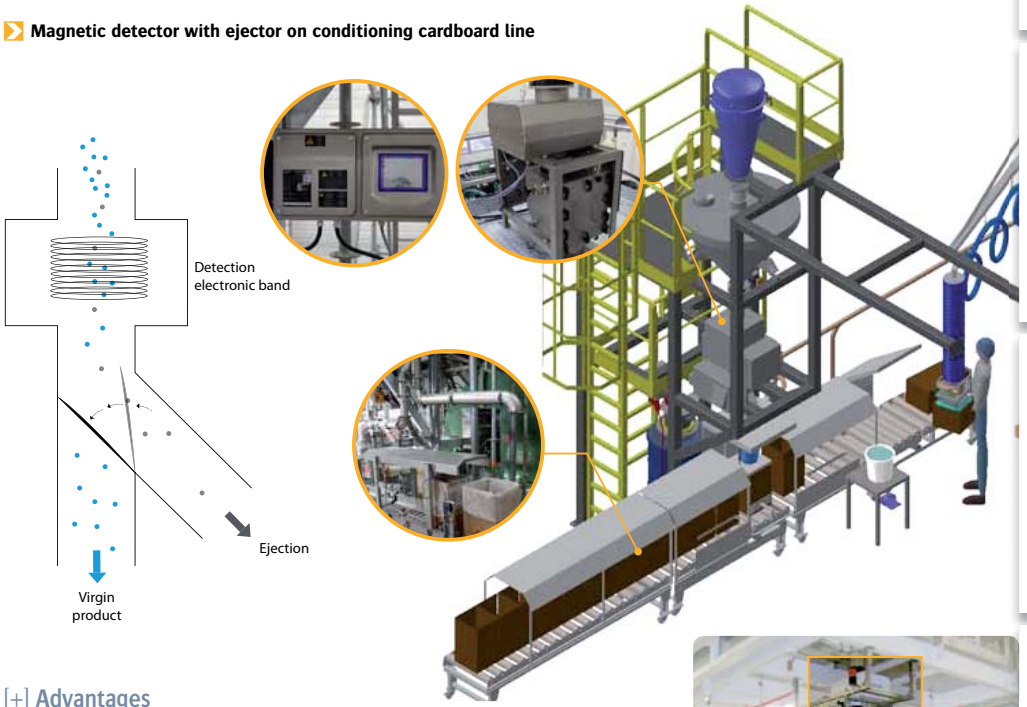
Magnetic Separator

Metal Detector

FERROUS SEPARATOR FOR GRAVITY APPLICATION

This gravity detector is manufactured to suit any gravity application. This system is ideal to manage the free-flowing material regardless its location on the production line. When powdery or bulk materials pass through the metal detector, the small ferrous contaminants are immedialty separated from the flowing material. The equipment can be equipped with an automatic waste flange system. It is the optimal solution to control cocoa, coffee, sugar, aromas, fruit and dry vegetables, flour, rice, chemical and plastic granulates.

Magnetic detector with ejector on conditioning cardboard line



[+] Advantages

- Excellent detection of ferrous particles, resistance to maximum interference and high reliability.
- Permanent and automatic self-calibration with self-balancing and temperature compensation.
- Fully automatic operation is guaranteed after setting the level of sensitivity and the duration of ejection to the desired values.

Big bag loading system of chocolate balls equipped with gravity metal detector with suspended ejector

Case studies

PROCESS FOR FOOD PRODUCTS «SPRAYING»

Magnetic detection with bars as close as possible to the big bag loading station. The product conditionned is free of contaminants. The magnet inpection is made by removal of a quarter turn.

PROCESS OF MILK POWDER WITH FAT MATERIALS

Considering a difficult product flowing, the rotary magnetic bar technology enables keeping a high throughput as well as guarantees a high quality of the material.
The rotary solution guarantees the throughput of difficult materials.

CONVEYING UNDER SILO

Directly set under the silo, the magnetic double grids feeds the pneumatic conveying pipeline. To facilitate the daily control of the production, a magnetic drawer is installed under the rotaty valve transfer giving access to the magnets. The mechanical design of the drawer ensures high resistance to pressure.

PNEUMATIC CONVEYING FEEDING

The magnetic bars, installed on the pneumatic conveying line, control the materials coming from various loading points. This configuration optimizes the investment cost and compact design.

Sampler

AVAILABLE CUSTOM MADE

VOLUMETRIC COLLECTION OF POWDERS IN THE FLOW OF THE PRODUCT TO GUARANTEE A REPRESENTATIVE SAMPLE

Case Studies

The sampler removes a representative sample from the whole cross section of the material and keeps it confined without any contact with the air. The confined collection of the material guarantees the operators' security.

3 TECHNOLOGIES

Screw sampler

The end of the screw is situated in the product flows

Piston sampler

Valve system with a manual piston

Pipe spoon sampler

3 TYPES OF ACTUATORS

Manual actuator screw

A wheel allows sampling

Manual actuator piston

Pneumatic screw or piston

Automatic sampler with pneumatic cylinder

DISASSEMBLY FOR CLEANING PROCESS

Sample collection in a plastic bottle

OUTLET OF THE SPRAY TOWER

The pneumatic screw sampler is directly set up on the receiving cyclone filter of the spray tower to control the batch production.
The automatic and sequenced steering ensures regular sampling.

SAMPLER ON CONDITIONING STATION

The sampler is set up on the big bag loading station. It ensures an automatic collection of representative samples to each loading station. Thus, the traceability is guaranteed.

SAMPLER ON MIXER

Due to the complex mixing process, the sampler on the mixer helps to define the mixing time and the relative incorporation.
The final sampler is a guarantee of the quality of the mix before discharging.

MULTI-POINTS SAMPLER

The quality requirements call for regular sampling in different steps of the process. The pipe spoon sampler is a very efficient solution and it saves money.

Test Center

Equipment TEST CENTER Available

INDUSTRIAL SCALE TESTS & FLEXIBILITY

3 STEPS TO VALIDATE YOUR PROCESS

Step1 - Before Test

- Select the likely optimal machine configuration based on your technical requirements (powders, flow rate, dosing)
- Draft test proposal by our sales-engineers representatives

Step 2 - During Test

- Process validation for product testing
- Perform testing and sample collection
- Discussion on results after the test with machines (phase diagram, degradation tests, fines content)

Step 3 - After Test

- Analysis of machine test data and samples
- Write a summary report
- Collaborate on the optimal solution for your requirements
- Submit a quotation

- An individual consultation with and on-going support by our R&D engineers
- Confirmation of the appropriate machines to conduct a test with your product
- Tests at various operating conditions to define the most efficient process according to your industrial requirements
- Evaluation of the profitability of equipment configuration
- Possibility to test additional options using PALAMATIC PROCESS' range of products
- Maximize the return on your investment
- Maximize the optimum selection of the proper machine
- Capitalize on the wide experience of our experts

- Come with your materials
- Participate in selecting the test machines
- Maximize your productivity

300

+ than **300** configurations

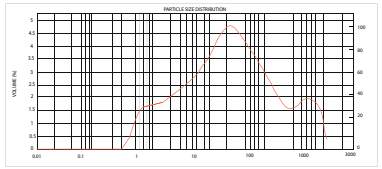
- + than **300** process configurations
- **2,400** sq. feet of surface dedicated to the test
- **35** industrial machines
- **35** feet of ceiling
- Test with **all types of products**
- **2 support engineers**
- **ATEX** configurations

Laboratory for Powders

Ex AVAILABLE CUSTOM MADE

PALAMATIC PROCESS powder laboratory has been built for the needs of all industrials looking for production machines that would meet their expectations.

Example of grading curve



Size (µm)	Vol. Under %	Size (µm)	Vol. Under %	Size (µm)	Vol. Under %	Size (µm)	Vol. Under %	Size (µm)	Vol. Under %	Size (µm)	Vol. Under %
0.250	0.00	0.964	0.00	3.715	8.73	14.322	21.72	55.209	39.90	212.826	74.11
0.271	0.00	1.043	0.01	4.022	9.43	15.505	22.52	59.769	41.50	230.407	76.06
0.293	0.00	1.130	0.15	4.354	10.14	16.785	23.32	64.707	43.19	249.441	77.90
0.317	0.00	1.223	0.43	4.714	10.87	18.172	24.14	70.052	44.94	270.047	79.63
0.343	0.00	1.324	0.77	5.103	11.61	19.673	24.98	75.839	46.77	292.355	81.24
0.372	0.00	1.433	1.18	5.525	12.36	21.298	25.84	82.104	48.67	316.506	82.71
0.403	0.00	1.552	1.66	5.981	13.11	23.058	26.72	88.887	50.63	342.652	84.06
0.436	0.00	1.680	2.19	6.476	13.88	24.963	27.65	96.230	52.66	370.959	85.27
0.472	0.00	1.819	2.77	7.010	14.66	27.025	28.61	104.179	54.74	401.603	86.35
0.511	0.00	1.969	3.38	7.590	15.44	29.257	29.62	112.785	56.87	434.779	87.32
0.553	0.00	2.131	4.01	8.217	16.22	31.674	30.68	122.102	59.03	470.696	88.18
0.599	0.00	2.308	4.66	8.895	17.00	34.291	31.79	132.189	61.23	509.579	88.96
0.648	0.00	2.498	5.33	9.630	17.79	37.124	32.97	143.109	63.43	551.675	89.67
0.702	0.00	2.705	6.00	10.426	18.57	40.190	34.21	154.931	65.64	597.248	90.33
0.760	0.00	2.928	6.67	11.287	19.36	43.510	35.53	167.730	67.83	646.586	90.96
0.822	0.00	3.170	7.35	12.219	20.14	47.105	36.91	181.586	69.98	700.000	91.59
0.890	0.00	3.432	8.04	13.229	20.93	50.996	38.37	196.586	72.08		

Discover our sieves in vidéo on our YouTube channel:
https://www.youtube.com/

Our expertise:

FILLING SOLUTIONS FOR BIG BAG AND OCTABIN
To fill

EMPTYING SOLUTIONS FOR BIG BAG AND OCTABIN
To empty, compact and massage

SACK, DRUM AND CARDBOARD FILLING SOLUTIONS
To fill, package, handle

SACK AND DRUM EMTYING SOLUTIONS
To empty, compact, handle, discharge

SOLUTIONS FOR PNEUMATIC CONVEYING
Vacuum, pressure

SOLUTIONS FOR MECHANICAL CONVEYING
To transfer with screw, belt conveyor, bucket elevator, aeromechanical or vibratory conveyor, truck loading spout

CRUMBLING AND GRINDING EQUIPMENT
To granulate, crumble, grind, pound, micronise, disagglomerate

SIFTING EQUIPMENT
To sift, segregate, sieve, protect

CONTAINERS AND STORAGE SOLUTIONS
To fill, charge, empty, contain

DOSING EQUIPMENT
To control, regulate, empty, extract

MIXING EQUIPMENT
To homogenise, incorporate, fluidify, stir, mix

FLOW AND CONNECTION
To vibrate, fluidise, unclog, drain, facilitate extraction, control the descent, prevent stacks and vaults, connect

INDUSTRIAL DUST COLLECTING EQUIPMENT
To filter, clean, confine, secure

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