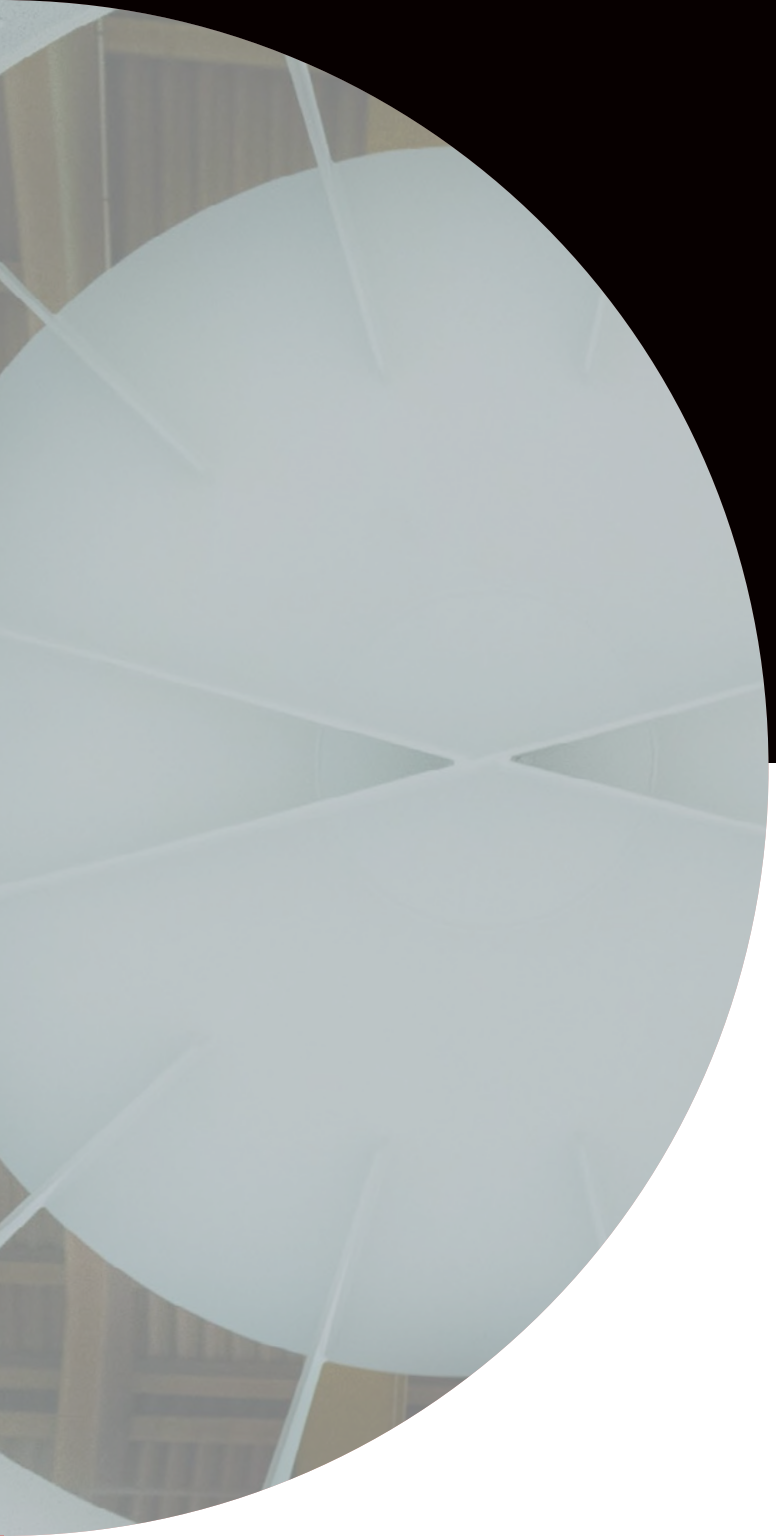


EXTRACTAVATOR
PRODUCT CATALOG

ADAPTIVE MIXING TECHNOLOGY

MIXSYS™

OUR EXPERTISE:
BULK HANDLING

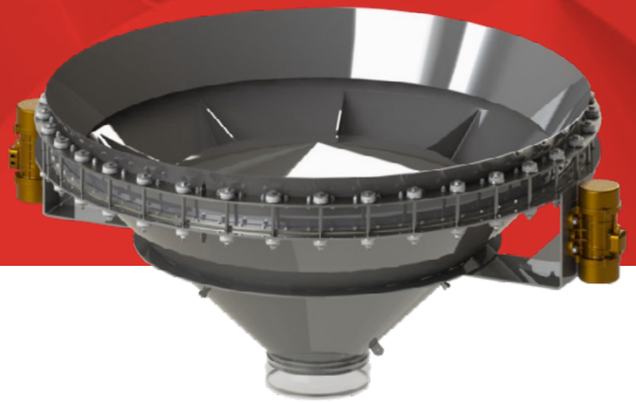
MIXSYS is the partner of many companies in various fields. We know that each business area requires specific needs and our expertise in equipment for bulk handling is second to none.

A VARIETY OF INDUSTRIES SERVED:

- FOOD
- FISH MEAL
- ANIMAL FEED
- WATER TREATMENT
- RECYCLING
- MINERAL
- CHEMICAL
- ENVIRONMENT
- PLASTICS
- PARA-PHARMACEUTICAL

EXTRACTAVATOR

The MIXSYS EXTRACTAVATOR offers a wide range innovative features to allow for the emptying of substances from your silo.



WHY CHOOSE A MIXSYS EXTRACTAVATOR

The industrial revolution has led companies to store their finished products or raw materials in vertical silos. Cereals have always been extracted without assistance. However, fine powders such as cohesive flours or metal oxides, refuse to come out of the silo without manual intervention.

The **EXTRACT**AVATOR, suspended under a silo and assisted by vibration, allows the extraction of difficult-flowing powders without human action. Since its creation, **MIX**SYS has specialized in bin activators and bulk bag fillers exported all over the world.

The **EXTRACT**AVATOR is the essential tool for your storage silos. Our wide product range allows you to identify the most suitable equipment for your application in your area or industry of expertise.

THE EXTRACTAVATOR

- Consumes less energy
- Operates with little noise
- Ensures regular extraction
- Is offered in stainless steel
- Reduces vertical storage space
- Is low maintenance
- Is automatically operated
- Is manufactured for cost-savings
- Does not require external air intake
- Can be customized to allow for modularity in your process

THE **ESSENTIAL** EXTRACTION TOOL

THE MIXSYS EXTRACTAVATOR IS THE ESSENTIAL EXTRACTOR FOR YOUR STORAGE SILOS.

EXTRACTAVATOR BENEFITS

- Saves on vertical space

- Homogeneous extraction, approaching mass-flow

VIBRATING BOTTOM

- Avoids the creation of bridging by positioning geometrically over the theoretical construction of the latter

- Avoids the creation of chimneys by balancing the course of particles positioned in the middle or at the periphery

- Avoids collapsing by having a more symmetrical outflow

- Dissociates the frictional forces which bind the particles together, passing them from the friction state to the sliding state, the **EXTRACT**AVATOR is essential when it comes to power in a process (weighing, dosing, pneumatic conveying.)

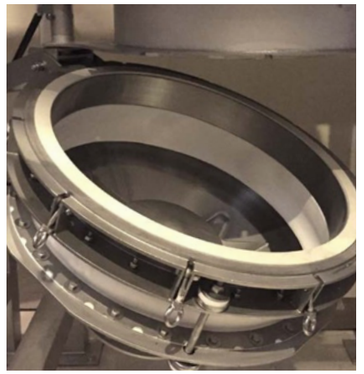
TECHNICAL

Our standard range of **EXTRACT**AVATORS varies from 450 to 4500mm in diameter. Similarly, our output diameters range from 150 to 600mm. Custom diameters and other inquiries are also available on request.

We work with both carbon and stainless steel. Our carbon steel versions are shot blast and then painted. We offer a wide range of different types of paint—your choice of RAL, food grade, etc. Our stainless steel models can be glass bead blasted inside and outside. A wide range of polishing can also be provided. Each **EXTRACT**AVATOR is custom-design based on the product, its environment and its storage requirements needed.

Additionally, we offer a wide range of baffles—primary baffles, fluidized baffles and more. Our years of experience enable us to manufacture a variety of specialized bin activators—square bin activators, modular parts for tight installations, and even activators with several outlets.

OUR **INSTALLATIONS**



EXTRACTAVATOR AISI Ø900

This first image shows the installation of a stainless steel assembly, including a pivoting system to facilitate the cleaning of the interior.

EXTRACTAVATOR ST 37.2 Ø3500

Manufacturing a model Ø3500 in panels. The replacement of a bin activator installed under a skirt silo required the assembly of the panels of the unit on site.

EXTRACTAVATOR ST 37.2 Ø2100

This specific model was made using mild steel, equipped with an option dedicated to insulation.

OUR **EQUIPMENT**

1 | FLEXIBLE SLEEVE WITH TIGHTENING COLLARS AT OUTLET

To provide the seal between the **EXTRACT**AVATOR, which moves, and the downstream device, which is stationary. As a result, the vibrations will not be passed on to the downstream equipment. Its resistance to pressure must be identical to the resistance of the connection sleeve.

2 | U-TYPE SLEEVE HELD BETWEEN THE OUTLET FLANGES AND THE BIN ACTIVATOR

Identical purpose to the above, but designed for higher pressure levels. In order to fit this seal, a flange must be welded to the outlet of the activator. Make sure that the flange welded to the downstream device is identical to that of the activator.

3 | MANUAL EMERGENCY SLIDE PLATE

This device isolates the activator when maintenance operation is required below the latter. The seal obtained is therefore relative. This device includes a 180° peripheral slit on the outlet spigot of the activator outlet. During normal working conditions, this slit is covered with a rubber sleeve or collar. This slit allows the operator to introduce a plate, which fits into the inner spigot of the activator. This device has the benefit of never getting blocked. However, given its manual nature, this system can never be used to replace a conventional valve.

4 | PNEUMATIC ACCELERATOR

This device is connected directly to the external compressed air network (5 to 7 bar). It mechanically releases the air, thereby creating a sweeping effect above the outlet of the **EXTRACT**AVATOR. The pneumatic accelerator is particularly recommended:

- When a butterfly valve is fitted under the unit, or more generally, if the outlet of the activator does not provide a complete passage.

- When the **EXTRACT**AVATOR feeds into a loss-in-weight dispenser. The nominal flow rate of the activator is attained much more quickly.

- In the case of cohesive products which tend to clog the outlet cross-section. The pneumatic accelerator always operates vertically from top to bottom.

It must be positioned 500mm above the outlet. Its action will last no more than one second to avoid applying pressure to the activator and the handling operations. The operating frequency of the pneumatic accelerator will be set by **MIX**SYS.

5 | POKE HOLE

This device is composed of a sloped tube which is directed towards the outlet of the **EXTRACT**AVATOR. This device is used to perform tasks inside the unit, when the latter is loaded. The poke hole must never be used for fusing products, e.g. hot plaster. The opening of this pipe is hazardous. All specific precautions must be applied.

6 | FISHTAIL

The fishtail is composed of a metal plate, which is welded or screwed to the outlet cone of the activator. This plate creates a 3mm gap with the inside of the outlet cone. This fishtail has the shape of an equilateral triangle, which is always pointing upwards with the base at the bottom. The compressed air blown by the fishtail creates a stream of air which goes in between the cone and the product itself. This stream has a mechanical effect on the product, which acts vertically downwards in the gravitational direction. When the fishtails are operating, the frictional forces between the inside of the cone and the product disappear. The action of the fishtails does not cover the entire surface of the cone, but it does break up the balance of the horizontal and circular pressure of the powder inside the bin activator.

Although this is not part of the intended purpose, the air injected into the fishtail fluidizes the product as a result of its expanding effect. The expanded air of each fishtail leaves the inside of the **EXTRACT**AVATOR with the product, without pressurizing it. The fishtails must always be activated one at a time or in groups of no more than three, starting by the lowest fishtails.

The fishtails will all be activated until the outlet cone of the unit is completely empty. This means that they may be activated several times if necessary. The fishtails will be connected to the factory compressed air circuit. Depending on the situation (hygroscopic product or ATEX), the compressed air will be dried or replaced with nitrogen. Each fishtail, or group of three fishtails, will be used for less than one second. At 5 bars, each fishtail will discharge about 15 normal liters of air.

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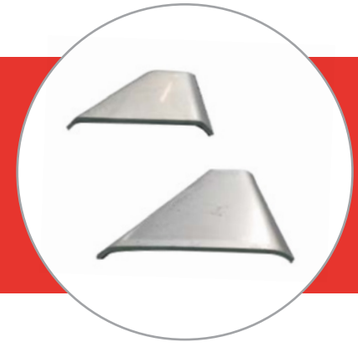
- 2 -

- 3 -

- 4 -

- 5 -



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