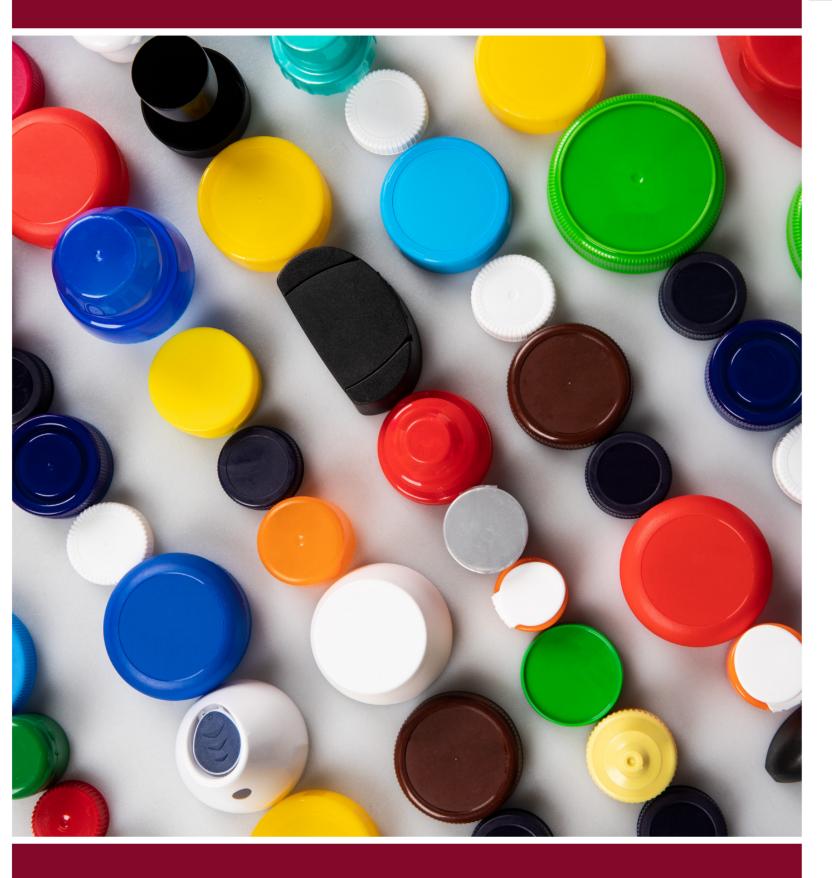


# **CAP SORTERS**



**EXCELLENCE, QUALITY & PRECISION** 



## **EXCELLENCE, QUALITY & PRECISION**

At POSIMAT we design and manufacture our own feeder systems for all types of plastic caps. Our systems take bulk cap loads, orientate them into the desired position and, in a predefined manner, move them onto the next step of the production chain.

**POSIMAT** has developed a wide range of options to offer the best solution for each type of cap and production system.



### WATERFALL CAP SORTER

The caps are loaded directly into the elevator hopper. The caps are elevated via the flights on the belt and the space between them sorts the caps according to their orientation; those not oriented correctly fall back into the hopper. The caps, now correctly oriented, are removed at the top of the elevator by means of blowers or mechanical deflectors. They are then transported toward a ramp and, subsequently, to an accumulation chute.

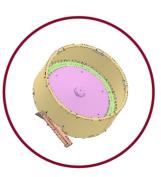
This type of unscrambler is ideal for high production volumes and suitable for caps for which the height is less than the base or diameter. The inclusion of a rolling device allows the orientation of asymmetric caps.



#### WATERFALL CAP SORTER WITH CAVITIES

The elevator belt features flights with cavities into which the spherical part of the cap is positioned. They are turned in the upper section of the elevator as the belt rotates and are orientated within an impulse air conveyor that extracts them from the elevator.

This type of unscrambler is ideal for high production volumes and suitable for spherical caps.



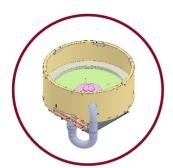
#### **CENTRIFUGES**

In this type of unscrambler, both the bowl and rotating disk are angled. The caps accumulate at the bottom of the bowl and those that fall into the rotating disk housing are pushed towards the top. Using a light jet of compressed air, the caps that are incorrectly positioned are ejected from the cavities.

The correctly positioned caps are transported out of the bowl to a ramp via fixed guides and are subsequently channeled into an accumulation chute.

**CAP SORTERS** 

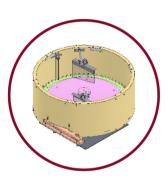




### **CENTRIFUGES WITHOUT CAVITIES**

This type of centrifuge sorter is for high speed production of caps that are wider than taller. The sorting bowl and rotating disk are horizontal with no cavities on the edge. The caps collect in the periphery of the bowl and exit single filed.

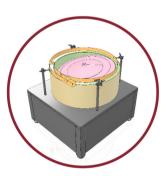
At the machine exit, the caps that are correctly positioned go on to the discharge conveyor and the caps incorrectly positioned are ejected back to the sorting bowl, by means of compressed air.



### **HORIZONTAL CENTRIFUGES**

These unscramblers are variants of centrifuges for high production. The bowl and the disk are positioned horizontally. Internal effectors allow multiple loads of each cavity, per revolution. Each loading area is fitted with a compressed air jet to eject incorrectly positioned caps.

The cavity shape and ejection device for this system allows the orientation of both spherical and asymmetric caps.



#### **ROTARY SYSTEM**

This machine is comprised of a rotating bowl and a rotating disk, the latter of which is angled so that the caps accumulate at the bottom of the bowl. The caps accumulate in the channel at the top of the rotating bowl. In this area, either by limiting the width of the channel itself against the fixed guide, or by means of a compressed air jet, with orientation detection if required, the incorrectly positioned caps are ejected.

The shape of the channel on the rotating bowl for this system also allows nozzle cap orientation.



#### **VERTICAL WHEELS**

The shape and distance between the two disks, upper and lower, that rotate in unison, results in the caps being channeled onto the exit ramp in a unified position.

To increase production, it is also possible to have two wheels running in parallel.



## **MACHINE CHART & CAPS**



## ADDITIONAL SYSTEMS (+)

POSIMAT also supplies additional systems for the handling of caps, such as hoppers, elevators, oscillation feeders, Venturi conveyors, linear conveyors, both vacuum and blowing, oval cap feeders, box tippers, etc.

POSIMAT, always conscious of the needs of the market, undertakes the mission of responding to every kind of industry demand and meeting the requirements of a wide variety of sectors, such as food, beverages, perfume and cosmetics, pharmaceutical, house hold products, etc.

## POSIMAT ADVANTAGES I

- Stainless steel, PEHD, PA and PC finishes.
- Face-up or face-down cap delivery output, depending on the project requirements.
- Quick, adjustment-free format change over.
- Zero wear.
- Virtually maintenance-free.
- Compliance with CE, UL certification standards, among others.

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