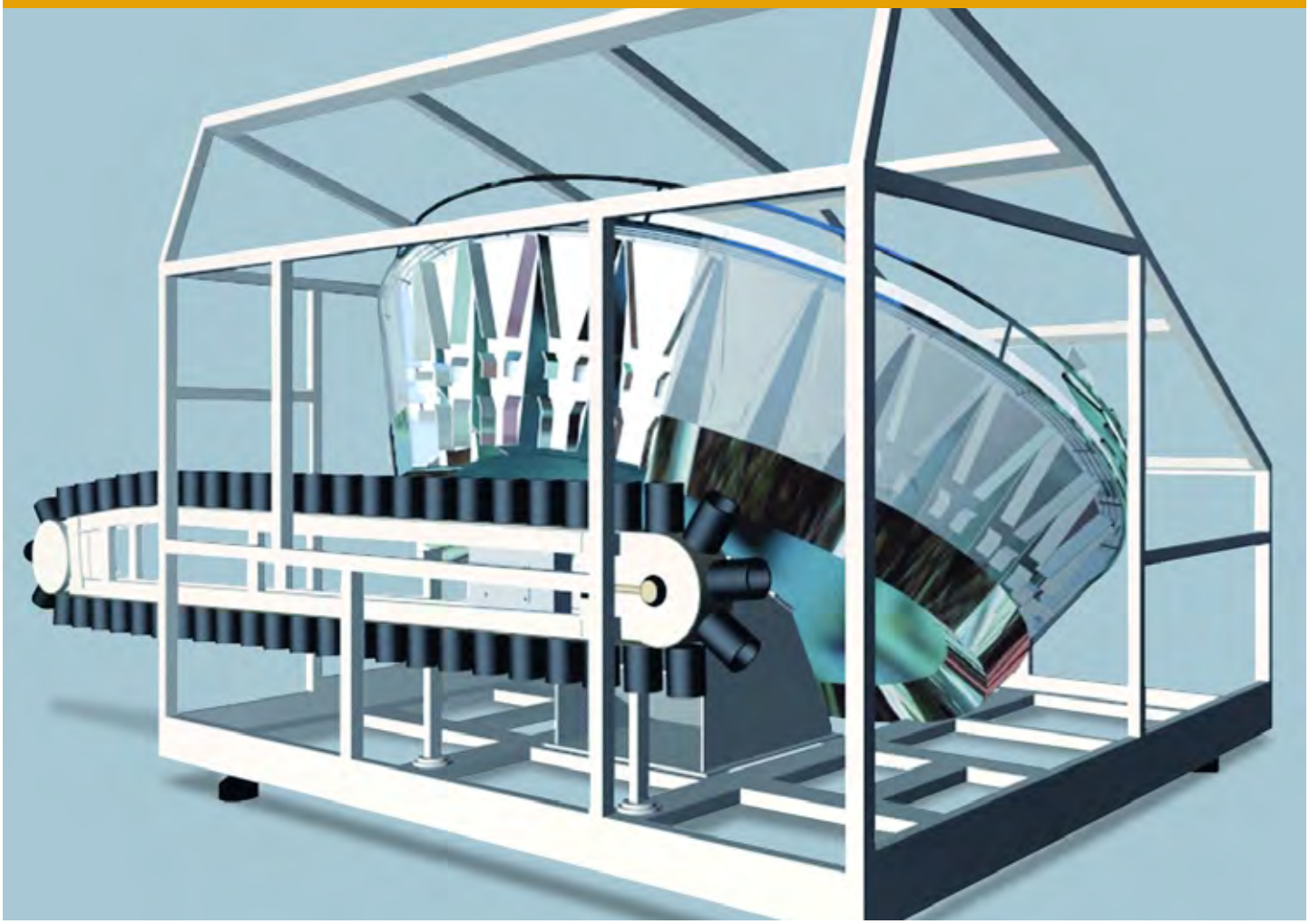
UNSCRAMBLER SYSTEM

ACCESS



*The **ACCESS** UNSCRAMBLER permits the operator to view every step the bottle takes during the unscrambling process and avoid stoppages in the production line and the need for an operator to resolve line jams.*

The ACCESS series is made in two format-change versions, automatic and instantaneous: POSI-SWITCH and POSIFLEX, in addition to the traditional "N" system of rapid plug-in and unplugging. Ask for brochures on each of these models.

POSIMAT®

ACCESS

POSIMAT

THE DESIGN OF THE ENCLOSURE ON THE ACCESS SERIES, (COMMON TO THE “N”, POSIFLEX AND POSI-SWITCH SERIES OF UNSCRAMBLERS), ALLOWS THE OPERATOR TO VIEW EVERY STEP THE BOTTLE TAKES, FROM THE MOMENT IT ENTERS THE POSIMAT UNTIL IT LEAVES, VIA THE EXIT CONVEYOR ON ITS WAY TO THE FILLER. WITH THIS SYSTEM THE OPERATOR IS ABLE TO IMMEDIATELY DETECT ANY IRREGULARITY THAT OCCURS WITHIN THE UNSCRAMBLER: DEFORMED BOTTLES, FOREIGN OBJECTS THAT MAY HAVE ENTERED THE UNSCRAMBLER, DIRT, ETC.

ACCESS = TOTAL ACCESS

THE ENCLOSURE’S WALLS ARE MADE OF AISI 304, STAINLESS STEEL PANELS THAT ARE REMOVABLE AND EASY ENTRY DOORS, WHICH MAKES THE ACCESS SERIES EASILY ACCESSIBLE FOR FORMAT CHANGES CLEANING, ETC. THE ENCLOSURE PROTECTS THE OPERATOR FROM ACCIDENTS, MAINTAINS A CLEANER ENVIRONMENT FOR THE UNSCRAMBLER AND REDUCES THE NOISE LEVEL. THE NOISE LEVEL ON THIS SERIES OF UNSCRAMBLERS WITH THE ACOUSTIC CABIN IS UNDER THE 80 DB USUALLY REQUIRED. AN ADDITIONAL OPTION IS AVAILABLE TO FURTHER REDUCE THE NOISE LEVEL TO 75 DB OR LESS (DEPENDING ON THE BOTTLES).

ACCESS, THE SOLUTION FOR THE DEFECTIVE BOTTLE PROBLEM

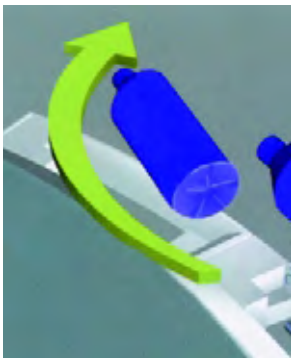
WHAT HAPPENS TO A DEFECTIVE BOTTLE IN AN ACCESS MACHINE?

WHEN A DEFECTIVE BOTTLE ENTERS THE POSIMAT ACCESS SERIES UNSCRAMBLER, THE FOLLOWING MAY OCCUR:

1

THE BOTTLE MAY BECOME JAMMED IN THE SELECTOR PIECE.

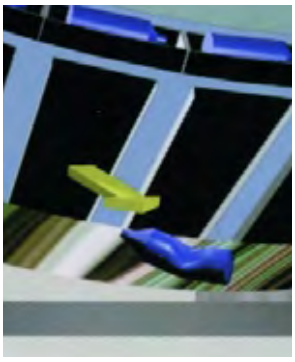
Action: An electronic detector immediately sets off a burst of air which will generally blow out the defective bottle from the selecting piece. (patented system).



2

IF IN SPITE OF THIS, A DEFECTIVE BOTTLE STILL MANAGES TO GO INTO THE FUNNEL, IT CAN STILL GET STUCK:

Action: Because of the open funnel system (patented) the bottle will be removed from the funnel by the centrifugal force and drop to the floor of the unscrambler.



3

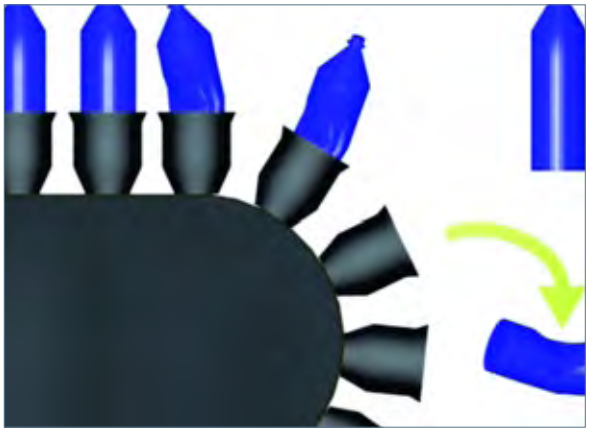
IN ADDITION, IN THE CASE THAT THE EXIT CONVEYOR BELT IS OF THE POSITRANS TYPE, IT WILL ACT AS THIRD CALIBRATOR. IF THE BOTTLE HAS NOT LEFT THE FUNNEL AND CONTINUES IN ITS NORMAL PATH TOWARDS THE EXIT CONVEYOR, TWO THINGS CAN HAPPEN:

3a- The bottle may come out standing:

Action: In this case the cup on the POSITRANS conveyor will reject bottles whose diameters are oversized and will not allow them to enter the cup. Thus, defective bottles will fall to the floor.

3b- If the bottle descends upside down:

Action: The special design on the POSITRANS cups will accept these upside down bottles, but when they are ready to transfer to the air conveyor these bottles will be shorter than the rest and will not be picked up by the air conveyor and will fall to the floor at the end of the POSITRANS.



THE BEST TREATMENT FOR DELICATE BOTTLES

The Access series, in any of its versions, **N**, **POSIFLEX**, or **POSI-SWITCH** is specially gentle with delicate bottles like PET, PE, PP, those with satin finishes, etc.

Bottle movement from the loading zone to the selecting piece is done by sliding (by gravity), which is to say, without any element that pushes or exerts pressure nor up ramps which produce scratches on the bottles.

In the Access series machines, every last detail has been considered, for both the interior and the exterior design:

The only materials in contact with the bottles are stainless steel, polyurethane (PU) or polyethylene (PE), to ensure the best bottle treatment.

OPTIONALLY, A GSM MODEM CAN BE INTEGRATED INTO THE UNSCRAMBLER'S PLC, PERMITTING REMOTE ACCESS FOR THE CLIENT AND FOR POSIMAT (IF SO DESIRED BY THE CLIENT) TO BE ABLE TO MAKE DIAGNOSTIC CHECKS OR REMOTE MODIFICATIONS.

WHAT IS POSITRONIC?

POSIMAT HAS DEVELOPED A NEW OPERATIONAL SYSTEM AND ELECTRONIC CONTROL FOR ITS BOTTLE UNSCRAMBLING MACHINES WHICH PERMITS, BY USING A PLC, THE SELECTION BETWEEN VARIOUS METHODS OF OPERATION AND ELECTRONIC CONTROL FOR ITS BOTTLE UNSCRAMBLERS:

CLASSIC FUNCTION: A photoelectric cell in the exit conveyor sends a signal to the PLC which reduces the unscrambler's rotation speed. Another photocell, which detects accumulation in another point, stops the machine, if the bottling line is full.

CONSTANT PRODUCTION FUNCTION: One photocell controls the number of bottles exiting the unscrambler and changes the speed every 3 seconds to match the required fixed speed.

FILLER FOLLOW-UP FUNCTION **(POSITRONIC)**: A photocell is installed at the entry of the filling machine. This photocell sends information concerning the number of bottles that the filling machine demands in each prefixed time unit. Another photocell in the exit of the Posimat sends information about the bottles that exit in each time unit. The PLC compares these two sets of information and gives a suitable signal to the frequency inverters, ensuring that the unscrambler only turns at the minimum speed necessary in accordance with the line sequence, with the following advantages:

- **Absence of stoppages and unnecessary sudden starts:** The UNSCRAMBLER only stops when the filling machine stops.
- **Turning speed is at a minimum, necessary and sufficient:** Less wear, better efficiency of selector filling.
- **A large accumulation of bottles is unnecessary between the unscrambler and the filling machine:** The number of bottles at the filling machine are monitored.

POSITRONIC IS AVAILABLE IN ALL ACCESS SERIES.

COMPARISON BETWEEN THE UNSCRAMBLER SYSTEMS OF POSIMAT ACCESS

POSIFLEX	N
IT USES ADJUSTABLE SELECTORS AND FUNNELS THAT CAN BE ADAPTED TO NEW BOTTLES IN A FEW SECONDS BY JUST PRESSING A BUTTON. EUROPEAN PATENT No.EP98920545 AMERICAN PATENT No.US6 435 333	THE FORMAT CAN BE CHANGED BY SIMPLY **PLUGGING** AND **UNPLUGGING** THE NEW SELECTORS/FUNNELS OF THE FORMAT TO BE UNSCRAMBLED, AND DOES NOT REQUIRE ANY TOOLS OR ADJUSTMENTS. PATENT No.: US 4,681,209 / US 5,415,322 EP 578,602 / FR 2543926
THE MOST VERSATILE SERIES: IT IS SUITABLE FOR AN INFINITE NUMBER OF BOTTLES.	APPROPRIATE FOR ANY TYPE, SIZE OR SHAPE OF BOTTLE.
IT DOES NOT REQUIRE NEW SELECTORS OR FUNNELS TO ADAPT TO NEW FORMATS. THESE CAN BE INCORPORATED AT ANY TIME, PROVIDING THEY ARE WITHIN THE INITIALLY ESTABLISHED MINIMUM AND MAXIMUM LIMITS.	**BOTTLES OF DIFFERENT SHAPES AND SIZES** CAN BE UNSCRAMBLED IN THE SAME MACHINE.
IT IS THE MOST APPROPRIATE FOR THOSE COMPANIES THAT REQUIRE FREQUENT FORMAT CHANGES, OR FOR THOSE THAT ARE MOST LIKELY TO HAVE TO INCORPORATE DIFFERENT FORMATS (SIZES AND/OR SHAPES) IN THE FUTURE. TYPICAL EXAMPLES ARE THE FIELDS OF COSMETICS, PERSONAL HYGIENE, DETERGENTS, CHEMICALS, DOMESTIC CLEANERS, MOTOR OILS, ETC.	APPROPRIATE FOR THOSE INDUSTRIES WHERE THE **FORMAT CHANGES ARE LIMITED** IN NUMBER OR WHERE THEY USE BOTTLES OF COMPLETELY DIFFERENT SHAPES.
THE FORMAT CHANGE IS DONE: **A.** IN AN AUTOMATIC AND INSTANTANEOUS WAY BY PRESSING A BUTTON **B.** BY MANUALLY OPERATING HANDWHEELS IN LESS THAN FIVE MINUTES.	**FOR EACH FORMAT CHANGE IT IS NECESSARY TO CHANGE THE SELECTORS AND FUNNELS** AND STORE THEM. THEREFORE, THIS SERIES REQUIRES THE MOST TIME FOR CARRYING OUT THIS OPERATION: APPROXIMATELY 30 SECONDS PER SELECTOR/FUNNEL, THAT IS, 10 MINUTES FOR A MACHINE WHICH HAS 20 SELECTORS/FUNNELS.
ITS PRICE IS HIGHER THAN THE **N** MODEL; IT IS USUALLY MORE EXPENSIVE THAN AN EQUIVALENT **POSI-SWITCH** MODEL. HOWEVER, **THE POSIFLEX OFFERS BETTER ECONOMICS, PARTICULARLY, WHEN UNSCRAMBLING A LARGE NUMBER OF BOTTLES.**	THIS SERIES IS **VERY COMPETITIVELY PRICED** FOR THOSE NEEDING TO UNSCRAMBLE FEW FORMATS. **ADDITIONAL FORMAT SETS CAN BE SUPPLIED AT ADDITIONAL COST.**

World's best seller in machinery and systems for handling plastic bottles: silos, unscramblers, airveyors, conveyors, etc.

ENTRUST YOUR BOTTLES TO THE LEADER®

WHAT IS AN UNSCRAMBLER?

A plastic bottle UNSCRAMBLER is a machine that automatically feeds a filling line, in a continuous and controlled manner.

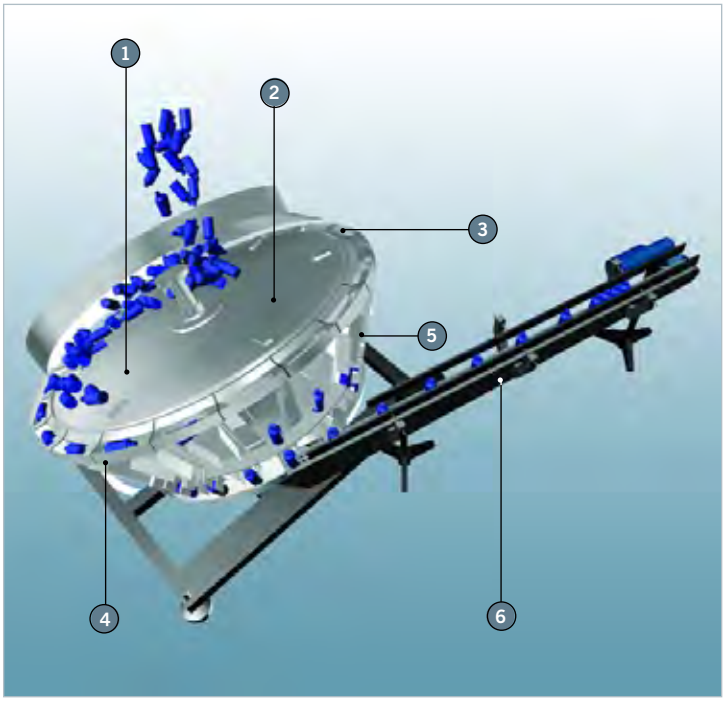
It is an addition to a bottling line to consider, since it not only has reduced labor requirements and an excellent cost/efficiency ratio, but also promotes hygiene and ensures continuity of bottle delivery to the filling line.

The first UNSCRAMBLER with the POSIMAT rotary system was developed in 1977, while the systems of rapid format change, rejection of defective bottles and other mechanisms were designed and patented afterwards.

OPERATION PRINCIPLE

The bottles are loaded into the integral hopper/elevator and enter the machine via a window in the lid. They then proceed to the pre-selection area **(1)**. In the interior of the machine there is a rotating disk **(2)** which carries at its periphery the selecting pockets **(3)** which receive the bottles in one of only two positions: either with the neck leading or the neck trailing. Once the bottles are sitting in their selecting pockets, they are carried along to the end of the bottle transporting shelf **(4)** at which point they have no alternative other than to fall bottom down through the funnels or channels **(5)** to the bottom of the machine.

The bottles remain in their funnels until they emerge from the machine onto the exit conveyor **(6)**, the design of which is dependent upon the type of bottle being unscrambled. Flat bottomed bottles are usually conveyed along a vacuum conveyor, whilst petalloid bottles are transported either by a paddle conveyor or by a POSITRANS conveyor.



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