

BU12

BOTTLE UNSCRAMBLER



- BU12 is a 'bottle-unscrambling-machine' designed for receiving a batch of bottles from box or sack, and delivering the bottles standing upright on a conveyor.
- BU12 is designed for handling plastic bottles in sizes from approximately 10 ml to 100 ml.
- BU12 is mainly for bottles with circular cross section, but the system can be adapted to handle oval or rectangular bottles.
- BU12 can work as a stand-alone unit, delivering bottles to a conveyor. Delivery will only be halted in the event of queue on the conveyor.
- BU12 can also work as a fully integrated part of a filling line, where start and stop of BU12 is controlled by the FMB210 filling and capping machine. The production capacity of BU12 is suited for the FMB210 filling and capping machine.

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BU12 TECHNICAL SPECIFICATIONS

TECHNICAL DESCRIPTION

Mechanical:

BU12 consists of a basic machine with all drives and controls. Handling of bottles is done by a set of format parts, customized for the individual bottle.

Electrical:

Electrical control system is built into the machine base. The control system includes sensors for monitoring and control of the production, and sensors for machine status.

Controls:

Operation and adjustment of running parameters on a local panel.

Illuminated signalling of machine status, such as ready, running, no bottles in bowl and alarm.

Safety:

Guarding around all moving parts on BU12 for operator safety. The guarding has sensors stopping the machine, when the guarding is opened.

Materials and design:

BU12 is manufactured from stainless steel AISI304 or higher, anodised aluminium and Polyacetal.

BU12 is designed in accordance with cGMP regulations and complies to CE-regulations regarding safety and design.



FUNCTIONAL DESCRIPTION

Process description:

The operator delivers a batch of bottles to the bowl of BU12. When the machine is running, the bottles will fall into the slots in the inclined bottle disc. The rotation of the disc will transport the bottles in the direction of the rotation. At the highest point of the rotation, the bottles are no longer supported by the bottom of the bowl, and are allowed to fall into the outlet guide.

Depending on whether the bottle will enter the highest point neck-first or bottom-first, they will be aligned by the bottle hook, so that the bottle always will fall bottom-first down through the outlet guide.

At the end of the outlet guide the bottles are delivered to an outlet wheel. The outlet wheel will by its rotation deliver the bottles onto the conveyor.

Change of format parts:

Change of format parts requires no tools as all format parts are fitted with finger screws. Format parts can be changed by the operator.

Format parts are set-up according to a set-up scheme and are not adjustable. In order to ease the change of format parts, the bowl can be tilted.



Bottle dimensions:

Diameter: 16-60 mm
Height: 35-130 mm
bottle neck: min. 8 mm ID

Bowl capacity:

Approx. 40 litres

Bottle delivery capacity:

1200-3500 bottles per hour, depending on bottle size

Power supply:

110-230 VAC, 50/60 Hz
Consumption: 150 W

Note:

When integrated with FMB210 no separate power supply is required

Protection class:

IP54

Weight:

225 kg

Dimensions:

