





MOVIDO

CAPPING MACHINE SERVO-CAPPER VERSATILE AND EFFICIENT



# CAPPING OF LARGE AND SMALL CONTAINERS FOR FOODS, COSMETICS, CHEMICALS AND PHARMACEUTICALS

High production output by the use of up to 5 servo axes. All movements are tailored to your closures and containers individually and stored in the machine.

### BASIC FUNCTIONS OF THE MACHINE

The containers are transported by a conveyor belt into the machine and positioned by a star-wheel at the capping station. The number of revolutions and torque of the capping head and the transport speed of the star-wheel are individually adjusted to the respective container and closure. After the container is closed, it is driven out of the machine by conveyor belt. The outlet is monitored by photoelectric sensors to stop the machine in the case of malfunction should a possible build-up of containers occur; in the event of a jam in the cap chute, for example. The servo drives are operated as "line control" ("electronic transmission"). This allows the movements of the individual axes to be set optimally. In addition, this permits full setting up of the machine in jog mode (as in a mechanical system). In practice this results in a performance gain of about 10% with respect to a "point-to-point" positioning.

#### 1. Servo axis - CAPPING ACTION

- Spindle speed and torque electronically controlled
- Non symmetrical closures can be handled; correctly orientated by means of control sensors
- Automatic checks of the set torque and evaluation of the rotation angle

#### 2. Servo axis - SCREWING HEAD STROKE

- The stroke for picking up the closure from the transfer lever is individually adjustable
- Pipettes, dispensers, pumps and trigger sprays with feed tubes can be safely inserted into the bottle
- Speed and acceleration can be set individually

#### 3. Servo axis - CLOSURE TRANSFER SYSTEM

- Performance optimization through rapid transfer of the closure to the capping head
- Controlled feed and transfer of the closure between the discharge chute and screw head taking account of its weight, height and centre of gravity
- Positioning / orientation of dispenser pumps for labelling

#### 4. Servo axis - CONTAINER STAR-WHEEL

- Freely adjustable step angle / pitch to permit high flexibility (from 4 times to 32 times)
- Optimized further transport from the small bottles to canisters
- Rapid cycle transport without spilling ideally adapted to the filling height

## CLOSING TECHNOLOGY MADE INDIVIDUALLY



## **FEATURES**

#### **COST REDUCTION**

- Minimized number of format parts (largely tool-free changes)
- · Quick and easy retooling
- "Parameters" by selecting the memorized formats (up to 200 recipes)
- During production format parameters may be optimized
- Tremendous flexibility for future products and formats

## **FLEXIBILITY**

IN THE MACHINERY

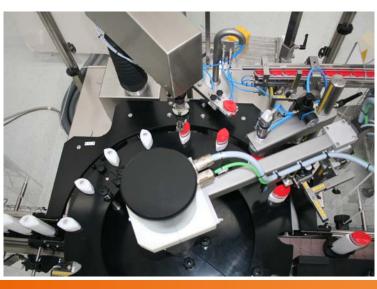
The sealing covers a wide range of container size from e.g. 30 ml bottle to 20 litre canister. The use of size parts is kept to a minimum. Format settings are electronic parameters (within the machine control) and reproducible adjustment settings are recorded. The format parts are designed for quick, tool-free, change.

#### **CONTAINER DIMENSIONS**

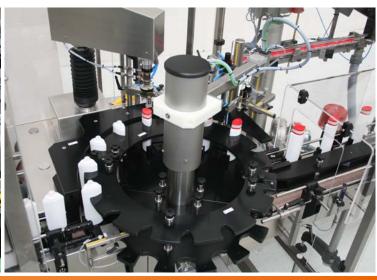
The maximum allowable package dimensions are highly dependentonfromthecontainergeometry. Roundbottles with concentric bottleneck can have a max. diameter of 100 mm and a max. height of 300 mm.

However a wide range of canister dimensions can also be hand-

You may enquire for an accurate assessment based on our years of experience with several thousand container shapes and dimensions.







## **TECHNICAL SPECIFICATIONS**

THE CLOSING - BASIC MACHINE

**VSP 5014** MACHINE TYPE

WORKING PROCEDURE

**CAPPING STATIONS** 

ADDITIONAL

**WORKING STATIONS** 

OPERATING DIRECTION

intermittent motion with transport star-wheel

1 (2nd optional)

possible

left to right (optional right to left)

**WORKING HEIGHT** 900 mm **CAPPING STATION** 

servo motor **TORQUE** 0.3 to 3.5 Nm (for greater torque - please enquire)

SUPPLY

**ELECTRICAL POWER** 3 x 400 V, N, PE, 4 kW

**COMPRESSED AIR** 100 NI /min

## **PERFORMANCE**

OF THE CAPPING MACHINE

Depending on product and packaging. Maximum mechanical output of 3,600 containers/hour.

#### **VERSIONS**

#### ACCORDING TO YOUR REQUIREMENTS

- Individual stainless steel conveyor belt sizes
- Various methods of transport possible (formats with or without pucks for example)
- Servo Application station for plugs etc before capping
- Servo Application station for overcaps etc after capping
- · Additional sealing and inspection stations
- Explosion protection according to directive 94/9 EC (ATEX 95) possible
- Nitrogen injection before capping
- · Vapour extraction from machine filling area

VCP – capping machine with additional pressing station

- for applications before the capping station; for example, for droplet dispensers, bungs, Pouring aids, deodorant balls ...
- for applications after the capping station; for example, for overcaps, measuring cups, secondary capping ...







## CONTROL

#### **ERGONOMIC AND EASY TO USE**

- logical and sophisticated machine control
- Graphical user interface and the operator adjusted allowing hiding of infrequently used switches and parameters
- Touch-screen display 26.5 cm (10.5 inches) Main functions separated as illuminated button
- All parameters are stored in the recipe / format (additionally secured on USB Stick)
- Notes and any error messages in plain text

- User login via transponder (option)
- Design according to the latest Machinery Directive 2006/42/EC
- Service Modem / router via VPN for any service cases (option)
- Switching to other languages (option)
- OPC Server Connection (option)

The machine control and the ergonomics of the complete machine are designed for the convenience of the operator to enable a variety of solutions for various containers and product to be run together with the simple and quick format and product changes. Once optimized, parameters for the production are saved in a recipe.

The menu for machine operation is simple, infrequently used "buttons" and parameters are hidden.

## **AVAILABILITY - SERVICE - SOLUTIONS**

BREITNER has built packaging machines for over takes place in-house. This includes continuous docuexperience.

This includes Filling and Closing machines for bottles/ containers at output speeds from 10 to 360 per minute. It also includes ancillary machinery for the filling line such as unscramblers and feed-tables.

Our customers include the Cosmetics, Food, Chemical and Pharmaceutical industries worldwide.

From over 100 employees, approximately 20 technicians are committed to developing new technical solutions and innovations and bringing them to reality. CNC production machines and short ways to development are the guarantee for simple solutions. Programming, structure of the control panels and cabling all

50 years for the liquid sector and has enormous mentation for the standards, which ensures production capacity is quickly restored in the event of operator

> To this day, machines that have provided over 20 years faithful service continue to operate and be maintained as before.

> Through our design and manufacturing of machine parts, enclosures, software and self-assembly, we provide one-stop solutions and offer direct service.

> Our mechanical and electrical technicians are the inspiration for each of your machines and are available for any assembly, training and maintenance required by you - we guarantee this.



