



# SERVOCAP

ROTARY CAPPING MACHINE  
WITH VARIABLE SERVO TECHNOLOGY

SERIES  
VRS/SRV/SRT

food  
cosmetics  
chemicals  
pharmaceuticals | english

## CAPPING OF LARGE AND SMALL CONTAINERS FOR FOOD, COSMETICS, CHEMICAL AND PHARMACEUTICALS

BREITNER rotary capping machines are available in different production output models (60-350 bottles / minute). In the project design, the number of capping spindles is determined (4, 6, 8 or 12) to achieve your required output. These machines ensure quiet operation and safe handling of your closures whereby the closure is taken from a transfer plate to the gripper head and then screwed, pressed or pushed as required. Different variations and combinations are possible.

For closure with feed tubes (trigger sprays, pump dispensers... ) the tube is gripped, aligned and inserted into the bottle. Closing or screwing may be done with simple closures via a slip clutch. When non-symmetrical closures are run (e.g. hinge caps) or frequent format changes are to be made, BREITNER SERVO – servo driven capping heads are used which allows the setting „by pressing a button“ for different torque settings or rotations to achieve the application of the closure in its correct predetermined position.

### TYPE VRS

- Torque setting via a friction or magnetic clutch
- Use for simple screwed or pressed caps
- Monitoring of closure by subsequent height scanning (option)
- Can be combined with rotary filling machine on common frame MONOBLOCK (also in type SRV / SRT)

### TYPE SRV

- Screw servo motor with simultaneous torque monitoring
- Free positioning of capping axis for non-symmetrical closures
- Constant torque regardless of temperature fluctuations or wear
- Screwing, pressing, alignment with monitoring functions
- Cap sensor on transfer plate for previous closure position determination (option)
- Adjustable angle of rotation for specific rotational requirements, for example for bayonet closures
- Format related parameters (recipe) saved in machine programme
- Parameter adjustments such as torque may be made during operation

### TYPE SRT

- As type SRV
- Z- axis (vertical movement) of the variable capping head by additional servo axis
- Insertion and screwing for trigger sprays and pump dispensers ...
- Grippers and guides for closure tubes (option)
- Variations for all types of closures
- For new formats – easy programming of storable servo drive parameters
- Quick format change by quick release couplings

## VERSATILITY AND EFFICIENCY



exemplary picture

## FLEXIBILITY

### IN THE MACHINERY

The capping machines cover a wide range of container sizes from 30 ml bottles to 10 litre canisters, whereby the use of format parts is kept to a minimum. Format settings are electronic parameters stored in the machine control.

The format parts are designed for quick tool-free changing.

## CLOSURE FEEDING

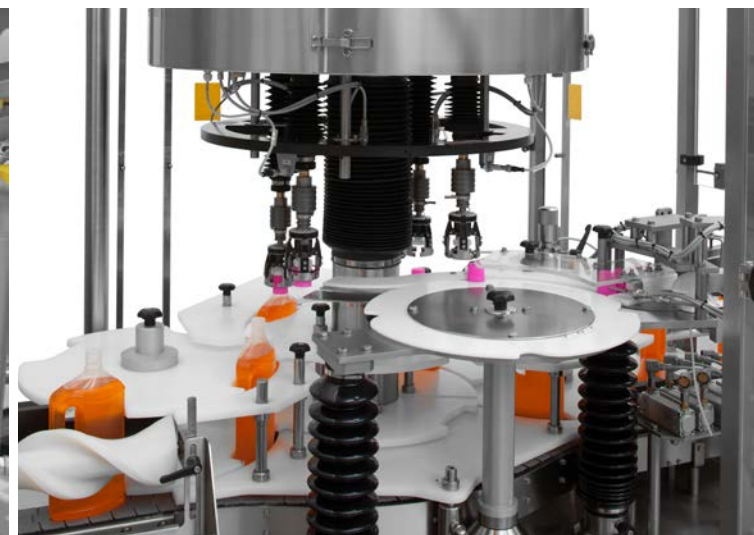
### AND CLOSURE UNSCRAMBLING

From standard conveyors, vacuum conveyors, air channels to vibration channels, all variants are possible. We will gladly advise. Unscrambling according to your preferences can be integrated with the machine and controlled by the capping machine including the parameters for each change of format.

## VERSIONS

### ACCORDING TO YOUR REQUIREMENTS

- Individual stainless steel conveyor belt sizes
- Various methods of transport possible (formats with or without pucks for example)
- Application station for plugs etc before capping
- 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 closing area



## TECHNICAL DATA

### THE CLOSING - BASIC MACHINE

|                          |                                             |
|--------------------------|---------------------------------------------|
| MACHINE TYPE             | VRS, SRV or SRT                             |
| WORKING PROCEDURE        | continuous motion                           |
| CLOSING STATIONS         | 4, 6, 8 or 12 heads                         |
| ADDITIONAL WORK STATIONS | Pressing station<br>before or after capping |
| OPERATING DIRECTION      | left to right<br>(optional right to left)   |
| WORKING HEIGHT           | 900 mm                                      |

|                  |                                                               |
|------------------|---------------------------------------------------------------|
| CAPPING STATION  |                                                               |
| DRIVE            | Asynchronous motors (Type VRS)<br>Servo motors (Type SRV/SRT) |
| TORQUE           | 0,3 - 3,5 Nm<br>(greater torque on request)                   |
| SUPPLY           |                                                               |
| ELECTRICAL POWER | 3 x 400 V, N, PE, 1,5 - 4 kW                                  |
| AIR              | 100 NL/min                                                    |

## PERFORMANCE DATA

### THE CAPPING MACHINE

Depending on product and packaging materials and the number of capping spindles maximum mechanical speed: 18,000 containers / hour.

## CONTAINER DIMENSIONS

The maximum allowable package dimensions are highly dependent on the container geometry. Round bottles with concentric bottleneck can have a max. diameter of 90 mm and a max. height of 300 mm. However a wide range of canister dimensions can also be handled. You may enquire for an accurate assessment based on our years of experience with several thousand container shapes and dimensions.

## 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



## CONTROL

### ERGONOMIC AND EASY TO USE

- Logical and sophisticated machine control
- Graphical user interface and operator adjustable
- Notes and any error messages in plain text
- Cabinet in stainless steel design – sealed against aggressive atmosphere (option)
- Design according to the latest Machinery Directive 2006/42/EC

- Switching to other languages (option)
- OPC Server Connection (option)

The logical machine control and the ergonomic design provide a variety of solutions for a range of containers and product. These properties lead to the shortest format and product changes. Once optimized, parameters for production are stored on the machine control.

## AVAILABILITY - SERVICE - SOLUTIONS

BREITNER has built packaging machines for over 50 years for the liquid sector and has enormous experience.

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

takes place in-house. This includes continuous documentation for the standards, which ensures production capacity is quickly restored in the event of operator error.

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.



CIP/SIP

VTR  
Trigger

SERVO CAP

CAFI  
Control and Fill

CNC 32000 DOS