BREITNER®

ABFÜLLANLAGEN GMBH
- MASCHINENFABRIK-

LIQUID PACKAGING AT IT´S BEST

english

A FAMILY BUSINESS WITH TRADITION

Hans Breitner (Company Founder)

Gisela Breitner

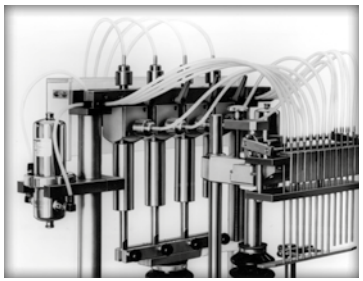
Hans Breitner founded the BREITNER company in 1960. Initially a handicraft business, he thereby laid the foundation for a successful family business.

Hans-Joachim Breitner

In 1981, Hans-Joachim Breitner took over management of the company from his father.

Volker and Achim Breitner
Managing Directors of BREITNER GmbH

In 1998 and 2001, brothers Volker and Achim Breitner also enter into their father's footsteps.



Breitner dosing units, „System P" toolless disassembly for rapid cleaning of autoclaves

BREITNER / Vom Kleinstbetrieb zum Unternehmen

Neu: Verschließen ohne Anlage zu stoppen

MITARBEITERERHRUNG / Firma Breitner Abfüllanlagen dankt Beschäftigten

Treue zahlt sich für Betrieb aus

Its employees are a core strength of this company. Many years of employment with the company secure its know-how and increase its capabilities.

Filling/closing of monoblocks

Bottle turners/orientation

YOUR PARTNER FOR FILLING SYSTEMS AND MORE!

Are you a manufacturer of liquid products and would like to package these in an efficient and safe manner? Then take a look at the solutions offered by BREITNER.

Renowned manufacturers in Germany and around the world trust in our high-quality bottle unscrambling, filling and closing machines.

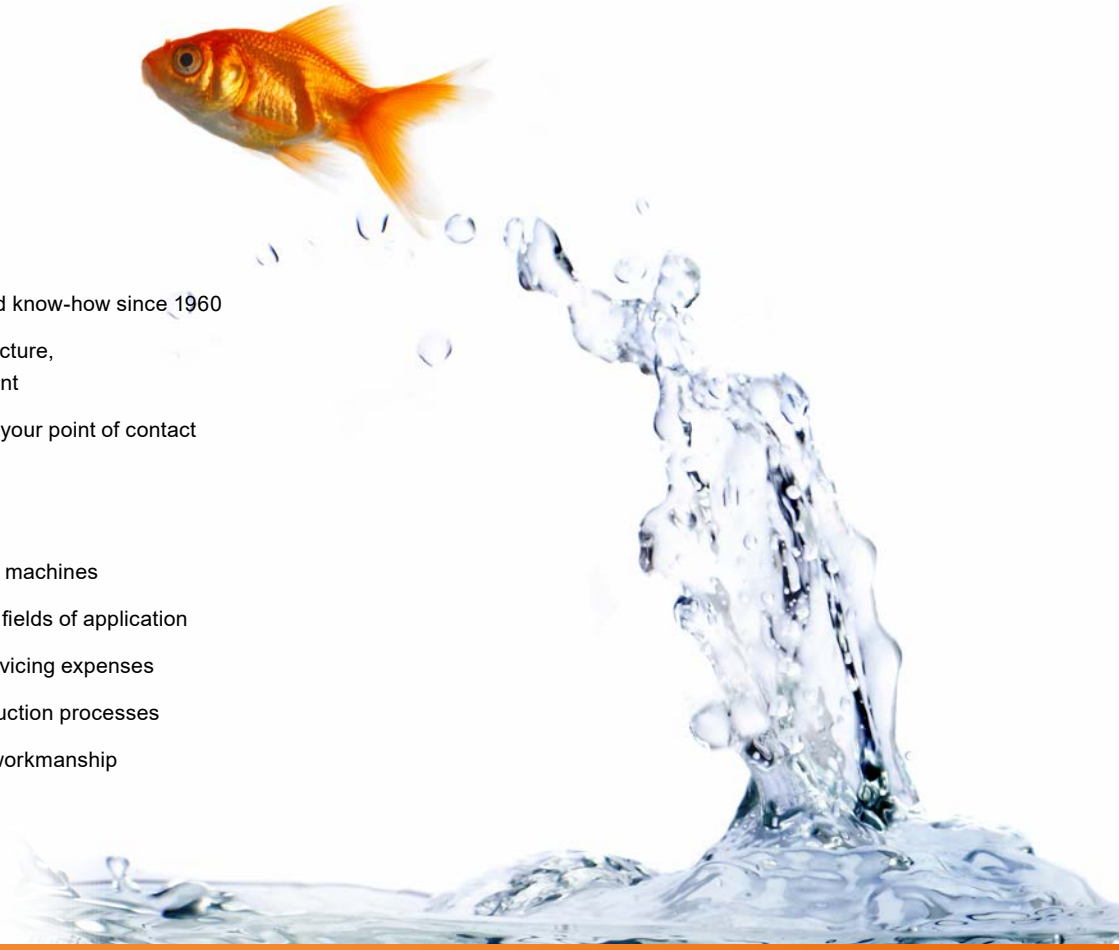
Our comprehensive portfolio encompasses manufacturing, distribution, consultation and servicing and - thanks to our many decades of experience in specialist engineering - we are able to serve as your experienced partner for all possible applications related to the filling and packaging of liquids.

A wide know-how and capacity to innovate have allowed us to become a leading and trendsetting company in the area of modern flow metering as well as manufacturing of trigger pumps and closures using riser pipes.

Chemical, food, cosmetics or pharmaceutical industry - we are aware of industry-specific demands and processes and can deliver sustainably convincing and efficient solutions ranging from individual filling machines to integrated all-in-one solutions.

TYPICALLY BREITNER

- Process-optimized solutions
- Innovative concepts
- Technical and process-related know-how since 1960
- High vertical range of manufacture, in-house software development
- Defined project technician as your point of contact
- Transparent offers
- In-house servicing
- Expandable and upgradeable machines
- Low running costs, maximum fields of application
- Minimal maintenance and servicing expenses
- Robust and undisturbed production processes
- High-quality materials, solid workmanship



EVERYTHING OPTIMIZED TO PERFECTION

BREITNER solutions allow packing of any liquid material: This is ensured by 100 qualified and responsible-minded employees with a high degree of developmental and manufacturing-related competence. In order to guarantee the high degree of quality of our machines and the greatest possible flexibility, we manufacture all of our components using the latest machine tools - with the exception of sheet metal parts produced in the region. Our entire software suite is also developed by our in-house specialists.

We also offer an all-in-one servicing solution comprising: Maintenance, repairs, expansions and conversions performed by our skilled technicians. An optimized integration with your production processes, variable fields of application, minimal set-up times and almost entirely maintenance-free components of excellent material and processing quality characterise our machinery. Please contact us, if you're interested in a plant solution with low operating costs and a wide range of applications perfectly adapted to your own specific requirements.

We will gladly serve as your experienced and reliable partner, providing professional consultation and taking technical as well as economic factors into account in equal measures.

We are at your disposal!

WWW.BREITNER.DE

CHEMICALS FOOD COSMETICS PHARMACEUTICALS

BENEFIT FROM OUR EXPERIENCE

The efficiency of a filling machine is substantially determined by its flexible usability, though other factors, such as maintenance expenses and cleaning aspects must also be considered. We develop and manufacture high-performance filling machines, which satisfy the requirements of modern production and can be used in a multitude of ways or fields of application. Changes to the product range or packaging size are no problem.

FOR MAXIMUM AVAILABILITY

- Minimal use of size parts
- Product and format changing without
- Low-output run-in phases
- Almost entirely free of maintenance requirements and wear

FOR US, THE CUSTOMER IS AT THE CENTRE OF ALL CONSIDERATIONS

EFFICIENCY IN ABUNDANCE!

Our product range comprises linear filling machines, rotary filling machines and double track linear filling machines with innovative flow metering technology as well as linear filling machines as piston dosing machines for highly viscous products and special applications. The combination of filling and closing machines in a space-saving monoblock is also possible. As a leading pioneer and expert in the field of wear-free flow metering technology, we are also well versed with regard to explosion protection, integrated CIP/SIP cleaning, abrasive products as well as ultra-clean techniques.

We shall gladly provide you with an individual consultation and develop a packaging concept that is adapted to your products, processes and specific space situation.

THE IMPORTANCE OF PROPER CLOSING

Our modern closing machines are available for almost any type of closure and are capable of performing all packaging tasks in a reliable and accurate manner. Containers of all conceivable shapes can be fitted with closures of any type or size using our high-performance machinery solutions. Our closing machines are perfectly adapted to the filling system and are flexible, adaptable and individually adjustable. They are capable of mastering any (lift) curve.

One of the main focus points of our concepts is, once again, marked by ensuring a high degree of availability and flexibility, in order to provide our customers with a competitive advantage thanks to the efficient use of machinery.

Contact us and have a look at our innovative developments!

LEADERS IN CLOSING TECHNOLOGY

We provide you with everything that is required for an efficient closing solution:

- Sophisticated systems for the processing of screw caps, spray pumps, trigger pistols, hinge closures,
- Soap dispensers, etc.
- Accessories for closing
- Control stations
- Feeding units
- Sealing systems

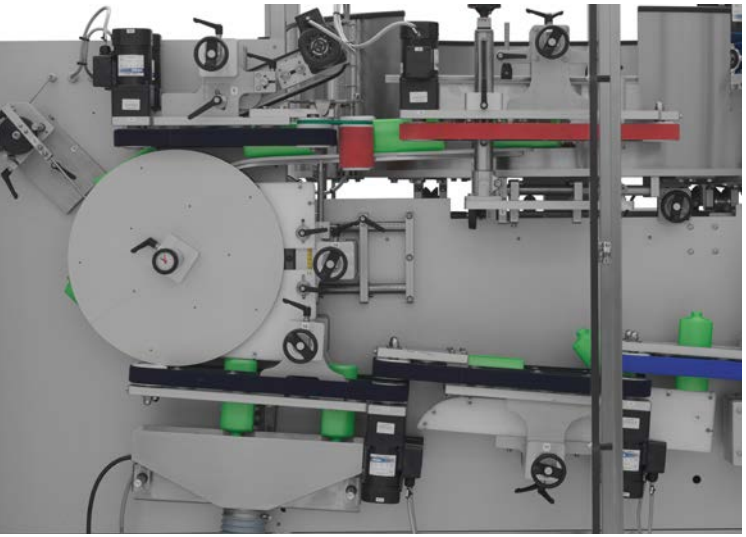
FLEXIBLE AND VERSATILE - BREITNER BOTTLE UNSCRAMBLERS

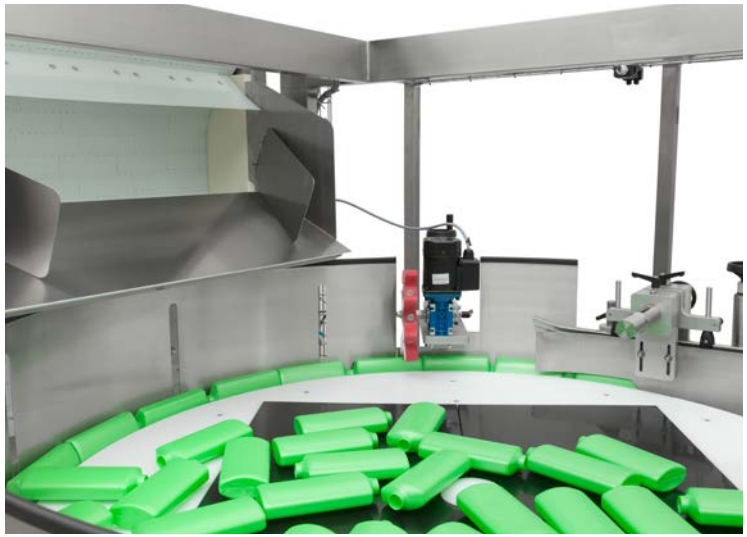
Visual impressions are an important factor in purchasing decisions - this leads to various forms and sizes of containers. Certainly a technical challenge. In spite of increasing requirements for bottle unscrambles, the budget for such systems is, however, often limited.

Our thoroughly developed bottle unscrambles, featuring various fields of application, optimal availability and an excellent price-performance ratio fully satisfy this condition.

YOUR BENEFITS AT A GLANCE

- Rapid amortisation thanks to savings in personnel costs
- Large adjustment range - almost no size parts
- Handling systems/complete robotic systems for use in transport forms
- Vacuum conveyors, recognition and turning stations for special containers
- Wide range of applications
- Rapid product changes, memory programs
- Low maintenance expenses, low-wear operation
- Space-saving, low-emission models
- Hygienic bottle handling without „lasting fingerprints“





BREITNER ALWAYS PROVIDES TAILOR-MADE SOLUTIONS

Unscrambling and orientation of bottles and small containers made of

- PET
- HDPE
- PE
- PP

FULLY AUTOMATIC BOTTLE UNSCRAMBLING AND ORIENTING
... THE EASY WAY

BREITNER bottle unscramblers provide a high-performance and gentle handling of products for the fully automatic unscrambling of plastic bottles of various shapes and sizes. The use of size parts is reduced to a bare minimum thanks to the feeding principle. This allows for rapid and inexpensive conversions of the machine. Bottle feeding using transport belts allows for a gentle and reliable transportation, even with problematic bottle shapes and materials (particularly PET).
There are three different models. The sorting principle is the same for all of these. Different hopper volumes are possible – depending on storage requirements (e. g. 15 min at maximum speed). Feeding also possible directly from blow moulding machines.

OPERATION

Loosely poured containers are „stored“ in a hopper and transported to a drum screen by a vertical conveyor. The containers are fed into a slot by rotation of the drum screen in a horizontal position and lined up. A clamping belt system separates the bottles from each other and guides these to the turning hook. This hook grabs all containers on the outside opening and releases these with the bottom facing forward. A simple stop lug raises the containers and another clamping belt places them gently on the transport conveyor belt. An optional alignment station rotates asymmetrical containers to the desired position.

PERFORMANCE

High output of up to 20,000 bottles/h

Blowing out station using ionized air

Checks and alignment using sensor and camera solutions after actual positioning.

Hopper volume up to 7 m³

CONTAINERS

Suitable for almost all plastic bottles, both symmetric and asymmetric.

Placement into transport cups (or pucks) possible as well

VOLUME

100 ml up to approx. 3.5 l

LINEAR FILLING MACHINES WITH FLOW METERING

FLEXIBLE – NO SIZE PARTS – EFFICIENT – CIP/SIP

THE FLOW METERING TECHNOLOGY OF BREITNER PROVIDES DECISIVE ADVANTAGES FOR THE FILLING OF LIQUID AND PASTE-LIKE MEDIA

As the entire product flow systems is composed of a simple „pipe system“ with smooth walls, cleaning of all parts in contact with the product is possible in just a short amount of time under real CIP/SIP conditions in an efficient manner.

Great variability of the dosing range with highest filling accuracy - for many years as there is no mechanical wear. Double track design (TWIN variant) with 2 diving bridges and two-way filling.

OPERATION

The containers are stopped on the transport conveyor belt by a stopping slider and centred on the bottleneck. All filling pipes extend to the bottom of the bottles and filling commences. The diving bridge where the filling pipes are mounted on, moves upward in precise alignment with the filling level. The pneumatically closing filling pipe terminates the filling of the bottle. By opening the centring mechanism, a drip catcher is moved over the containers at the same time in order to prevent after-dripping into the containers (especially for under level filling/foaming products).

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

1,500 - 9,000 bottles/h (TWIN up to 16,000 bottles/h)

2 - 16 filling points

Multi-colour filling

Two-phase filling

CONTAINERS

Plastic bottles

Glass bottles/jars

Tin cans

Containers

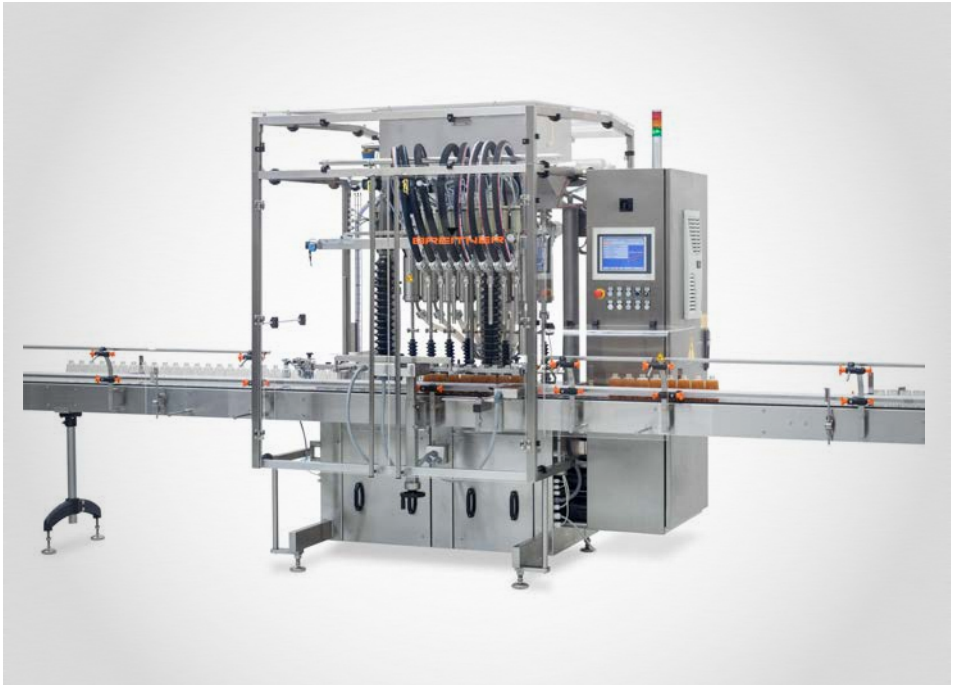
Transport cups (or pucks) (also possible in combination)

VOLUME

30 ml to 30 l

LINEAR FILLING MACHINES WITH SERVO-BASED PISTON DOSING FOR LOW AND HIGH VISCOSITY PRODUCTS

FLEXIBLE – NO SIZE PARTS – EFFICIENT – CIP/SIP



POWERFUL LINEAR PISTON FILLING MACHINE FOR LOW AND HIGH VISCOSITY PRODUCTS - NO SIZE PARTS

For all flowable products, such as honey, shampoo, oils or jam with chunk contents. Of course, the machine can be used for all other products as well. The heart of this machine is the dosing drive with servo motor. The pistons are guided by 2 ball screws. This allows for precise dosing as well as double or multi strokes. Depending on requirements, the machine is cleaned simply by rinsing with water or via fully automatic CIP cleaning using various media. The dosing pistons are moved to an extended rear area, so that the piston seals can also be rinsed from behind.

OPERATION

The containers are stopped on the transport conveyor belt by a stop-bar slider and centred on the bottleneck. All filling pipes extend to the bottom of the bottles and filling commences. The diving bridge where the filling pipes are mounted on, moves upward in precise alignment with the filling level. By opening the centring mechanism, a drip tray is moved over the containers at the same time.

Depending on the product, the machine can be equipped with thread separators and/or filling pipes.

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

1,500 - 7,200 bottles/h

2 - 12 filling points

Filling pipes and/or string cutters

Multi-colour filling

Two-phase filling

CONTAINERS

Plastic bottles

Glass bottles/jars

Tin cans

Containers

Transport cups (or pucks) (also possible in combination)

VOLUME

30 ml to 1,000 ml

Larger volumes with multi strokes

SINGLE-HEADED, INTERMITTENT CLOSING MACHINE
INDIVIDUALLY ADJUSTED CLOSING TECHNOLOGY

CLOSING OF SMALL AND LARGE CONTAINERS FOR FOOD, COSMETICS, CHEMICALS AND PHARMACEUTICALS

OPERATION

The containers are fed into the machine by a conveyor belt and positioned beneath the closing station by a transport star.

The rotational speed of the screw spindle is configured by a parameter. The torque of the screw spindle is determined by a slip clutch or servo motor. The transport speed of the transport star is connected to the main drive unit by a stepping motor or also by means of a servo drive.

After the container has been closed, it is removed from the conveyor belt again. Any possibly occurring idle times for containers or closures and/or backlog at the output is monitored by sensors and leads to the machine being stopped.

Many optional extra functions/workstations available – depending on your requirements.

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

600 - 4,000 bottles/h

Screw-fitting station as SERVO variant or classic version

Torque range 0.3 - 3.5 Nm
(higher torque available on request)

Additional testing and pressing stations

CONTAINERS

Plastic bottles; glass bottles/jars; tin cans; containers; tubes, etc.

CLOSURES

Screw caps and press-on caps; deo roll-ons; droppers; dosing tips, etc.

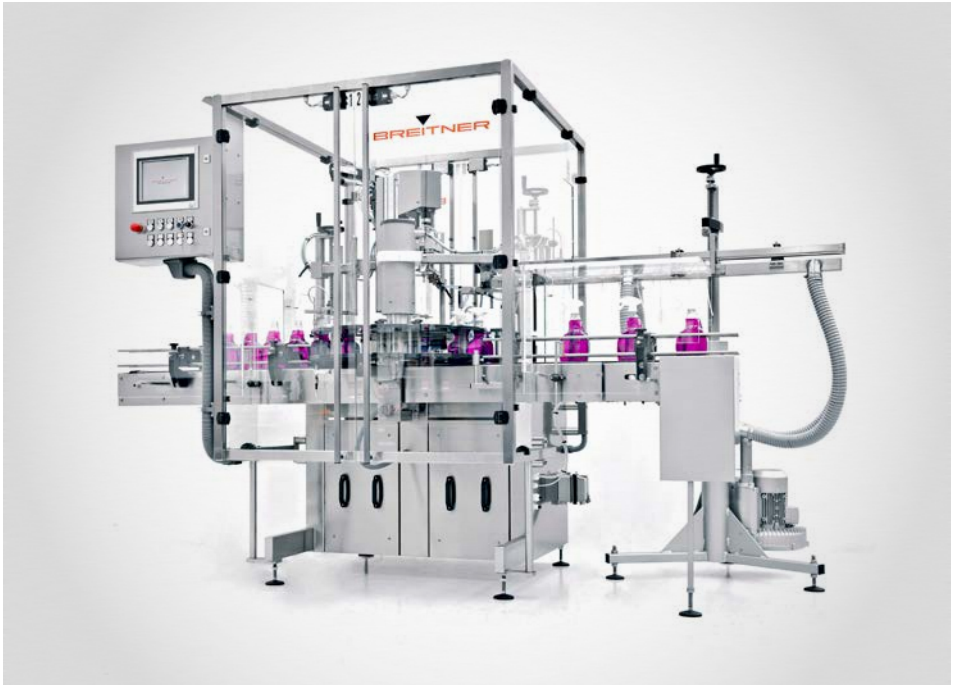
Transport cups (or pucks) (also possible in combination)

VOLUME

30 ml to 30 l

Multiple container sizes covered by rapid size changes (for example 100 ml to 10 l)

SERVO CLOSING MACHINE WITH VARIABLE SERVO-BASED TECHNOLOGY
INDIVIDUALLY ADJUSTED CLOSING TECHNOLOGY



CLOSING OF A MULTITUDE OF CONTAINERS FOR FOOD, COSMETICS, CHEMICALS AND PHARMACEUTICALS

High level of output due to the use of up to 6 servo axes. All movements are individually adapted to the closures and containers and stored in the recipe.

OPERATION

The containers are fed into the machine by a conveyor belt and positioned beneath the closing station by a transport star and then closed. Rotational speed and torque of the screw spindle as well as the transport speed of the transport star are individually adjusted to every container and closure. The servo drives are operated as „contouring controls“ („electronic transmission“). This allows for the movements of individual axes to be optimally adjusted to one another.

- Servo axis - SCREWING AXIS
- Servo axis - LIFTING MOVEMENT OF SCREWING AXIS
- Servo axis - CLOSURE TRANSFER SYSTEM
- Servo axis - CONTAINER STAR WHEEL
    - Freely adjustable switching angle/separation to ensure high degree of flexibility (from 4-fold to 32-fold)
    - Optimal onward movement from smallest bottles to large containers
    - Fast cycling without sloshing – ideal adjustment to filling level
- Servo axis - Riser pipe introduction
- Servo axis - Prior insertion of a dosing insert/roll-on ball and similar objects

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

600 - 4,000 bottles/h

Screwing station as SERVO variant
Torque range 0.3 - 3.5 Nm

Screwing axis with vertical movement using servo technology (for triggers; dispensers, spraying units...)

Testing and pressing stations

CONTAINERS

Plastic bottles; glass bottles/jars; tin cans; containers; tubes, etc.

CLOSURES

Screw caps and press-on caps; deo roll-ons; drippers; dosing tips; triggers; dispensers; spraying units...etc.

Transport cups (or pucks) (also possible in combination)

VOLUME

30 ml to 10 l

Multiple container sizes covered by rapid size changes (for example 100 ml to 10 l)

SERVO CLOSING MACHINE WITH TRAVELLING SCREW AXIS
HIGH PERFORMANCE - NO SPILLING

CLOSING OF LARGE AND MEDIUM-SIZED CONTAINERS

Open containers do not like to be stopped for screwing purposes! To counter this, measure the opening of the container and screw the closure while passing using the BREITNER servo axis - no spilling and with high output performance.

OPERATION

The containers are fed into the machine by a transport conveyor and centred by a clamping belt with adjustable width. Sensors are used to detect the container opening and closure, which was previously dispensed into the screwing head, is screwed in place (at the same speed as the container). The vertical and horizontal movement is performed by 2 linear axes and therefore provides an optimal adjustment to your various types of containers and bottles.

1. Servo axis - SCREWING AXIS
• Spindle speed and torque electronically controlled
• Check of configured torque

2. Axis (vertical) linear motor - LIFTING MOVEMENT
• Lifting movement when retrieving the closure from the magazine
• Axis follows the pitch of the closure thread

3. Axis (horizontal) linear motor - CLOSURE RETRIEVAL AND synchronization with container
• Parallel movement with the container
• After successful screwing, rapid retraction for closure transfer

PERFORMANCE

600 - 2,400 bottles/h

Screwing station as SERVO variant
Torque range 2.5 - 12 Nm

Screwing axis with vertical movement using servo technology

Checking and reject stations

CONTAINERS

Plastic bottles; tin cans; containers; ... etc.

Transport cups (or pucks) (also possible in combination)

CLOSURES

Screw caps and press-on caps;
trigger screwing; ... etc.

VOLUME

500 ml to 40 l

Multiple container sizes covered by rapid size changes (for example 500 ml to 40 l)

SINGLE-HEADED CLOSING MACHINE – DIRECT CLOSURE ON THE CONVEYOR BELT
MINIMAL USE OF SIZE PARTS

CLOSING OF LARGE AND MEDIUM-SIZED CONTAINERS

This BREITNER closing machine processes your containers directly on the conveyor belt. It allows for closing many different types of bottles and containers using only a few size parts and without requiring long conversion times. Comparable machines have been used for decades, even for heavy containers, large closures and high torque applications.
For high torque applications, difficult closures and for processing of asymmetric caps, we recommend our optional servo screw axis.

OPERATION

The containers are fed into the machine by a conveyor belt and stopped beneath the closing station by a stopping slider. They are then positioned precisely beneath the closing spindle by the container centring unit. After the container has been closed, it is released again by the stop-bar and discharged.

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

600 - 2,000 bottles/h

Screw-fitting station as SERVO variant or classic version

Torque range 2.5 - 12 Nm

Checking and reject stations

CONTAINERS

Plastic bottles; tin cans; containers; ... etc.

CLOSURES

Screw caps and press-on caps; trigger screwing; ... etc.

Transport cups (or pucks) (also possible in combination)

VOLUME

500 ml to 40 l

Multiple container sizes covered by rapid size changes (for example 500 ml to 10 l)

CLOSING MACHINE WITH VARIABLE SERVO-BASED TECHNOLOGY
VERSATILITY AND EFFICIENCY

CLOSING OF A MULTITUDE OF CONTAINERS FOR FOOD, COSMETICS, CHEMICALS AND PHARMACEUTICALS

BREITNER rotary closing machines are available as different performance variants (from 60 to 350 bottles/minute). The number of required closing spindles (4, 6, 8 or 12) is determined as part of the project design phase, so that your desired/required output level is reached.

OPERATION

These machines guarantee a smooth bottle travel and safe attachment of your closure. As part of this process, the closure is fed to the gripping head by a transfer disk and then screwed, pressed or pushed into place. Different variants and combinations are possible in this regard. For closures with so-called „riser tubes“ (triggers, dispensers; sprayers...), the riser tube is caught, aligned to be straight and inserted into the bottle. Torque application through a hysteresis clutch or servo technology.
BREITNER SERVO screwing axes are used when closures (for example hinge caps) have to be aligned and/or if frequent size changes are necessary. These can be adjusted to a different torque „at the push of a button“ or turn the closure to a predefined position prior to setting the closure into place.

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

4,000 - 20,000 bottles/h

Screw-fitting station as SERVO variant or classic version

Torque range 0.3 - 3.5 Nm

Screwing axis vertical movement, optionally using servo technology (for triggers; dispensers, spraying units...)

Testing and pressing stations

CONTAINERS

Plastic bottles; glass bottles/jars; tin cans; containers; tubes, etc.

Transport cups (or pucks) (also possible in combination)

CLOSURES

Screw caps and press-on caps; deo roll-ons; inserts; dosing tips; triggers; dispensers; spraying units...etc.

VOLUME

30 ml to 5 l

Multiple container sizes covered by rapid size changes (for example 100 ml to 5 l)

ROTARY FILLING MACHINE – MONOBLOCK WITH ROTARY CAPPER
CUSTOMIZED AND COST-SAVING

These rotary filling machines deliver a constantly high output while at the same time ensuring smooth and continuous operation. Perfectly suited for products, such as ketchup, mayonnaise, shampoo as well as household cleaners or chemical products. Flow metering allows for a large dosing range as well as easy cleaning and does not suffer from wear. This ensures that your products are filled quickly, precisely and cleanly.
The accuracy of the filling systems at the end of the service life of the BREITNER filling machine is exactly the same as in the beginning. Subsequent cleaning is performed in a fully automatic fashion in an optimal time frame with previously validated amounts of cleaning media.

OPERATION

A worm screw separates the containers and feeds them to the filling tower with a defined spacing. By lifting the container, the filling pipe is submerged completely. The filling process now commences during which the container is lowered in sync with the filling level. The container now leaves the filling machine or is fed to the optional closing tower.

ATEX variant
in accordance with EU standards (optional)

PERFORMANCE

6,000 - 20,000 bottles/h

12, 16, 24 or 30 filling points

Multi-colour filling

Combination with rotary capper

CONTAINERS

Plastic bottles

Glass bottles/jars

Tin cans

Small containers

Transport cups (or pucks) (also possible in combination)

VOLUME

100 ml to 3 l


DEMAG

SUCCESSFUL PACKAGING MACHINES ALWAYS COME WITH A STRONG PARTNER

At BREITNER, we value quality and efficiency - your success is our primary objective. That is why the preparation of control systems and wiring as well as the manufacturing of parts are all handled in-house and are therefore consistently documented.

In many cases, a bottling plant will only come to notice (and appreciate) this after some time has passed and the packaging machines have started to age – a reliable supplier is now required who is capable of delivering and installing replacement parts in a professional fashion integrating new packaging materials with existing machines in a simple manner understands changes of requirements and implements these with expedience

Special machines are distinguished by the fact that customized solutions are developed and implemented as well as by the efficient usage of space-related conditions on site. In this regard, the flow of goods must be adjusted and designed in an optimal way. Customer standards are considered to the greatest possible extent - this is only possible thanks to in-house planning, manufacturing and assembly.

Our CNC manufacturing machines make this possible in combination with the many years of experience that our fitters and technicians provide.

Assembly is organised in such a manner that our fitters assemble and commission the installations on site and integrate them with new or existing lines at your location.
Preliminary acceptance and training measures are a part of this system and guarantee a successful start into production – that is what we stand for.

BREITNER®






BMG 511 profi.line



AVAILABILITY – SERVICE – SOLUTIONS

BREITNER has been manufacturing packaging machines for the liquid material sector for over half a century and possesses a wealth of experience.

This includes bottle unscramblers, feeding/loading tables; filling machines and closing machines with outputs of up to 10 - 360 bottles/containers per minute.

Our customers stem from the cosmetics, food, chemical and pharmaceutical industries. Of more than 100 employees in total, approx. 20 technicians are responsible for developing and implementing our practical technical solutions. CNC production machines and short development paths guarantee simple solutions. Programming, development of control panels and all wiring is done in-house. This also includes thorough documentation, which quickly restores production capabilities in the event of a fault. Some of our machines have fulfilled their tasks for more than 30 years and are still being maintained and serviced as before.

Thanks to our in-house development and production of machine parts, control cabinets, software and self-installation, we can offer comprehensive solutions from a single source as well as direct customer service.

Our fitters and electronics technicians are responsible for every one of your machines and will be employed for the installation, training and maintenance at your location - this is guaranteed.

BREITNER

CIP/SIP
VTR Trigger
SERVO CAP
CAFI
CNC SERVODOS

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