

## The Envases range of containers: Safe packaging for hazardous goods and more

Envases is the leading specialist in type-approved packaging for hazardous goods. Accordingly, we are well aware of the fact that the strict requirements involved in leak and drop testing require for a specific amount of force to be applied when closing containers with clamping rings. That is where our automatic and flexible FlexoClose closing system comes in. The range of products covered by the standard system consists of five container diameters – all of them with UN approval for the transport of dangerous goods (see in table).



### Unparalleled flexibility

All containers can be closed both by hand and automatically, as all the components are standardized parts. This not only allows for the flexible use of the containers, but also makes the corresponding material planning and stocking much easier.

Container characteristics / dimensions	Volume range	Approval
Plug lid pail, diameter of 163/155 mm	2,5 – 3,5 liters	UN/1A2/Y/100/D/BAM 5837 KHV
Tapered plug lid pail, diameter of 185/173 mm	4,0 – 6,0 liters	UN/1A2/Y/100/D/BAM 4941 KHV
Tapered plug lid pail, diameter of 230/217 mm	5,0 – 12,0 liters	UN/1A2/Y/100/D/BAM 9084 KHV
Tapered plug lid pail or hobcock, diameter of 280/262 mm	12,0 – 20,0 liters	UN/1A2/Y/100/D/BAM 5322 KHV
Tapered plug lid hobcock or pail, diameter of 328/312 mm	20,0 – 33,0 liters	UN/1A2/Y/100/D/BAM 4213 KHV

Even if you are not filling your containers with hazardous goods, FlexoClose is the perfect closing system for your needs. Whether you are working with water-based paint, dispersions, chemical prod-

ucts, or even food, Envases tinplate packaging is always guaranteed to provide you with reliable and unrivalled packaging performance.

Moreover, FlexoClose ensures that you will be able to simplify and streamline your clamping ring closing operations regardless of the application at hand.

## The perfect FlexoClose starter pack for your needs

Our focus is on coming up with a business model that meets your specific needs so that you can get started with state-of-the-art, streamlined closing operations right away.

We offer Envases FlexoClose systems for lease preferentially, making it possible for you to take advantage of the benefits without any financial risk.

In addition to an even-handed lease agreement, we will enter into a service agreement with you and take care of all the maintenance and servicing stipulated in it. We also sell our cutting-edge tech-

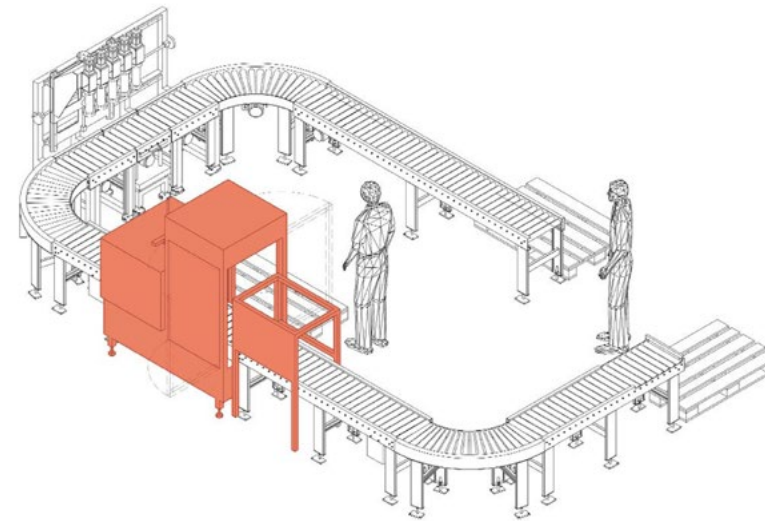


nology together with deliveries of tinplate packaging in the event that this is better suited to your requirements.

We will be more than happy to prepare a custom-tailored quotation for the lease or sale of a FlexoClose closing system, in conjunction with the delivery of tinplate packaging,

## System planning support

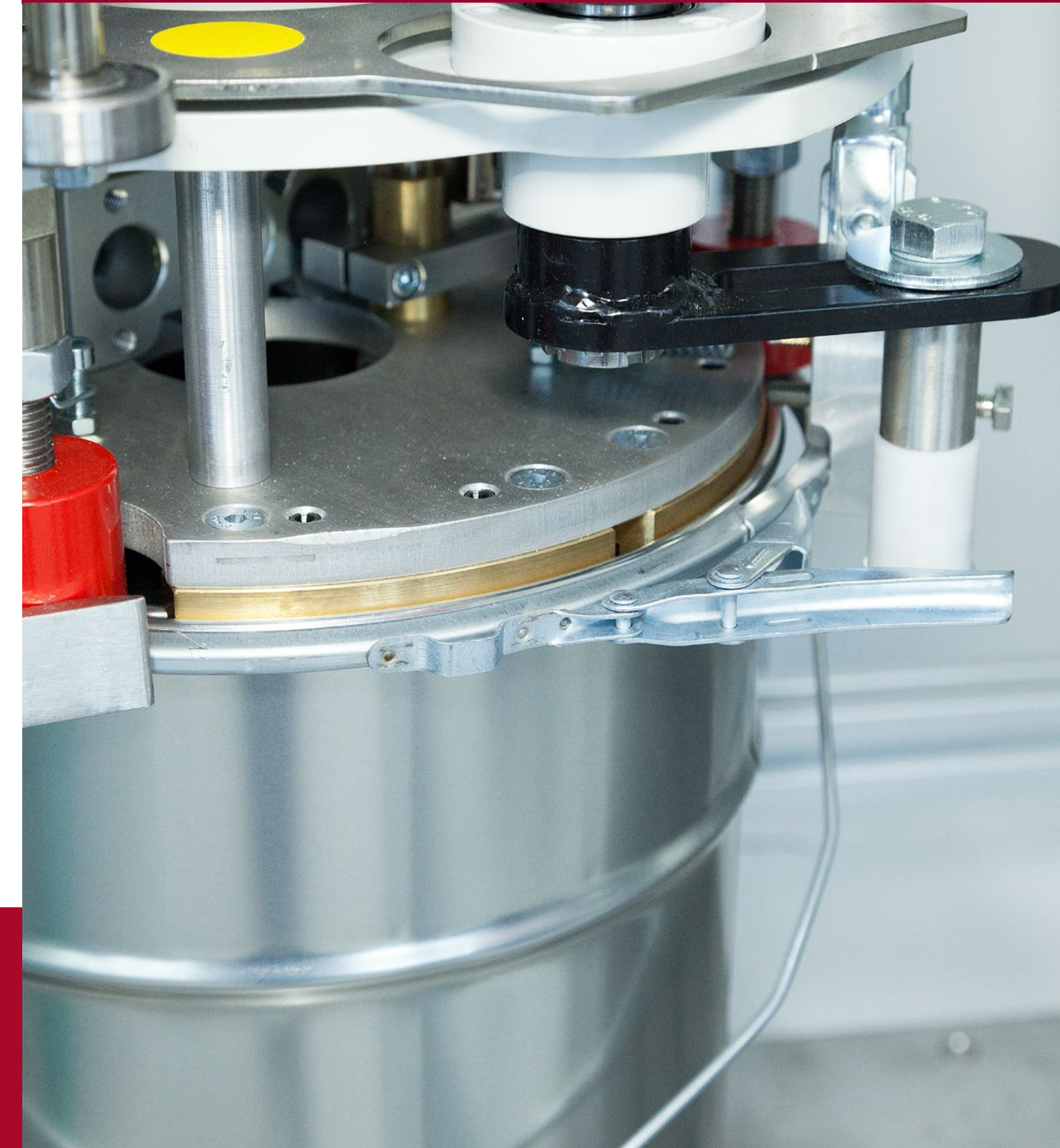
We will be more than glad to work together with you on the technical design and layout for integrating a FlexoClose system into an existing or new filling system. By taking advantage of our experience with a wide variety of filling and closing systems, you can rest assured knowing that your operations will be ideally optimized.



07/2022 Änderungen vorbehalten, alle Angaben ohne Gewähr.



# Flexo Close



Envases Öhringen GmbH  
Otto-Meister-Straße 2  
74613 Öhringen  
GERMANY  
Phone +49 (0) 79 41 / 66 -0  
info@envases.de  
www.envases.de



# Flexo Close

## A modern, automatic closing system for clamping ring containers

Prepare your company for the future and take advantage of the improvements in productivity that a new closing system can provide by helping you automate your filling and closing processes. The advantages behind FlexoClose are not just limited to reducing your total operating costs, but also include maximizing the output and flexibility of your production operations.



FlexoClose represents the latest generation of closing machines for medium and large industrial tinplate packaging (5.0 – 33.0 liters) with clamping rings. With its modular, variable system, it is designed to enable you to close up to five container diameters with the use of a single system.

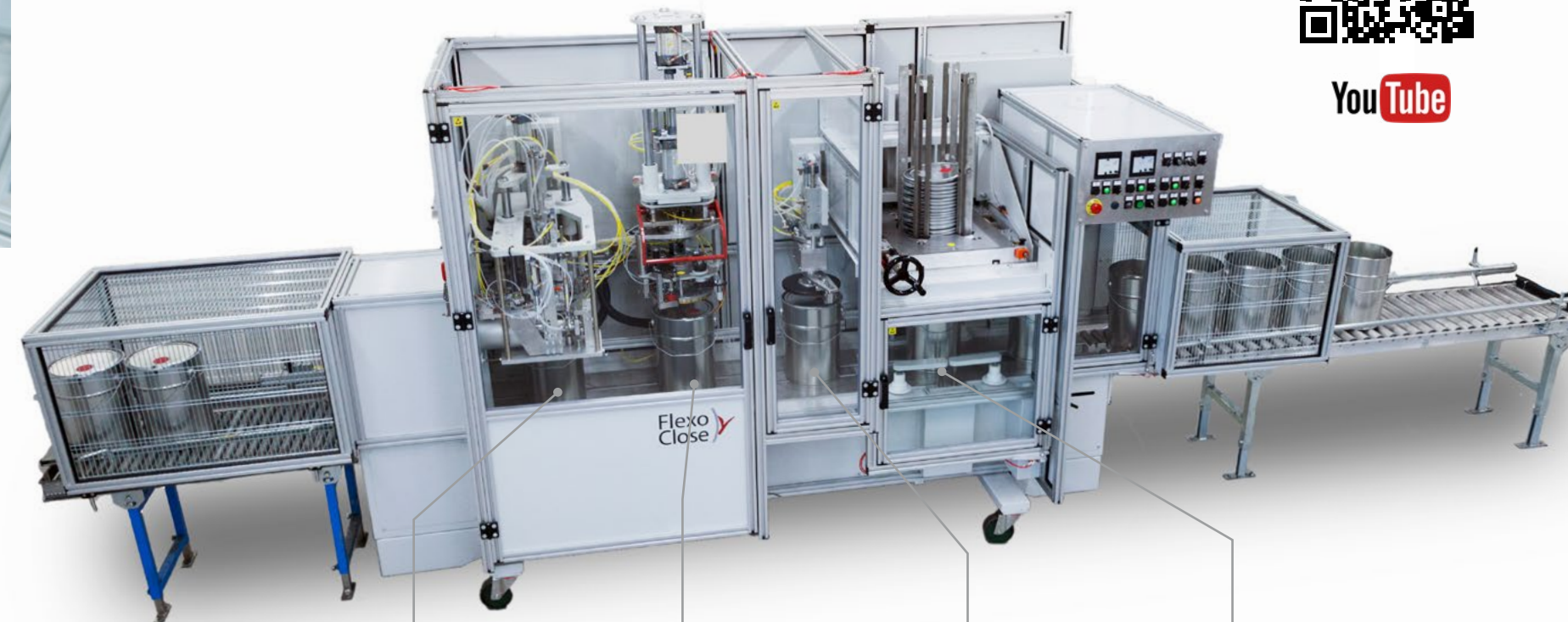


FlexoClose makes it possible to close standard tinplate packaging – especially pails and hobbicks used for hazardous materials – with a clamping ring in an automated and ergonomic manner. This eliminates the need to manually close lock rings, which not only renders work for your staff more ergonomic and much less exhausting, but also maximizes productivity.

- The entire system features a modular design, meaning it can be expanded as necessary. Individual steps can be omitted or added later on.
- The step of automatically closing lids and lever lock rings as a minimum requirement is the core module, or basis, behind all expansions.
- A lever lock ring applicator and a pin module can also be retrofitted later on using the core module as a basis.
- CE Declaration of Conformity, CE marking, ATEX certified for Zone 1 T4 for operation in hazardous locations.
- Operation with compressed air only; a pressure of at least 5 bar is required.
- Cycle rate max. 7 container/min.
- A single person (unskilled worker) can operate the closing unit and make the required changes for a different diameter.
- Space required for the system:
  - 3.075 bis 4.700 mm wide
  - 1.300 mm deep / 2.290 mm tall
- Conveyor system alignment height: 480 mm.
- For more details, please refer to our Technical Information



YouTube



**Station 4**  
Locking pin is placed



**Station 3**  
Clamping ring is closed



**Station 2**  
Clamping ring is placed into the closing position



**Station 1**  
Container is centered and lid placed

## Always the right sealing system: Flexible, modular and expandable

Envases FlexoClose can not only be customized to meet your specific needs, but can also be expanded together with your requirements. Moreover, the fact that there are both leasing and purchasing options available for FlexoClose systems ensures that you can also benefit from financial flexibility and low barriers to entry (see reverse).



- The **base system version** takes care of the lid / clamping ring closing operation and accordingly focuses primarily on providing ergonomic benefits by eliminating the physical effort involved in closing clamping rings. With this system, the following actions are all performed manually: Applying the lid / clamping ring combination, conveying the containers for feeding and discharge, and inserting the locking pin.
- The **semiautomatic version** can be optionally equipped with an automatic lid / clamping ring combination application module or an automatic locking pin insertion module. Meanwhile, the containers will be conveyed for feeding and discharge with the use of a transfer system.
- The **fully automatic version** performs the following operations automatically: Applying the lid / clamping ring combination, opening and closing the clamping rings on the containers, and inserting the locking pin. Meanwhile, the containers will be conveyed for feeding and discharge with the use of a transfer system.

Process step / sequence	Base system	Semi-automatic*	Fully automatic
1. Feeding the filled, open container	Manual	Manual	Automatic
2. Applying the lid with the clamping ring on the filled container	Manual (+ aligning the clamping ring)	Optional: Manual or automatic *	Automatic
3. Automatically closing the lid with the clamping ring	Automatic after two-hand control is activated	Automatic	Automatic
4. Inserting the locking pin into the clamping ring	Manual	Optional: Manual or automatic *	Automatic
5. Discharging the closed container and conveying it away	Manual	Automatic	Automatic

\* With the semi-automatic version, you have the option of working without the "2. Lid applicator" and "4. Pin inserter" modules or to select them individually as an automatic process step. If both modules are selected, this will be the same as using the fully automatic version.