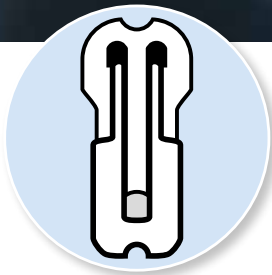




Home of Containment Solutions



SafeSeal Closure System

Containment-Level \leq OEB 5 ($<1\mu\text{g}/\text{m}^3$)

LUGAIA
Containment Solutions



SafeSeal from Lugaia – simply ingenious or ingeniously simple?

The manual SafeSeal Closure System for Continuous Liner Systems (patented)

The SafeSeal Closure is manually pulled over the bag and compressed with special locking pliers. The crimp can then be separated using a cutting tool. Crucial for the closure size is the foil size. The SafeSeal Closure guarantees Containment-Level OEB 5

($1\mu\text{g} / \text{m}^3$) in action with Lugaia Continuous Liners and thus forms the spearhead of the manual lock systems. Through the deployment of the SafeSeal Opener, the closure can be removed again without any additional cutting processes. The entire

closure system consists of SafeSeal Closure clips, a crimp and a cutting tool and it can be completed with a protective cap and hanger.

The Lugaia SafeSeal Crimp in 3 different sizes: S (blue), M (red), L (green)

(Double clip with axial locking mechanism)



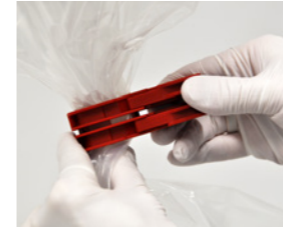
The advantages of the SafeSeal Closure System:

- Easy handling
- High occupational safety
- Universal usability
- Low investment costs
- High quality
- Axial closure mechanism
- Guaranteed OEB 5 ($1\mu\text{g} / \text{m}^3$) Containment-Level
- 3 different sizes
- Can be expanded with a protective cap and hanger

2-part SafeSeal Closure Size L



SafeSeal Closure – how it works



Stick together



Press together



Cut through / separate



Both parts locked



Scan the QR code and watch directly the video

Application example SafeFlex Isolator



Application examples



SafePort TransferBag



RTP-Beta (CLCC)



Continuous Liner System (CLS)

The new SafeSeal DuoPro

The innovative 2-in-1 solution for safe and efficient containment

The compact tool now combines two functions in one device: crimping and cutting. A key advantage: the defined sealing force ensures a reproducible closure and increases process safety. Thanks to its simple manual operation, lightweight design, and ergonomic shape, the tool is also ideally suited for use in isolator environments.

Available in two versions - one version for sizes S & M and another for size L - it can be perfectly matched to the respective crimp sizes. In addition it is fully compatible with Lugaia's proven SafeSeal Closure System, which is already established for OEB-5 containment (<math><1\mu\text{g}/\text{m}^3</math>).

The advantages of the SafeSeal DuoPro:

- Combined crimp and cut function
- High process safety
- Intuitive handling
- Available for Crimp sizes (S, M, L)
- Meets OEB-5 containment requirements



Scan the QR code and watch directly the video

Toolset Type 90 and Premium Toolset

Safe and ergonomic tool for closing and separating the SafeSeal Crimps

With the SafeSeal Toolsets we give you effective, qualitative and high-quality tools specifically designed for handling the Lugaia SafeSeal Closures to close and separate the Continuous Liner System (CLS) properly. A Containment-Level of OEB 5 (<math><1\mu\text{g}/\text{m}^3</math>) is guaranteed. Each toolset contains one pair of ratchet scissors as well as locking pliers.

Both sets are useable for all SafeSeal Closure sizes. With the **Premium Toolset** we give you the best handling in combination with the best materials, the handles are rustproof and made of anodized aluminum. Due to corrosion resistance, the **Premium Toolset** is also very suitable for the process of cleaning and washing in the isolator.

The advantages of the Lugaia Toolsets:

- Easy handling
- High occupational safety
- Low investment costs
- Also available as a premium version, rustproof handles made of anodized aluminum



Both Toolsets are available in a practical tool case!

(Contents: locking pliers and ratchet scissors)

Lugaia SafeSeal Pneumatic Tool

With the SafeSeal Pneumatic Tool (available for SafeSeal Closure size M and L) a partially automated closing system was developed, which excels with simple operation, high work safety, universal usability and high quality.

In connection with the SafeSeal Closures and the foils of the Lugaia Continuous Liner Systems (CLS: for standard sizes, see separate product sheet) a Containment-Level OEB 5 (<math><1\mu\text{g}/\text{m}^3</math>) is guaranteed.

The SafeSeal Pneumatic Tool is used at the end of line packaging with high filling rates.

How the SafeSeal Pneumatic Tool works



SafeSeal Pneumatic Tool



Activate opener



Insert SafeSeal Crimp



Close



Two-hand operation



Removal



The advantages of the SafeSeal Pneumatic Tool:

- Automatic pressing and cutting of the SafeSeal Closures
- Completely pneumatic operated (suitable for ATEX)
- Made of stainless steel
- High security through two-hand operation
- Integrable in existing systems



Scan the QR code and watch directly the video

SafeSeal

Protective Cap and Hanging System

SafeSeal

Opener



SafeSeal Protective Cap and Hanging System

The proven and patented SafeSeal Closure System (for crimp sizes M and L) ensures a safe closure for any foil system at Containment-Level OEB 5. To further develop the safety and ergonomics of SafeSeal, the system was expanded with an additional protective cap and a practical hanger.

SafeSeal Opener

A sealed Liner package can be opened without additional cutting processes or the use of pointed tools; using the **SafeSeal Opener** (3 sizes), it can be re-opened without any problems.

Using the Opener, the SafeSeal Closure will be separated and pushed apart very quickly.



Scan the QR code and watch directly the video



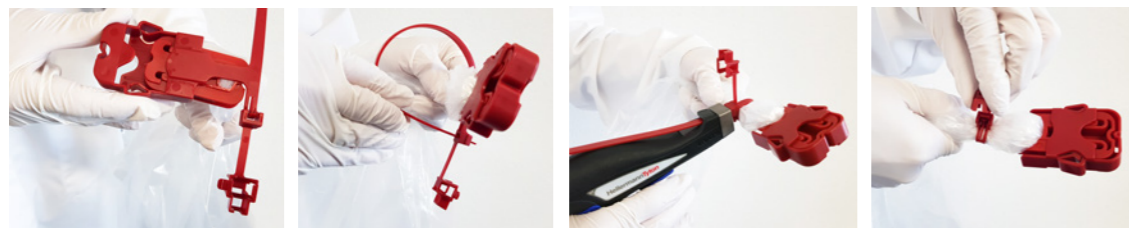
SafeSeal Opener in sizes S, M, and L

The advantages of the protective cap and the hanging system:

- Cover of the SafeSeal-interface
- Additional security of the closure systems through the use of SafeSeal Crimp and cable ties
- Safe suspension of the foil packaging
- Easy to open
- Available for crimp sizes M and L



Attaching the Protective Cap



Attach the protective cap Apply cable ties Tighten the cable ties Closing the cap

Assembling the Hanging Tool



Slip the hanging tool on Bend the foil Put on cable ties Tighten cable ties

Opening the lock size M (lock size S opens identically)



Lugaia SafeSeal Crimp



Insert the opener, the outer crimp opens



Separate the crimps

Opening the lock size L



Break open the safety brackets on both sides



Insert opener



Separate the crimps

Opening the protective cap (suspension system can be opened identically)



Installed protective cap



Opening the protective cover with the tab



Manual release of the cable tie closure



Lugaia AG
Containment Solutions

Industriezone Basper 31
3942 Raron, Switzerland
Telephone +41 (0) 27 948 45 55
anfrage@lugaia.ch

Lugaia Deutschland GmbH
Containment Solutions

Westendstraße 2
85084 Reichertshofen, Germany
Telephone +49 (0) 8453 33 550-0
info@lugaia.de

Lugaia USA, LLC Containment Solutions

Ponte Vedra Beach, Florida
Telephone +1 904 401 0003
info@lugaia.com

www.lugaia.com

Our product overview:

- Continuous Liner System CLS / CLCC
- SafeSeal Closure System
- TransferBag System
- SafeFlex Isolator System

Follow us on



LUGAIA
Containment Solutions

