



# Twist-

#### Twist-Off<sup>®</sup> & PT<sup>\*</sup> – The Original

White Cap invented the Twist-Off<sup>®</sup> lug closure for glass containers, designed for use with the Vapour-Vacuum<sup>®</sup> method, to provide excellent oxygen barrier properties and dramatically enhanced shelf life for foods.

#### Product-Range Twist-Off®

The most comprehensive lug closure product portfolio on the market:

- Available diameters: 27mm to 100mm
- Various closure shapes and profiles such as safety button, deep or angled
- Categories:
- Non-carbonated beverages and all kind of foods in glass
- Suitable for hot, cold and aseptic filling followed by non-treatment, pasteurisation, or retort processing
- Various glass finish specifications

**PT\* – The Original for Premium Products** A special vacuum-holding closure designed for high speed Press-On and Twist-Off<sup>®</sup> operation, with superior tamper resistance and a hygienic construction, achieved by an extended compound side wall in a closure shell without lugs.

#### **Product Range PT\***

- Available diameters: 40, 51, 54, 63, 70 mm in a unique PT profile incorporating a safety button
- Categories:
  - Premium food segments such as baby foods and drinks, desserts and paté.

#### Sealing Gasket

Compound materials for sealing gaskets are developed in house. This enables seals to be created with particular properties that ensure:

- Maximum pack integrity
- Food product safety that meets all types of filling requirements

#### Application

All Twist-Off<sup>®</sup> closures can be applied using Silgan White Cap's high speed in-line cappers, offering easy set up and fast changeovers between different cap and glass sizes/ shapes.

#### Enhancement

Create further on-shelf differentiation through a variety of decoration options:

- High quality multi-colour printing
- Specialty inks and coatings with glossy or matt finishes
- Shaping features such as embossing
- Other options available on request

#### Vacuum Packaging

The Vapour-Vacuum<sup>®</sup> System is applied during the capping operation to ensure minimal oxygen in the headspace of the container.

#### **Food Preservation**

Unrivalled oxygen barrier properties are achieved through the use of tin plated steel combined with specially designed compound materials for the sealing gasket. This airtight seal protects food from contaminants and minimises Vitamin C degradation or discolouration.

#### Convenience

Easy to open, easy to reseal, while the tight reseal after initial opening allows opened jars to be stored in the refrigerator and ensures odours cannot escape and mix with other food products.

## Metal Closures – a permanently available material

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Metal closures not only take good care of the environment in the way they are manufactured and used; they also contribute to ensuring that the products they contain have as little impact on the environment as possible.

By using metal packaging, product waste from spoilage or expired bestbefore dates can be avoided. Packaging material and closures made of metal give their contents one hundred percent protection from light, air and harmful external influences. This increases shelf-life so that consumers really can consume their food when they like.

#### **Regulatory Compliance**

Materials used to manufacture Silgan White Cap metal closures fully comply with the latest requirements of European food contact legislation.

**Commitment to Quality & Environment** 

- ISO 9001
- ISO 14001

Standard Food Safety

- BRC
- **Social Responsability**
- SEDEX
- Ecovadis



## Equipment sures ( )

### Equipment is Part of our Strategy

Every glass or plastic container needs the right closure, not only to facilitate opening and reclosing but also to preserve the contents without influencing the flavour and without quality degradation. We provide the necessary equipment.









#### Cap Feeder

Silgan White Cap's high speed cap feed systems maintain a physical separation of feed and product areas. Alternatively, for small line speeds, the simple Universal Hopper offers the optimum solution.

#### Feeder Types Available

#### Universal Hopper 6 R 17

This is a simple solution for slower line speeds. The manually adjustable drive can be easily adapted for different speeds.

#### Magnetic Elevator

This unit comprises bin, feed conveyor, sorting device and elevator and is available in different specifications.

- Type MF standard cap feeder for 800 caps per minute, increased to 1500 caps per minute for diameters up to 53mm
- Type CSE For high speed lines. The closures are sorted by gravity. Particularly appropriate for angled caps (RA).

#### Sealing Machine

The Vapour-Vacuum<sup>®</sup> System maximises product quality and this is the principle of all Silgan White Cap sealing machines. There is a wide choice, from semi-automatic hand cappers to stainless steel sealing machines for high speed lines. Most of the cappers can be specified in left- or right-hand configuration.

#### Ideal for Trial and Small Production Runs or Laboratory Use

- Silgan White Cap 100 Semi-automatic sealing machine with Silgan White Cap Vapour-Vacuum<sup>®</sup> technology.
- Silgan White Cap 160 Hand-operated machine.

#### Low to Medium Speed

- Silgan White Cap 200
- Sophisticated technical solution for low and medium production speeds up to 300 caps per minute.
- Silgan White Cap 300
  Line speeds of up to 300 Twist-Off<sup>®</sup>
  and PT closures per minute. Electronic
  height adjustment allows shorter changeover times. Available in left- or right-hand
  configuration.
- Silgan White Cap 500-1 Optimised features are particularly ideal for capping at medium to higher speeds. Available in left- or right-hand configuration.

#### **High Speed**

• Silgan White Cap 600-1 Up to 1000 PT closures per minute, quick-change over and easy set-up.

#### Dud Detector

#### Type Silgan White Cap MFB

Used for electronic vacuum testing immediately after the capping operation on cold fill lines or after re-cooling the product on hot fill lines. Jars with insufficient or no vacuum are rejected. This is an indispensable additional feature to optimise product and line safety.



#### Food Technology Services

#### Process Reliability – Our Know-how Product Quality – Your Benefit.

Our Food Technology ensure that every application has the necessary process reliability and product quality – and can sometimes also add a valuable extra dimension.

#### Vapour-Vacuum<sup>®</sup> – Created by Silgan White Cap

The Vapour-Vacuum<sup>®</sup> System delivers product quality of the highest level. For the consumer this means improved taste and preservation of product colour as well as product consistency and an extended shelf life.

#### From Recipe to Shelf

We individually analyse every customer's

process and produce recommendations for best practice. This enables customers to enhance product quality, reduce failure rates and through this effectively cut costs. Any change in process requirements is fully supported by our experienced personnel to ensure a smooth transition.

#### White Cap University

We offer comprehensive in-house training courses to enable line operators and support staff to benefit from the broad experience and Know-how of Silgan White Cap's personnel ensure the successful and smooth-running capping and processing of Twist-Off® and PT (Press-On Twist-Off®) metal closures.



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#### Customer Technical Service

#### Safe, Reliable, Efficient

CTS supports all the engineering processes of the Vapour-Vacuum<sup>®</sup> allround sealing technology.

#### You Fill, We Seal. CTS incorporates:

- A commitment to product quality and safety that is second to none
- Operator-friendly machines that are adapted to precise customer process requirements
- Quick and easy change-overs for different closure types and diameters

- Coordination of line layouts to meet the specifications of customers' manufacturing operations
- Equipment designed and certified under CE-marking to comply with the highest safety standards and energy efficiencies
- Original spare parts
- Trouble shooting
- Regular maintenance
- Line operator training
- Complete line inspection

#### Litho Design Service

#### **Premium Designs for Discerning Consumers**

Silgan White Cap's integrated litho printing service takes customer designs from concept to production. Final artwork is accurately adapted to the specified closure type and diameter.

- Direct communication with customers' advertising agencies if required
- The best print finish may not always require all the colours originally envisaged; our design specialists can advise on the most effective approach

#### Create Further On-shelf Differentiations through a Variety of Decoration Options

- High quality multi-colour printing
- Specialty inks and coatings with glossy or matt finishes
- Shaping features such as embossing



#### Research & Development

#### Centre of Excellence for Compound Material and New Product Development

Even small changes to closure geometry can make a significant improvement. Recent examples such as reducing the compound channel of the 27 RRP Twist-Off®, the universal shape of the 51 PTU and the new 38 RAB Twist-Off®, provide a brief demonstration of how Silgan White Cap's ongoing metal vacuum closure developments focus on effective use of materials while taking into account food regulatory and environmental requirements.

#### Testing

Our testing service for new applications has included solutions for wine, beverages with low alcohol content and metal closures on plastic or metal containers instead of glass.

#### In-house Material Development

Compound materials for sealing gaskets are developed in-house. This enables seals to be created with particular properties that ensure:

- Maximum pack integrity
- Food product safety that meets the requirements of the entire range of fillers' processing and storage conditions

#### In-house Design and Engineering with Prototyping and Pilot Line Capabilities

- See your new closure shape in 3D sketches and animation
- Hold prototypes in hand for marketing presentations prior to any decision on new packaging styles

#### Planning

You Set the Deadline, we Meet it – On Time, Every Time. Centralised planning across all Silgan White Cap plants, combined with local fine-tuning at plant level, deliver a number of customer benefits:

- Shorter internal communication channels for quick and reliable responses
- Direct coordination of litho and closure production
- Consolidated planning of the entire production capacity

Turning a preferred delivery date into reality remains our key objective. We support customers' own internal planning procedures through reliable, on-time deliveries.

#### Your Flexibility – Our Commitment

- Even unscheduled orders can be swiftly accommodated
- Seasonal peaks can be catered for
- Retailers place their orders, you can respond quickly

Anticipation of customer requirements in addition to careful, central planning and local implementation are all key to achieving this.





Ømm	Twist-Off <sup>®</sup> Regular	Twist-Off <sup>®</sup> Medium	Twist-Off <sup>®</sup> Deep	PT Press-On Twist-Off®
27	$\checkmark$			
30		$\checkmark$	$\checkmark$	
33		$\checkmark$	$\checkmark$	
38	$\checkmark$	$\checkmark$	$\checkmark$	
40				$\checkmark$
43	$\checkmark$			
48	$\checkmark$			
51				$\checkmark$
53	$\checkmark$			
54				$\checkmark$
58	$\checkmark$		$\checkmark$	
63	$\checkmark$		$\checkmark$	$\checkmark$
66	$\checkmark$		$\checkmark$	
70	$\checkmark$		$\checkmark$	$\checkmark$
77	$\checkmark$			
82	$\checkmark$		$\checkmark$	
89	$\checkmark$			
100	$\checkmark$			

#### Metal Closure Categories Served

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Category	Twist-Off®	PT Press-On Twist-Off®
Sweet Spreads	$\checkmark$	$\checkmark$
Desserts	$\checkmark$	$\checkmark$
Delicatessen	$\checkmark$	
Ready Meals	$\checkmark$	$\checkmark$
Fish Products/Sea Food	$\checkmark$	$\checkmark$
Meat & Soya Bean Products/Eggs	$\checkmark$	$\checkmark$
Vegetables	$\checkmark$	
Beverages	$\checkmark$	$\checkmark$
Spices	$\checkmark$	
Babyfood	$\checkmark$	$\checkmark$
Dairy Products	$\checkmark$	$\checkmark$
Fruits	$\checkmark$	
Soups	$\checkmark$	$\checkmark$
Sweets	$\checkmark$	
Pet Food	$\checkmark$	
Powdered Products	$\checkmark$	
Non Food	$\checkmark$	



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