

A close-up photograph of a capping machine's metal head positioned above a white plastic bottle with a yellow screw cap. The machine's components are metallic and polished, with a focus on the area where the cap is being applied. The background is blurred, showing other parts of the production line.

# Complete Capping systems

Screw-on, Roll-on Sealing  
and Push-in and Snap-on  
Capping

# High quality capping machinery

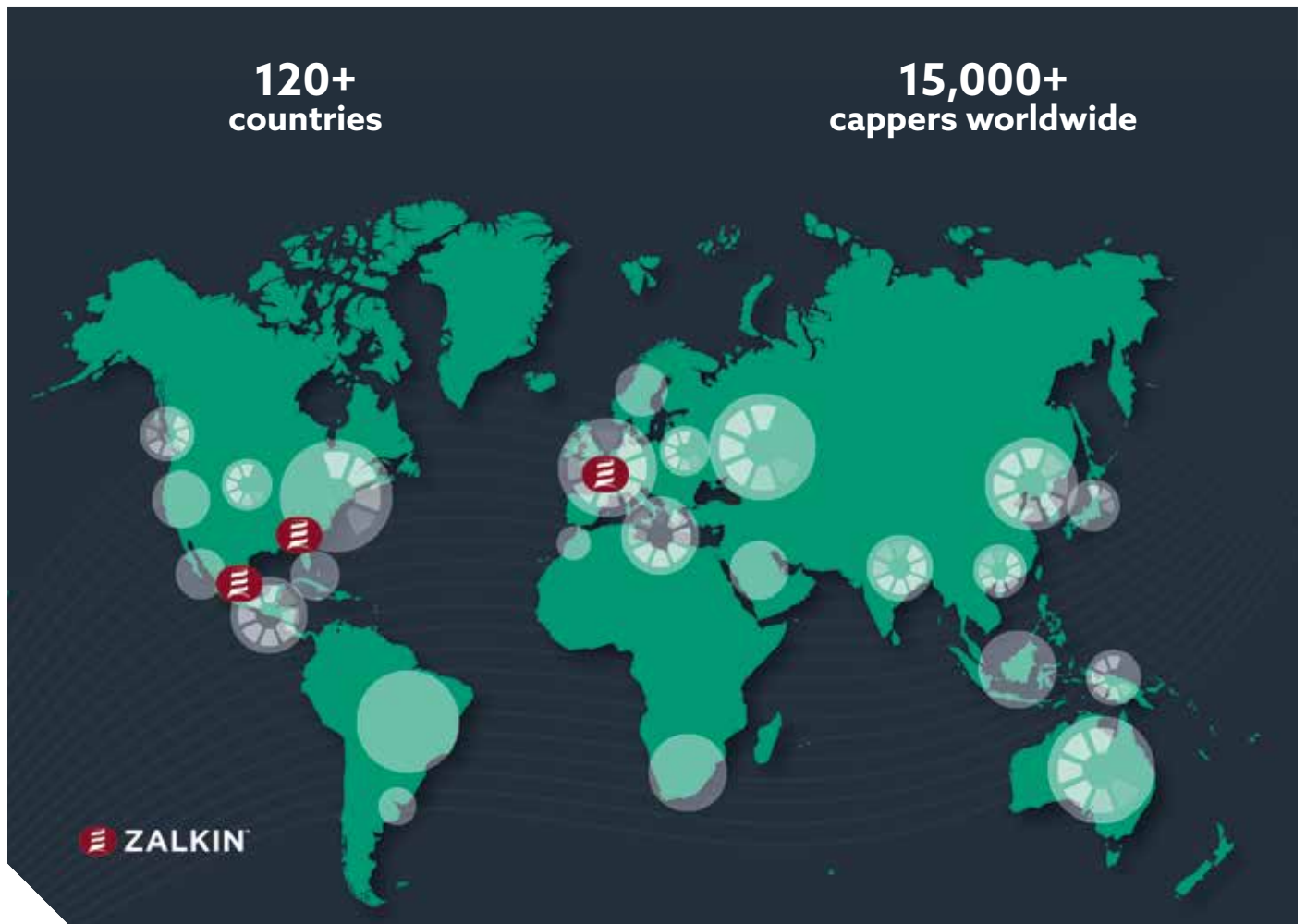
World renowned for its expertise of more than 90 years in capping solutions, Zalkin specializes in the design, manufacture and commissioning of capping machinery and cap handling systems for all bottle sizes and closure types.

From application needing either high speed, high production volume, high precision, or high capability for running a difficult closure or bottle, Zalkin has the capping machinery to meet your production requirements.



## GLOBAL SERVICE

Robust construction, performance and versatility protect our customers' investment in Zalkin capping machinery for decades. An experienced and dedicated team offers exceptional service throughout the life of the machine. Zalkin places high importance on training of operating personnel, maintenance support, conversion of existing equipment, availability of spare parts, and prompt response to customer service needs.



# Zalkin from bulk to capping

## Serving multiple industries

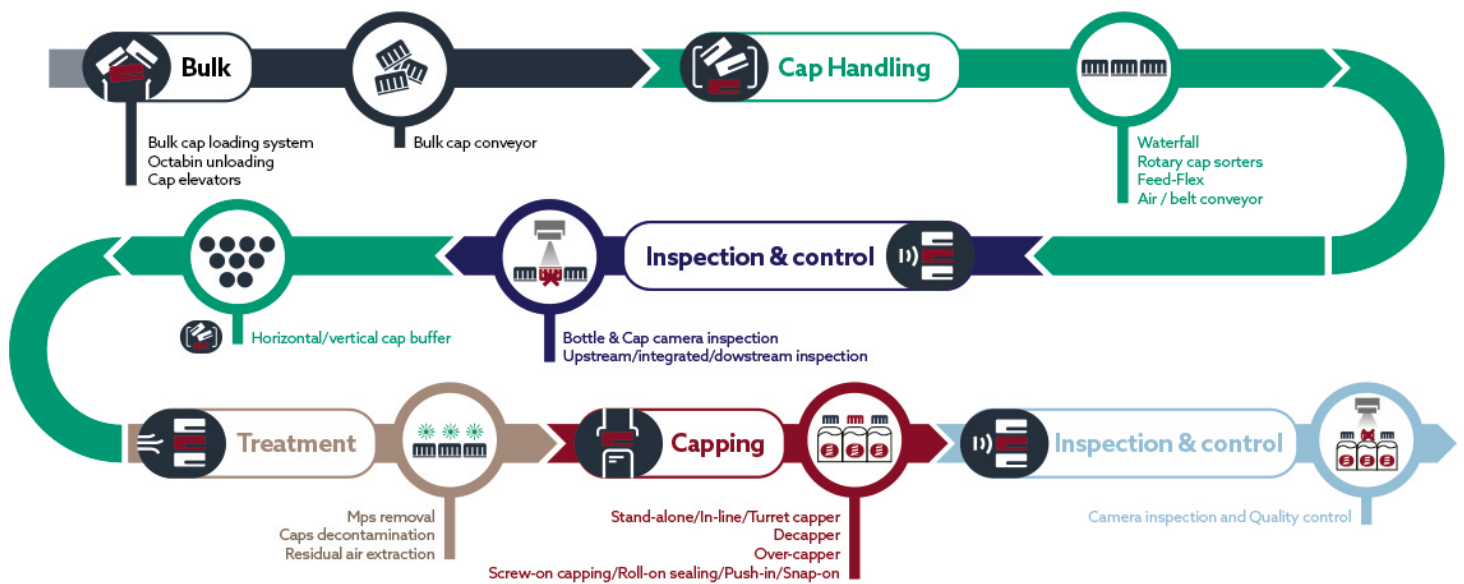
Bottled water, carbonated soft drinks (PET & aluminum bottles), non-carbonated soft drinks, food & dairy, distilled spirits, wine, beer (aluminum bottles), pharmaceutical, personal care, household products, chemical.

## Handling a wide range of caps & closures

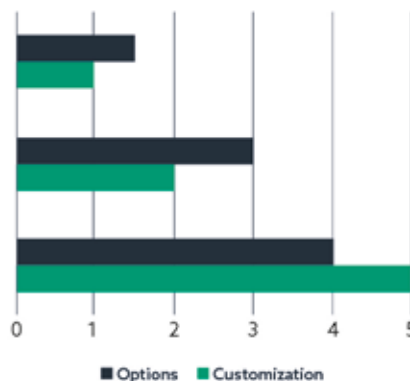
- Plastic screw-on caps (flat, sport, flip top,...).
- Tethered caps (snap and screw).
- Aluminum Roll-On Pilfer Proof (ROPP) closures.
- Snap-on caps.
- Push-in caps (T-corks, stoppers, and plugs).
- Metal Twist-Off caps.
- Dosing pumps and trigger sprayers.



## Providing solutions for every stage of the capping process



OPPTI.  
PRO.  
MASTER.



**High standard** with selected options

**State-of-the-art** solution for the most demanding applications

**Tailor-made** solution for highly specific projects



# Standalone single-head cappers

Single-head cappers suitable for roll-on, screw-on, push-in, and snap-on capping at speeds ranging from 600 to 3,500 caps per hour (depending on the machine model and the cap being used). Three models are available:



## TM3 Semi-Automatic Capper

**The TM3 single-head machine is the ideal equipment for laboratory testing of heads or new products and small volume manual production.**

- For application of roll-on, screw-on and push-in caps.
- Caps are manually placed up to 800 caps per hour.



## TM135 Single-Head Capper

**The TM135 single-head capper applies roll-on aluminum closures (ROPP) or screw-on caps (Lux / Novatwist) to glass, PET or aluminum bottles.**

- Speeds up to 3,500 caps per hour (depending on the cap type and the bottle being processed).
- Fully integrated system with a cap elevator incorporated within the framework of the capper.
- Fast closure and container changeovers.



## TM300 Single-Head Capper

**The TM300 single-head capper is designed for applying any type of plastic or aluminum closure**

- Maximum recommended speed of 2,500 caps per hour.
- Can be fitted with single or dual stations to combine multiple functions (e.g. fitting of insert, followed by application of screw-on cap).
- Fast closure and container changeovers.

### OPTIONS AVAILABLE FOR TM135 / TM300 AUTOMATIC CAPPERS

- Steam or nitrogen injection systems
- Oppti.Pure MPs extraction system
- Programmable logic controller and operator interface
- Various detections (presence of integrity seals before push-on capping, presence of caps at the machine outfeed, ...)





# Freestanding rotary machines

Rotary capping machines can apply roll-on aluminum closures, plastic screw-on, push-in, and snap-on caps at speeds ranging from 3,500 to 60,000 caps per hour (depending on the cap type and bottle being used). Cappers can be equipped with 3 to 24 heads and offered in pitch circle diameters ranging from 300 to 720 mm.



## Oppti.Cap range

**The Oppti.Cap machine combines modular design, exceptional product integrity, and ergonomic operation to deliver a versatile, high-performance and standardized capping solution.**

- Multi-head rotary capper for all market applications.
- For application of plastic screw-on caps, aluminum roll-on closures, and push-on caps at speeds up to 30,000 containers per hour.
- 3 to 10 capping heads.
- Eco-design approach with low energy consumption.
- Fast, tool-less capping head changeover.



## Pro.Cap & Master ranges

**Zalkin freestanding rotary cappers are recognized for their reliable and repeatable performance and their durability in the most demanding production environments.**

- Multi-head rotary cappers for all market applications.
- For application of plastic screw-on caps, aluminum roll-on closures, and push-on caps at speeds up to 60,000 containers per hour.
- 3 to 24 capping heads.
- Fast, tool-less capping head changeover.



## Decapping machine range

**The rotary decappers are designed to remove plastic caps from bottles. Available with container infeed and discharge conveyors, the decapping equipment can be configured with an inline conveyor or parallel conveyors.**

- DR-type decapping equipment with inline conveyor.
- MS-type decapper machinery with parallel containers.
- Speeds up to 60,000 caps per hour.
- 3 to 24 capping heads.

### MACHINE OPTIONS (\*)

- Synchronization with the filler (mechanical or electronic) for very high speed or fragile bottles
- Programmable Logic Controller and operator interface (HMI)
- Oppti.Pure MPs extraction and decontamination system (via UV lamp or pulsed light)
- Vacuum before capping
- Electric or steam heating system for Twist-Off application
- Servo technology
- Single or dual turret configuration

(\*) depending on the range chosen



# Capping turrets

Zalkin capping turrets are designed to be mounted onto a monobloc filler and are adapted to the pitch of the filler. They can be equipped with 3 to 48 heads and offered in pitch circle diameters up to 2000 mm. They are suitable for roll-on, screw-on, push-in, and snap-on capping.



## Screw-on Capping Turret

- For application of plastic screw caps to containers.
- Pick and Place technology with transfer starwheel with pockets or pegs.



## Roll-on Sealing Turret

- For application of roll-on aluminum caps with short and long skirts onto glass or aluminum/metal bottles.
- Direct pick-off of caps by bottle (cap transfer).



## Push-In / Snap-On Capping Turret

- For application of a wide variety of push-in and snap-on closures to containers.
- Pick and Place technology with transfer starwheel with pockets or pegs.

### MACHINE OPTIONS (\*)

- Various cap inspection and rejection control systems of misapplied or missing caps
- Head space steam or nitrogen injection systems
- Oppti.Pure MPs extraction and decontamination system (via UV lamp or pulsed light)
- Vacuum before capping
- Available with electrical package for Atex or EEx classification
- Ultra-clean configuration
- Servo technology

(\*) depending on the range chosen



# Linear freestanding machines

Zalkin inline cappers are ideal for space-constrained lines and speeds up to 300 cpm. They handle both screw-on and snap-on closures with flexible, versatile operation. The linear system ensures smooth and consistent cap application with its optimized container transfer.



## Pro.Cap FTM-300 Automatic Capper

A single-head inline chuck style capper that gently handles large format containers for food, agriculture, and chemical industries.

- Washable machine base to comply with health regulations.
- Servo Motor for machine main drive works in conjunction with servo conveyor drive for optimized container indexing and gentle handling to prevent product spillage.
- Servo capping heads ensures quality by providing real-time torque monitoring enabling 100% inspection of closure application.



## Pro.Cap FTM-300 TANDEM Inline capper

The FTM-300 TANDEM capping machine features dual capping heads which provide a 50% increase in operating speeds.

- Up to 36 cpm on 35# JIB containers compared to only 24 cpm on a single head FTM-300 Capper.
- Dual Picking Pegs on the Cap Transfer Arm transfer two caps at a time to the heads from a single cap chute allowing a singular cap feeding system.
- Features Zalkin Servo Motor Capping Heads providing On-Line Torque Monitoring enabling 100% Torque Inspection.
- Integrated Zalkin Waterfall Cap Orienter gently orients and elevates caps with no usage of compressed air resulting in energy savings.



## Master.Cap Linear capper

Zalkin's linear capper combines compact design with exceptional versatility in one equipment

- Screw-on, snap-on, and roll-on sealing closures, dosing, pumps, and spray triggers.
- Advanced robotics and vision systems.
- "Pilgrim-step" transfer system.
- Limited changeover format parts.
- Tool-free adjustments.



# Capping heads

Used to position the cap on the bottle. Hysteresis, Magnetic and servo technologies for an accurate and smooth capping process.

ZALKIN HEADS	TYPE	APPLICATION & ADVANTAGES
BM5 / M5	SCREW-ON CAPPING	<b>Magnetic Screw-On Capping Heads (M Series)</b> <ul style="list-style-type: none"><li>• Flexible and robust</li><li>• Torque ensured by two concentric permanent magnets</li><li>• Graduated torque settings</li><li>• Torque range up to 55 inch pounds</li></ul>
BH5 / H5 / H6	SCREW-ON CAPPING	<b>Hysteresis Screw-On Capping Heads (H Series)</b> <ul style="list-style-type: none"><li>• Smooth (non-ratcheting) magnetic torque control</li><li>• Accurate and repeatable application torque</li><li>• Standard quick release chucks or jaws</li><li>• No tool, quick change torque adjustment</li><li>• Available in low-maintenance all stainless steel</li><li>• Three torque ranges up to 52-inch pounds</li></ul> <b>H6 Heads</b> <ul style="list-style-type: none"><li>• Designed and developed to meet the specific requirements of beverage industry</li><li>• Watertight design</li></ul>
81 / 97 / 104	ROLL-ON CAPPING	<b>For Aluminum Roll-On Closures On Aluminum and Glass Bottle</b> <ul style="list-style-type: none"><li>• Stainless-steel construction</li><li>• Heads available in different diameters: 81 mm, 97 mm, 104 mm (Lube Free version available)</li><li>• Fitted with thread rollers and/or tuck-under rollers for closure application</li><li>• Incorporates no cap/no roll mechanism</li></ul>
VS 110	SCREW-ON & ROLL-ON CAPPING	<b>For Wine and Spirits Industry</b> <ul style="list-style-type: none"><li>• Dual function cap application (screw-on and roll-on)</li><li>• Quick release head</li><li>• Cap pick-up with jaws</li><li>• Screw-on capping via hysteresis coupling</li><li>• Toolless torque adjustment</li><li>• Excellent repeatable torque</li><li>• Roll-on operation via arms and tuck</li></ul>
CAPCO / TPV	PUSH-IN AND SNAP-ON CAPPING	<b>For Snap-On Lids and Push-In Plugs</b> <ul style="list-style-type: none"><li>• Fully adjustable for varying top load requirements</li><li>• Friction grip chuck or TPV solid, vacuum-assist chuck for shaped or very thin, flat caps</li><li>• No tool quick change chucks available</li></ul>
DRZ / DRB	DECAPPING	<b>For Plastic or Aluminum Caps</b> <ul style="list-style-type: none"><li>• Equipped with 4 arms or jaws</li><li>• No cap, no grip safety system</li></ul>
	SERVO CAPPING	<b>For Screw-On or Push-in and Snap-on Closures</b> <ul style="list-style-type: none"><li>• Application of a constant torque</li><li>• Centralization of remote torque adjustment</li><li>• Traceability of each head and bottle</li><li>• Indexing system for orientation of the closure before application</li></ul>





# Capping heads

The high-performance heart of Zalkin cappers! Our capping heads deliver reliable, repeatable and accurate closure application.

## Screw-On Capping



M5 SCREW-ON CAPPING HEAD  
WITH JAWS OR CHUCKS



H5 SCREW-ON CAPPING HEAD  
WITH JAWS OR CHUCKS



H6 SCREW-ON  
CAPPING HEAD

### Magnetic standard

### Magnetic Hysteresis

## Roll-On Capping



104 ROLL-ON HEAD



VS110 SCREW-ON &  
ROLL-ON HEAD

## Push-in & Snap-On Capping



CAPCO PUSH-IN  
CAPPING HEAD



TPV SNAP-ON  
CAPPING HEAD

## Servo Capping



SERVO CAPPING HEAD

## Decapping



DRB HEAD



DRZ HEAD



# Bulk cap handling

Storage and feeding equipment for non-oriented caps. Standard or customized configurations to suit different packaging line layout.



## Octabin Tilter (Pro.Load)

- Back, lateral or 45° loading.
- US or European pallet with conversion kit.
- Air free and maintenance free.
- 304L stainless steel execution.
- Max loading height of 1400 mm.



## Storage bin (Oppti/Pro.Load)

- Storage capabilities from 50l up to 3000l.
- To be combined with our range of elevators (Lift).
- Loading height of 1100 mm.
- 304L stainless steel execution.
- HDPE coating for fragile capsules.
- Air overpressure in option.
- Oppti.Load: Additional storage bin with modular design for increments of 250l (Max 4x250l).



## Elevators (Oppti/Pro/Master.Lift)

- Vertical/Inclined/Inclined horizontal configurations.
- Dumping height: from 1650 mm up to 6000 mm.
- Belt width: from 150 mm up to 400 mm.
- Optional packs available (fragile caps, enhanced hygiene,...).
- Optional air overpressure.



## Conveyors (Oppti/Pro/Master.Way)

- Mechanical (belt or chain) and air conveyors.
- FDA & UFDA certification.
- Belt width: from 150 mm to 400 mm.
- Drain trap in standard.
- Optional air overpressure.
- Single or twin outlet.



# Cap Orienting

Cap orientation systems for screw-on, roll-on, push-in and snap-on closures.



## Oppti.Select

**Wide range of caps for the most common uses. Packs and options available depending on market specificities.**

### Rotary

- CA 12: up to 35,000 caps per hour.
- GC3 & GC12: up to 90,000 caps per hour.
- Universal (300 – 1500): up to 45,000 caps per hour.

### Gravitary

- Vertical waterfall: up to 120,000 caps per hour.



## Pro.Select

**Advanced caps orientation solutions, energy savings, easy access and large capacity.**

### Rotary

- Ecotwin ET 800: up to 35,000 caps per hour, air free depending on the cap design.
- Universal (500-750-1000) with energy saving or fully automated changeover.
- Universal 2000: up to 60,000 caps per hour.

### Gravitary

- Waterfall Z-Cascade: up to 120,000 caps per hour, single or twin track.



## Master.Select & Robotics solution

**Specific and customized orienting systems to meet the most complex needs.**

- For pumps, triggers, droppers or sensitive closures.
- Fully automated changeover capability (Feed-Flex).
- Picking from rotary table (bulk) or from trays.
- Contactless transport system for sensitive caps.



# Oriented cap conveying & buffering

The oriented closures are conveyed to the capping area.



## Oppti.Stock rotary table

**Rotary table:** often used for beverage, pharmaceutical or food.

- Storage capacity: about 520 caps (ø55mm).
- Max output: 44,000 cph.
- Food-grade material.
- Smooth cap handling.
- Transparent protection cover.



## Pro.Stock vertical and horizontal buffers

**Vertical buffer:** compact design, installed on the monobloc filling enclosure.

- Max output: 110,000 cph.
- Plastic caps: flat and sport.
- $32 < \text{Cap } \varnothing > 50\text{mm}$
- $8 < \text{Cap H} > 16\text{mm}$
- Located outside the wetland area of the line.

**Horizontal buffer: single/twin track**

- Max output: 120,000 cph.
- Plastic caps: flat and sport.
- $20 < \text{Cap } \varnothing > 45\text{mm}$
- $10 < \text{Cap H} > 55\text{mm}$
- Single track: up to 1700 caps.
- Double track: Up to 940 caps/track.
- Located outside the wetland area of the line.



## Pro.Way cap conveyors

- Single-lane conveyor: used to transfer oriented closures from a floor-mounted rotary sorter to the capper's sweep starwheel (Pick & Place).
- Air conveyor: used in conjunction with remotely-located waterfall cap orienter/elevator or stand-mounted rotary sorter to transport oriented closures to the capper.





# Inspection & control

Zalkin offers quality control equipment to help with line efficiencies.



## Oppti.Secure embedded control sensors

- Caps defect.
- Foil presence.
- Crooked caps on bottles.

## Pro.Secure ZC-PRISM

**Pre-Inspection & Sorting Module** has been developed for high speed detection and control of defective caps.

- Up to 2,000 cpm (120,000 cph).
- Single camera station and cap defect detection system.
- Cap diameter from 20 to 50 mm / Cap height from 5 to 40 mm.
- Between cap orienter & capper or cap orienter & buffer.



## Pro.Secure Zalkin calibration tools

### • Torque Calibration Tool (TCT)

Designed specifically for plastic screw-on caps, the TCT accurately measures both the application torque of capping heads and the removal torque of closures.

### • Roller Calibration Tool (RCT)

Engineered for aluminum closures, the RCT measures the lateral force of sealing rollers.

### • Shared Benefits

- Accurate, repeatable measurements.
- Complete traceability.
- Easy-to-use measurement reports.
- Reliable and operator-friendly design.



## Master.Secure advanced cap camera Inspection / AI

- Suitable for speed up to 24,000 caps/hour.
- High resolution single or multiple camera with HMI and control box.
- Defaults controlled (missing closure, cap height, cap shape, ...).



# Cap treatment

Zalkin offers cap treatment devices such as microparticle extraction or pulsed light systems to optimize the performance of your capping processes while maintaining the highest standards of hygiene and reliability.



## Oppti.Pure

- Oppti.Pure Mps extraction ionization/aspiration (cap chute/ buffer) - Optimum efficiency up to 3 log (99.9%).
- UV cap decontamination on the cap chute.
- Skid with vacuum and monitoring system.



## Pro.Pure

- Dust and Mps extraction from bulk cap handling equipment, cap orienters and conveyors (filtration H14 + suction).
- Dry decontamination
- Pulsed light decontamination by Claranor
- Nitrogen/steam treatment



## Master.Pure

- Steam treatment.
- Vacuum packaging process.



# Know how and expertise

As a trusted partner throughout the entire product lifecycle, Zalkin offers tailored services and dedicated laboratory expertise to support the development of your most innovative projects.



## Zalkin services

A full range of aftermarket service and technical support is available for every Zalkin capping system.

- Support, technical expertise and settings.
- Service contracts.
- Audits for preventive maintenance.
- On-site intervention, remote support.
- Rotational reconditioning.



## Spare parts and upgrades

Zalkin offers services to optimize inventory management, facilitate routine interventions on equipment. Maintenance is proactive, budget controlled and capping system is kept at rated speeds and quality standards.

- Replacement parts.
- Repair kits.
- Conversions on container & cap handling parts.
- Maintenance programs.



## Zalkin Training Center - ZTC

Our customers can benefit from on-site, hands-on training programs for freestanding and monobloc capping systems.

You will acquire new skills to:

- Understand how Zalkin capping heads operate.
- Master adjustments and settings.
- Identify and troubleshoot malfunctions.
- Perform preventive maintenance.



## Zalkin Center of Expertise - ZCE

Whatever the configuration of your packaging line, we can help you implement the right solution for your equipment and develop new projects.

- Capping line audits.
- Laboratory test.
- Cap design and neck finish validation.
- MPs protocol.
- Complete reports.





# WHAT MAKES ZALKIN UNIQUE?



## Sustainable development

We do what it takes to accelerate the development of your sustainable packaging with scalable and cutting-edge technologies.



## Adaptive customization

We listen to your specific capping needs to implement a unique solution that meets your current and future requirements.



## Dedication to quality

We always strive to improve the quality of our solutions and raise up our standards of hygiene and safety, to guarantee your product's integrity.



## Customer care

We engage early to get a deep appreciation of how our services support your packaging project through your entire Zalkin equipment lifecycles.

## The Greatest reward is your loyalty!

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