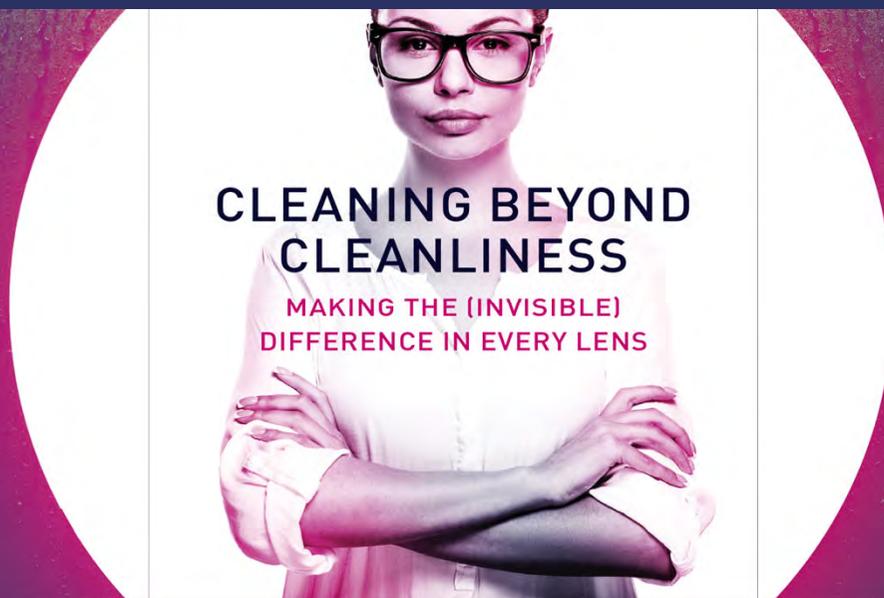




In ophthalmic lens cleaning – aside from cleaning quality – cleaner consumption, waste volume and maintenance costs are equally important factors.

Our cleaning solutions ensure every factor makes a difference.

[www.safechem.com](http://www.safechem.com)



- UNCOMPROMISED CLEANING QUALITY |
- REDUCED CLEANER CONSUMPTION |
- REDUCED MAINTENANCE COSTS |
- REDUCED WASTE VOLUME |

[www.safechem.com](http://www.safechem.com)

# SUSTAINABLE CLEANING IN OPHTHALMIC LENS MANUFACTURING

Milano, February 10th, 2025

## CLEANING BEFORE INSPECTION: EXAMPLES

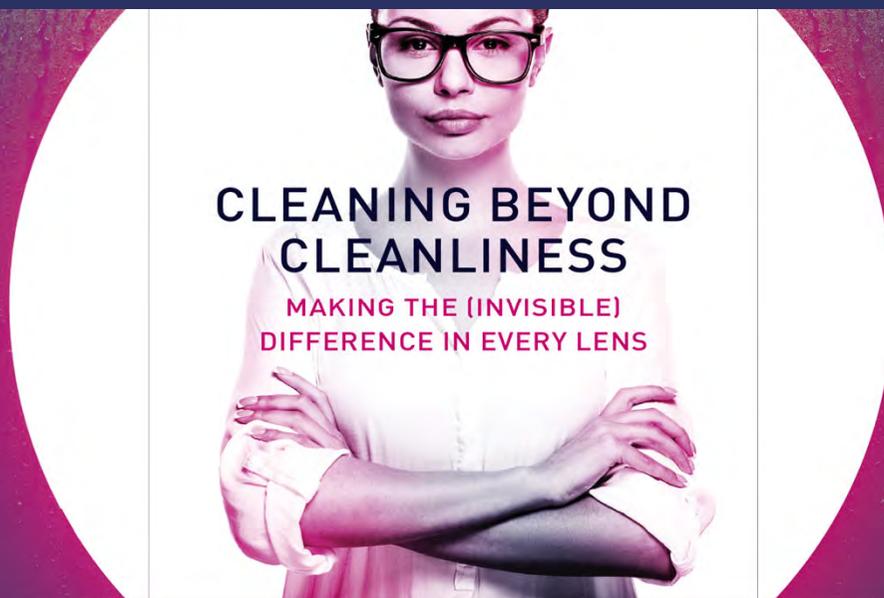




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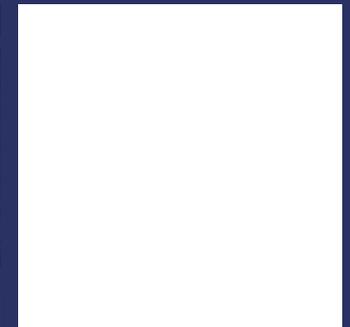
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# SUSTAINABLE CLEANING IN OPHTHALMIC LENS MANUFACTURING

Milano, February 10th, 2025

# AGENDA

- 01 – SAFECEM
- 02 – Ophthalmic Lens Manufacturing
- 03 – Sustainable Cleaning Before Inspection with XZ O5-17
- 04 – SAFECEM Cleaners



# 01 - SAFECEM

Your partner for ophthalmic lens cleaning:

More than 30 years of experience in cleaning with strong customer focus resulted in deep application know-how and expert knowledge.

Full-Service offering:

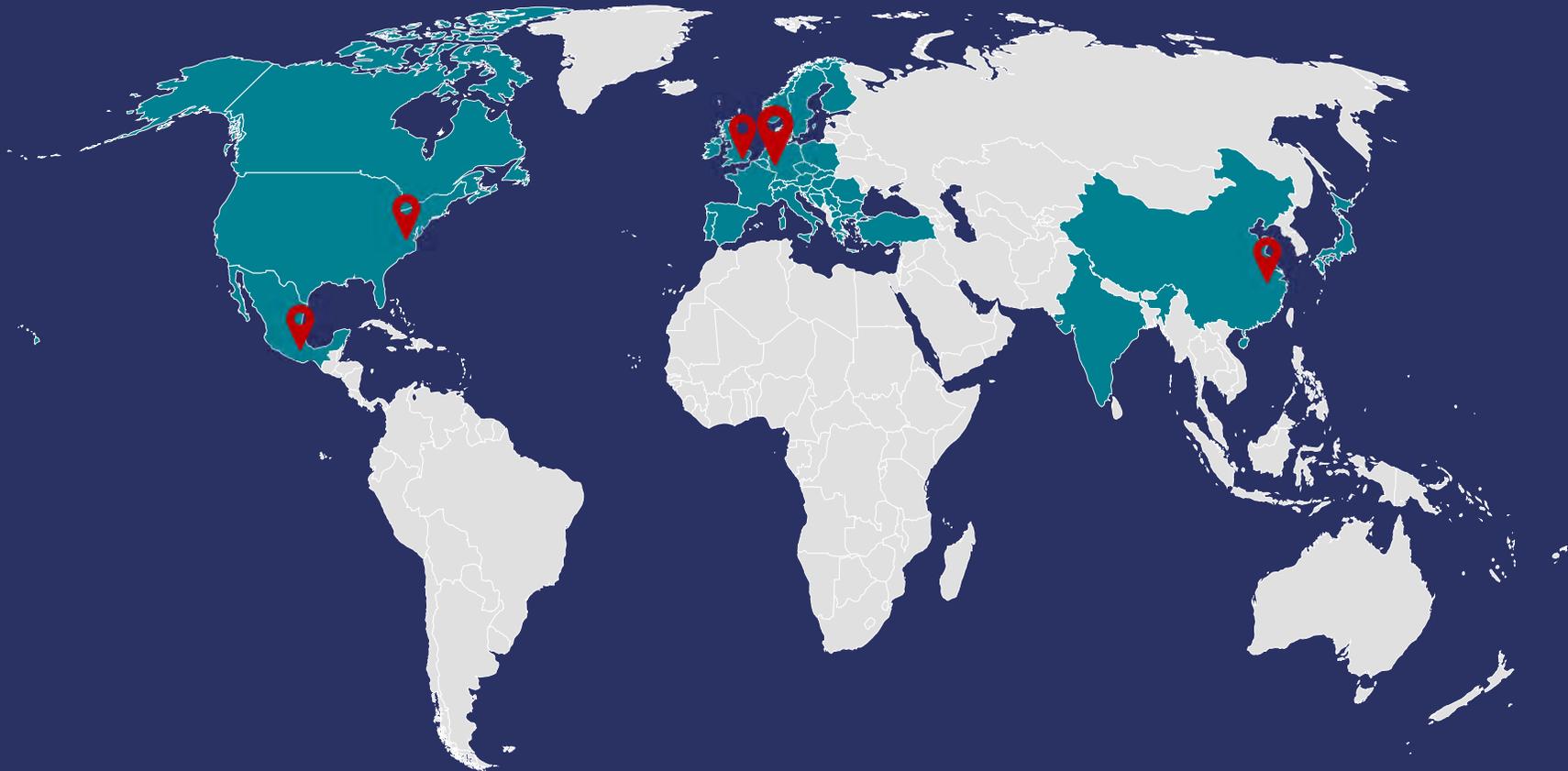
- Specialized aqueous- and solvent-based cleaner portfolio
- Development of tailored customer processes
- On-site support for trials and process set-up
- Lab Services

Since 2024: part of

**ITELYUM** , a champion for the circular economy

- Leader in the generation of used oils as well as recovery and purification of used solvents
- Offers integrated environmental services to industrial waste producers

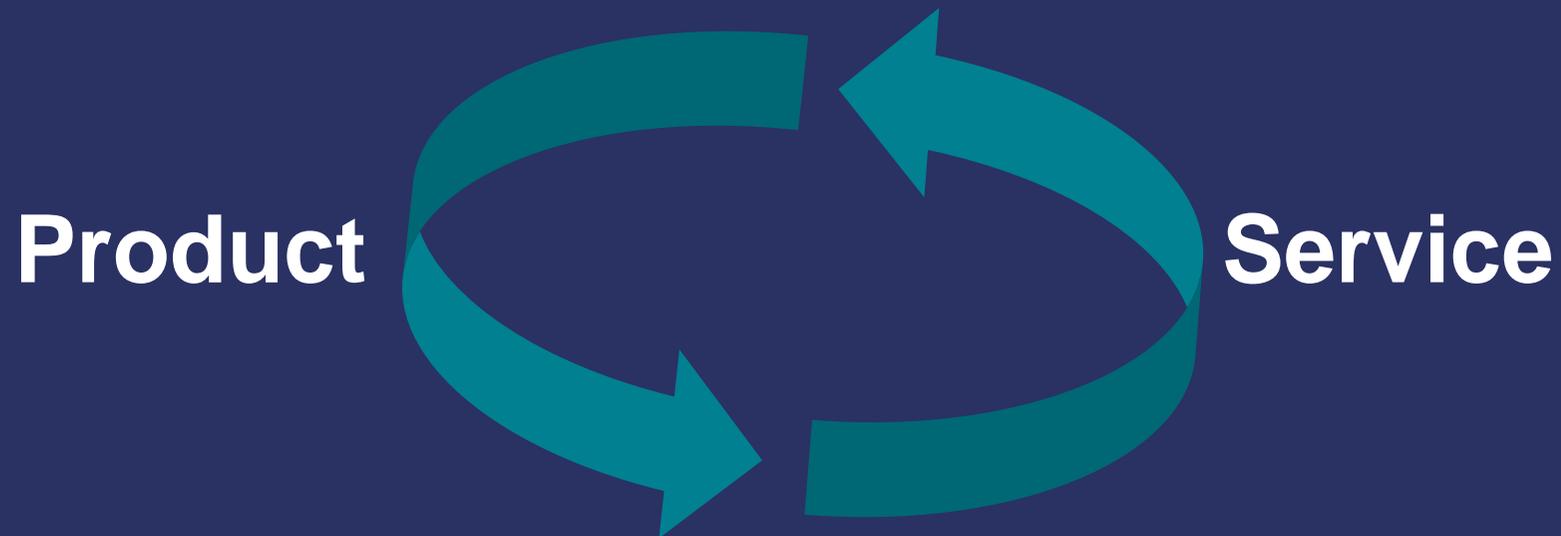
# SAFECEM LOCATIONS



*SUSTAINABLE* CLEANING IS THE  
CORE OF OUR BUSINESS

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## AT SAFECEM WE LIVE SUSTAINABILITY



Cleaner Consumption has  
Been Reduced by **80%**.



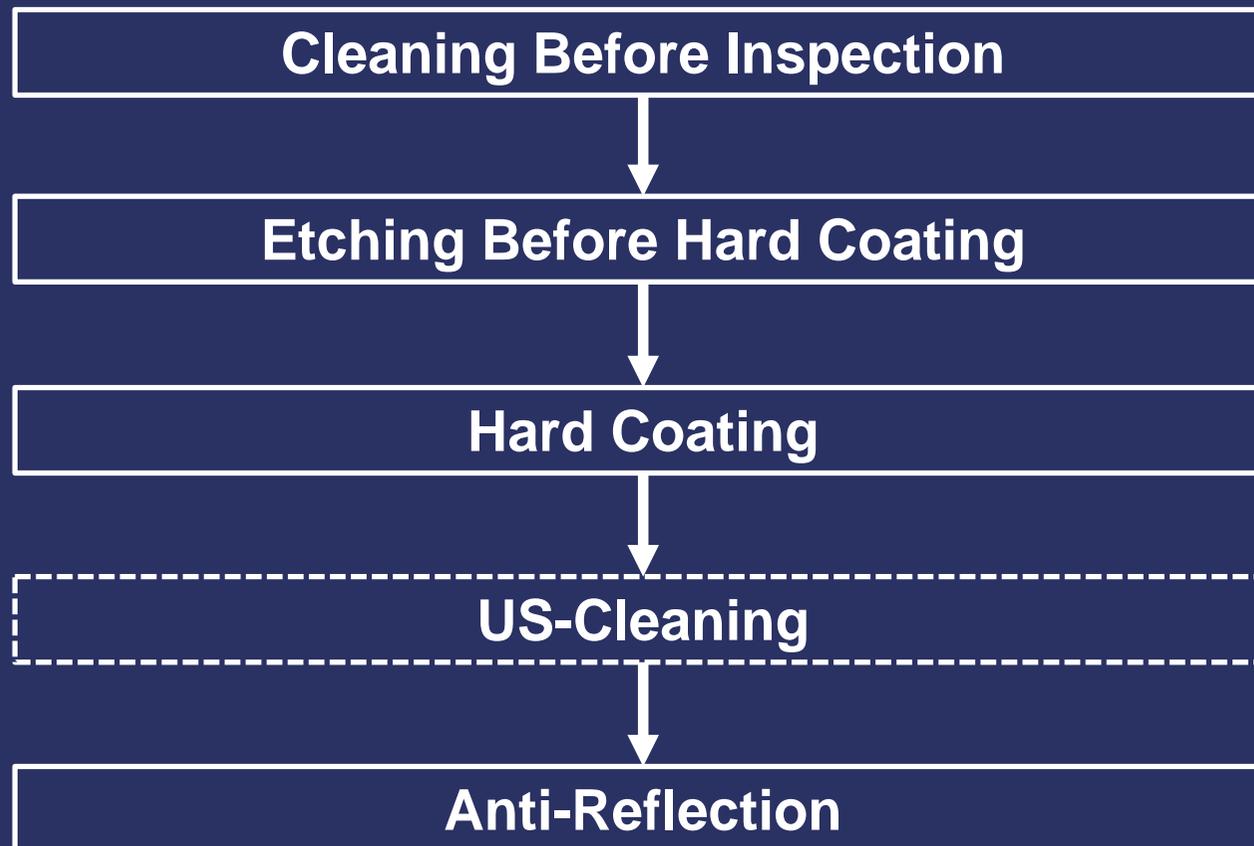
Volume of Waste Requiring  
Disposal was Reduced by **90%**.

# 02 - OPHTHALMIC LENS MANUFACTURING

# OPHTHALMIC LENS MANUFACTURING PROCESS



# OPHTHALMIC LENS MANUFACTURING PROCESS



# CLEANING CHALLENGES

Partial Cleaning Effectiveness Due to...

... Adhesive Residue,

... Progressive Marks,

... Polishing Agents,

... Particles,

... Splinters,

... Fingerprints,

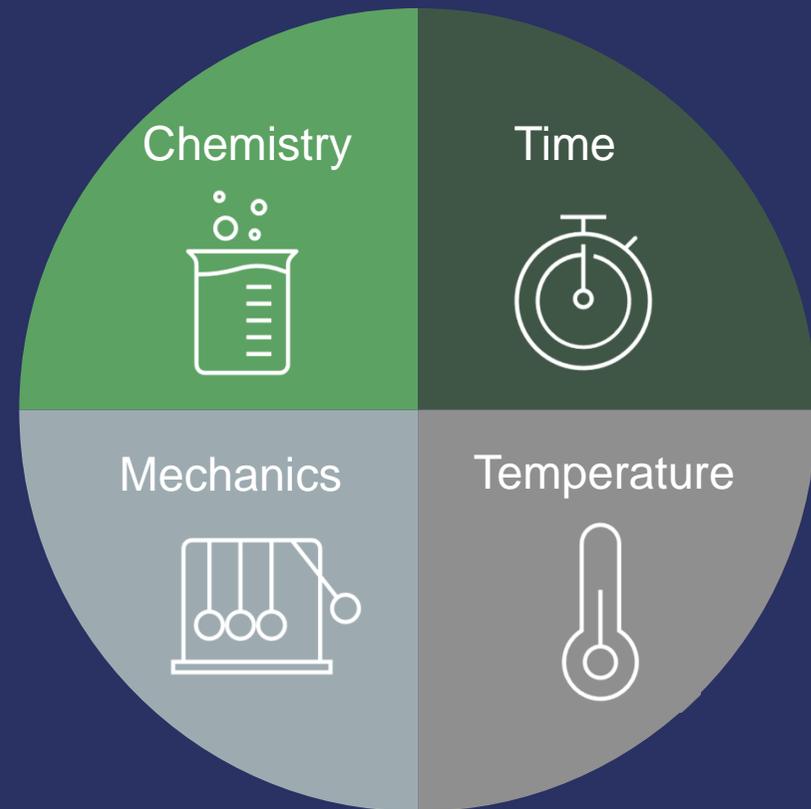
... Lubricants,

... Coolants,

... etc.

## 4 FACTORS FOR SUCCESSFUL CLEANING

***SUCCESSFUL  
CLEANING IS  
THE RESULT OF  
4 FACTORS***



# 03 - SUSTAINABLE CLEANING BEFORE INSPECTION WITH XZ 05-17

## CLEANING BEFORE INSPECTION: EXAMPLES



## CLEANING BEFORE INSPECTION

Cleaning Before Inspection is Subject to Following Contamination:

- Adhesive Residue
- Progressive Marks
- Polishing Agents
- Splinters

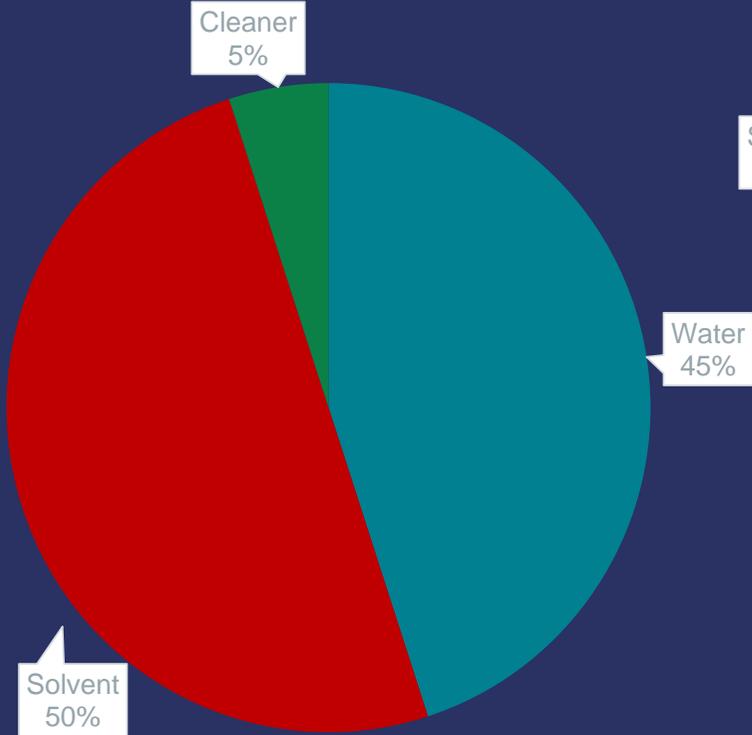
→ **SAFECHEM Solution: XZ O5-17**



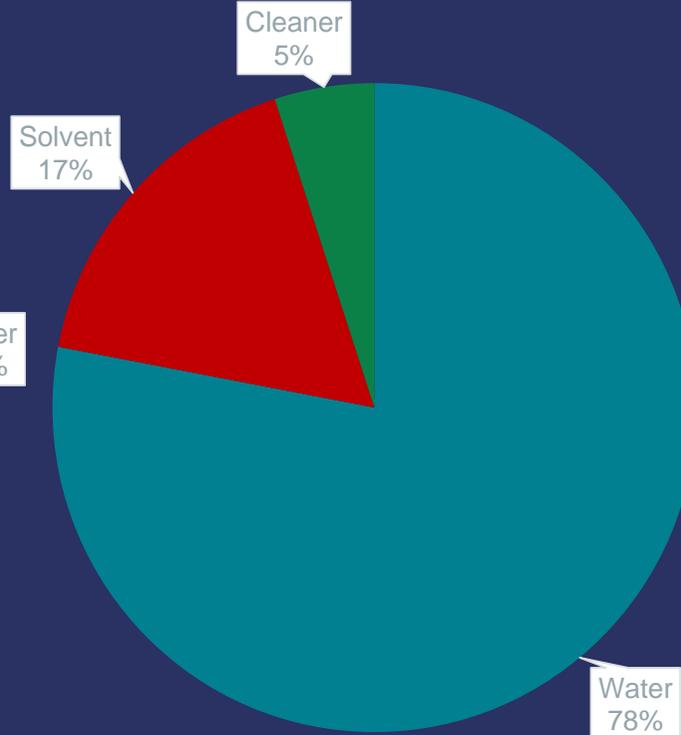
Own Picture of a Brush Cleaning Machine

# CLEANER COMPOSITION

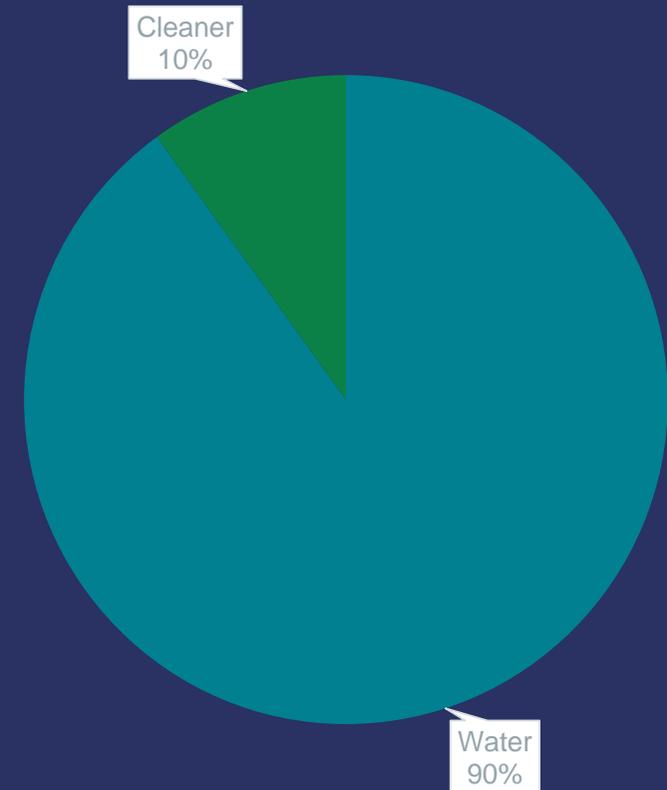
Case 1



Case 2



SAFECHEM's XZ O5-17

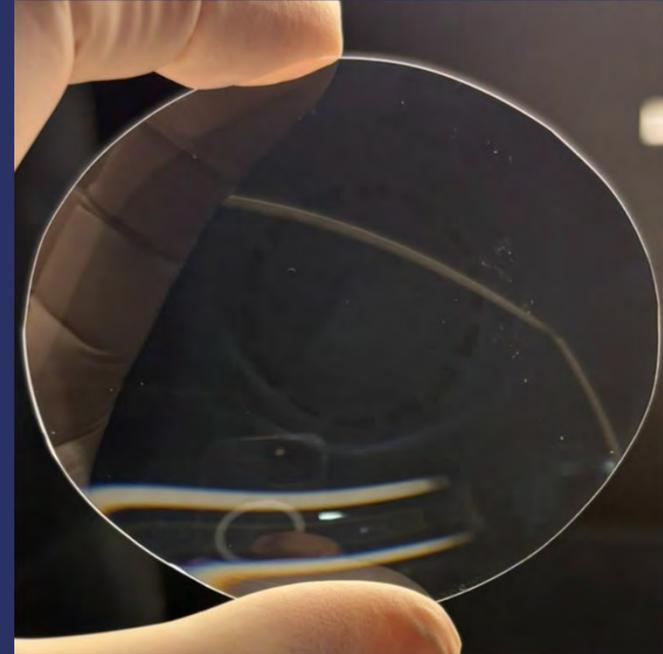


# SUSTAINABLE CLEANING PROCESS WITH SAFE CHEM



## UNCOMPROMISED CLEANING EFFECTIVENESS

- Improved Cleaning Effectiveness



## REDUCED CLEANER CONSUMPTION



- **One-Component Solution**
- **Lower Chemical Carry-Over Into Rinse Stages**
- **Long Lasting Cleaning Tank**

## REDUCED MAINTENANCE COSTS



- **High Process Stability**
- **Increased Lifespan of Machine Filters and Brushes**

## REDUCED WASTEWATER



- **Less Hazardous Wastewater**
- **Decreased Resources Dedicated to Waste Disposal**

# 04 - SAFECEM CLEANERS

# SAFECEM CLEANER PORTFOLIO

CLEANING APPLICATION	SAFECEM CLEANER
Cleaning of Semi-Finished Products	XZ O5-12 XZ O5-16
Mold Cleaning	XZ O5-17
Cleaning Before Inspection	Brush Cleaning Machine: XZ O5-17 Ultrasonic Cleaning Systems: XZ O5-09, XZ O5-12, XZ O5-16
Cleaning Before Hard Coating	XZ O5-12 XZ O5-16
Dyeing	XZ O5-14
Deblocking	XZ O5-16 XZ O5-19

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Website: <https://drkhuen.de>

### Some of Our References:





**SAFECHEM**

be responsible