

EcoCnews

Winter 2023

Introduction



In an industry where standards and technologies evolve rapidly, staying ahead means embracing change. This year, our Group has responded proactively by expanding our portfolio of solutions to meet the dynamic needs of the market.

- We continued to develop in the MedTech, Precision Cleaning and High Purity sectors. The initiatives in these key sectors have broadened our horizons, allowing us to apply our renowned parts cleaning expertise in new and exciting ways. Developing our product range to meet the highest cleanliness requirements of these fields stands as a testament to our adaptability and vision.

- We have ventured into hydrogen technology, recognizing and embracing its potential to shape a sustainable future.
- We have held numerous online webinars, as well as seminars and training sessions at our subsidiaries and Test Centers. These events have been key in sharing knowledge and discussing the latest trends – since knowledge is our greatest resource.
- On the global stage, our presence at various trade fairs allowed us to present our solutions and keep in touch with our customers. These events were a melting pot of ideas, giving us fresh perspectives that fuel our strategic decisions. We were happy to meet you all over Europe and in Mexico, USA, China and India.
- At the same time, a lot has happened at our sites worldwide. We have moved offices and plants in Silao, Mexico, and Pune, India, to find the perfect environments for our research, engineering, and administration teams.
- In Switzerland, we celebrated 30 years of the UCM AG – a great milestone!
- Throughout all these endeavors, we have remained true to our core identity: providing state-of-the-art equipment and systems for industrial parts cleaning and surface processing.
- As we look ahead, we do so with the confidence that comes from a year of solid performance and the excitement of embracing new opportunities.

Here's to another year of innovation, growth, and excellence.

Our Group at parts2clean: future-proof solutions

A virtual showroom, live demonstrations, and expert presentations – at the parts2clean fair in September in Stuttgart, Germany, Ecoclean and UCM presented our optimally tailored innovative product, training and service range. Once again, we have been able to demonstrate that parts cleaning is key to product quality and adds significant value for our customers. High-tech industries such as semiconductor, medical and precision optics rely on the efficient and reliable removal of ultra-fine submicron or even nanoscale contaminants. And the demands continue to grow: there are countless cleaning tasks with product- and industry-specific cleanliness requirements.

At the parts2clean, our visitors were also able to discover how we can help them achieve their energy efficiency and sustainability goals.

Live demonstrations in the field of High Purity and aqueous parts cleaning

We presented our UCMSmartLine live – a modular, immersion-type ultrasonic system with up to nine wash and rinse stages. It demonstrates how standardized modules for the process steps of washing, rinsing, drying, loading and unloading, as well as flexible part transport systems, can be combined to create solutions that meet even the highest cleanliness requirements.

In addition, our powerful spray flood cleaning system with a vacuum sealed working chamber, the EcoCwave machine, demonstrated live the various features and process options for tasks ranging from pre-cleaning, intermediate, final and precision cleaning. These included standard and custom chamber systems for aqueous and solvent-based cleaning, as well as multi-chamber immersion cleaning systems. With the use of upright cylindrical flood tanks, it ensures optimized fluid management and high flexibility.

New virtual showroom: explore our parts cleaning systems from around the world

Besides showcasing our existing products in new tasks and contexts, a highlight was our brand-new virtual showroom. It is a combination of a three-dimensional environment with virtual reality: with a VR headset and an individual avatar, visitors can explore even the smallest details of our cleaning equipment and systems in 3D and visit almost every location of the company. During the virtual tour, customers can share their camera or screen – it is like a meeting in a three-dimensional world. And perhaps best of all: customers can watch cleaning trials live from anywhere in the world.

As always, our showcased range of advanced solutions and services are ready to serve our customers and their and future current needs.



Inside our High Purity Test Center

High Purity component cleaning is essential to ensure the removal of microscopic contaminants that are critical to high-tech industries such as semiconductor manufacturing, precision optics, aerospace, laser, scientific-metrology, and other high-tech components. Recognizing the changing and industry-specific requirements of industrial parts cleaning, the SBS Ecoclean Group has added new products and services to its



portfolio of cleaning machines and systems designed specifically for High Purity cleaning applications. Our state-of-the-art solutions for High Purity applications are made visible to our customers in our High Purity Test Center in Dettingen-Teck, Germany – one of our 15 existing Technology Centers worldwide. This facility has been created to carry out cleaning trials on high-tech components with the highest cleanliness requirements.

Making High Purity cleaning visible

Customers can experience our solutions in a realistic environment at our High Purity Test Center. It consists of a total of five cleaning systems specially equipped for High Purity cleaning tasks. These systems cover all the technologies, media and processes required for wet chemical parts cleaning. The benefits: up-front assessment of process requirements and cleaning results in advance, as well as an individually designed and optimized cleaning process for each component.

To learn more about our High Purity Test Center and the critical role of High Purity in component cleaning for cutting-edge industries, just have a look at our behind-the-scenes video. For key insights, and a guided tour through our facility: [Watch now!](#)

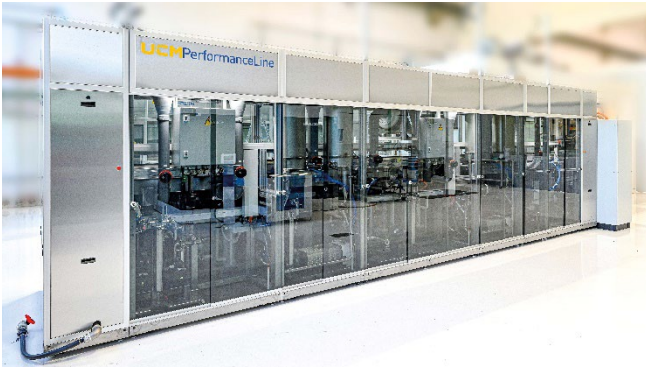
Advancing MedTech cleanliness



Medical Technology encompasses a wide range of healthcare products used to diagnose, monitor, and treat medical conditions and diseases. This includes devices, machinery, and advanced solutions that improve patient care and are decisive for health outcomes. The cleanliness of medical products such as implants, instruments, cannulas and endoscopes is of highest priority.

Monitored ultrasonic frequency and output

The SBS Ecoclean Group brands Ecoclean and UCM specialize in advanced cleaning systems for medical devices, particularly in the field of endoscopy. UCM offers the UCMPerformanceLine, an ultrasonic multi-chamber immersion cleaning system, which is crucial for maintaining the high standards of cleanliness required for optical lens systems in medical endoscopes. The UCMPerformanceLine is designed for the efficient and precise cleaning of small, delicate parts such as coated lens systems, ensuring they meet stringent cleanliness specifications. The system features modular design for customized cleaning processes, automated parts transport, and is directly connected to a cleanroom. Our UCMPerformanceLine is a great example for focusing on innovative technology, sustainability, and precision: our



solutions support the production of high-quality medical devices, contributing to better diagnostic and therapeutic outcomes in healthcare.

Our MedTech Test Center in Monschau

At our Test Center in Monschau, Germany, the SBS Ecoclean Group makes the latest turnkey solutions and innovative parts cleaning and surface processing equipment available for trials. In addition to the well-known infrastructure already

available at this location, an exclusive medical technology area has been created to support medical device and implant manufacturers with new advanced cutting-edge solutions.

The MedTech Test Center offers a range of solutions for cleaning and packaging medical implants and instruments. Our complete portfolio, from single-chamber solvent and water-based systems to multi-stage ultrasonic cleaning machines, is used to evaluate the best process for our customers. As one of the biggest challenges for manufacturers in the medical device component industry is keeping up with the ever-changing regulatory environment, the SBS Ecoclean Group offers qualified support to meet the requirements and a recalibration service to bring production up to date. Always in compliance with the latest MDR and FDA regulations.

We are well equipped for your cleaning challenges – with turnkey validated and standardized processes!

Let's make it all tangible: case studies

To conclude, we present two case studies, the first one is about Precision Cleaning of optical parts for the medical industry. In the field of medical endoscopy, the quality of optical lens systems is crucial for reliable diagnoses. This case study introduces a renowned manufacturer of coated precision optics who opted for a UCMSmartLine for the final cleaning of precision optics. The company needed a solution that would meet high cleanliness standards and annual throughput targets. Find out why the SBS Ecoclean Group had the best option for the final cleaning step: [read the case study](#).

The second case study shows how the newly developed Acoustic Performance Measurement (APM) system provides in-line monitoring of the parameters of ultrasonic frequency and output at each processing station for each parts cleaning batch. Learn how a global manufacturer of knee implants replaced its intermediate and final cleaning equipment with UCMPerformanceline to meet MDR and FDA regulations and requirements for product safety, process validation, and quality management: [read the case study](#)



Local production worldwide: profiling Ecoclean in India and China

All around the world, companies under the SBS Ecoclean Group are committed to provide comprehensive industrial parts cleaning solutions with a strong emphasis on global after-sales service and proximity to customers. Let us introduce you to our local subsidiary manufacturing facilities in Pune, India and Shanghai, China. In India, 2023 was a year of highlights: Besides relocating to a newer, larger, and more modern facility, Ecoclean Pune has merged with the Group member Mhitraa Engineering Equipments Pvt. Ltd.

For the company profile of Ecoclean India, we sat down with representatives of the local management, Mangesh Agarwal, Managing Director, and Manoj Velhal, Sales Director, to hear about the specialties of our subsidiary in Pune and their achievements in 2023.

What's the story behind Ecoclean India in Pune?

Mangesh Agarwal: "We have locations in Delhi, Chennai and Pune offering solutions for Batch Cleaning, Single Piece Cleaning, Precision Cleaning & Surface Processing. In Pune, we have established a state-of-the-art Technology Center with dedicated machines to conduct cleaning trials for our customers and a high-end Millipore laboratory within our cleanroom facility. Since 2012 we have installed 200 machines 'made in India'."

What milestones has Ecoclean India achieved in 2023?

Manoj Velhal: "One of our biggest milestones in 2023, of which we are quite proud of, is the inauguration of our new and larger manufacturing plant in Pune. The new location reflects our growth and standing in the local market."

Mangesh Agarwal: "This coincides with the start of the merger of Mhitraa Engineering headquartered in Chennai. This is an important strategical step towards the diversification of our machinery and expansion of our services! Mhitraa is the South Indian specialist in industrial parts cleaning, including parts such as cylinder heads, crankshafts, gears, housings and other miscellaneous parts. It will help us serve the Indian market best."

News from our Ecoclean manufacturing site in Shanghai

In China, we are also adapting to local needs and the constant changes in this dynamic market. In 2023, we highlight the changes to our Universal 81W which is a versatile parts cleaning system that can be used to remove oil and emulsion from mass-produced parts or even for fine clean assembly parts. An overview:

- Upgrade of the Universal 81W to 81W XL
- The 81WXL is now able to accommodate larger parts cleaning with its larger work chamber and a larger liquid storage tank to meet customer needs

We also introduced changes to our Universal 81 CP which is an innovative product designed for parts of varying sizes and capacity requirements:

- Upgrade of the Universal 81 CP to 81 CP XL
- Development of the 81CP XL in order to enhance our range of choices for our Chinese customers



Sharing knowledge: Getting ahead

From academy courses over in-house events to training for stakeholders around the world – sharing knowledge gives us a competitive edge. We want to give everyone a head start by preparing them to get the most out of our technology and to achieve the best possible cleaning results.

Our Ecoclean Academy: knowhow is essential

Due to the complexity and specific issues involved in industrial component cleaning, we offer a number of training modules at our Ecoclean Academy that are tailored to the needs of our customers.

We organize customized online or on-site seminars that address specific and individual training needs at the time and on the schedule our customers require. In addition, at our Center of Competence Filderstadt, we teach the basics of performing a professional cleanliness analysis, as well as two-day intensive training courses that combine theory and practice in industrial component cleaning. In this way, we want to ensure that our participants are able to make a holistic assessment of the issue of cleanliness in industrial component cleaning.

Spreading expertise globally

In February and April, we hosted free live webinars on the basics of solvent cleaning. Participants learned about the different solvents available, the basic design of solvent systems, and the regulatory, environmental, and safety requirements.



In the middle of 2023, we welcomed representatives to the “International Representative Meeting 2023” at our Filderstadt Center of Competence. For two days, the participants had the opportunity to visit the production facility in Filderstadt and the new High Purity Test Center in Dettingen. They attended presentations and participated in lectures. The level of detail and hands-on demonstrations provided allowed the visitors to gain a full understanding of the new machines and techniques.

Another great example of our knowledge sharing is Ecoclean India. Our colleagues have even launched their own newsletter, the “Industrial Cleaning Insider” on LinkedIn, where they give an inside scoop on industrial cleaning solutions.

In 2024, we will continue to share our passion for technology with you!