



**optimal**  
TECHNOLOGIES



## Precision Cleaning Range

Global Leaders in the Design and Manufacture of Multi-stage Ultrasonic Cleaning Systems

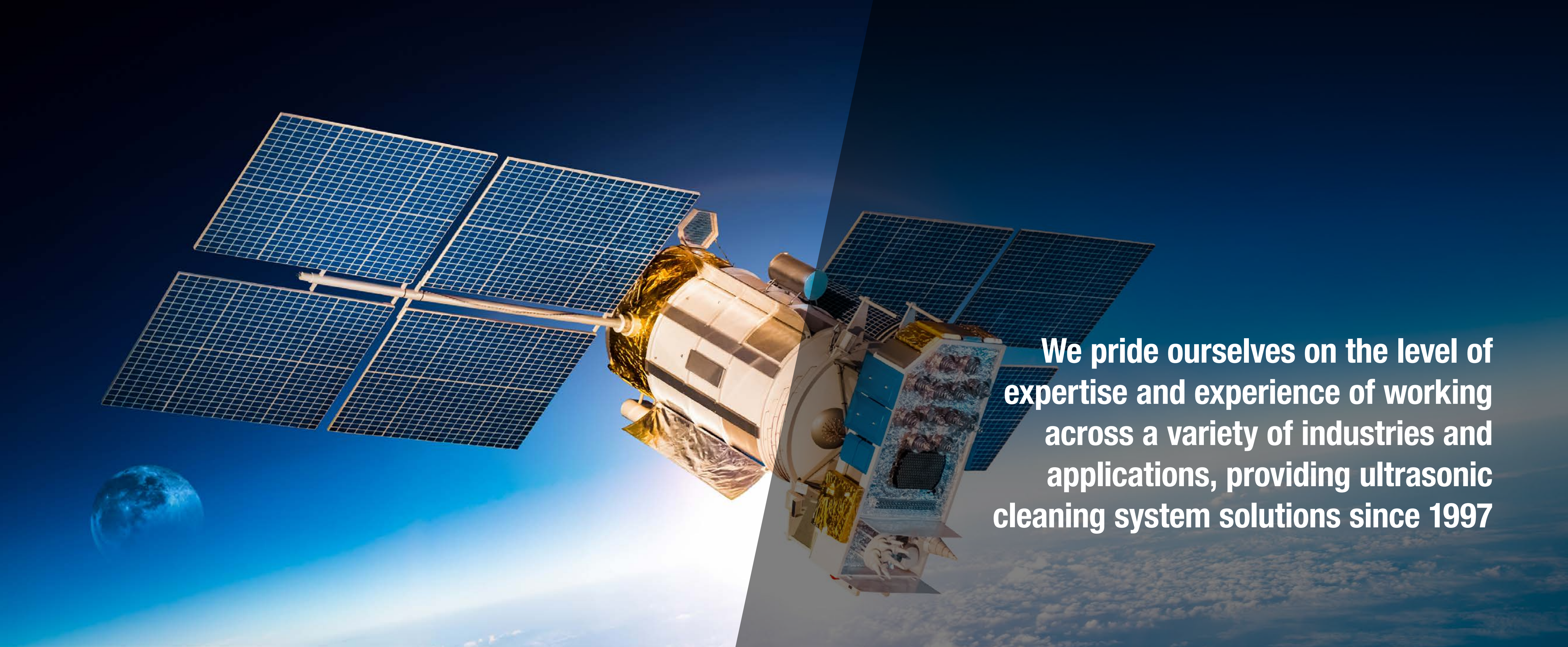
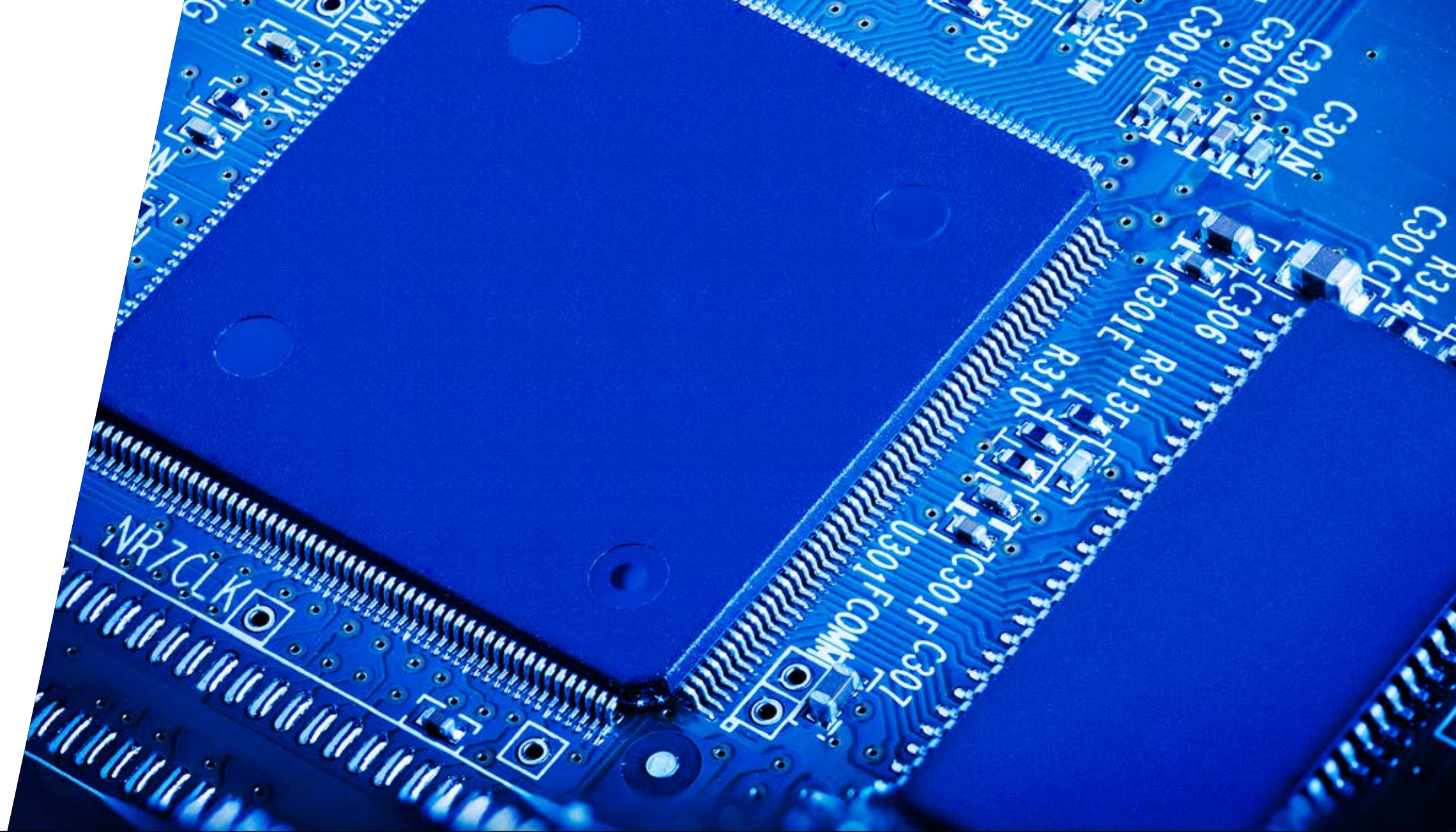


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# Expertise

Optimal Technologies are known globally as the leading supplier of ultrasonic cleaning systems into a variety of industries and applications, providing systems to some of the world's best-known ophthalmic lens, medical implant, precision optics and semi-conductor manufacturing companies.

Our highly knowledgeable and experienced team members provide our customers with the confidence that each system is built with expertise.




**We pride ourselves on the level of expertise and experience of working across a variety of industries and applications, providing ultrasonic cleaning system solutions since 1997**



## Lean and Efficient

We have been very selective with our supply chain to make sure that our suppliers are local to our manufacturing facility, which means a reduction in their travel reduces our carbon footprint during the manufacture of our systems. We constantly review our processes to find other ways of reducing our carbon footprint.

We're fully aware that space is often at a premium, so our systems have been specifically designed and optimised to provide the required throughput without sacrificing valuable manufacturing floor space through their compact footprint



**Our Ultrasonic Cleaning Systems (UCS) range is the ideal step-up to providing an automated solution for precision cleaning needs**

## **Trusted Partners**

With over 20 years' experience in providing precision cleaning systems across a variety of industries, we pride ourselves in the relationships we build with our customers, providing a long-term partnership throughout the life of their equipment. We can provide expert knowledge on the best solution to suit the requirements of any size manufacturer regardless of the product requiring precision cleaning.

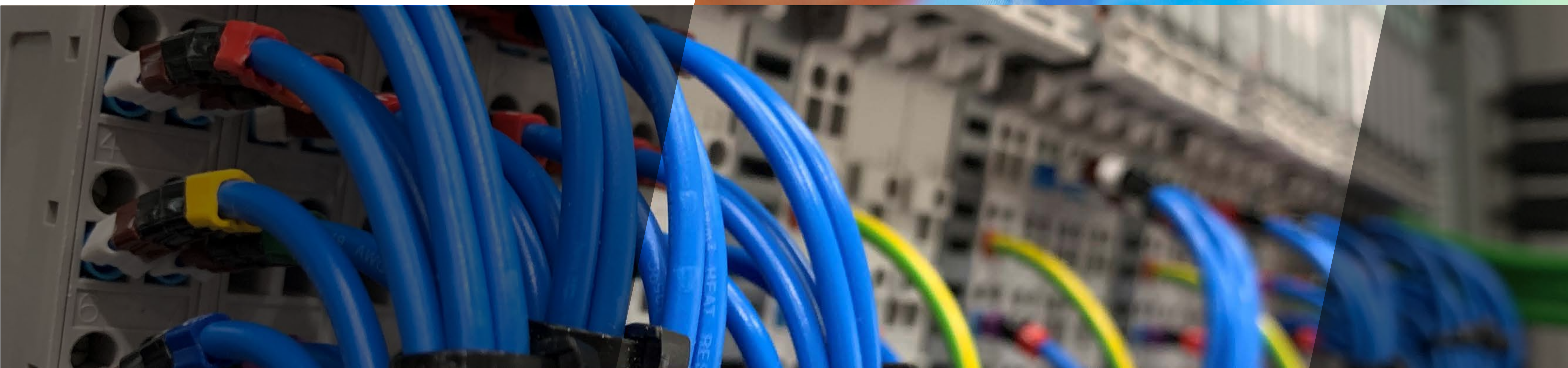


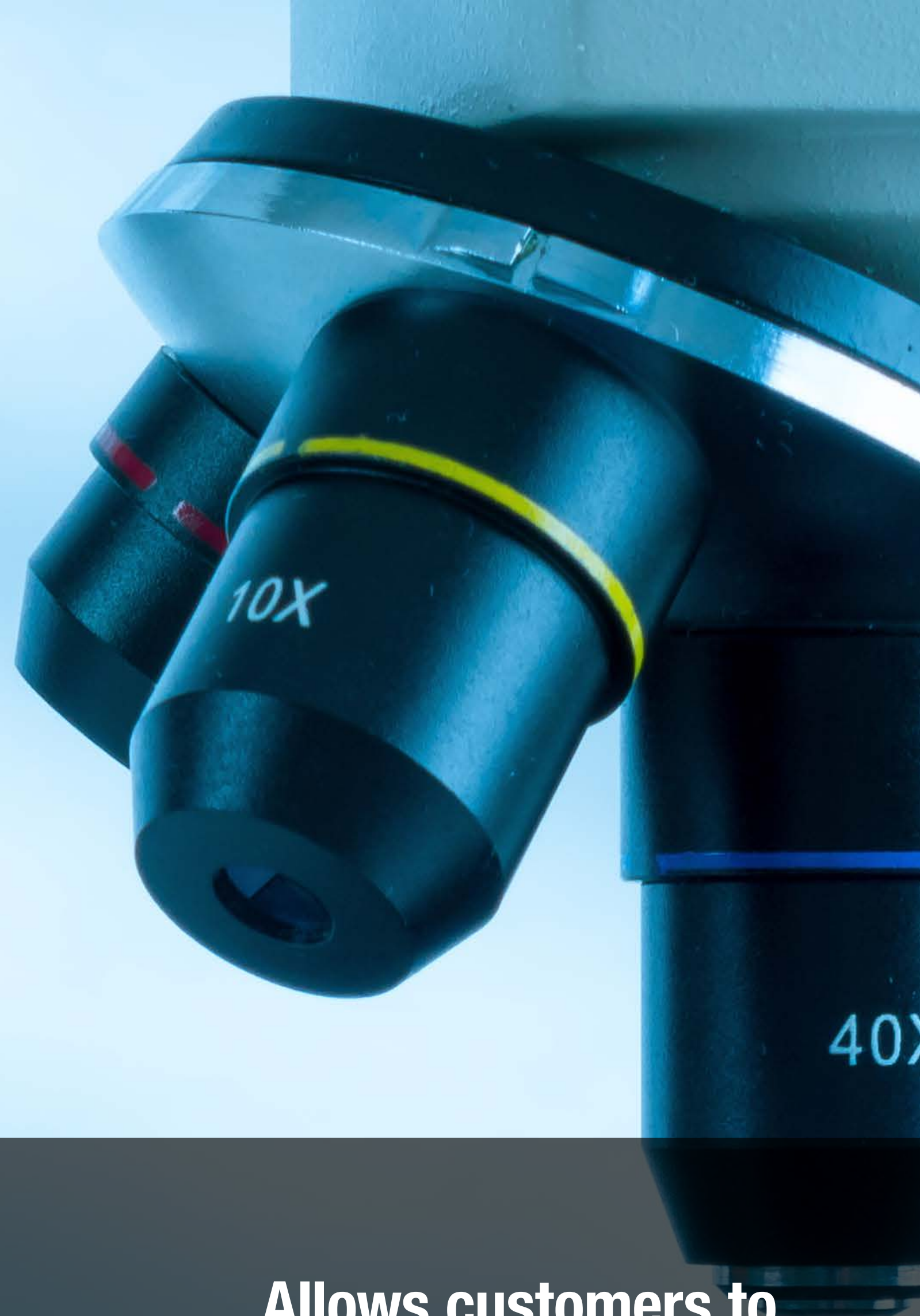
## Helpful and Flexible

Once we have installed a customer's system, we train their teams on production-ready elements such as; start-up, processing software, on-going and preventative maintenance.

Once complete, our sign-off process gives our customers the assurance that all their teams are fully trained and competent in operating the system.

Our software allows full recipe flexibility, allowing the customer to design a recipe in-line with their processes, offering multiple points of variability throughout each stage.





## Exceptional Cleaning

The innovative design and processing delivered is comprehensive. The compact construction of the systems mean that they can be positioned in small production areas, enabling them to be installed in manufacturing cells where previously, a centralised cleaning facility would have been used, enabling improving quality and efficiency.

In designing the precision cleaning systems, we have brought together all the features required to produce an exceptionally clean surface, which opens new opportunities for decentralised cleaning across a variety of industries.

**Allows customers to choose from a number of configurations throughout the range, based on their precision cleaning requirements**

# Precision Cleaning

Our Ultrasonic Cleaning Systems (UCS) range provide all the elements for a right-first-time clean solution for all our customers precision cleaning needs.

- System and product OEE
- Loading and unloading conveyor
- Colour touch screen monitor HMI (Human Machine Interface) with on-board DI water purification data as standard
- Automatic process transfer technology using vertical oscillation during cleaning and rinsing
- Servo driven slow lift-out on final DI rinse
- IR drying and air knife
- Safety interlocks and password protection
- Air extraction and Class 100 HEPA filtration
- Remote access to ensure productivity remains high



## Powerful Cleaning

Every system in the range is fitted with adjustable ultrasonic power frequencies depending on the application, gently scrubbing the surface with millions of microscopic cleaning implosions.

# Tailored Solution

We supply a range of Ultrasonic and In-process cleaning systems, standard or bespoke to suit the individual requirements of each customer to take into consideration a variety of factors based on our experience and knowledge of the industries we supply in to.

The systems comprise of a comprehensive multi-stage chemical cleaning process, followed by factory water and de-ionised water rinsing and drying stages. All cleaning and rinsing stages utilise 316L stainless steel tanks.

## IPC (In Process Cleaning) System

Features of the IPC include:

- Unloading conveyor
- Colour touch screen monitor HMI (Human Machine Interface)
- On-board DI water purification as standard
- Automatic process transfer technology using vertical oscillation during cleaning and rinsing
- Slow lift-out on final DI rinse
- IR drying and air knife
- User safety is paramount, with safety interlocks and password protection
- Air extraction and Class 100 HEPA filtration as standard
- Overall Equipment Effectiveness (OEE) is maintained via remote access to ensure productivity remains high
- Can be designed to UL standards



# UCS Range (Ultrasonic Cleaning System)



## Key features include:

- A series of wet load, chemical cleaning, heating, ultrasonic and drying stages to deliver exceptional, right first-time cleaning
- Fully automated transfer system comes complete with specific tooling, either standard or bespoke designed to match your product requirements
- Class 100 Hepa filtration and extraction as standard
- Compact design and footprint
- Optional door interlock and user access request (UCS200 only)
- Load and unload conveyors (UCS200 only)
- Built-in remote access unit for support and to ensure high levels of productivity

**UCS40-MF**



**UCS60**



**UCS150**



**UCS120**



**UCS200**



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Compliance | Validation | Quality

**t: +44 (0) 1462 491616**  
**e: [sales@optimal-technologies.com](mailto:sales@optimal-technologies.com)**  
**[www.optimal-technologies.com](http://www.optimal-technologies.com)**

Fourth Dimension Fourth Avenue Letchworth Garden City Hertfordshire UK SG6 2TD

