

■ made  
■ in  
■ germany



Ultrasonics.Steam.Ultraclean.



Ultrasonic Cleaning Systems

## xtra line 2

THE FUTURE OF CLEANING

- From manual to fully automatic systems, optimised for fine and ultra-fine cleaning with multi-frequency in 5 tank sizes
- Individually extendible system with option of interface to the clean room (optionally also available with enclosure and laminar flow technology)
- Optional side-ultrasound for complex component geometry
- Various drying systems for different material requirements

[www.elma-ultrasonic.com](http://www.elma-ultrasonic.com)

## xtra line 2

### Ultrasonic Cleaning Re-defined

#### Advantages and benefits

- Modular system set-up with 5 tank sizes
- Multi-frequency technology with 25/45 kHz or 37/130 kHz
- For fine and ultra-fine cleaning with rounded tank corners and special pipework
- Optional side-ultrasound technology for special component geometry
- Different drying systems (hot-air, infra-red and vacuum drying) for different material requirements
- Compact system design with easy-to-clean surfaces
- Integrated ancillaries such as filters, oil separators, etc.
- IPC control with intuitive operating concept
- Equipped with floor tank as standard
- Extremely service and maintenance friendly thanks to the compact system design with easily accessible and swiftly replaceable components

#### Technical data

	xtra 2 - 300	xtra 2 - 550	xtra 2 - 800	xtra 2 - 1200	xtra 2 - 1600
<b>Ultrasonic frequency (kHz)</b>	25/45 or 37/130	25/45 or 37/130	25/45 or 37/130	25/45 or 37/130	25/45 or 37/130
<b>Max. tank capacity (l)</b>	30.0	55.0	80.0	120.0	160.0
<b>Basket int. dim. W/D/H (mm)</b>	244 / 258 / 120	244 / 424 / 200	244 / 424 / 330	432 / 505 / 200	432 / 505 / 300
<b>Max. batch weight (kg) incl. basket</b>	15.0	15.0	15.0	35.0	35.0



## xtra line 2

### The right cleaning system for the task at hand

Designed for fine and ultra-fine cleaning tasks, the xtra line 2 can be flexibly deployed and extended due to the modular system concept (building block system) at any time. Different tank sizes can even be easily accommodated in one system, so that individualised systems are conceptualised.

The compact, closed system design enables easy system maintenance. Ancillaries for bath care, such as oil separators, filter units or similar, are positioned inside the system in order to save space. Removable back elements facilitate the easy maintenance and servicing of the xtra line 2. All of the pipework can therefore also be easily accessed.

With the new transport robot, the conversion speed is increased by up to 20 %. Furthermore, the following baskets and carriers can be used with the transport robot:

- Normal baskets in transport mode,
- Horizontal turning devices for bulk materials baskets,
- Vertical rotation devices for fixed parts, such as optical lenses, as well as
- Lift rotation devices for positioned components in carriers.



#### xtra line 2 is at home in the following industries.

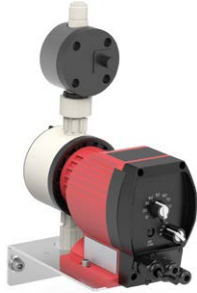
- Production of medical technology and precision optics,
- In the aerospace industry,
- Pharmaceutical industry,
- Manufacture of watches and jewellery,
- Electronics and metalworking industry, and much more.



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# Service, ancillaries and accessories for xtra line 2 systems

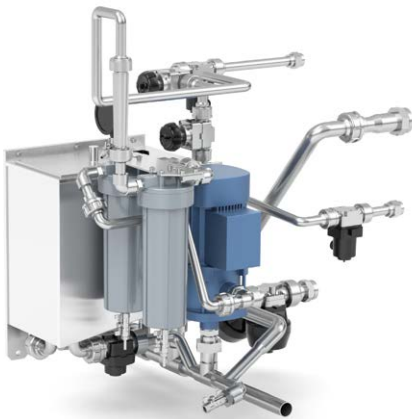
Individually aligned to your requirements



The xtra line 2 offers a comprehensive range of accessories precisely chosen to meet individual customer requirements. Automatic filling/emptying of the tanks, metering systems with automatic filling level control as well as measurement and status monitoring of the media used contribute to ensuring that the optimised cleaning processes remain safe and stable. This provides consistent and reproducible cleaning results for validation purposes.

## Baskets and carriers

Different parts can be cleaned using the different basket types. Whether it is bulk materials or individually positioned parts, baskets/carriers with different mesh sizes or with coated contact surfaces, the transport of parts is individually tailored to customer requirements and the cleaning process.



## System ancillaries for bath care, filtration and disposal

With bath care, filtration and disposal ancillaries of the xtra line 2, the contamination is easily collected and separated. For example oil, in concentrated form, is collected and can be disposed of in an environmentally-friendly way.

Not only is this good for the environment, but it also saves money.

## Service and maintenance friendly design

Our modular system (building block principle) allows the integration of many of the ancillaries at the rear of the system. Due to the fact that these components can be easily inserted and replaced - through modular, exchange technology - maintenance and servicing periods are reduced to a minimum. Thereby, the system is back in action again very quickly.

Another advantage of the xtra line 2 is the small amount of space required by these systems. Due to the integration of individual ancillaries such as oil separators, filters, etc., the systems require up to 30 % less space and have a neat, structured and easy-to-maintain appearance.

So each xtra line 2 cleaning system can be easily integrated into existing production processes.



## xtra line 2

### The modular system that adapts to requirements

With an xtra line 2 cleaning system, the first steps into professional precision cleaning are easy. For smaller quantities, a manual system, **EASY xtra line 2**, is the most suitable. If the system capacity is too small, it can be extended at any time thanks to the modular design, or supplemented by various ancillaries.

Thus it is quite easy to adapt - even afterwards - to changing conditions and increasing requirements in terms of parts cleaning. Different transport systems such as the pneumatic handling system or the automatic transport system for heavy parts provide high throughput with the required level of process safety.

#### **EASY** xtra line 2



- In case of low throughput
- Easily extendible process, at any time

#### **AUTO** xtra line 2



- Throughput-optimised with transport robots and conveyor belts
- Process-safe, as IPC controlled
- Consistently high cleaning quality

#### **SEMI** xtra line 2



- Enhanced by semi-automatic handling system for the movement of heavy parts
- User-friendly and ergonomically optimised operation

#### **AUTO+** xtra line 2



- With enclosure
  - in order to meet highest cleaning requirements,
  - for noise reduction and
  - as interface to clean room

# Tailor-cut Elma Service

The all-round carefree package for your cleaning system

## The Elma process laboratory

Perfect cleaning results are the measure of all things. In order to achieve these, the focus lies on designing the right sequence of individual process steps.

This is where the Elma service concept comes in. Together with our customers, we individually develop a tailor-made cleaning process in the Elma process laboratory. Equipped with state-of-the-art technology, our laboratory carries out cleaning tests for customers on a daily basis and checks these results for the required cleanliness level.

Take advantage of our many years of experience and knowledge, and let us design your process solution!



## The Elma Service Concept

From process development through to system qualification, commissioning and assembly on site - for our customers we are a reliable and experienced partner for cleaning technology at their side. The worldwide network of Elma sales and service partners ensures that the supply of replacement parts, repair works and maintenance are carried out quickly and efficiently. The re-qualification of your system is also possible at any time. Our customers' systems are therefore always swiftly available for operation, contributing to their success.

