

Can I have a cleaning system which is flexible enough to answer for changing demands?

Which system can I use for both coarse and fine cleaning tasks?

Is there any cleaning system which is originally operated by hand, and can be automated later?

Elmasonic X-tra line pro

Multi-frequency modular cleaning systems in five different unit sizes

Plug & Clean



Elmasonic X-tra line pro

Individual solutions with Elma serial components
– from manual to completely automatic cleaning systems –

- Five unit sizes available, from the single-unit device up to the completely automatic cleaning system.
- Modular design to allow individual adjustment to the required cleaning process. Retrofitting of additional modules possible to answer for changed cleaning demands.
- Pre-cleaning with solvents with X-tra LSM ultrasonic unit.
- Multi-frequency technology (25/45 or 35/130 kHz) for virtually every cleaning task in the range of aqueous cleaning.
- All modules (Elmasonic X-tra pro ultrasonic units, rinsing units and dryer) are fitted with LCD display – easy intuitive menu navigation. Display indication of all actual and set values. Five programmes can be saved.
- All components can be interfaced via BUS system.
- Control at each unit or via IPC.
- In addition to the multi-frequency technology for coarse, fine and micro-cleaning, the Elmasonic ultrasonic units are equipped with
 - power control
 - Pulse mode for added power to be applied for difficult cleaning tasks
 - Sweep mode for a uniform sound field distribution
 - Degas mode for the quick degassing of fresh cleaning liquids.
- Easy to maintain through complete exchange of generator / operating panel; self-adjusting generator – reduces idle phases of the system to a minimum.
- Splashproof operation panel, stainless-steel housing and transducer tank made of special stainless steel provide top quality for the industrial application.
- Oscillation device integrated into the support frame (optional) for an accelerated removal of dirt particles in the cleaning bath (including basket drip-off position).
- Optional peripheric units available, such as pump filter aggregate, oil separator and pure water unit.



Single unit with oscillation device



Manual 2-chamber system with oscillation device

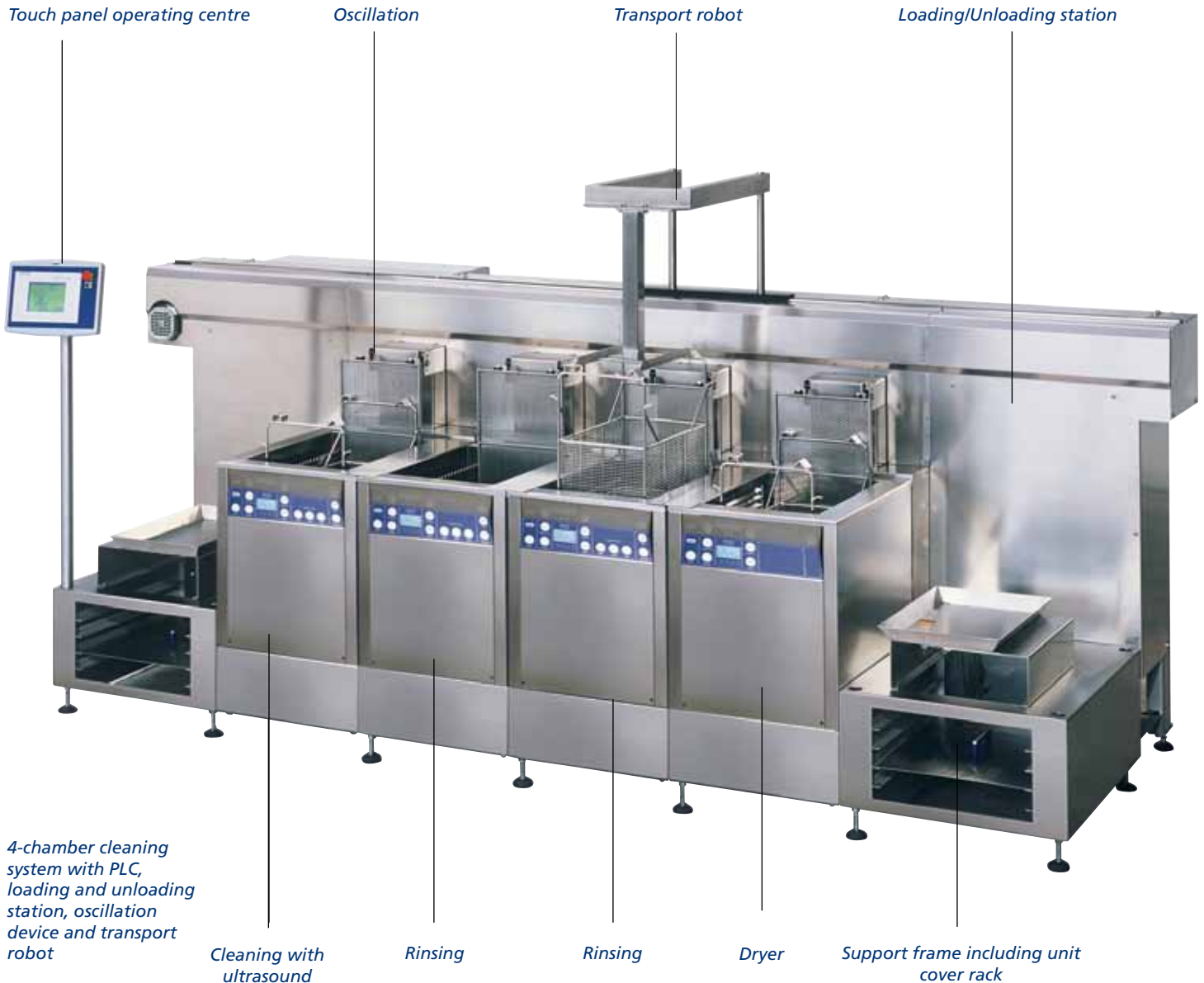


Manual 3-chamber system with oscillation device



Manual 4-chamber system with oscillation device

From the single unit up to the completely automatic cleaning system



Our modular cleaning lines are based on the ultrasonic cleaning by our latest Elmasonic X-tra units with multi-frequency technology.

The ultrasonic cleaning process is efficient, economical and environment-friendly. Each industrial cleaning task requires its own flexible and optimized process.

The Elma modular cleaning system allows the individual composition of the required equipment for cleaning, rinsing and drying.

Expansion or modification of any existing cleaning line to answer for changed requirements is easily possible at any later time. There is a wide range of modular accessory equipment to add to the cleaning system, such as oscillation device, baskets, bath care systems, central switch cabinet and water processing units.

The cleaning system can be equipped with a transport robot device to automate the throughput of the cleaning items. Even cleaning lines that are originally controlled and operated by hand can be retrofitted with an automatic transport robot.

Control and monitoring of all modular and peripheral equipment via IPC is possible. For pre-drying of the cleaned items a Lift-Out device can be integrated.

Technical Data:

5 unit sizes:

Elmasonic X-tra line pro 300, 550, 800, 1200 and 1600

Total capacities: 30 l, 55 l, 80 l, 110 l, 160 l

Multi-frequency combinations: 25/45 kHz or 35/130 kHz



Tank capacity max.	(L)	32	55	83	110	165
Service dimensions WxDxH	(mm)	300x330 x250	300x500 x295	300x500 x445	500x600 x300	500x600 x450
Unit external dimensions WxDxH total	(mm)	497x522 x568	497x691 x568	497x691 x718	720x790 x568	720x790 x718
Weight	(Kg)	37	51	59	80	95
Material tank, casing		stainless steel	stainless steel	stainless steel	stainless steel	stainless steel
Drain ball valve	(inch)	1"	1"	1"	1"	1"
Basket internal dimensions WxDxH	(mm)	245x255 x165	244x424 x204	244x424 x340	438x524 x210	438x524 x360
Basket loading max.	(Kg)	30	30	30	40	40
Mains voltage	(Vac)	230	400 / 208	400 / 208	400 / 208	400 / 208
Mains frequency	(kHz)	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Mains connection		1 Ph. +N+PE	3 Ph. +N+PE	3 Ph. +N+PE	3 Ph. +N+PE	3 Ph. +N+PE
Current consumption total	(W)	2310	3910	6810	9320	9520
Ultrasonic frequency, changeable	(kHz)	25/45-35/130	25/45-35/130	25/45-35/130	25/45-35/130	25/45-35/130
Ultrasonic power effective	(W)	600	1000	1000	1800	2000
Ultrasonic peak power max. *	(W)	2400	4000	4000	7200	8000
Heating power	(W)	1 X 1700	1 X 2900	2 X 2900	3 X 2500	3 X 2500
Heating control temperature range		30-80 °C	30-80 °C	30-80 °C	30-80 °C	30-80 °C
Sweep mode		✓	✓	✓	✓	✓
Degas mode		✓	✓	✓	✓	✓
Ultrasonic power regulation		✓	✓	✓	✓	✓
Ultrasonic period adjustable		✓	✓	✓	✓	✓
Available as unit LSM (for solvents)		✓	✓	-	-	-
Oscillation (max. charge weight)		40 kg	40 kg	40 kg	40 kg	40 kg
Lift oscillation/Lift-Out (max. charge weight)		20 kg	20 kg	20 kg	-	-
Automatic transport robot (max. charge weight)		12 kg	12 kg	12 kg	-	-
Loading/Unloading conveyor		✓	✓	✓	-	-

Optional accessory equipment



Operating panel designed as touch panel



Oscillation



Filter-pump aggregate 250A

Filter-pump aggregate 250CIS



Hot air dryer



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