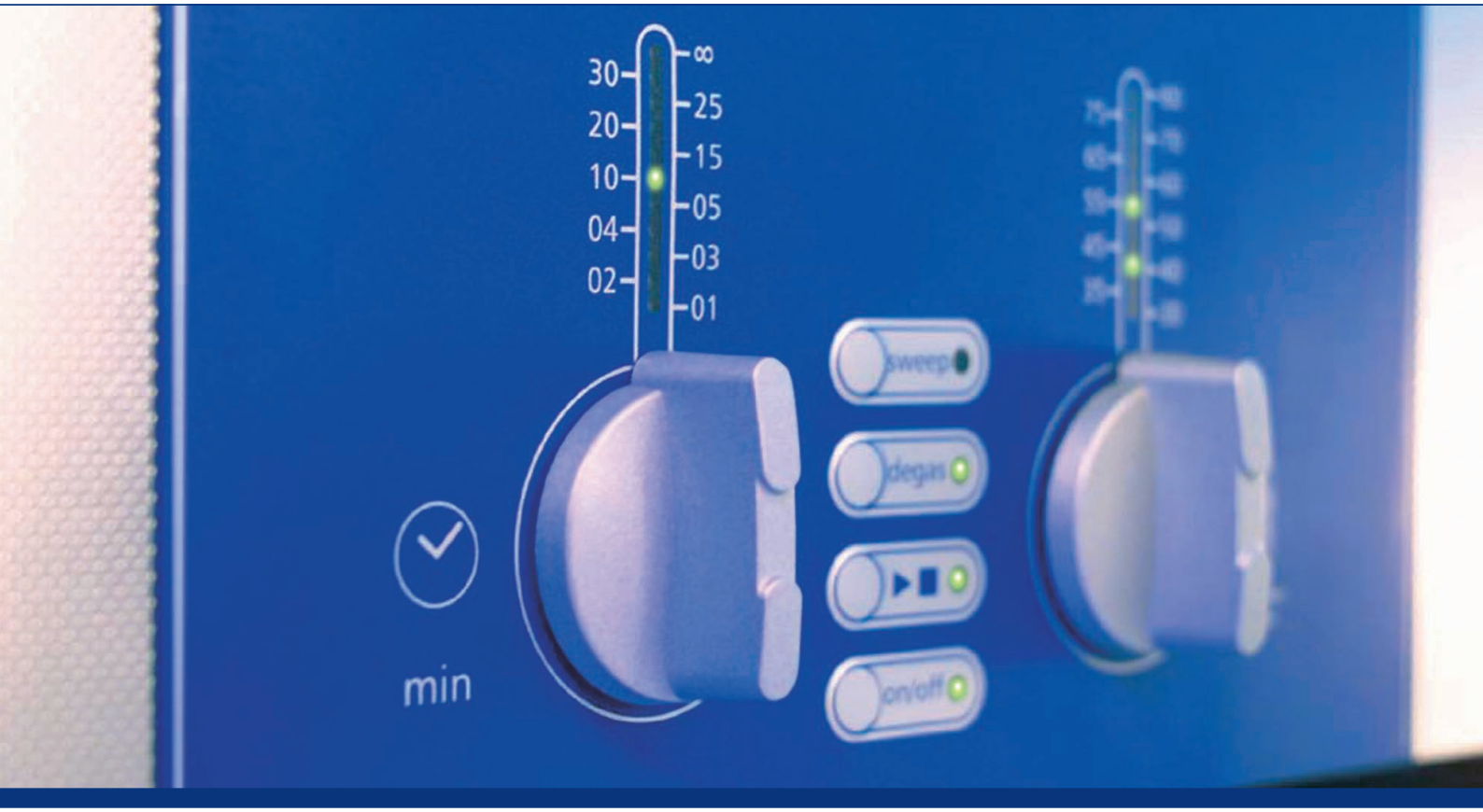
Made
in
Germany

Ultrasonics.Steam.Ultraclean.



Ultrasonic Cleaning Units

Elmasonic S

The sum of all possibilities

- Electronic time and heating control
- Autostart temperature-controlled/temperature pre-selection
- High-performance transducer systems
- Dry run proof ceramic heating
- Quick degassing with Autodegas/Degas
- Improved cleaning performance with Sweep
- Safety switch-off

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Elmasonic S

Ultrasonic cleaning units with specific features for different business sectors



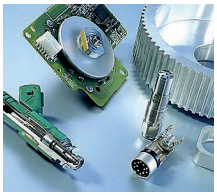
Cleaning, degassing and dispersing in the lab



Cleaning in the dental and medical sectors



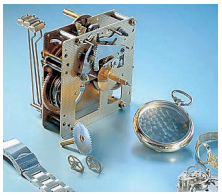
Cleaning of optics and ophthalmology



Parts cleaning in industry, workshops and service



Cleaning in the jewellery branch



Cleaning of items in the watchmaker branch

The Elmasonic S ultrasonic units offer every available technical feature. Ultrasound cleans everywhere the cleaning liquid can go.

- Laboratory: It is particularly suitable for the cleaning of laboratory instruments made of glass, plastic or metal. Elmasonic S units degas HPLC solutions, mix, disperse, emulsify and dissolve specimens.
- Medical sector: Thorough cleaning of surgical, medical and of micro-instruments without causing damage to the material; or cleaning of rigid endoscopes and flexible endoscopic accessories.
- Dental laboratory: Cleaning of instruments, removal of cement and plaster; cleaning of dental mould spoons, drills and prostheses. Cleaning of dentures, crowns and other prosthetic materials.
- Jewellery: Cleaning and brightening up of gold, silver, platinum and fancy jewellery. Cleaning of precious, semiprecious and set stones.
- Watch sector: Cleaning of watch cases, mechanical parts and metal bracelets. Cleaning of clockworks.
- Optics: Cleaning of complete glasses and optics. Intensive cleaning of spectacle pads and joints.
- Workshop and service: Intensive cleaning with alkaline, acid and neutral elma clean products in the workshop, for service works, for the final cleaning and for conditioning for coating.
- Industry: Cleaning in the mechanics, electronics and glass industries, automobile parts production and plating or other surface refinement processes. Gentle and intensive cleaning of items made of steel, light and non-ferrous metals, plastics and glass.

The Elmasonic S product series



All unit sizes are also available without heating (except S 450H and S 900H)..

Elmasonic S
Special functions and advantages

The Elmasonic S units are available in 17 different sizes, ranging from 0.5 up to 90 litres. They are equipped with efficient 37 kHz ultrasonic high-performance transducers of the latest generation.



Knob for drain on side



Adjustable drain duct



Practical cover



Filling level marking

- The optional dry run proof heating supports the cleaning process.
- The operating panel is user-friendly and arranged so that no liquid can enter the electronics.
- The newly developed cover reduces the noise and accelerates the heating-up process. When turned over, the cover can be used as drip-off basin. The collected cleaning liquid can be emptied back into the tank.
- Cleaning tanks are made of stainless steel.
- Optional Sweep-function guarantees an optimum sound field distribution in the cleaning bath (except for S 10/H).
- Marking for filling level.
- Carrying handles made of plastic.
- Set cleaning time and remaining cleaning time are both indicated by LED-displays (except for S 10/H).
- Pre-selection of the cleaning period can be turned to permanent or short-time operation.
- Turning knob on the side allows an easy draining of the cleaning liquid through the drain duct on the back of the unit.
- LED-display Temperature (except for S 10/H)
- Degas function
- Start/Stop ultrasound
- On/Off unit
- Temperature



- The Degas function allows a quicker degassing of the cleaning liquid. Another advantage is the time-controlled „Autodegas" function for the efficient degassing of freshly mixed cleaning liquids.
- For safety reasons, the unit automatically switches off after 12 hours.
- The removable mains cable with mains plug allows easy and safe transportation (except S 450H and S 900H).
- Elmasonic S ultrasonic units in proven Elma quality „Made in Germany".
- The cleaning process can be switched on by hand or automatically (temperature-controlled).
- With the temperature turning knob the temperature can be set between 30° and 80°C in steps of 5°. Both set and actual temperature of the liquid are indicated by LED display (except S 10/H).

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Ultrasonic technology, accessories and cleaning chemicals all from one source

The true value of carefully developed products are appreciated as soon as they are used.

We have expanded the well-known range of accessory equipment for the Elmasonic S series. Baskets with plastic coated handles, a jewellery rack with 10 adjustable hooks, a cooling coil, clasps for Erlenmeyer flasks or the new cover are practical little helpers.

- Baskets for all unit sizes
- Plastic cover, except S 450H & S 900H
- Stainless-steel cover with openings for 1 or 2 beakers
- Beakers
- Acid-proof tanks or Hostalen tanks
- Immersion baskets made of Hostalen or stainless steel
- Instrument holder or test tube rack
- Electric hot air dryer
- Instrument holder for 1 litre solvent flasks HPLC

Already in 1975 Elma started developing and producing own tailor-cut cleaning chemicals.

The Elma cleaners have been specially designed for the use in ultrasonic baths and are adjusted to the various cleaning tasks of the different business branches.



Technical data

	S 10 / H	S 15 / H	S 30 / H	S 40 / H	S 60 / H	S 70 / H	S 80 / H	S 90H
Ultrasonic frequency (kHz)	37	37	37	37	37	37	37	37
Tank labour capacity (l)	0.7	1.2	1.9	3.2	4.3	5.2	7.3	7.0
Volume max. (l)	0.8	1.75	2.75	4,25	5.75	6.9	9.4	8.3
Heating power (W)	60	60	200	200	400	600	600	400
Total power consumption (W)	30/90	35/95	80/280	140/340	150/550	150/750	150/750	550
Unit ext. dimensions W/D/H (mm)	206/116/178	175/180/212	300/179/214	300/179/264	365/186/264	568/179/214	568/179/264	400/180/295
Tank int. dimensions W/D/H (mm)	190/85/60	151/137/100	240/137/100	240/137/150	300/151/150	505/137/100	505/137/150	335/140/180
Max. basket loading (kg)	1.0	1.0	1.0	3.0	5.0	5.0	5.0	5,0
Basket int. dimensions W/D/H (mm)	177/73/30	112/103/50	198/106/50	190/105/75	255/115/75	465/106/50	455/106/75	289/124/75
Basket mesh size (mm)	7x1	7x1	7x1	7x1	9x1	9x1	9x1	9x1
Weight (kg)	2.0	2.1	3.3	4.0	5.1	5.6	6.4	5.3

	S 100 / H	S 120 / H	S 130H	S 150	S 180 / H	S 300 / H	S 450H	S 900H
Ultrasonic frequency (kHz)	37	37	37	37	37	37	37	37
Tank labour capacity (l)	7.5	9.0	11.3	10.0	12.9	20.6	35.0	75.0
Volume max. (l)	9.5	12.75	13.6	14.0	18.0	28.0	45.0	90.0
Heating power (W)	400	800	800	0	800	1200	1600	2000
Total power consumption (W)	150/550	200/1000	1100	300	200/1000	300/1500	2000	2800
Unit ext. dimensions W/D/H (mm)	365/278/264	365/278/321	400/275/295	568/340/224	390/340/321	568/340/321	615/370/467	715/570/467
Tank int. dimensions W/D/H (mm)	300/240/150	300/240/200	335/230/180	505/300/100	327/300/200	505/300/200	500/300/300	600/500/300
Max. basket loading (kg)	6.0	7.0	6.0	-	8,0	10.0	20.0	30.0
Basket int. dimensions W/D/H (mm)	255/200/75	250/190/115	296/200/75	DIN-Med. Körbe	280/250/115	455/250/115	455/270/194	545/450/190
Basket mesh size (mm)	9x1	9x1	9x1	-	9x1	9x1	9x1	16x1.2
Weight (kg)	5.9	7.5	8.0	10.0	8.5	11.0	25.0	42.0

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Subject to technical and visual modifications. - Elmasonic S_EN_09_16