

Ultrasonic cleaning on the cutting edge of technology

**Model 218-100**

**Ultrasonic Cleaner**

Uses ultrasonic wave principle for good cleaning effect with high efficiency. Dirt can be thoroughly removed. Liquids generate cavitation when acted by ultrasonic waves. This Ultrasonic Cleaner is excellent for cleaning and removing smudge, dirt, grease and carbon residues.

**Specifications**

- Power Consumption : 100 Watt
- Frequency : 40 KHz
- Capacity : 225 x 135 x 100mm
- Dimensions : 265 x 160 x 245mm
- Power Supply : 220V/50Hz
- Weight : 3 kg (approximately)



**Features**

- High Power Ultrasonic Cleaner
- User friendly operation
- Based on ultrasonic wave principle
- Removes dirt very easily

**Applications**

- Cleaning of components that need to be electroplated
- Cleaning of semi-conductor components and PCBs
- Cleaning of mechanical components

**Elma** Made in Germany, Top of the Line Benchtop Ultrasonic Cleaners

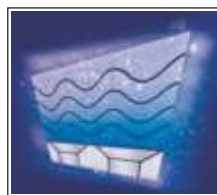
The Elma Sonic S series of **Elma Germany** are high end series of ultrasonic cleaners and offer all sophisticated features like sweep, degas etc. Sophisticated German technology and high quality materials used ensure effective performance and long term reliability. The basis of nearly perfect cleaning with ultrasound are the Elma-performance transducer systems with 37 kHz power ultrasound. The sweep function ensures a uniform sound field distribution by continuous shifting of the sound field to maximum. The degas function accelerates the degassing of the cleaning liquid, particularly in freshly mixed baths. These units with their functional features fully meet the needs of practical cleaning of parts that are difficult to reach as well as complex shaped items (as mechanical parts, gears, watches etc.)



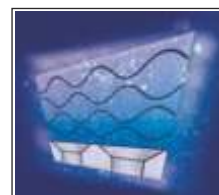
**Features:**

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

**Various Cleaning Modes**



Ultrasound-Swinging System



Sweep System



Degas and Autodegas

**APPLICATIONS**

Ultrasonic precision cleaning is the fastest and most economical way of effectively removing oil, grease, filings, small chips, surface dust, biofilm, organic matter etc in the following fields.



Cleaning, Degassing & dispersing in the lab



Cleaning in the dental & medical sectors



for electronics industries for cleaning PCBs etc.



Cleaning in industry, workshops and service



Ultrasonic cleaning in the jewellery branch



Ultrasound in the watchmaker branch

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## The special functions and advantages

The Elmasonic S series units are available in different sizes, ranging from 0.8 litre to 90 litre. They are equipped with efficient 37 kHz ultrasonic high-performance transducers of the latest generation.

- 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.



Knob for drain on side



Adjustable drain duct



Practical cover



Filling level marking

The cleaning tanks are made of cavitation-resistant stainless steel.

The optional Sweep function guarantees an optimum sound field distribution in the cleaning bath due to a modulation of the frequencies.

The set cleaning period and the remaining cleaning time are both indicated by LED display (except S 10 / H).

The turning knob for the pre-selection of the cleaning period can be turned to permanent operation or short-time operation



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.

Marking for filling level

The carrying handles are made of ergonomically shaped plastic

The 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 for temperature

Degas function key

Start/Stop key Ultrasound

On/Off key Unit

Turning knob for temperature

- 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).
- Elmasonic S ultrasonic units in proven Elma quality "Made in Germany"

- 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 & S 900H).
- 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.

### Practical Accessories *(Please contact us for the additional accessories as these are not part of standard supply).*

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 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

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made in Germany

**MODELS SELECTION GUIDE**

Specifications	S 10 / H	S 15 / H	S 30 / H	S 40 / H	S 60 / H	S 70 / H	S 80 / H
Tank max. volume (litre)	0.8	1.75	2.75	4.25	5.75	6.9	9.4
Tank service volume (litre)	0.2	0.5	0.7	1.0	1.5	1.8	2.4
Tank internal dimensions (WxDxHmm)	190x85x60	151x137x100	240x137x100	240x137x150	300x151x150	505x137x100	505x137x150
Unit external dimensions (WxDxHmm)	206x116x178	175x180x212	300x179x214	300x179x264	365x186x264	568x179x214	568x179x264
Weight (Kg)	2.0	2.1	3.3	4.0	5.1	5.6	6.4
Ultrasonic frequency (kHz)	37	37	37	37	37	37	37
Ultrasonic peak power max. (Watt)	240	280	320	560	600	600	600
Heating power (Watt)	0 / 60	0 / 60	0 / 200	0 / 200	0 / 400	0 / 600	0 / 600
Power consumption total (Watt)	30 / 90	35 / 95	80 / 280	140 / 340	150 / 550	150 / 750	150 / 750
Sweep	✓	✓	✓	✓	✓	✓	✓
Degas / Autodegas	✓	✓	✓	✓	✓	✓	✓
Carrying handles	no	no	✓	✓	✓	✓	✓
Drain duct / diameter (inch)	no	no	3/8"	3/8"	3/8"	3/8"	3/8"
<b>Order number</b>							
With heating *4) (220-240VAC)	100 1214	100 2060	100 1955	100 2006	100 2238	100 2140	100 2170
Without heating *4) (220-240VAC)	100 5507	100 4626	100 4631	100 4635	100 4643	100 4650	100 4652
<b>Accessories:</b>							
Basket internal dimensions (WxDxHmm)	177x73x30	112x103x50	198x106x50	190x105x75	255x115x75	465x106x50	455x106x75
Basket mesh size (mm)	7x1	7x1	7x1	7x1	9x1	9x1	9x1
Basket loading (kg)	1	1	1	3	5	5	5

Specifications	S 100 / H	S 120 / H	S 180 / H	S 300 / H	S 450H	S 900H
Tank max. volume (litre)	9.5	12.75	18	28	45	90
Tank service volume (litre)	2.5	3.4	4.7	7.4	11.9	23.8
Tank internal dimensions (WxDxHmm)	300x240x150	300x240x200	327x300x200	505x300x200	500x300x300	600x500x300
Unit external dimensions (WxDxHmm)	365x278x264	365x278x321	390x340x321	568x340x321	615x370x467	715x570x467
Weight (Kg)	5.9	7.5	8.5	11.0	25	45
Ultrasonic frequency (kHz)	37	37	37	37	37	37
Ultrasonic peak power max (Watt)	600	800	800	1200	1600	3200
Heating power (Watt)	0 / 400	0 / 800	0 / 800	0 / 1200	1600	2000
Power consumption total (Watt)	150 / 550	200 / 1000	200 / 1000	300 / 1500	2000	2800
Sweep	✓	✓	✓	✓	✓	✓
Degas / Autodegas	✓	✓	✓	✓	✓	✓
Carrying handles	✓	✓	✓	✓	✓	✓
Drain duct / diameter (inch)	3/8"	3/8"	3/8"	3/8"	1/2"	1/2"
<b>Order number</b>						
With heating *4) (220-240VAC)	100 2279	100 2825	100 2877	100 3033	100 3908	100 3946
Without heating *4) (220-240VAC)	100 4655	100 4658	100 4662	100 4669	-	-
<b>Accessories:</b>						
Basket internal dimensions (WxDxHmm)	255x200x80	250x190x115	280x250x115	455x250x115	455x270x194	545x450x250
Basket mesh size (mm)	9x1	9x1	9x1	9x1	9x1	16x1,2
Basket loading (kg)	6	7	8	10	20	30

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