

# **Technology for Dental Practice and Laboratory**



Ultrasonic Cleaning Units Accessory Equipment Steam Jet Cleaners Hydrogen Soldering Units Cleaning Chemicals

# Programmed cleanness in practice and laboratory



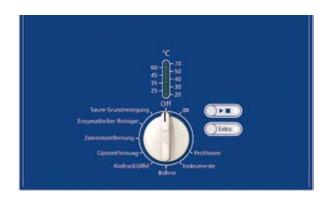
### Elmasonic Denta Pro Convenience for the user – quality for the result

The ultrasonic cleaning technology has constantly been refined over the last few years. The new digital technology offers various operating modes, such as Sweep, Degas, Boost or operation at different ultrasonic frequencies. At the same time, however, proper handling of a modern ultrasonic cleaning unit has become more and more difficult. Users have had to give much thought to how the new options had to be applied.

Now, these problems belong to the past. The new Elmasonic Denta Pro does it all for the user. It provides a number of cleaning programmes which cover all routine cleaning jobs in the dental branch. All required parameters, such as cleaning time, ultrasonic power, temperature and the perfect use of the various operating modes Sweep, Degas and Boost are pre-set individually for each programme. This makes the daily cleaning job much easier. In addition, the user can be sure to have applied the optimum cleaning process with constant good cleaning results.

The advantages at a glance:

- optimum setting of all cleaning parameters
- no knowledge required on operating modes such as Sweep, Degas or Boost
- automatic heating switch-off at 41°C to prevent the coagulation of proteins in the blood
- tank and casing completely made of easy-care stainless steel
- convenient drain duct



The Elmasonic Denta Pro provides individual cleaning programmes for the following applications:

- dentures
- instruments
- drills / rotating instruments
- dental moulds
- plaster removal
- cement removal
- enzymatic cleaning
- acid basic cleaning







Elmasonic S30H 3 litre



Elmasonic S60H 6 litre

### Elmasonic S

Ultrasonic cleaning units – the sum of all options



Ultrasonic cleaning units from 1 to 6 litres

**Elmasonic \$10H** - Professional ultrasonic cleaning unit completely made of stainless steel, service volume approx. 1 litre. Ideal as starter unit or for small practices.

Elmasonic S30H - Clearly the favoured unit in the dental branch. All standard instruments easily fit into the 3 litre tank. Optionally the unit can be operated with 2 beakers for the simultaneous cleaning of different instruments, e.g. drills or dentures. Special Elma feature: even the small units (from S30) are fitted with a convenient drain duct. It is no longer necessary to carry the unit to a sink and pour the used liquid out.

The advantages at a glance:

- electronic timer with LED display
- electronically controlled heating with LED display, 30°C – 80°C
- Sweep, for an improved sound field distribution
- Degas, for the quick degassing of cleaning liquids for better cleaning results
- strong sandwich-type transducer systems
- tank and casing completely made of easy-care resistant stainless steel
- convenient drain duct, operated from the tank side (on units S30 and larger)

**Elmasonic S60H** - Powerful unit for high standards. The large tank with a service volume of 6 litres can easily take large quantities of instruments for cleaning in one cleaning cycle.





Elmasonic S130H for the cleaning in the basket



for small trays or individual instruments for simultaneous cleaning in beakers



for the cleaning in norm mesh trays in medical practices and oral surgeons

### Elmasonic Tray Dent

# Cleaning in trays for oral surgeons and dental practices

Norm tray cassette systems are more and more becoming standard equipment in dental clinics and in the practices of oral surgeons. The Elmasonic S series now comprises two units which can take more than one norm tray at a time. As an alternative option, the Tray Dent units can be operated with one or two glass beakers plus one basket. This allows the application of 3 different cleaning liquids for cleaning in one cycle, e.g. for instruments, dentures and drills.

**Elmasonic S130H** - Special ultrasonic cleaning unit for the cleaning of complete trays. The tank can take up to 3 norm tray cassettes at a time. The unit can also be operated with 2 glass beakers and a basket. This makes the Elmasonic S130H an ultrasonic cleaner that leaves nothing to be desired.

**Elmasonic S90H** - This is the little brother of the S130H. Perfect for the cleaning of norm tray cassettes of half DIN size. Alternatively, the unit can be operated with one glass beaker plus basket for the instruments.

The advantages at a glance:

- cleaning of up to 3 norm tray cassettes (130H) or 2 norm tray cassettes of half size (S90H)
- electronic timer with LED display
- electronically controlled heating with LED display, 30°C 80°C
- Sweep, for an improved sound field distribution
- Degas, for the quick degassing of cleaning liquids for better cleaning results
- strong sandwich-type transducer systems
- tank and casing completely made of easy-care resistant stainless steel
- convenient drain duct, operated from the tank side (on units S30 and larger)





# Elmasonic One – ideal as second unit

### Elmasonic One

Powerful quality in a pleasing design

The daily jobs in a dental practice comprise many cleaning tasks that are best dealt with at once. For this it is desirable to have an ultrasonic cleaning unit within reach without having to get up and move to the cleaning and processing room every so often.

The compact Elmasonic One allows the carrying out of cleaning jobs right in the surgery. The modern design makes the unit fit to any style of furnishing.

#### The advantages at a glance:

- professional ultrasonic cleaning unit in plastic casing
- approx. 1 litre service volume, sufficient for dentures and small instruments
- removable cover, can be used as drip-off tray
- timer or permanent operation

### Technical data

	Elmasonic One	s 10	S 10 H	S 30 / H	Denta pro / H	S 60 / H	S 90 H	S 130 H
Ultrasonic frequency (kHz)	35	37	37	37	37	37	37	37
Ultrasonic peak performance max	x. *(W) 60	240	240	320	320	600	600	1200
Heating power (on H units) (W)	-	-	60	-/200	-/200	-/400	400	800
Power consumption total (W)	30	30	90	80 / 280	80 / 280	150 / 550	550	1100
Filling volume max. (litre)	0.8	0.8	0.8	2.75	2.75	5.75	7.4	12.5
Unit outer dimensions W/D/H (mi	m)236/144/157	206/116/178	206/116/178	300/179/214	300/179/214	365/186/264	400/180/295	400/275/295
Tank internal dimensions W/D/H	(mm)194/84/60	190/85/60	190/85/60	240/137/100	240/137/100	300/151/150	325/130/175	325/225/175
Drain duct (inch)	-	-	-	3/8"	3/8"	3/8"	3/8"	3/8"

<sup>\*</sup>S10/H – Elmasonic One: impulse sound; S30 – S130 H: double half wave sound.

The signal form has been matched to the tank geometry. Due to the signal form the maximum ultrasonic peak calculates with 2, 4 or 8 respectively.



# Elmasteam Steam Cleaners – essential in any dental laboratory



Dentures, brigdes and inlays are thoroughly cleaned after each production step. The powerful hot steam jet gently and quickly removes aluminum oxide after sandblasting, oxide residues after soldering and spotwelding, wax, grinding and polishing media.

Dewaxing, for instance, causes particular problems. Normally, wax is removed in special dewaxing machines. Removal of fine residues of wax, however, needs high temperatures. The melting point of wax must be exceeded.

The Elmasteam 5000 can optionally

be fitted with a special wet steam feature. The mixture of steam and water is changed via turning knob on the unit. The steam is enriched with water which takes higher temperatures to the cleaning object, so that the wax melts and can easily be removed.

The units are very powerful and operate at a pressure of 8 bar. For continued operation the unit can optionally be operated with an integrated pump, so that refilling of water by hand is not necessary. For quick drying the unit can also be connected to a compressed air tank.

The advantages at a glance:

- 8 bar steam pressure with the latest safety technology
- constant pressure supply
- high-level production quality
- environment-friendly, no chemicals used
- flexible hand piece
- wet steam mode (optional on ES 5000)
- pump (optional) for continued operation





Display of all relevant data by LED



ergonomically shaped hand piece with electrostatic dissipation



flexible use for every production step

## Elmasteam

at 8 bar steam pressure with latest safety technology





# Technical data

	Elmasteam 3000	Elmasteam 5000
Mains voltage (V)	115 oder 230	230
Power consumption (W)	1790	2950
Max. gas production (litre/h)	3	5
Max. nozzle size	1.7	2.4
Workstations	160	160
Unit outer dimensions W/D/H (mm)	385/260/330	385/260/420



Micro-soldering and welding units for the dental laboratory with a gas production volume of 140, 240 or 300 litres



The production of dentures and bridges requires the application of spot welding units, laser and hydrogen soldering units.

These quality products are made to the order. Excellent fitting accuracy, precision and longevity are essential.

Spot welding units and laser units weld the materials in spots. The advantage of using hydrogen soldering units, however, is an actual soldering seam that it produces. The selection of the correct nozzle size ensures that the energy is taken precisely to the soldering spot at a temperature of up to 2800 °C. The adjoining sections remain thermally uneaffected.

The Elma Flame is availabe in 3 different unit sizes with gas production volumes of 140, 240 and 300 litres/hour.

The advantages at a glance:

- production of a very strong soldering seam (not spotwelded)
- highest safety standard complying with DIN 32508, low operating cost
- clean hydrogen oxygen mixture, burns without residues
- simple micro-processor controlled operation, leak detector integrated
- booster lighting for the monitoring of operation and filling level of vaporiser liquid
- quick regulation of the precise operating pressure with automatic adjustment
- units made of high-quality stainless steel, single or multiple workstation operation





Booster for drying and separation of water



handy filling duct



efficient tabel-top unit

# Elma Flame

for permanent connections



clear display



hand piece with fine tuning

# Technical data

	Elmaflame 140	Elmaflame 240	Elmaflame 300
Mains voltage (V)	115 oder 230	230	230
Power consumption (W)	900	1700	2000
Pressure vessel volume (L)	140	240	300
Steam volume (L/sec)	G19 / 1.1mm	G17 / 1.5mm	G15 / 1.8mm
Steam temperature at outlet (°C) approx.	1-3 (1xG19 - 3xG26)	1-8 (1xG17 - 8xG26)	1-8 (1xG15 - 8xG26)
Unit outer dimensions W/D/H (mm)	395/275/445	515/375/515	515/375/515



# Elma clean is the right solution for every cleaning problem all around practice and laboratory



Elma clean chemicals for ultrasonic units

- long-term maintenance of the dental instruments
- cavitation supporting and gentle to the transducer tank

Acid, neutral or alkaline cleaners

- for the cleaning of instruments
- for plaster removal
- or for cement removal
- for the cleaning of drills with disinfectant effect
- or for used dentures, give a fresh flavour













availabe as 1 or 2.5 L package

#### elma clean 10

For the efficient and thorough cleaning of instruments and pieces. Specially designed for medical or dental instruments and for pieces used in laboratories. Almost any material can be treated: glass, plastic, stainless steel and ceramics, metals (not Al, Zn). Highly efficient. Removes blood, saliva, proteins, fat, oil, etc. Removes alginates and plaster.

#### elma clean 25

Removes the problematic alginates and dental plaster from dental moulds and dental instruments and tools. Suitable for all materials: stainless steel, plastic, glass and ceramics.

**elma clean 35** - prosthesis cleaner highly efficient concentrate

Active oxygen and gentle cleaning substances clean used dentures and prostheses efficiently and hygienically. In particular, organic particles and bacteria deposits are removed, also food remains and other particles. Regular use prevents the forming of dental calculus

# **elma clean 40** - cement-free concentrate

Easily removes cement from bridges and crowns and from dental instruments. Suitable for stainless steel, plastic, glass, rubber (not light metals). Removes metal oxides, cement, lime and fluxing media.

**elma clean 55d** - aldehyde-free drill cleaner, ready-for-use solution

Aldehyde-free immersion bath for the cleaning and disinfection of nerve acus, cutters and drills. Removes remains of amalgam, tissue and bone, saliva, blood and proteins. Bactericidal, tuberculocidal, fungicidal, virucidal. For all materials (except light metals).

**elma clean 60** - acid cleaning concentrate for instruments

For the acid basic cleaning of medical stainless-steel instruments. Also suitable for glass and plastic pieces. Removes reliably unaesthetic brown tarnished spots from instruments.







Highly specialized, and yet innovative in multiple ways – this is Elma, a company which has successfully been on the market with their ultrasonic technology for more than 50 years now. Elma started in 1948 with only 2 people who had an idea for a totally new watch cleaning machine. They kept looking for the perfect cleaning technology which eventually led them to try ultrasound.

Constant research and permanent technical improvement of the products in the ultrasonic and process technology department have always been the core competence of the company. The product range contains a large number of serial units, modular cleaning lines and special custom-made cleaning installations. Cleaning chemicals, developed, tested and produced in our own chemical laboratory round off the Elma product range and help to solve even the most difficult cleaning jobs in various business sectors.



from the left: Manfred Bönisch, Technical Support, Ronald Bauer, Product Management, Markus Löffler, Division Manager Dental and Medicine, Tamara Fuchs, Office Management



Experienced, committed, service-oriented





**TECHSPANGROUP** 

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