

Cleaning systems Overview

You have the cleaning tasks, we have the appropriate solutions. Our cleaning systems cover the whole spectrum of industrial part cleaning:

Using the joke BioCleaner cleaning tables, you can conduct purely water-based cleaning without solvents. The microorganisms effectively and rapidly degrade the contaminants.

The range also includes the high-performance steam jet cleaners ES 8000 basic, which are ideal for carrying out all preliminary and final cleaning tasks in the watchmaking and jewellery industry and in general workshops. The stainless steel surface of the devices is easy to clean. The pressure vessel is easily filled via the filling trough, fixed water connection or canister with pump.

For ultrasonic cleaning, you have a choice between single-frequency (joke Basic-Clean) and multi-frequency systems (joke Multi-Clean), ranging in size from S to XXXL.

The modular design of the joke Flex-Line devices allows configuration of an ultrasonic cleaning installation exactly according to your requirements. Assemble different components to suit your needs. In addition to the versatility of the devices, we have also compiled a comprehensive selection of matching ultrasonic cleaning products.







ES 8000 basic









Ultrasonic cleaning product joke Clean





Cleaning tables joke BioCleaner

Cleaning tables joke BioCleaner

Cleaning with the new joke BioCleaner cleaning tables is performed completely without the use of solvents. Processing brines, cooling lubricants, corrosion protection products, light greases and other contaminations are optimally removed by water-based means. The natural microorganism ensure that the contaminations are immediately degraded. The particulate debris is separated by the integrated filter system.

- · Cleaning on a biological basis without solvents and without cold cleaners
- pH-neutral, therefore less risk of skin irritation
- very good and consistent cleaning performance by an optimum combination of mechanical action, chemistry and nature
- no hazardous substances and/or dangerous goods; this means no restrictions on storage, handling, etc.
- optional fine filter (250 µm) for optimised filtering of the cleaning fluid consequently an extended period of use
- two models: BioCleaner 930 with a high load-bearing capacity for a large working area and BioCleaner 760 with optimum use of working area with a compact construction







| | Cleaning table joke BioCleaner 760 | Cleaning table joke BioCleaner 930 |
|--|---|---|
| Work height | 950 mm | 950 mm |
| Working chamber dimensions (W x D x H) | 760 x 560 x 20/50 mm | 930 x 545 x 250/110 mm |
| Operating temperature | 41 °C | 41 °C |
| Load bearing capacity of work area | 100 kg | 250 kg |
| Heating power | 0.6 kW in the heating-up phase, on average 0.1 kW | 1.0 kW in the heating-up phase, on average 0.1 kW |
| Pump output | approx. 4 l/min | approx. 4 l/min |
| Tank volume | 80 I | 100 l |
| Dimensions (W x H x D) | 890 x 750 x 1,155 mm | 1,010 x 785 x 1,140 mm |
| Supply voltage | 230 V, 50/60 Hz | 230 V, 50/60 Hz |
| Weight | 45 kg | 55 kg |
| Order No. | 0 958 020 | 0 958 000 |
| Price | | |



Cleaning tables joke BioCleaner

* Accessories / spare parts

| Price from for model Order No. 1 set Filter set (Fineness 250 μm) filters pollutions and BioCleaner 930 0 958 001 | 1 piece |
|---|---------|
| Filter set (Fineness 250 μm) | 1 piece |
| · | |
| filters pollutions and BioCleaner 930 0 958 001 | |
| improves the life time of the cleaningfluid; with changeable sieve insert (fineness 250 µm), incl. fastening angle and connection (pre-mounted) | |
| BioCleaner 760 0 958 020-2 | |
| Folding lid | |
| incl. hinge and fastening BioCleaner 930 0 958 003 material | |
| BioCleaner 760 0 958 020-1 | |
| Cleaning fluid for BioCleaner | |
| for de-oiling and degrease of 200 litres 0 958 010 metal and plastic workpieces; cleaning on the basis | |
| of water (is not subject to solvent regulation!) 20 litres 0 958 009 | |



Optional fine filter (fineness 250 $\mu\text{m})$ for both models available!



Energy-saving mode

The BioCleaner 930 may be switched to an energy-saving mode with a constant temperature of 30 °C during shutdown periods (nights, weekends). In this mode, the microorganisms remain active, thereby guaranteeing optimum oil and grease degradation.



Price from

Steam cleaners ES 8000 basic

High-performance steam jet cleaner ES 800 basic

This high-performance steam jet cleaner is the right companion wherever material-friendly removal of stubborn soiling is required. They can now be found in many workshop areas and for pre- and final cleaning in the watch and jewellery industry.

Simple operation and convenient handling were the focus of development here. The stainless steel surface is therefore easy to clean; the pressure vessel is simply filled via a filling trough, a fixed water connection or suitable canister. The filling level indicator provides information about the filling level and when the device needs to be refilled. The device also indicates when descaling is required and guides the user through the following steps. All other functions are controlled or activated via a pushbutton/rotary knob. The lock mode for application pauses deactivates the handpiece and foot switch as a safety measure. With automatic switchover to eco mode, the operating pressure is reduced to 3 bar, thereby saving

Scope of supply:

tweezers, sieve, maintenance hose, flushing set, safety screw cap with 3 replacement seals and measuring strips.

Other highlights:

- 3-year guarantee
- choice of 2 pressure ranges: soft from 4 to 6 bars and strong from 6 to 8 bars (adjustable in 0.5 bar increments)
- · constant steam availability due to high heating capacity
- optional steam control for wet and dry steam
- optionally only compressed air
- optional use of rigid nozzle and/or flexible handpiece
- tested according to DIN EN 61010-1
- intelligent pump control to avoid work breaks owing to refill cycles



Steam cleaner ES 8000 basic available in different variants.

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| | | Design | Order No. | 1 piece |
|---|--|---|-----------|---------|
| er | | | | |
| Technical data: Mains voltage: Mains frequency: | 220 – 240 V 50/60 Hz | with rigid nozzle and flexible handpiece (1.4 m), pump, 2 x compressed air and foot pedal | 0 668 090 | |
| Max. power consumption: Material, housing: Material, pressure tank: | 3,120 watts stainless steel stainless steel/ | with rigid nozzle, pump, compressed air and foot pedal | 0 668 074 | |
| Weight: | aluminium bronze 20 kg | with flexible handpiece, pump, compressed air and wet steam | 0 668 073 | |
| Max. filling volume: | 5 3.8 | with flexible handpiece, pump and compressed air | 0 668 070 | |
| Max. working pressure: Steam temperature in pressure tank: Steam temperature at nozzle: | 8 bars 185 °C 160 °C | with rigid nozzle and flexible handpiece (1.7 m), foot pedal | 0 668 071 | |
| Dimensions (W x D x H): | 285 x 350 x 520 mm | with rigid nozzle and foot pedal | 0 668 072 | |
| | | with flexible handpiece (1.7 m) | 0 668 076 | |



Steam cleaners ES 8000 basic

* Accessories / spare parts

| | | | Price fro | m |
|------------------------|--|-----------|-----------|-------|
| | | Order No. | 1 piece | 1 set |
| Reservoir with level r | regulation | | | |
| Day. | Only for devices with an integrated pump | 0 668 075 | | |
| | Volume: 10 litres Hose length: 2 metres | | | |
| Adapter set | | | | |
| | 8-piece, incl. tongs | 0 668 077 | | |
| Screw-on adapter | | | | |
| | for the adapter set | 0 668 078 | | |
| Evaporating dish | | | | |
| | | 0 668 079 | | |





Ultrasonic cleaningBasic principles

The term "ultrasound" means vibrations that are beyond the range of frequencies audible to the human ear (above 20 kHz). In liquids, these vibrations create tiny vacuum bubbles, which form and break within a fraction of a second. This breaking (imploding) results in extremely rapid liquid movements, which remove any contaminants from the work-pieces.

Advantages of ultrasonic cleaning

Unlimited cleaning power

The vigorous movement of the cleaning liquid allows cleaning anywhere on the component immersed in the fluid. Even narrow grooves, bores or blind holes, which are impossible or very difficult to reach with other methods, are thoroughly cleaned.

Contact-free cleaning

Cleaning is performed exclusively by liquid movement, i.e. contact-free. The cleaned component is not stressed or damaged, as would be inevitable with other cleaning methods (for example brushing) even if great care is taken. Ultrasound is therefore more gentle than almost all other conventional cleaning methods.

Effortless cleaning

All you need to do is place the dirty parts in the cleaning bath and take them out again after a predetermined time — and all your components will be thoroughly clean. This is achieved without any manual effort, just the power of ultrasound. There is another side-effect working in your favour: because the cleaning process runs automatically, you save plenty of time for other activities.

Ultrasound in all sectors

Ultrasound is therefore an efficient, gentle and labour-saving cleaning method with applications in many different sectors. It was originally used in the field of science and medicine, but is now, due to larger and more powerful units, increasingly applied in the industrial sector, too.



The joke ultrasonic cleaning systems



Single-frequency

joke Basic-Clean

- Useful volume 0.7 to 75 litres
- All units with heating system (also available without)
- Sweep and DeGas as standard
- Cleaning frequency 37 kHz



Multi-frequency

joke Multi-Clean

- Useful volume 3.5 to 16.8 litres
- All units with heating system
- Sweep and DeGas as standard
- Cleaning frequency 25 kHz und 45 kHz



joke Multi-Clean Premium

- Useful volume 22 to 215 litres
- All units with heating system
- Sweep and pulse function as standard
- Cleaning frequency 25 kHz und 45 kHz



ioke Flex-Line 1 / 2

- Useful volume 32 to 112 litres
- All units with heating system
- Sweep, DeGas and pulse function as standard
- Cleaning frequency 25 kHz und 45 kHz



Functional description "Sweep" and "DeGas"



What is "Sweep" and "DeGas"?

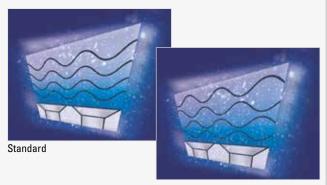
All our ultrasonic cleaners feature the Sweep and DeGas functions – but what exactly does that mean?

Sweep

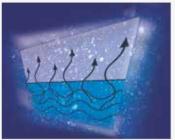
When the Sweep function is activated, the ultrasonic bath unleashes its full power. Frequency modulations ensure even distribution of the ultrasonic vibrations in the cleaning fluid.

Pulse

The cleaning performance can be markedly increased by a newly developed use of two slightly different frequencies. Local removal of stubborn contaminants can therefore be achieved before one switches over to "sweep" again for uniform final cleaning. With the new joke Multi-Clean Power devices, the system automatically transfers to "sweep" mode after "pulse" is deactivated, thereby guaranteeing optimum cleaning results.



with Sweep



DeGas

DeGas

The DeGas function degases the cleaning liquid quickly and efficiently. This is necessary, because gas and air bubbles interfere with the cleaning process. This function is particularly useful each time the liquid is replaced.



Application advice

Ultrasonic cleaning combines many factors, which in turn influence the achievable results. These results are influenced by the parts to be cleaned as well as the cleaning environment. We offer you the chance of a free cleaning trial at our premises. These trials should establish the perfect result for your application. The questionnaire that we have developed (available in PDF format or as a fax form) covers all relevant aspects for this test process.

Please consult us: Tel. +49(0)2204/839-0 sales@joke.de









Ultrasonic cleaners joke Basic-Clean

Ultrasonic cleaners joke Basic-Clean

The new introductory series of joke ultrasonic cleaning units offers fully developed technology, practice-orientated equipment and operator convenience at a fair entry-level price. All units feature cleaning troughs made from cavitation-proof stainless steel and a dry run-safe and electronically controllable heating temperature as well as cleaning time. The auto-start option allows the user to preset a temperature at which the cleaning process is to start automatically. With the Sweep and DeGas functions, these models ensure perfect and effective cleaning.

Further useful characteristics: all units (with the exception of 80 H and 175 H) feature a drain cock for rapid emptying of the troughs. The optional cover can also be used as a drip tray – just turn it over. The collected liquid can thus be reused in the cleaning trough.

Whether you are using ultrasound only occasionally or on a regular basis: the new Basic-Clean units offer modern design, efficiency and quality "Made in Germany".



A single series – two signal shapes!

The signal shape of the ultrasound has been adapted to the trough geometries of the units. The small units work with impulse sound and from 275 H and above, the units work with double half-wavelength sound. Consequently, a 4 to 8-fold value results in this case for the ultrasonic output data!

| | joke Basic-Clean 80 H | joke Basic-Clean 175 H | joke Basic-Clean 275 H | joke Basic-Clean 425 H | joke Basic-Clean 575 H | joke Basic-Clean 690 H |
|---|---------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Recommended useful volume | 0.7 l | 1.2 | 1.91 | 3.2 | 4.3 | 5.2 l |
| Working chamber dimensions (W x D x H) | 190 x 85 x 60 mm | 151 x 137 x 100 mm | 240 x 137 x 100 mm | 240 x 137 x 150 mm | 300 x 151 x 150 mm | 505 x 137 x 100 mm |
| Device dimensions (W x H x D) | 206 x 116 x 178 mm | 175 x 180 x 212 mm | 300 x 179 x 214 mm | 300 x 179 x 264 mm | 365 x 186 x 264 mm | 568 x 179 x 214 mm |
| Frequency | 37 kHz | 37 kHz | 37 kHz | 37 kHz | 37 kHz | 37 kHz |
| Ultrasonic output, effective | 30 W | 35 W | 80 W | 140 W | 150 W | 150 W |
| Ultrasonic peak output, max. | 240 W | 280 W | 320 W | 560 W | 600 W | 600 W |
| Drain | _ | _ | 3/8" | 3/8" | 3/8" | 3/8" |
| Heating power | 60 W | 60 W | 200 W | 200 W | 400 W | 600 W |
| Power consumption | 90 W | 95 W | 280 W | 340 W | 550 W | 750 W |
| Supply voltage | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz |
| Weight [kg] | 2 kg | 2.1 kg | 3.3 kg | 4 kg | 5.1 kg | 5.6 kg |
| Suitable cover | 0 669 003, included in delivery | 0 669 013 | 0 669 023 | 0 669 033 | 0 669 043 | 0 669 053 |
| Suitable baskets | 0 669 002 | 0 669 012 | 0 669 022 | 0 669 032 | 0 669 042 | 0 669 052 |
| Order No. | 0 669 000 | 0 669 010 | 0 669 020 | 0 669 030 | 0 669 040 | 0 669 050 |
| Price | | | | | | |

Basket for joke Basic-Clean

| Basket dimensions (W x D x H) | 177 x 73 x 30 mm | 112 x 103 x 50 mm | 198 x 106 x 50 mm | 190 x 105 x 75 mm | 255 x 115 x 75 mm | 465 x 106 x 50 mm |
|-------------------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| for model | Basic-Clean 80 H | Basic-Clean 175 H | Basic-Clean 275 H | Basic-Clean 425 H | Basic-Clean 575 H | Basic-Clean 690 H |
| Order No. | 0 669 002 | 0 669 012 | 0 669 022 | 0 669 032 | 0 669 042 | 0 669 052 |
| Price | | | | | | |

Cover

| Material | Plastic | Plastic | Plastic | Plastic | Plastic |
|-----------|------------------|-------------------|---------------------------|-------------------|---------------------------|
| for model | Basic-Clean 80 H | Basic-Clean 175 H | Basic-Clean 275 H & 425 H | Basic-Clean 575 H | Basic-Clean 690 H & 940 H |
| Order No. | 0 669 003 | 0 669 013 | 0 669 023 | 0 669 043 | 0 669 053 |
| Price | | | | | |



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Ultrasonic cleaners joke Basic-Clean



| joke Basic-Clean 940 H | joke Basic-Clean 950 H | joke Basic-Clean 1275 H | joke Basic-Clean 1800 H | joke Basic-Clean 2800 H | joke Basic-Clean 4500 H | joke Basic-Clean 9000 H |
|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|-------------------------------|-------------------------------|
| 7.3 | 7.5 | 9.0 | 12.9 l | 20.6 | 35.0 l | 75.0 l |
| 505 x 137 x 150 mm | 300 x 240 x 150 mm | 300 x 240 x 200 mm | 327 x 300 x 200 mm | 505 x 300 x 200 mm | 500 x 300 x 300 mm | 600 x 500 x 300 mm |
| 568 x 179 x 264 mm | 365 x 278 x 264 mm | 365 x 278 x 321 mm | 390 x 340 x 321 mm | 568 x 340 x 321 mm | 615 x 370 x 467 mm | 715 x 570 x 467 mm |
| 37 kHz | 37 kHz | 37 kHz | 37 kHz | 37 kHz | 37 kHz | 37 kHz |
| 150 W | 150 W | 200 W | 200 W | 300 W | 400 W | 800 W |
| 600 W | 600 W | 800 W | 800 W | 1,200 W | 1,600 W | 3,200 W |
| 3/8" | 3/8" | 3/8" | 3/8" | 3/8" | 1/2" | 1/2" |
| 600 W | 400 W | 800 W | 800 W | 1,200 W | 1,600 W | 2,000 W |
| 750 W | 550 W | 1000 W | 1000 W | 1500 W | 2000 W | 2800 W |
| 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz |
| 6.4 kg | 5.9 kg | 7.5 kg | 8.5 kg | 11 kg | 25 kg | 42 kg |
| 0 669 053 | 0 669 073 | 0 669 083 | 0 669 093 | 0 669 103 | 0 669 113, Stainless steel | 0 669 123, Stainless steel |
| 0 669 062 | 0 669 072 | 0 669 082 | 0 669 092 | 0 669 102 | 0 669 112 | 0 669 122 |
| 0 669 060 | 0 669 070 | 0 669 080 | 0 669 090 | 0 669 100 | 0 669 110 | 0 669 120 |

| 0 669 062 | 0 669 072 | 0 669 082 | 0 669 092 | 0 669 102 | 0 669 112 | 0 669 122 |
|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Basic-Clean 940 H | Basic-Clean 950 H | Basic-Clean 1275 H | Basic-Clean 1800 H | Basic-Clean 2800 H | Basic-Clean 4500 H | Basic-Clean 9000 H |
| 455 x 106 x 75 mm | 255 x 200 x 75 mm | 250 x 190 x 115 mm | 280 x 250 x 115 mm | 455 x 250 x 115 mm | 455 x 270 x 194 mm | 545 x 450 x 250 mm |

| Plastic | Plastic | Plastic | Stainless steel | Stainless steel |
|----------------------------|--------------------|--------------------|--------------------|--------------------|
| Basic-Clean 950 H & 1275 H | Basic-Clean 1800 H | Basic-Clean 2800 H | Basic-Clean 4500 H | Basic-Clean 9000 H |
| 0 669 073 | 0 669 093 | 0 669 103 | 0 669 113 | 0 669 123 |
| | | | | |



Ultrasonic cleaners joke Multi-Clean TI-H

Ultrasonic cleaners joke Multi-Clean TI-H

Compact tabletop units with two frequencies for intensive cleaning at 25 kHz and for gentle cleaning at 45 kHz, during which even the finest openings and grooves in the goods to be cleaned are reached. The frequencies can be changed by simple commutation. All units have adjustable onboard heating and likewise a rear drain for simple emptying in addition to a timer function. All devices are equipped with infinitely adjustable ultrasonic output as standard.





| | joke Multi-Clean TI-H 5 | joke Multi-Clean TI-H 10 | joke Multi-Clean TI-H 15 | joke Multi-Clean TI-H 20 |
|---|-------------------------|--------------------------|--------------------------|--------------------------|
| Recommended useful volume | 3.5 | 8.6 | 12.2 | 16.8 l |
| Working chamber dimensions (W x D x H) | 240 x 130 x 150 mm | 300 x 240 x 150 mm | 300 x 240 x 200 mm | 330 x 300 x 200 mm |
| Device dimensions (W x H x D) | 340 x 300 x 370 mm | 400 x 415 x 370 mm | 400 x 415 x 420 mm | 430 x 470 x 420 mm |
| Frequency | 25/45 kHz | 25/45 kHz | 25/45 kHz | 25/45 kHz |
| Ultrasonic output, effective | 100 W | 200 W | 200 W | 250 W |
| Ultrasonic peak output, max. | 400 W | 800 W | 800 W | 1,000 W |
| Drain | 1/2" | 1/2" | 1/2" | 1/2" |
| Heating power | 400 W | 800 W | 1,000 W | 1,400 W |
| Power consumption | 500 W | 1000 W | 1200 W | 1650 W |
| Supply voltage | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz |
| Weight [kg] | 10.5 kg | 14.8 kg | 16 kg | 20 kg |
| Suitable cover | 0 667 001 | 0 667 011 | 0 667 011 | 0 667 031 |
| Suitable baskets | 0 667 003 | 0 667 013 | 0 667 023 | 0 667 033 |
| Order No. | 0 667 000 | 0 667 010 | 0 667 020 | 0 667 030 |
| Price | | | | |

Basket for joke Multi-Clean TI-H

| Basket dimensions (W x D x H) | 200 x 100 x 90 mm | 260 x 210 x 90 mm | 260 x 210 x 135 mm | 290 x 270 x 135 mm |
|-------------------------------|-------------------|-------------------|--------------------|--------------------|
| for model | TI-H 5 | TI-H 10 | TI-H 15 | TI-H 20 |
| Order No. | 0 667 003 | 0 667 013 | 0 667 023 | 0 667 033 |
| Price | | | | |

Stainless steel cover

| for model | TI-H 5 | TI-H 10 & 15 | TI-H 20 |
|-----------|-----------|--------------|-----------|
| Order No. | 0 667 001 | 0 667 011 | 0 667 031 |
| Price | | | |



Ultrasonic cleaners joke Multi-Clean Power





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Ergonomic, easy to operate, splashproof

Professional units for constant industrial use
 Pulse function for extremely intensive cleaning
 Ultrasonic trough in cavitation-proof stainless steel



Ultrasonic cleaners joke Multi-Clean Power

Ultrasonic cleaning device Multi-Clean Power

As the successor to the joke Multi-Clean Premium line, the new "power devices" are convincing in their customary high quality and are thus perfect when it comes to cleaning stubborn soiling and sensitive surfaces. Three different cleaning programs markedly increase your options. In "sweep function", frequency modulations ensure uniform distribution of the ultrasound waves in the cleaning fluid. At 25 kHz, you can free your workpieces intensively from coarse contamination; at 45 kHz, you can clean gently and finely into the tiniest openings and grooves. The "pulse function" increases your peak ultrasound performance, thereby removing particularly stubborn contamination. In the "dynamic function" both "sweep" and "pulse" functions are combined and run automatically in alternation, consequently the results can sometimes be increased by up to 20 %.

Highlights:

- 3 different programs for maximum cleaning performance
- high heating output with temperature control between 30 80 °C
- Oscillating tank made of particularly cavitation-proof special stainless steel
- Control panel with protection against projected water

| | joke Multi-Clean Power 300 | joke Multi-Clean Power 500 | joke Multi-Clean Power 600 | joke Multi-Clean Power 800 |
|--|--|--|--|--|
| Recommended useful volume | 22.0 | 42.0 l | 45.0 l | 70.0 l |
| Working chamber dimensions (W x D x H) | 300 x 300 x 300 mm | 300 x 300 x 500 mm | 500 x 330 x 350 mm | 500 x 330 x 500 mm |
| Device dimensions (W x H x D) | 500 x 550 x 936 mm | 500 x 550 x 936 mm | 670 x 580 x 936 mm | 670 x 580 x 936 mm |
| Frequency | 25/45 kHz | 25/45 kHz | 25/45 kHz | 25/45 kHz |
| Ultrasonic output, effective | 480 W | 540 W | 800 W | 900 W |
| Ultrasonic peak output, max. | 600 W | 600 W | 1,000 W | 1,000 W |
| Drain | Ball valve | Ball valve | Ball valve | Ball valve |
| Heating power | 1,400 W | 1,400 W | 1,400 W | 4,200 W |
| Noise level | < 80 dB(A) | < 80 dB(A) | < 80 dB(A) | < 80 dB(A) |
| Power consumption | 2000 W | 2000 W | 2400 W | 5200 W |
| Supply voltage | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 230 V, 50/60 Hz | 3 x 400 V/N/PE |
| Weight | 40 kg | 45 kg | 55 kg | 61 kg |
| Suitable cover | 0 690 101 0 690 102 Noise protection cover | 0 690 101 0 690 102 Noise protection cover | 0 690 121 0 690 122 Noise protection cover | 0 690 121 0 690 122 Noise protection cover |
| Suitable baskets | 0 690 103 | 0 690 113 | 0 690 123 | 0 690 133 |
| Order No. | 0 690 100 | 0 690 110 | 0 690 120 | 0 690 130 |
| Price | | | | |

Basket

| Basket dimensions (W x D x H) | 255 x 230 x 170 mm | 255 x 230 x 370 mm | 400 x 255 x 220 mm | 400 x 255 x 370 mm |
|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| for model | Multi-Clean Power 300 | Multi-Clean Power 500 | Multi-Clean Power 600 | Multi-Clean Power 800 |
| Order No. | 0 690 103 | 0 690 113 | 0 690 123 | 0 690 133 |
| Price | | | | |

Cover

| for model | Multi-Clean Power 300 & 500 | Multi-Clean Power 600 & 800 |
|-----------|-----------------------------|-----------------------------|
| Order No. | 0 690 101 | 0 690 121 |
| Price | | |

Noise protection cover

| noise protection ecro. | | |
|------------------------|-----------------------------|-----------------------------|
| for model | Multi-Clean Power 300 & 500 | Multi-Clean Power 600 & 800 |
| Order No. | 0 690 102 | 0 690 122 |
| Price | | |



Ultrasonic cleaners joke Multi-Clean Power



| joke Multi-Clean Power 1400 | joke Multi-Clean Power 1600 | joke Multi-Clean Power 2500 |
|----------------------------------|----------------------------------|----------------------------------|
| 97.0 | 133.0 | 215.0 |
| 600 x 600 x 350 mm | 600 x 600 x 450 mm | 750 x 650 x 520 mm |
| 005 050 000 | 005 050 000 | 4.005 .000 .000 |
| 885 x 850 x 936 mm | 885 x 850 x 936 mm | 1,035 x 900 x 936 mm |
| 25/45 kHz | 25/45 kHz | 25/45 kHz |
| 1,440 W | 1,600 W | 1,600 W |
| 1,800 W | 2,000 W | 2,000 W |
| Ball valve | Ball valve | Ball valve |
| 5,000 W | 7,500 W | 7,500 W |
| < 80 dB(A) | < 80 dB(A) | < 80 dB(A) |
| 6800 W | 9500 W | 9500 W |
| 3 x 400 V/N/PE | 3 x 400 V/N/PE | 3 x 400 V/N/PE |
| 87 kg | 93 kg | 107 kg |
| 0 690 141 | 0 690 141 | 0 690 161 |
| 0 690 142 Noise protection cover | 0 690 142 Noise protection cover | 0 690 162 Noise protection cover |
| 0 690 143 | 0 690 144 | 0 690 163 |
| 0 690 140 | 0 690 150 | 0 690 160 |
| | | |

| 490 x 525 x 210 mm | 480 x 525 x 300 mm | 630 x 575 x 370 mm |
|------------------------|------------------------|------------------------|
| Multi-Clean Power 1400 | Multi-Clean Power 1600 | Multi-Clean Power 2500 |
| 0 690 143 | 0 690 144 | 0 690 163 |
| | | |

| Multi-Clean Power 1400 & 1600 | Multi-Clean Power 2500 |
|-------------------------------|------------------------|
| 0 690 141 | 0 690 161 |

| Multi-Clean Power 1400 & 1600 | Multi-Clean Power 2500 |
|-------------------------------|------------------------|
| 0 690 142 | 0 690 162 |







Modular ultrasonic cleaning system joke Flex-Line

Modular ultrasonic cleaning system joke Flex-Line

Built to cope with any cleaning task. Owing to the modular construction, the new joke Flex-Line cleaning devices ofer a wide range of configuration possibilities. Ultrasonic cleaning in modernmultifrequency devices forms the basis of this module line with the joke Flex-Line 1. Equipped with an oscillation unit that already results in a cleansing rinsing effect with its up-and-down movements. The joke Flex-Line 2 includes a rinsing module in addition to the ultrasonic cleaning device. Consequently, in the combination of ultrasound, oscillation and rinsing, a three-stage cleaning process in two chambers results. Maximum cleaning performance guaranteed! The high flexibility of the joke Flex-Line also makes subsequent additions or adaptations to the cleaning process possible at any time.

The structure of the optionally available accessories is also modular. A matching circulating air dryer is available for each size. Likewise, an oil separator, a showering device and a filter-pump unit are available. These components optimise the cleaning result and markedly extend the period of use of the cleaner by optimised filtering.



Flex-Line 1 Cleaning

| | joke Flex-Line 1 - 550 | joke Flex-Line 1 - 800 | joke Flex-Line 1 - 1200 |
|---|------------------------|------------------------|-------------------------|
| Recommended useful volume | 55.0 l | 84.0 l | 112.0 |
| Working chamber dimensions (W x D x H) | 296 x 501 x 309 mm | 296 x 501 x 459 mm | 519 x 600 x 321 mm |
| Device dimensions (W x H x D) | 500 x 940 x 1,200 mm | 500 x 940 x 1,500 mm | 730 x 1,070 x 1,500 mm |
| Frequency | 25/45 kHz | 25/45 kHz | 25/45 kHz |
| Ultrasonic output, effective | 600 W | 1,000 W | 1,800 W |
| Ultrasonic peak output, max. | 2,400 W | 4,000 W | 7,200 W |
| Drain | 1" | 1" | 1" |
| Heating power | 3,000 W | 5,800 W | 7,500 W |
| Power consumption | 3,650 W | 6,810 W | 9,320 W |
| Supply voltage | 3 x 400 V/N/PE | 3 x 400 V/N/PE | 3 x 400 V/N/PE |
| Weight | 90 kg | 110 kg | 200 kg |
| Suitable cover | 0 665 205 | 0 665 205 | 0 665 305 |
| Suitable baskets | 0 668 102 | 0 665 206 | 0 665 306 |
| Order No. | 0 665 101 | 0 665 201 | 0 665 301 |
| Price | | | |

Basket

| Basket dimensions (W x D x H) | 244 x 424 x 204 mm | 244 x 424 x 340 mm | 438 x 524 x 210 mm |
|-------------------------------|---------------------|---------------------|----------------------|
| for model | Flex-Line 1/2 – 550 | Flex-Line 1/2 – 800 | Flex-Line 1/2 – 1200 |
| Order No. | 0 668 102 | 0 665 206 | 0 665 306 |
| Price | | | |

Stainless steel cover

| for model | Flex-Line 1/2 – 550 & 800 | Flex-Line 1/2 – 1200 & 1600 |
|-----------|---------------------------|-----------------------------|
| Order No. | 0 665 205 | 0 665 305 |
| Price | | |



Modular ultrasonic cleaning system joke Flex-Line



Flex-Line 2 Cleaning and rinsing

Advantages through additional rinsing module:

- less moving around when working and drier working environment
- optional showering device: rinsing water refreshment, cleaner surfaces, environment-friendly owing to multiple reuse of water
- optional circulating air dryer as an additional module improves the drying process



We will be pleased to advise you!

You will achieve optimum results following comprehensive advice. Please consult us in order to individually compile the components of the Flex-Line system in the right combination:

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| | joke Flex-Line 2 - 550 | joke Flex-Line 2 - 800 | joke Flex-Line 2 - 1200 |
|--|------------------------|------------------------|--------------------------|
| D | • | • | • |
| Recommended useful volume | 43.0 | 84.0 l | 112.0 |
| Working chamber dimensions $(W \times D \times H)$ | 296 x 501 x 309 mm | 296 x 501 x 459 mm | 296 x 501 x 309 mm |
| Device dimensions (W x H x D) | 1,100 x 940 x 1,200 mm | 1,100 x 940 x 1,500 mm | 1,450 x 1,070 x 1,500 mm |
| Frequency | 25/45 kHz | 25/45 kHz | 25/45 kHz |
| Ultrasonic output, effective | 600 W | 1,000 W | 1,800 W |
| Ultrasonic peak output, max. | 2,400 W | 5,800 W | 7,200 W |
| Drain | 1" | 1" | 1" |
| Heating power | 3,000 W | 5,800 W | 7,500 W |
| Power consumption | 3,650 W | 6,810 W | 9,320 W |
| Supply voltage | 3 x 400 V/N/PE | 3 x 400 V/N/PE | 3 x 400 V/N/PE |
| Weight | 180 kg | 210 kg | 400 kg |
| Suitable cover | 0 665 205 | 0 665 205 | 0 665 305 |
| Suitable baskets | 0 668 102 | 0 665 206 | 0 665 306 |
| Order No. | 0 665 601 | 0 665 701 | 0 665 801 |
| Price | | | |
| | | | |

Basket

| Basket dimensions (W x D x H) | 244 x 424 x 204 mm | 244 x 424 x 340 mm | 438 x 524 x 210 mm |
|-------------------------------|---------------------|---------------------|----------------------|
| for model | Flex-Line 1/2 – 550 | Flex-Line 1/2 – 800 | Flex-Line 1/2 – 1200 |
| Order No. | 0 668 102 | 0 665 206 | 0 665 306 |
| Price | | | |

Stainless steel cover

| for model | Flex-Line 1/2 – 550 & 800 Flex-Line 1/2 – 1200 & 1600 | |
|-----------|---|-----------|
| Order No. | 0 665 205 | 0 665 305 |
| Price | | |



Cleaning products for ultrasonic cleaning joke Clean

Cleaning products for ultrasonic cleaners

The ultrasound plays an important role in the cleaning process. In addition to the further factors temperature and time, cleaning chemicals are the fourth component. The cleaning media must correspond to the kind of contamination and be compatible with the surface of the cleaning items. Also, not all media are suitable for ultrasonic cleaning.

The cleaned items must be rinsed with water after the ultrasonic cleaning process. To prevent water stains, de-ionised or distilled water (possibly with added corrosion protection) must be used. If such protection cannot be used, corrosion should be prevented by using a rinsing medium that vaporises without leaving residues (e.g. alcohol). Thus, the whole process consists of three stages: cleaning, rinsing, drying.

Cleaning of metals and corrosion

Unalloyed steels are very susceptible to corrosion, particularly after acid ultrasonic cleaning. They require a corrosion protection (at least temporarily) to be added to the cleaning bath and in particular to the aqueous rinsing baths, or a water-displacing rinsing medium (e.g. solvents with added oil). Another successful measure against corrosion is immediate blowing off after the final rinse.

| | | | | Price from |
|------------------|--|---------|-----------|------------|
| | | Content | Order No. | 1 piece |
| joke Clean 100 S | | | | |
| | Suitable for cleaning of non-ferrous metals, aluminium, stainless | 2.5 | 0 666 320 | |
| | steel, plastics and also glass. Likewise for passivating of rustproof and chrome-alloyed steels. Brass and copper-based alloys are | 10 l | 0 666 321 | |
| Jake Cheen 100 S | lightened. Removes greases, oils, oxide layers (e.g. verdigris) in addition to rust and limescale. The passivating effect in case of Cr-based steels is based on the dissolving out of Fe atoms from the surface, so that the relative Cr content in the latter increases. | 25 | 0 666 322 | |

| | | | | Price from |
|----------------|---|---------|-------------|------------|
| | | Content | Order No. | 1 piece |
| oke Clean 110 | | | | |
| | Liquid alkaline cleaning concentrate for the elimination of stub- | 2.5 | 0 666 103-1 | |
| Joke Clear 110 | born soiling from metal, ceramic and plastic surfaces in ultrasonic immersion baths. Excellent suitability for the cleaning of: metal surfaces, many plastic surfaces, rubber surfaces and in particular quartz and silicon wafer cleaning following mechanical processing. Removes metal oxides, quartz deposits and stubborn organic soiling such as: oxidised and gummy oils and fats, waxes, lacquer and paint residues. Not suitable for light metals (AI, Mg and their alloys); plastics must be initially tested for resistance (not suitable for plastics susceptible to tension cracking). | 251 | 0 666 102-1 | |



Cleaning products for ultrasonic cleaning joke Clean

| | | | | Price from |
|----------------|---|---------|-------------|------------|
| | | Content | Order No. | 1 piece |
| joke Clean 210 | | | | |
| | Liquid, weakly alkaline cleaning concentrate. Suitable for gentle 2.5 l | 2.5 | 0 666 113-1 | |
| john Chain 210 | cleaning of metal and plastic parts. joke Clean 210 delivers excellent cleaning results on steel, non-ferrous heavy, noble and light metals, in addition to nickel, chrome, zinc and nickel-silver surfaces (including material combinations) and on plastics resistant to tension cracking. Mg-, MgZnAl ("electron") alloys and plastics must be tested for resistance before use. This cleaner has an emulsifying effect and eliminates the following substances: aqueous cooling lubricant emulsions, fats and oils, abrasive and polishing compounds. A prior suitability check should be performed for polishing media containing animal fats. | 25 | 0 666 112-1 | |

| | | | | Price from |
|-----------------|--|---------|-------------|------------|
| | | Content | Order No. | 1 pied |
| oke Clean 225 | | | | |
| | Liquid, mildly alkaline multipurpose cleaning concentrate for ultra- | 2.5 | 0 666 123-1 | |
| Julio Clain 221 | sonic immersion baths. Suitable for metal, glass, ceramic, plastic and rubber surfaces. Light metal alloys of AlSiMg type must be checked initially for resistance. For elimination of oils, fats, combustion residues, soot and other organic contamination and dust. Also suitable for overhaul cleaning (printed circuit boards, protection masks, copiers and printers). | 25 | 0 666 122 | |

| | | | | Price from |
|------------|--|---------|-------------|------------|
| | | Content | Order No. | 1 piece |
| ke KS | | | | |
| 786 | Liquid temporary corrosion protection for addition to the cleaning | 11 | 0 666 201 | |
| pin 15 Mer | or rinsing bath. For use in immersion baths with or without ultrasound. Corrosion-sensitive metal materials such as steel, grey cast iron and solid carbides are coated with a protective film providing temporary corrosion protection. | 2.5 | 0 666 200-1 | |
| | | | | |