

Cleaning systems

Overview

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

Solvent-based cold cleaners are often used for cleaning workpieces, machine parts or small parts. However, these pose considerable risks to humans and nature. They enter the environment through evaporation or spraying and are absorbed through the skin or respiratory tract. In addition, there is a risk of fire and explosion.

With the **new Bio Cleaner 600 and 1000 cleaning systems**, you can dispense completely **with harmful solvents** - with the best cleaning results. They are convincing due to their gentle and at the same time highly effective cleaning performance.

The advantages:

- Sustainable: oils and greases are biodegraded. Bio Cleaners are absolutely free of harmful solvents etc.
- Safe: No risks to the health of the user. No risk of explosion or fire. Very good skin tolerance.
- Efficient: BIO Cleaners are universally applicable with highly effective cleaning power due to selected and proven surfactants.
- Economical: Continuous self-cleaning ensures long service life with consistently high effectiveness.

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 Select 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.



430 Solvent-free part cleaning
Cleaning tables joke BioCleaner

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ES 8000 basic

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Basics
Single-frequency cleaners joke Select
Multi-frequency cleaners joke Multi-Clean Power
Modular ultrasonic cleaning system joke Flex-Line
Cleaning products for ultrasonic cleaning



Cleaning tables

BioCleaner

NEW!

Cleaning tables joke BioCleaner

Cleaning with the joke BioCleaner cleaning tables takes place completely without the use of solvents. Machining oils, cooling lubricants, corrosion protection products, light greases and other contaminants are optimally removed on an aqueous basis. The natural micro-organisms ensure that the dirt is broken down immediately. The particle dirt is separated via the integrated filter system.

- Cleaning on a biological basis without solvents and without cold cleaners.
- pH-neutral, therefore low risk of skin irritation
- very good and constant cleaning performance due to optimal combination of mechanics, temperature, chemistry and nature
- no hazardous material and/or dangerous goods, which means no requirements for storage, handling etc.
- two models: BioCleaner 1000 with high load capacity and large work surface and BioCleaner 600 with optimally used work surface and compact design

	Cleaning table joke BioCleaner 1000	Cleaning table joke BioCleaner 600
Work height	960 mm	870 mm
Working chamber dimensions (W x D)	950 x 600 mm	790 x 520 mm
Operating temperature	41 °C	41 °C
Load bearing capacity of work area	250 kg	200 kg
Heating power	1,000 W	1,000 W
Dimensions (W x H x D)	1,100 x 1,010 x 770 mm	890 x 870 x 520 mm
Supply voltage	230 V, 50/60 Hz	230 V, 50/60 Hz
Weight [kg]	55 kg	52 kg
Order No.	0 958 000-1	0 958 080
Price		



Pre-filter washable

flexible hose for precise positioning of the nozzle

Ergonomic workplace with large workspace







Cleaning tables BioCleaner **NEW!**



Roller set can be ordered optionally!

Accessories / spare parts

	for model	Order No.	Price from 1 piece
Roller set for BioCleaner cleaning table			
	BioCleaner 600	0 958 081	
Cover for cleaning table			
	BioCleaner 600	0 958 082	
	BioCleaner 1000	0 958 090	
Perforated plate for cleaning table			
	BioCleaner 600	0 958 083	
	BioCleaner 1000	0 958 091	
Cleaning fluid for BioCleaner			
	For de-oiling and degreasing metal and plastic parts; cleaning on a purely aqueous basis (not subject to solvent regulations!)	Contents: 20 litres	0 958 009
		Contents: 200 litres	0 958 010

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 energy.

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.

				Price from
				1 piece
Design				Order No.
High-performance steam jet cleaner				
	Technical data:		with flexible handpiece, pump and compressed air	0 668 070
	Mains voltage:	220 – 240 V		
	Mains frequency:	50/60 Hz	with rigid nozzle and flexible handpiece (1.7 m), foot pedal	0 668 071
	Max. power consumption:	3,120 watts		
	Material, housing:	stainless steel	with rigid nozzle and foot pedal	0 668 072
	Material, pressure tank:	stainless steel/ aluminium bronze	with flexible handpiece, pump, compressed air and wet steam	0 668 073
	Weight:	20 kg	with rigid nozzle, pump, compressed air and foot pedal	0 668 074
	Pressure vessel volume:	5 l	with flexible handpiece (1.7 m)	0 668 076
	Max. filling volume:	3.8 l	with rigid nozzle and flexible handpiece (1.4 m), pump, 2 x compressed air and foot pedal	0 668 090
	Max. working pressure:	8 bars		
	Steam temperature in pressure tank:	185 °C		
	Steam temperature at nozzle:	160 °C		
	Dimensions (W x D x H):	85 x 350 x 520 mm		

Steam cleaners ES 8000 basic

⚙️ Accessories / spare parts

		Order No.	Price from	1 piece	1 set
Reservoir with level regulation					
	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		



above: Adapter set - below: Evaporating dish



Screw on adapter



Ultrasonic cleaning

Basic 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 Select

- 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 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



joke 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“?

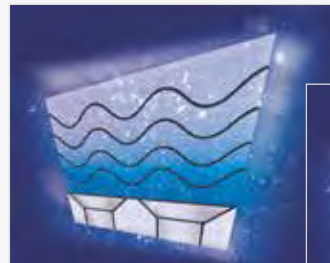
All our ultrasonic cleaners feature the Sweep and DeGas functions – but what exactly does that mean?

Sweep

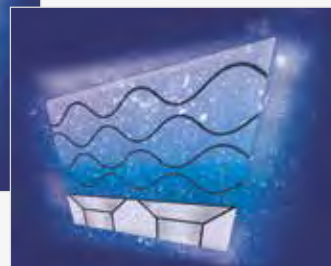
When the Sweep function is activated, the ultrasonic bath unleashes its full power. Frequency modulations ensure even distribution of the ultrasonic vibrations in the cleaning fluid.

Pulse

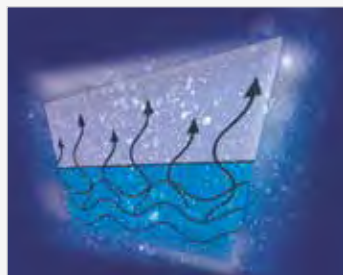
The cleaning performance can be markedly increased by a newly developed use of two slightly different frequencies. Local removal of stubborn contaminants can therefore be achieved before one switches over to „sweep“ again for uniform final cleaning. With the new joke Multi-Clean Power devices, the system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



Standard



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 2204 839-0
sales@joke.de

Ultrasonic cleaners

Elmasonic Select

NEW!

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. The powerful and versatile ElmasonicSelect ultrasonic cleaning devices are equipped with a frequency of 37 kHz, 5 ultrasonic modes and the possibility to save up to 4 cleaning programmes. Elmasonic Select is available with tank volumes from 3 to 90 litres.

5 ultrasonic modes for best cleaning results and easy sample preparation

- dynamic - Combines the ultrasonic modes pulse and sweep to increase the overall cleaning performance
- pulse - Removes even stubborn contaminations through a pulsating sound field distribution
- sweep - Uniform distribution of the ultrasonic power for most cleaning tasks
- eco - For gentle cleaning with quiet operation and for a longer service life of the ultrasonic cleaning device
- degas - Quick degassing of freshly prepared cleaning solutions and (HPLC) samples



All units include lids Type 500 and 900 incl. noise protection cover



	Ultrasonic cleaner Elmasonic Select 30	Ultrasonic cleaner Elmasonic Select 40	Ultrasonic cleaner Elmasonic Select 60	Ultrasonic cleaner Elmasonic Select 80	Ultrasonic cleaner Elmasonic Select 100
Recommended useful volume	1.6 l	2.9 l	4.3 l	6.8 l	6.8 l
Working chamber dimensions (W x D x H)	220 x 120 x 95 mm	215 x 115 x 145 mm	275 x 125 x 145 mm	475 x 110 x 145 mm	280 x 220 x 145 mm
Device dimensions (W x H x D)	305 x 170 x 230 mm	305 x 170 x 280 mm	370 x 210 x 275 mm	570 x 195 x 280 mm	380 x 300 x 280 mm
Frequency	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)
Ultrasonic output, effective	120 W	120 W	150 W	150 W	150 W
Ultrasonic peak output, max.	480 W	480 W	600 W	600 W	600 W
Drain			3/8 inch, on the rear of the device	3/8 inch, on the rear of the device	3/8 inch, on the rear of the device
Heating power	200 W	200 W	400 W	600 W	400 W
Noise level	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)
Power consumption	320 W	320 W	550 W	750 W	550 W
Supply voltage	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz
Weight [kg]	3.6 kg	3.8 kg	5.2 kg	6.9 kg	6.2 kg
Suitable baskets	0 669 022	0 669 032	0 669 042	0 669 062	0 669 072
Order No.	0 690 400	0 690 405	0 690 410	0 690 415	0 690 420

Baskets

Basket dimensions (W x D x H)	198 x 106 x 50 mm	190 x 105 x 75 mm	255 x 115 x 75 mm	455 x 106 x 75 mm	255 x 200 x 75 mm
for model	• Select 30	• Select 40	• Select 60	• Select 80	• Select 100
Order No.	0 669 022	0 669 032	0 669 042	0 669 062	0 669 072
Price					

Ultrasonic cleaners

Elmasonic Select

NEW!



Areas of application:

- Manufacturers of industrial components and workpieces, workshops and repair shops.
- Watchmakers, jewellers, watch and jewellery workshops
- Research and analytical laboratories.

In the laboratory, Elmasonic Select can also be used for sample preparation:

- Lysis,
- Thermosensitive incubation
- Biochemical assays
- Degassing
- Mixing and dissolving (dispersing, emulsifying, homogenising, deagglomerating).



Ultrasonic cleaner Elmasonic Select 120	Ultrasonic cleaner Elmasonic Select 150	Ultrasonic cleaner Elmasonic Select 180	Ultrasonic cleaner Elmasonic Select 300	Ultrasonic cleaner Elmasonic Select 500 with noise protection cover	Ultrasonic cleaner Elmasonic Select 900 with noise protection cover
10.0 l	8.7 l	14.2 l	22.0 l	40.3 l	63.7 l
300 x 215 x 195 mm	485 x 280 x 95 mm	300 x 370 x 195 mm	475 x 270 x 195 mm	500 x 330 x 290 mm	600 x 500 x 285 mm
380 x 300 x 330 mm	575 x 360 x 230 mm	405 x 360 x 330 mm	575 x 360 x 330 mm	770 x 510 x 975 mm, noise protection cover open	870 x 640 x 1145 mm, noise protection cover open
37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)	37 kHz (+5,5 -2,5)
200 W	300 W	200 W	300 W	540 W	960 W
800 W	1200 W	800 W	1200 W	2160 W	3840 W
3/8 inch, on the rear of the device	3/8 inch, on the rear of the device	3/8 inch, on the rear of the device	3/8 inch, on the rear of the device	Ball valve 3/4 inch, on the side of the device	Ball valve 3/4 inch, on the side of the device
800 W	800 W	800 W	1200 W	1600 W	2000 W
< 80 dB(A)	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)	< 80 dB(A)
1000 W	1100 W	1000 W	1500 W	2080 W	2960 W
220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz	220-240 V, 50/60 Hz
7.7 kg	8.8 kg	10.2 kg	12.2 kg	34.7 kg	49.3 kg
0 669 082	0 669 075	0 669 092	0 669 102	0 669 105	0 669 106
0 690 425	0 690 430	0 690 435	0 690 440	0 690 445	0 690 450
250 x 190 x 115 mm	455 x 250 x 45mm	280 x 250 x 115 mm	455 x 250 x 115 mm	460 x 300 x 195 mm	545 x 460 x 190 mm
• Select 120	• Select 150	• Select 180	• Select 300	• Select 500	• Select 900
0 669 082	0 669 075	0 669 092	0 669 102	0 669 105	0 669 106

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 l	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 reduction cover	0 690 101 0 690 102 Noise reduction cover	0 690 121 0 690 122 Noise reduction cover	0 690 121 0 690 122 Noise reduction 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

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

- Professional units for constant industrial use
- Pulse function for extremely intensive cleaning
- Ultrasonic trough in cavitation-proof stainless steel
- Ergonomic, easy to operate, splashproof

Ultrasonic cleaners joke Multi-Clean Power



joke Multi-Clean Power 1400

97.0 l
600 x 600 x 350 mm
885 x 850 x 936 mm
25/45 kHz
1,440 W
1,800 W
Ball valve
5,000 W
< 80 dB(A)
6800 W
3 x 400 V/N/PE
87 kg
0 690 141
0 690 142 Noise reduction cover

0 690 143
0 690 140

joke Multi-Clean Power 1600

133.0 l
600 x 600 x 450 mm
885 x 850 x 936 mm
25/45 kHz
1,600 W
2,000 W
Ball valve
7,500 W
< 80 dB(A)
9500 W
3 x 400 V/N/PE
93 kg
0 690 141
0 690 142 Noise reduction cover

0 690 144
0 690 150

joke Multi-Clean Power 2500

215.0 l
750 x 650 x 520 mm
1,035 x 900 x 936 mm
25/45 kHz
1,600 W
2,000 W
Ball valve
7,500 W
< 80 dB(A)
9500 W
3 x 400 V/N/PE
107 kg
0 690 161
0 690 162 Noise reduction cover

0 690 163
0 690 160

490 x 525 x 210 mm
Multi-Clean Power 1400
0 690 143

480 x 525 x 300 mm
Multi-Clean Power 1600
0 690 144

630 x 575 x 370 mm
Multi-Clean Power 2500
0 690 163

Multi-Clean Power 1400 & 1600
0 690 141

Multi-Clean Power 2500
0 690 161

Multi-Clean Power 1400 & 1600
0 690 142

Multi-Clean Power 2500
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 offer a wide range of configuration possibilities. Ultrasonic cleaning in modern multifrequency 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 l
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:

Markus Abstoß

Tel. +49 (0) 22 04 / 8 39-0 • m.abstoss@joke.de

	joke Flex-Line 2 - 550	joke Flex-Line 2 - 800	joke Flex-Line 2 - 1200
Recommended useful volume	43.0 l	84.0 l	112.0 l
Working chamber dimensions (W x D x 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.


	Content	Order No.	Price from 1 piece
joke Clean 100 S			
	Suitable for cleaning of non-ferrous metals, aluminium, stainless steel, plastics and also glass. Likewise for passivating of rustproof and chrome-alloyed steels. Brass and copper-based alloys are 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.	2.5 l	0 666 320
		10 l	0 666 321
		25 l	0 666 322


	Content	Order No.	Price from 1 piece
joke Clean 110			
	Liquid alkaline cleaning concentrate for the elimination of stubborn 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 (Al, Mg and their alloys); plastics must be initially tested for resistance (not suitable for plastics susceptible to tension cracking).	2.5 l	0 666 103-1
		25 l	0 666 102-1

Cleaning products for ultrasonic cleaning

joke Clean

	Content	Order No.	Price from 1 piece
joke Clean 210			
	2.5 l	0 666 113-1	
	25 l	0 666 112-1	
<p>Liquid, weakly alkaline cleaning concentrate. Suitable for gentle 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.</p>			

	Content	Order No.	Price from 1 piece
joke Clean 225			
	2.5 l	0 666 123-1	
	25 l	0 666 122	
<p>Liquid, mildly alkaline multipurpose cleaning concentrate for ultrasonic 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).</p>			

	Content	Order No.	Price from 1 piece
joke KS			
	1 l	0 666 201	
	2.5 l	0 666 200-1	
<p>Liquid temporary corrosion protection for addition to the cleaning 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.</p>			