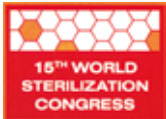


Manual reprocessing in the ultrasonic bath

Simultaneous disinfection and cleaning of medical instruments

NEW!
TRISON



Prague • Booth 19



Dusseldorf
Hall 12 • Booth A30



Dubai • Booth Z3 M51



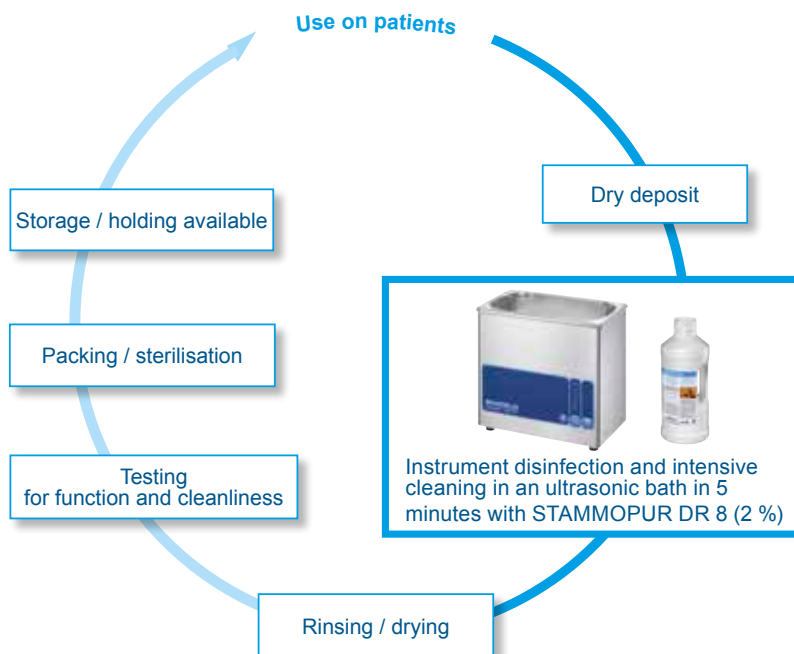
BANDELIN

65 years of experience in ultrasound

Notes on ultrasound use

What instruments can be treated with ultrasound

Small components
ECG, EEG electrodes
Endoscope accessories such as biopsy forceps, snares, valves
General instruments such as scissors, needle holders, tweezers, tongs, trocars, scalpels
Micro instruments used in Neurosurgery and Ophthalmology
MIS instruments such as take-apart tube shaft instruments, micro clamps, etc.
Robotic instruments



Advantages of instrument treatment in the ultrasonic bath

- Faster instrument circulation
- Disinfection time shortened to 5 minutes
- Protection of the instruments
- Instruments are in contact with the disinfecting and cleaning agents for a shorter length of time – no risk of corrosion
- Economical use of water, chemicals and energy
- Strong cleaning effect in hard-to-access locations such as boreholes, joints and seams.
- No mechanical damage

What to consider

- The objects to be cleaned may not rest directly on the tank bottom
- Do not stack the instruments and do not overload the baskets
- If necessary, articulated instruments such as tongs or scissors should be opened up or taken apart entirely
- The instruments must be fully covered with fluid
- Air must be able to escape from hollow areas

Which ultrasonic bath should I select?

- The size of the object to be cleaned determines the size of the tank and thus the type of unit
- The dimensions of the insert baskets should be taken into account
- In order to prevent overloading the unit, it is recommended that the next-largest sized unit be selected
- This also results in additional space for other applications

Recommended liquids

- STAMMOPUR concentrates have been especially developed for disinfection and cleaning in an ultrasonic bath
- Respective microbiological certificates regarding shortened disinfecting times are available
- Combustible fluids such as alcohols and aggressive cleaning fluids such as acids and saline solutions are not approved for use
- A disinfection or cleaning using only water is not possible without the appropriate additives

Is heating required?

Ultrasonic bath without heating:

- For simultaneous disinfection and cleaning following a dry deposit
- Disinfecting agents may not be heated up
- With temperatures starting at 40 °C, there is a risk of protein coagulation

Ultrasonic bath with heating:

- For basic cleaning of instruments

Treatment of medical instruments in the ultrasonic bath

Fast instrument pass-through and gentle instrument disinfection and intensive cleaning in 5 minutes with STAMMOPUR DR 8. No damage to the instruments thanks to manual "brushing".



Instrument disinfection and cleaning in the SONOREX DIGITEC DT 514 ultrasonic bath.



Cleaning of micro instruments in insert basket K 14. Free of contact on silicone knob mat SM 14.



Disinfection and cleaning of endoscope accessories with fixing clamps FE 12. Practically affixed in insert basket K 14.

Ultrasound works this fast

Soiling on the instruments loosens up after only a few seconds.



Photos: Arterial clamps with blood residue
Sonication in the SONOREX SUPER RK 1028 ultrasonic bath with STAMMOPUR DR 8.

Selection criteria for ultrasonic baths



SONOREX DIGITEC DT Series		SONOREX SUPER RK Series
0.9 – 28.0	Tank size (litres)	0.9 – 28.0
Push buttons	Operating elements	Turning knobs
1 – 30, continuous operation ∞ after 12 hours	Time setting (min)	1–15, continuous operation ∞
optional, H-version	Safety shut-down	no
20 – 80 °C, DT 31 H 65 °C pre-set	Heating	optional, H-version
yes	Heating, thermostatically controlled	30 – 80 °C, RK 31 H: 65 °C pre-set
yes, can be enabled	Excess temperature signal	no
±3.5 K	Protection against retardation of boiling	no
1.4301	Setting accuracy of the bath temperature	±5 K
yes, stamped	Stainless steel tank	1.4301
yes, starting with DT 106	Filling level mark for safe dosing	yes, stamped
IP 33	Single-step process	yes, starting with RK 106
Spray water protection	Degree of protection	IP 32
35	Liquid protection	Drip-proof protection
yes	Ultrasound frequency (kHz)	35
yes	SWEEP	yes
yes	PZT transducers	yes
yes	Degas	no
yes	Mains 230 V~ (± 1 %), alternative 115 V~ (± 1 %), 50/60 Hz	yes
1 programme	Programme storage	no
yes	CE according to MDD	yes
2	Warranty (years)	2

Technical information

Oscillating tank interior (L × W × D) mm	Content Litres	Unit type SONOREX DIGITEC	Order No.	Unit type SONOREX SUPER	Order No.	Exterior dimensions (L × W × H) mm	Outlet Ball valve	Ultrasound peak power* W	HF performance W _{eff}	Heating power W	Current consumption A**
190 × 85 × 60	0.9	DT 31 DT 31 H	3200 3220	RK 31 RK 31 H	329 044	205 × 100 × 170	-	240 240	30 30	- 70	0.2 0.5
240 × 140 × 100	3.0	DT 100 DT 100 H	3210 3230	RK 100 RK 100 H	301 312	260 × 160 × 250	- -	320 320	80 80	- 140	0.4 1.0
∅ 240 × 130	5.6	DT 106	3270	RK 106	306	∅ 265 × 270	G ¼	480	120	-	0.6
500 × 140 × 100	6.0	DT 156	3275	RK 156	305	530 × 165 × 245	G ¼	640	160	-	3.6
300 × 150 × 150	5.5	DT 255 DT 255 H	3215 3240	RK 255 RK 255 H	3066 316	325 × 175 × 295	G ¼ G ¼	640 640	160 160	- 280	0.7 2.0
325 × 300 × 150	13.5	DT 514 DT 514 H	3250 3211	RK 514 RK 514 H	277 207	355 × 325 × 305	G ½ G ½	860 860	215 215	- 600	1.0 3.6
500 × 300 × 200	28.0	DT 1028 DT 1028 H	3255 3231	RK 1028 RK 1028 H	322 324	535 × 325 × 400	G ½ G ½	1200 1200	300 300	- 1300	1.4 7.0

* corresponding to 4 times the HF power **at 230 V~ (± 1%) 50/60 Hz

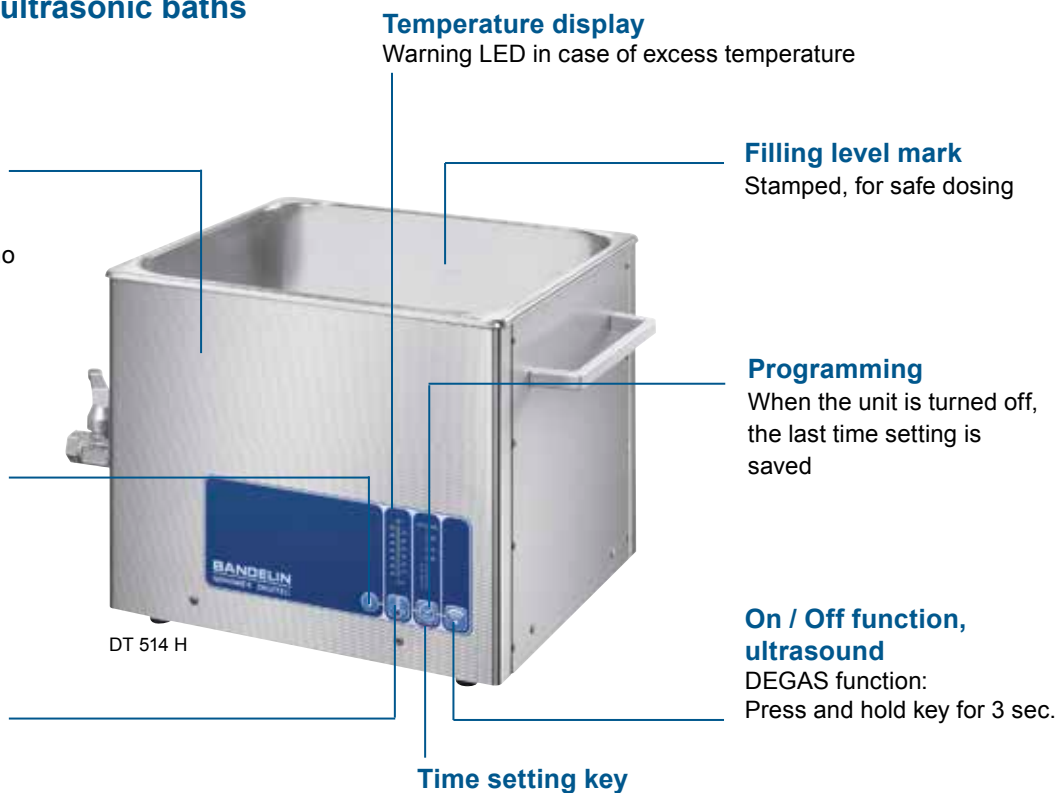
SONOREX DIGITEC ultrasonic baths

Hygienic

The level front surface allows for optimum surface disinfection and cleaning – no room for hidden build-up of germs

On / Off function Bath

Temperature selection key



Temperature display

Warning LED in case of excess temperature

Filling level mark

Stamped, for safe dosing

Programming

When the unit is turned off, the last time setting is saved

On / Off function, ultrasound

DEGAS function: Press and hold key for 3 sec.

Time setting key

SONOREX ZE ultrasonic built-in baths

Advantages

- suitable for DIN-/ISO baskets/trays
- tilted tank bottom for easier emptying, starting with ZE 1031
- filling level mark, stamped, for safer dosing
- hygienic care thanks to rounded tank corners and undertable mounting
- operating element on the front side
- generators may be hung on both the right- or left-hand sides

DIN basket / ISO tray	ZE ultrasonic built-in bath
1/2 DIN basket	ZE 514 /... DT
1/1 DIN basket	ZE 1031 /... DT, ZE 1032 /... DT
1/1 DIN basket or ISO tray	ZE 1058 /... DT, ZE 1059 /... DT
1/1 DIN basket or ISO tray	ZE 3000, ZE 3000 DT



SONOREX ZE 1031 DT, built-in



ZE 1031 DT



ZE 1031

Ultrasonic built-in baths in digital design with temperature display SONOREX ZE ... DT		Ultrasonic built-in baths in analogue design SONOREX ZE ...
13.5–60.0	Tank size (litres)	13.5–60.0
ZE 514 DT – no ZE 1031/1032/1058/1059/3000 DT – yes	Tilted tank bottom	ZE 514 – no ZE 1031/1032/1058/1059/3000 – yes
ZE 514/1031/1058	Bottom irradiation	ZE 514/1031/1058
ZE 1032/1059/3000 DT	Bottom- and side irradiation	ZE 1032/1059/3000
Key	Operating elements	Turning knobs
ST 30 DT: 1 – 30, continuous operation ∞ after 12 hours	Time setting (min)	ST 15: 1–15, continuous operation ∞
yes	Safety shut-down	no
yes	Temperature display	no
yes	Excess temperature signal	no
ZE 514 DT – 0.8 mm / 1.4301 ZE 1031/1032/1058/1059/3000 DT – 2 mm/1.4571	Tank thickness/stainless steel	ZE 514 – 0.8 mm / 1.4301 ZE 1031/1032/1058/1059 – 2 mm /1.4571
yes, stamped	Filling level mark for safer dosing	yes, stamped
ZE 514 DT – with drain set G 1½ ZE 1031/1032/1058/1059/3000 DT – bead 1½" (drain set G 1½ optional)	Outlet	ZE 514 – with drain set G 1½ ZE 1031/1032/1058/1059/3000 – bead 1½" (drain set G 1½ optional)
35	Ultrasound frequency (kHz)	35
yes	SWEEP	yes
yes	PZT transducers	yes
yes	Degas	no
yes	Mains 230 V~ (± 1%), alternative 115 V~ (± 1%), 50/60 Hz	yes
1 programme	Programme storage	no
yes	CE according to MDD	yes
2	Warranty (years)	2

SONOREX ZE ultrasonic built-in baths

SONOREX ZE built-in baths with bottom irradiation

Oscillating tank interior (L x W x D) mm	Content Litres	Unit type	Order No.	Exterior dimensions (L x W x H) mm	Outlet	Ultrasound peak power* W	HF performance W_{eff}	Current consumption** A
325 x 300 x 150	13.5	ZE 514 ZE 514 DT	2097 3202	350 x 324 x 215 ^②	Drain set G 1 ½	860	215	1.0
510 x 300 x 200/220 ^①	29.0	ZE 1031 ZE 1031 DT	3060 3217	570 x 360 x 270/290 ^{①②}	Bead 1 ½"	1200	300	1.4
600 x 400 x 200/220 ^①	46.0	ZE 1058 ZE 1058 DT	3050 3234	660 x 460 x 270/290 ^{①②}	Bead 1 ½"	2400	600	2.7

SONOREX ZE built-in baths with bottom- and side irradiation

Oscillating tank interior (L x W x D) mm	Content Litres	Unit type	Order No.	Exterior dimensions (L x W x H) mm	Outlet	Ultrasound peak power* W	HF performance W_{eff}	Current consumption** A
510 x 300 x 200/220 ^①	29.0	ZE 1032 ZE 1032 DT	3075 3223	570 x 410 x 270/290 ^{①②}	Bead 1 ½"	1760	440	2.0
600 x 400 x 200/220 ^①	46.0	ZE 1059 ZE 1059 DT	3085 3248	660 x 510 x 270/290 ^{①②}	Bead 1 ½"	2400	600	2.7
770 x 420 x 165/190 ^①	60.0	ZE 3000 ZE 3000 DT	3036 3037	900 x 480 x 245/275 ^{①②}	Bead 1 ½"	3040	760	3.3

ZE 514, ZE 514 DT Installation from above or below, ZE 1031 to ZE 1059 DT: Installation from below ^①tilted tank bottom

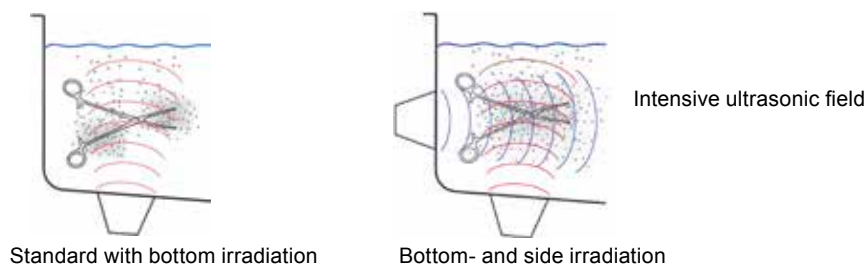
^②Dimensions without generator, outer dimension of the HF generators 360 x 310 x 142 mm (L x W x H)

*corresponding to 4 times the HF power **at 230 V~ (± 1%) 50/60 Hz

Optional:

Stainless steel rinsing tanks without ultrasound, for installation in work plates please request detailed documents!

Ultrasonic effect



SONOREX ultrasonic built-in baths with digital control unit and controlled temperature monitoring in accordance with KRINKO recommendation*

The ST 30 DT digital control unit has an integrated temperature display and offers the user added safety to prevent protein coagulation. If the bath fluid heats up to >40 °C, a red warning LED will also flash.

The built-in baths with digital control unit thus meet the current KRINKO recommendation*.

Later retrofitting of the analogue control unit (ST 15) is easily possible.



ST 30 DT



ST 15

* Recommendation of the Commission for Hospital Hygiene and Infection Prevention (KRINKO) and the Robert Koch Institute (RKI) and of the Federal Institute for Pharmaceutical and Medical Products (BfArM)
Federal Health Gazette 2012 • 55:1244-1310

Standard accessories



K 14



K 14 EM



KT 30 Z mit K 29 EM

Insert basket

made of stainless steel
Prevents damages to the tank bottom.
K 6 for inside positioning
Mesh size 5 × 5 mm, K 08: 4 × 4 mm
K 3 C: 3.5 × 3.5 mm

Basket's inner dimensions mm (L × W × H)

K 08	170 × 65 × 50
K 3 C	200 × 110 × 40
K 6	Ø 215 mm, 50 mm high
K 5 C	260 × 110 × 40
K 6 L	460 × 100 × 50
K 14	275 × 245 × 50
K 28	455 × 245 × 50

Insert basket

made of stainless steel
Basket holder required!
Mesh size 4 × 4 mm
Basket's inner dimensions mm (L × W × H)

K 14 EM	230 × 240 × 45
K 29 EM	470 × 240 × 45

Basket holder

made of stainless steel
For inset baskets or 1/2 and 1/1 DIN-, ISO-sieves.

KT 14	for K 14 EM or 1/2 DIN basket
KT 30	for K 29 EM or 1/1 DIN basket
KT 30 Z	such as KT 30, with handles
KT 57	for K 29 EM, 1/1 DIN basket or ISO tray
KT 57 Z	such as KT 57, with handles



D 514



D 14



D 3000

Lid

for RK/DT 514, made of stainless steel
To protect against contamination from outside. Condensation water is discharged in the oscillating tank.

Lid

for ZE 514, made of stainless steel
For use with K 14 EM and KT 14.
For bottom installations.

Lid

for ZE 3000, made of stainless steel
For use with ZE 3000 / ...DT

The proper accessories make ultrasound use easier and at the same time preserve the oscillating tank and instruments.

Bath type	RK 31 / H DT 31 / H	RK 100 / H DT 100 / H	RK 106 DT 106	RK 156 DT 156	RK 255 / H DT 255 / H	RK 514 / H DT 514 / H
Accessories						
Insert baskets Order No.	K 08 209	K 3 C 3025	K 6 356	K 6 L 202	K 5 C 3027	K 14 354
Insert baskets Order No.	-	-	-	-	-	K 14 EM 226
Basket holder Order No.	-	-	-	-	-	KT 14 131
Lid Order No.	D 08 218	D 100 3003	D 6 346	D 156 3004	D 255 3007	D 514 3010
Silicone knob mat Order No.		SM 3 093	-	SM 6 110	SM 5 101	SM 14 118
Insert basket Order No.		PK 2 C 3082	-	-	K 5 P 113	-
Insert tub Order No.		KW 3 715	-	-	KW 5 240	KW 14 613



SM 14

Silicone knob mat

For contact-free placement of highly-sensitive instruments, especially micro instruments, during cleaning.
Prevents damage to instruments.
Fixation to the basket. Permeable for ultrasound purposes.

SM 3	170 × 97 mm, for K 3 C
SM 5	213 × 97 mm, for K 5 C
SM 6	426 × 97 mm, for K 6 L
SM 14	235 × 245 mm, for K 14, K 14 EM
SM 29	470 × 245 mm, for K 28, K 29 EM



FE 12 in K 14 EM

Fixing clamp set

Order No. 117

Facilitates the disinfection and cleaning of biopsy forceps and instruments, and hinders damages.
Set consists of 2 large and 5 small plastic clamps for the secure fixation of flexible endoscope accessories. Fixation to the basket.



PK 2 C

Insert basket made of plastic

Prevents damage to instruments.
Resistant up to 137 °C. Hole size: Ø 2 mm

		Inner tank dimensions (L × W × H)
PK 2 C	PE	187 × 90 × 56 mm
K 5 P	PE	254 × 96 × 130 mm



KW 14

Insert tub made of plastic, with lid

For basic instrument cleaning with STAMMOPUR GR.

		Inner tank dimensions (L × W × H)
KW 3	PE natural	195 × 115 × 88 mm
KW 5	PE natural	254 × 96 × 130 mm
KW 14	PP white	280 × 215 × 145 mm
KW 28-0	PP natural	437 × 230 × 155 mm

Bath type	RK 1028 / H DT 1028 / H	ZE 514 ZE 514 DT	ZE 1031 ZE 1031 DT ZE 1032 ZE 1032 DT	ZE 1058 ZE 1058 DT ZE 1059 ZE 1059 DT	ZE 3000 ZE 3000 DT
Accessories					
Insert baskets Order No.	K 28 358	-	-	-	-
Insert baskets Order No.	K 29 EM 688	K 14 EM 226	K 29 EM 688	K 29 EM 688	K 29 EM 688
Basket holder Order No.	KT 30 056	KT 14 131	KT 30 KT 30 Z 056 077	KT 57 KT 57 Z 061 3078	KT 57 KT 57 Z 061 3078
Lid Order No.	D 1028 3011	D 14 344	D 30 049	D 57 052	D 3000 7755
Silicone knob mat Order No.	SM 29 178	SM 14 118	SM 29 178	SM 29 178	SM 29 178
Insert basket Order No.	-	-	-	-	-
Insert tub Order No.	KW 28-0 717	KW 14 613	KW 28-0 717	-	-

The ultrasonic bath for

- rinsable MIS instruments
- standard instruments

<p>Individual instrument checks</p> <p>Blocked or clogged MIS instruments are identified and clearly reported on the display. Sample message on the display: "Instrument 5 is blocked."</p>	<p>Suction rinsing</p> <p>The contamination is not conveyed through the entire lumen. Dirt particles cannot accumulate in strictures or in the handle area.</p>
<p>Universal adapter</p> <p>The universal adapter enables the connection of a max. of 12 MIS instruments with a diameter of 1 mm – 10 mm. A seal replacement is not required.</p>	<p>Flexible use</p> <p>Three programme choices allow for the treatment of diverse instrument types such as rinsable instruments, take-apart instruments, tongs, scissors, etc.</p>

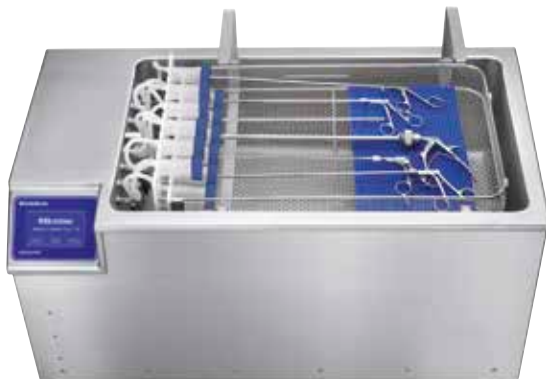
SONOMIC MC 1001 – ultrasonic bath

Set with basket, 12 adapters with seals and hoses.

Additional consumable materials:

30 filters, 12 adapter seals

Order No. 3315



SONOMIC MC 1001 E – ultrasonic built-in bath

Set consisting of:

Oscillating tank, HF generator with rinsing module, control unit, basket, 12 adapters with seals and hoses.

Additional consumable materials:

30 filter inserts, 12 adapter seals

Order No. 3345



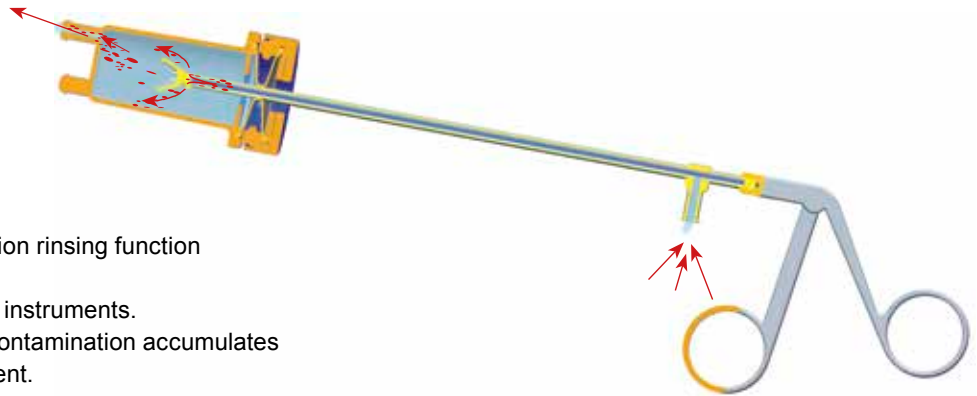
Swivelling control unit ST 1001 E

	SONOMIC MC 1001	SONOMIC MC 1001 E
Oscillating tank, interior (*tilted tank bottom)	650 × 400 × 160/170* mm (L×W×D)	650 × 410 × 160/170* mm (L×W×D)
Material	Stainless steel 1.4571, 2 mm thick	Stainless steel 1.4571, 2 mm thick
Content	42.5 litres	43.5 litres
Operating volume	27.0 litres	27.5 litres
Safety features	Fill level and temperature monitoring	Fill level and temperature monitoring
PZT large area transducers (bottom)	12	12
Ultrasonic peak power**	2400 W	2400 W
Ultrasonic frequency	40 kHz	40 kHz
HF power	600 W	600 W
Maintenance heating, programme-controlled	400 W	400 W
Current consumption	2.7 A	2.7 A
Exterior dimensions, housing	860 × 490 × 325 mm (L×W×H)	-
Exterior dimensions, oscillating tank	-	860 × 475 × 250 mm (L×W×H)
Outlet	Ball valve ¾", Threaded sleeves G ¾, rear right	G 1½ fitting, with turning knob and stainless steel plugs
Exterior dimensions, HF generator with rinsing module	-	455 × 155 × 360 mm
Interface	-	Parallel and serial for connection to a receipt printer or PC
Operation: Touchscreen 96 × 61 mm	built-in	in the control unit
Installation in the work plate	-	from below
Weight	45 kg	40 kg
CE according to MDD	yes	yes

*tilted tank bottom **corresponding to 4 times the HF power

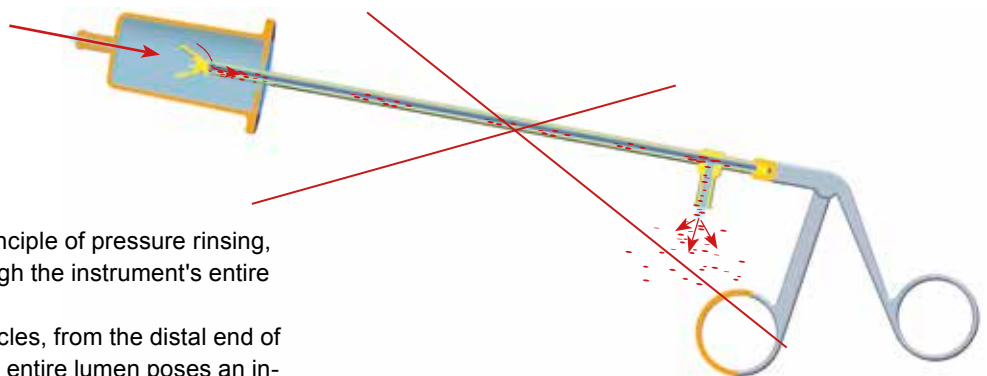
Thoroughness thanks to repeated suction rinsing

Principle of suction rinsing with SONOMIC



The SONOMIC is the first and only ultrasonic bath with a suction rinsing function – DE 20 2006 020 523 – for cleaning and disinfection of MIS instruments. Generally, the greatest amount of contamination accumulates in the distal end of the MIS instrument. Soiling is removed against the direction of ingress as a result of repeated suction rinsing with ultrasound support at the distal end of the instrument. At the same time, fresh disinfection and cleaning agent flows in. With suction rinsing, the contamination travels and lands directly in the adapter, ruling out any unnecessary contamination of the rear lumen portion. Suctioned dirt particles are caught by an exchangeable filter and do not land in the bath.

Principle of pressure rinsing by other suppliers



When cleaning according to the principle of pressure rinsing, all dirt particles are conveyed through the instrument's entire lumen. The long travel path of the dirt particles, from the distal end of the MIS instrument and through the entire lumen poses an increased risk for unwanted deposits, especially in narrowings in the handle area. The direct introduction of all dirt particles into the tank should be regarded as a further negative effect.

Upon request, we will be happy to send you our SONOMIC product film and detailed documents.

Additional information can be found at www.sonomic.eu

Technical advice and information
Telephone +49 30 76880-212

The ultrasonic bath for

- robotic instruments
- rinsable MIS instruments
- standard instruments



The new TRISON is a modularly-built ultrasonic bath for the intensive pre-cleaning of high-grade medical instruments with a special focus on the complexity of robotics instruments. The cleaning process is optimized through a combination of the operation methods listed below:

<p>Ultrasound</p> <p>Soiling at the distal ends of the instruments and in hard-to-access instrument lumina are thoroughly cleaned with gentle ultrasound cavitation, without damaging the instruments. In such cases, hard-to-access or inaccessible instrument locations are indeed reached, since the ultrasound is deployed everywhere that cleaning liquid is found.</p>	<p>Individual instrument inspection</p> <p>In the TRISON, robotic and MIS instruments are thoroughly rinsed during the ultrasound cleaning and individually inspected for flow-through. Clogged instruments are identified by the software and reported after treatment.</p>
<p>Suction pressure rinsing</p> <p>Robotics instruments are alternately exposed to suction and pressure rinsing. Rinsable MIS instruments only with suction rinsing.</p>	<p>Single instrument movement</p> <p>In the TRISON, robotic instruments are moved during ultrasonic cleaning using an innovative "Twist" multifunction holder. As a result, soiled working tools, joints, and the drive adapter cables up to the tip of the instrument are effectively cleaned with ultrasound.</p>



TB 3000 R TB 3000 L
Operating unit can be connected on the right- or left-hand side



Oscillating tank TE 3000



Generator GT 3000 M-C



SONOREX TRISON 3000 R
Order No. 7685
consisting of: Oscillating tank, HF generator, right-side TRISON Base, and mains switch
(The picture shows installation in a built-in cupboard [by customer])

TRISON – Advantages at a glance

- Versatile use for robotic instruments, but also may be used with rinsable MIS and standard instruments
- Improved treatment results thanks to a combination of ultrasound, rinsing and movement for robotic instruments
- Safety due to single-channel rinsing and inspection of the connected instruments
- Integrated temperature monitoring of the ultrasonic bath and warning function
- Easy, universal instrument connection
- TRISON Base – swivels in order to save space on the workstation
- Hygienic touchscreen control
- Logging of the treatment cycles through an ethernet or USB interface
- TRISON Base and Twist also for retrofitting of existing ultrasonic baths ZE 1058/1059



Swivelling operating unit

Ultrasonic tank TE 3000 and generator GT 3000 M-C

Thanks to its dimensions, the TRISON ultrasonic bath is specifically designed for very long robotic instruments; up to four instruments can be effectively sonicated in it.

Thanks to the high-performance ultrasonic oscillating systems, which are optimally distributed on the bottom and sides, drive adapters, instrument shafts and tools at the tip are optimally reached by ultrasound and disturbing acoustic shadows are avoided.

The ultrasound generator achieves the necessary output for the ultrasonic oscillating systems and is equipped with a Sweep Tec automatic frequency control that minimizes standing waves and ensures an almost homogeneous ultrasound intensity distribution.

TRISON Base

The swivelling TRISON control unit Base possesses an integrated filter, two multi-couplings, a touchscreen and interfaces to export the process data.

A special channel selector is responsible for a single-channel inspection. Non-rinsable (clogged) instruments are identified and reported by the software. In robotics mode, the unit automatically switches between pressure and suction rinsing (vacuum). This function is achieved through independently-developed components. The swivelling control unit for the ultrasound bath can be flexibly mounted/installed on the right or left side of the ultrasound tank.

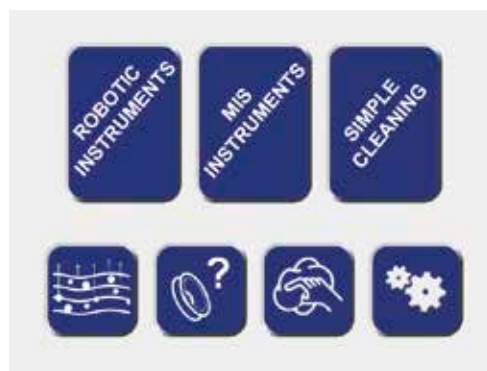
Existing built-in units such as ZE 1058 and ZE 1059 can be retrofitted.



Three treatment options in one device

Our independently-developed programme sequences are harmonised with the three instrument types: robotics instruments, rinsable MIS and standard instruments, in order to achieve high cleaning effectiveness.

Special baskets such as TRISON Twist and TRISON Rack can be quickly connected to the BASE without any risk of a mix-up.



Robotic instruments



MIS instruments

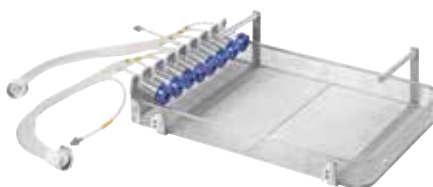


Standard instruments



Movement unit
TRISON Twist TT 3000
Order No. 7720

Treatment of a max. of four rinsable robotics instruments (IS 3000).



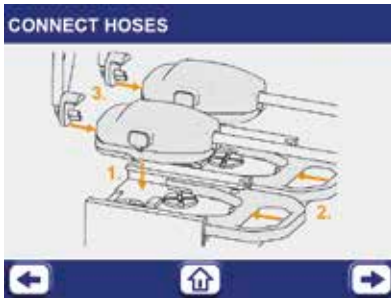
Special basket
TRISON Rack TR 3000
Order No. 7730

Treatment of a max. of eight rinsable MIS instruments.



Inset basket K 29 EM
Order No. 688
with basket holder KT 57
Order No. 061

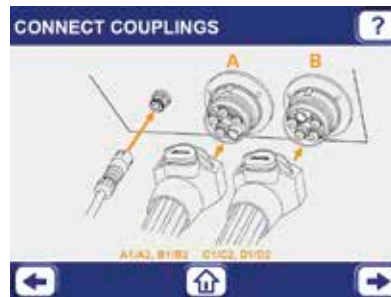
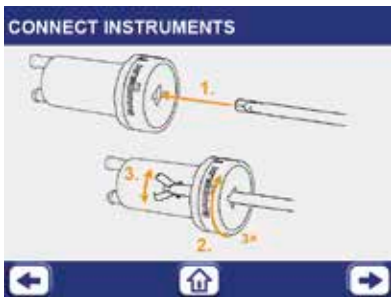
Treatment of standard instruments.
Also for 1/1 DIN or ISO sieves.



Operating concept / software

When designing the TRISON Base, value was especially placed on ergonomics and fitness for use in the intended work environment within a hospital's central sterile services department.

Thus, the device is operated using an easy-care touchscreen with user-friendly operating software that uses many icons and self-explanatory images, dispenses with long-winded operating texts and, instead, uses short and easy-to-understand key terms.



Example:

TRISON Twist

For holding and moving robotic instruments.

TRISON Base

Modern control unit with integrated rinsing technology.

HF generator

With a mounting bracket for vertical installation; hanging is possible on either the left- or right-hand sides.

TRISON Ultrasonic bath

Extra long, with optimised arrangement of the transducers, lateral sonication and basket mounts for comfortable equipping above the ultrasonic tank.

Mains switch

With a mounting bracket for vertical installation; hanging is possible on either the left- or right-hand sides.

The cabinet and tap are not part of the scope of delivery.



STAMMOPUR disinfection and cleaning concentrates

STAMMOPUR DR 8 – Instrument disinfection and intensive cleaning – VAH-certified

Disinfection and intensive cleaning of instruments after dry deposit. High blood dissolution, for instruments heavily contaminated with incrustations of blood and secretions. Due to short irradiation time especially recommended for the disinfection and cleaning of very sensitive and valuable micro-surgical, MIS instruments and endoscopic accessories. Recommended by known manufacturers of endoscopes. Solution applicable under strain for 3 sequent days. Very high material compatibility. Non-odiferous.

Anticorrosive. Without aldehydes, chlorine, phenols. Bactericidal, tuberculocidal, yeasticidal, virucidal against Vaccinia, BVDV, Papova, Adeno, HBV, HCV, HIV, H5N1, mildly alkaline pH 9.4 at 1 %.

Hazard identification: C, Corrosive; N, Dangerous for the environment

Form of delivery	2-litres-bottle	5-litres -jerrycan	25-litres-jerrycan
Order No.	972	974	936



STAMMOPUR R – Intensive instrument cleaning

Intensive cleaner for routine cleaning of medical instruments in the ultrasonic bath. High cleaning efficiency, even for instruments heavily contaminated with incrustations of blood and secretions.

Anticorrosive, very high material compatibility, applicable for all materials. In dosage of 2 % also applicable as contact liquid in the ultrasonic bath - e.g. for recommended basic cleaning of spotted and ugly looking instruments with STAMMOPUR GR.

Without phosphates, aldehydes and chlorine. Main active agents: tensides, mildly alkaline pH 9.6 at 1 %.

Hazard identification: Xi irritant

Form of delivery	2-litres-bottle	5-litres-jerrycan	25-litres-jerrycan
Order No.	934	989	976



STAMMOPUR GR – Basic instrument cleaning

Basic cleaning of spotted, encrusted and unsightly instruments in the ultrasonic bath. Removes tarnish, metal oxides, rust, spotting, burned-in residues after sterilisation and mineral residues e.g. lime. Caution with damaged chroming and nickel-plated parts.

Not for light metals, tin and zinc. Not to be used for routine cleaning.

Main active agents: phosphoric acid, tensides, pH 1.9 at 1 %.

Only to be used for basic cleaning. Use only in plastic insert tubs.

Hazard identification: C corrosive

Form of delivery	2-litres-bottle	5-litres-jellycan	25-litres-jellycan
Order No.	938	969	970



Current product information and EC material safety data sheets can be downloaded from www.bandelin.com.

Please request detailed documents and brochures!



BANDELIN *electronic*

is specialised in the development and manufacture of ultrasonic baths.

Certification according to EN ISO 9001:2008 and EN ISO 13485:2012

Fast and comprehensive consultations:

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All devices carry the CE label.
All images are exemplary, not true to size.

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Illustrative objects not included in the scope of delivery.

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BANDELIN

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65 years
of experience in ultrasound

BANDELIN *electronic*

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