ULTRASONIC CLEANING TECHNOLOGY FOR INDUSTRY





FLEXIBILITY

PASCAL TIERCE SinapTec president

"For more than 30 years now, our team of engineers and researchers has been working on understanding and exploiting ultrasonic power properties. This experience, implemented into a large number of industrial fields and into innovation, enables us to offer our ultrasonic technology for industrial cleaning.

Since 1984, business start-up year of SinapTec, our philosophy has always been to offer the best match between ultrasonic technology and the needs expressed by our customers. Our positioning is far beyond the one of a simple equipment supplier as we engage in a true support process.

How? By selecting for our partners and clients, the most relevant technology when facing a requirement. Our team of engineers is available to provide assistance and a consistent training for the initial implementation of our equipment and a follow-up of the commissioning, thanks to our remote IT support tools.

The generators and transducers developed by SinapTec are today distributed worldwide. These have been sophisticated through our experiences with our client's processes to reach their present proven and unmatched levels of performance and reliability."

ULTRASONIC CLEANING PROCESSOR FOR INDUSTRY

RESEARCH AND DEVELOPMENT PERFORMANCE AND RELIABILITY STATE-OF-THE-ART ENGINEERING DEMANDING APPLICATIONS PATENTED TECHNOLOGY

ULTRASOUNDS AND INDUSTRY

Our long-time practice acquired in industry, combined with our research on ultrasound production technology, enabled us to develop the patented NexTgen technology.

This technology is the result of the close cooperation between our electronics and software engineers, our ultrasound experts, our customers and partners. Implementation of the latest signal processor technologies and our technician's daily work to ensure the quality of the ultrasonic results have optimized the performances of our products at the highest level.

Over the years, this collaborative relationship enabled us to enlarge the NexTgen range to meet the requirements of our O.E.M. customers working in the most demanding business sectors: electrochemical treatment, micro-tube cleaning, nuclear decontamination, degassing process, liquid processing, continuous cleaning and decontamination for the food industry, preparation of ophthalmic lenses...



An excellent understanding of the physical mechanism of ultrasounds, as well as the implementation of equipment in a large number of industrial applications, enable us today to understand multiple market situations and to match your requirements by offering solutions adapted to the industrial environment.

NEXTGEN ULTRASONIC GENERATORS

This innovative equipment delivers the best technology thanks to the integration of a signal processor similar to the kind used in smartphones. Every millisecond, this processor ensures that the energy transferred to the media treated is mastered and realised in the best conditions, whatever its complexity. This equipment offers precision and high reactivity to frequency changes induced by the slightest trial conditions modifications.

The PC board, driven by algorithms developed by our engineers, is all the more reliable and robust. The generator maximum power has been designed for high levels and provides an instantaneous intensity permitting to meet the transducer and probe most important requirements...

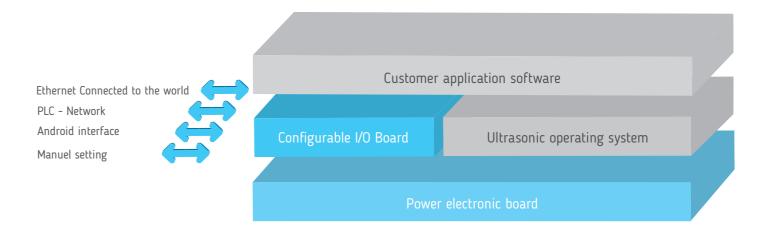




Our NexTgen technology is part of the world of connected objects. Indeed, it creates an information flow between the generator and the local (or distant) information systems which enables to ensure traceability, the monitoring of the process, preventive maintenance, the reconfiguring of the ultrasonic equipment,...

This technological advance enables our support team to keep direct contact with our customers making possible the remote management of the equipment owing to our software tools.

Communication is easily established via field networks or at a distance by an Ethernet connection (Bluetooth connection in certain cases).





EQUIPMENTS

SinapTec designs, modelizes and produces the transducers and ultrasonic transmitters which perfectly combine with the generators of the NexTgen range.





Transducers

The transducers are fixed on the bottom and/or the wall of a tank in order to optimize the power distribution inside the bath, while leaving space for other accessories.

This is the most economical solution for equipment produced in large series.

We offer wide frequency ranges in order to meet all cleaning requirements

THE REMOVABLE ONE

Immersible boxes

These waterproof transmitters are easy to integrate, also in existing installations. They are placed on the bottom or directly on the walls of the tank.





THE DISCREET

Ultrasonic plate

The US plates are fitted with ultrasonic transducers. Constructed in standard dimensions, the plates can easily be installed in tanks of any geometry.

The plates are fixed on the outside of the tank. They are the ideal solution for cleaning tanks with little space availability, thus not allowing the integration of immersible boxes.

Radial probe

The radial probes are designed for the production of a homogeneous ultrasonic field, distributed at 360° all along its sonotrode. They guarantee a consistent ultrasonic field. Their yield, higher than for classic transducers, and low space requirement make them the ideal systems for high power density requests.



TECHNICAL FEATURES

Technical information	NexTgen Inside for Transducers, Plates, Immersibles box		NexTgen Inside for Radial probes	NexTgen Analyser
MECHANICAL CHARACTERISTICS				
	Inside 500	Inside 1500	Inside 1500	Analyser
Type of model Size	270x175x100mm	270x175x160mm	270x175x160mm	Analyser 210X190X120mm
Weight				
Meißlir	3,4Kg	4,1Kg	4,1Kg	2.3kg
ELECTRICAL CHARACTERISTICS				
Power supply	220-240 Vac / 50Hz	220-240 Vac / 50Hz	220-240 Vac / 50Hz	220-240 Vac / 50Hz
Output Power	300W	1500W	1500W	/
Frequency Range	12 to 100kHz	20 to 100kHz	20 and 40kHz	10 to 100kHz
INPUT/OUTPUT INTERFACE				
Remote Start/Stop	Dry contact		Dry contact	Dry contact
Default relay	Yes		Yes	Yes
Additional Inputs/Outputs	Optional		Optional	Optional
Ethernet / RS485 fieldbus	Optional		Optional	Optional
CONTROL SETTING PARAMETERS				
Resonance frequency	Yes		Yes	/
Sweep frequency	Yes		No	/
Random frequency	Optional		No	/
Multiple sequencer program	Optional		Optional	/
Power setting	10 to 100%		10 to 100%	/
Timer	From 0,5s to 10 hours		From 0,5s to 10 hours	/
Custom settings	On de	emand	On demand	On demand
CONNECTIVITY				
Upgradable Software	Yes		Yes	Yes
Online technology assistance from our support			Yes	Yes
Preventive maintenance and diagnosis		es	Yes	Yes
			.33	
MONITORING /MEASUREMENT				
Frequency	Yes		Yes	Yes (10 to 100kHz)
Power	Yes		Yes	Yes (up to 1500W)
Advanced parameters (U,I,)	Optional		Optional	Yes
Recording parameters for traceability	Optional		Optional	Yes

NEXTGEN ULTRASONIC ANALYSER

The NexTgen Ultrasonic Analyser is an exclusive SinapTec product which enables to obtain on your ultrasonic cleaning equipment the same information as provided by a SinapTec NexTgen generator software.

The Analyser will allow you to carry out a reliable and reproducible measurement of the stability and efficiency of the bath. In order to follow the developments in real time, these measurements are graphically displayed by the NexTgen software. They can be saved and thus ensure you a quality control for the cleaning of your parts.

With regard to preventative maintenance, the Analyser will enable you to carry out an ultra-accurate diagnosis of the transducer taking into account the slightest operational failure.



ACCURACY OF MEASUREMENTS

QUALITY CONTROL

PREVENTATIVE MAINTENANCE

SinapTec specializes in the field of the development of innovative ultrasonic solutions for the industry for more than 30 years.

From the beginning in 1984, we made it a point of honor to work in close cooperation with our customers for the development of tailor-made new solutions as well as for the conception of new products.

Today, this collaborative spirit, the know-how of our expert engineer team, a total mastering of the technology and the use of specific software tools and materials enable us to guarantee optimum and adapted solutions to our customers.

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