






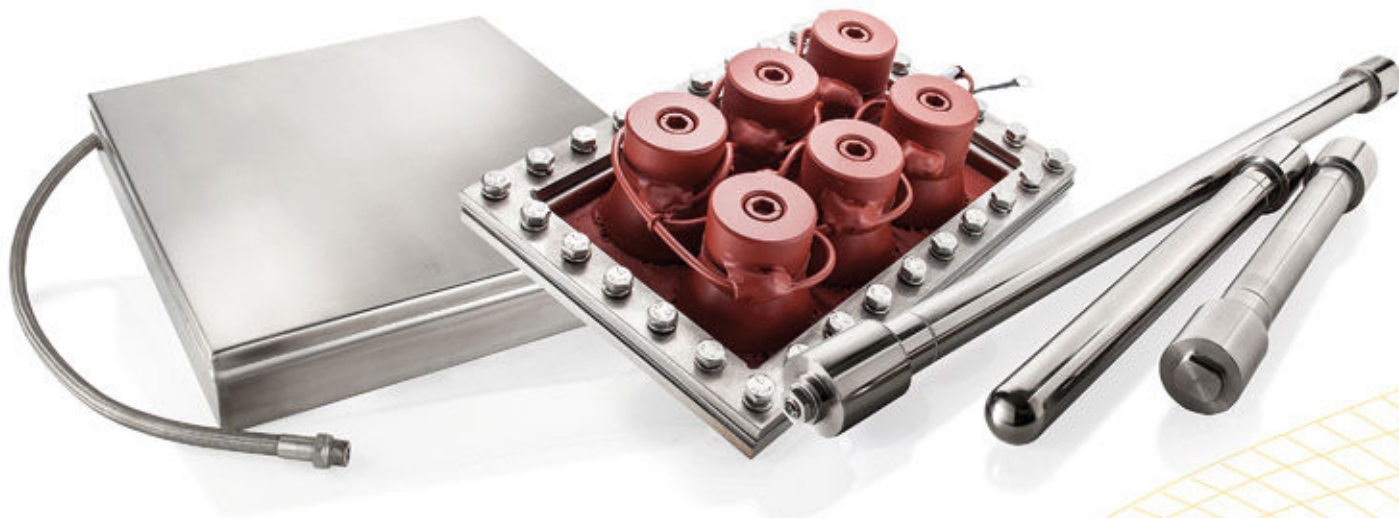
 **POWERSONIC®**  
**COMPONENTS FOR MECHANICAL ENGINEERING**

# POWERSONIC® GENERATORS



SMD technology, microprocessor control and robust power electronics for everyday industrial use in a small footprint (19") or for easy integration into existing modules and enclosure types.

SPECIFICATIONS	MOUNTING RAIL GENERATORS	ANALOG SERIES	DIGITAL SERIES
			
Microprocessor-based	✓	-	✓
Automatic impedance and frequency adjustment	✓	✓	✓
Adjustable output power between 40% and 100% of the nominal power of the ultrasonic generator	✓	✓	✓
Automatic constancy of the adjusted output power	✓	✓	✓
Plain text display of operating parameters	-	-	✓
RS232 and optional RS-485 (bus operation of up to 247 generators) interface	✓	-	✓
User-friendly setting options through plain text and structured user menu	-	-	✓
Frequency range from 25 kHz to 1 MHz possible	25, 40, 58, 75, 132, 192 kHz	25, 40, 58, 132 kHz	25, 40, 58, 75, 132, 192, 360, 470 kHz, 1 MHz
Compact design (335 x 165 x 100 mm)	✓	-	-
Prepared for quick and easy installation, e.g. control cabinet	✓	-	-
Latest microprocessor technology	✓	-	✓
19" housing	-	✓	✓
Output for each generator	from 300 W	from 300 W	from 300 W



## PUSHPULL® TRANSDUCER

Rod-shaped high-performance transducer systems with 2 ultrasonic heads for a homogeneous sound field independent of the resonator length.

Available as 25 kHz, 30 kHz and 40 kHz units in the material optimally adapted to your application.

### Universal and flexible in use:

- Ultrasonic cleaning
- Applications in environmental engineering (e.g. sewage sludge treatment)
- Sonochemistry (support of chemical processes)
- Emulsifying and dispersing
- Faster processing

### Benefits:

- Very long lifetime through solid resonator rod
- Extremely high efficiency (> 97%)
- Installation possible in pressure and vacuum vessels
- Dry-run safe

## SINGLEPUSH® TRANSDUCERS

The SinglePush® with one ultrasonic head is the lower-priced version of the PushPull® transducer.

Only one ultrasonic head generates all the ultrasonic power.

## SUBMERSIBLE TRANSDUCERS

Made of high-quality alloyed V4A stainless steel, optionally available in special materials.

Optimal sonication of the tank through specific arrangement of the transducer elements.

- Frequency range from 25 kHz to 1 MHz possible
- Customizable mounting options

## PLATE TRANSDUCERS

The space-saving version of submersible transducers. For maximum use of space, designed for installation in an opening in the container.

Made of high-quality alloyed V4A, available in the frequencies 25 kHz, 40 kHz and up to 192 kHz. Optionally also available in special materials.

# POWERSONIC® WELDING COMPONENTS



## ULTRASONIC WELDING

We offer special high-performance converters and generators for plastic and metal joining.

The welding converters and generators are available in frequencies of 20 kHz, 35 kHz and 40 kHz.

### Technical features:

- Automatic impedance and frequency adjustment
- Adjustable output amplitude between 50% and 100% of the nominal amplitude of the transducer element
- Automatic constancy of the adjusted output amplitude
- Measurement and output of the actually output ultrasonic effective power, thus recording of the energy possible

### Fields of application:

- Plastic and metal welding
- Compacting of copper strands
- Intense sonication in the near field
- Sonochemistry

## PATENTED CERAMICS

The patented ceramics elements are the product of intensive research within the Crest Group.

Ceramics elements have a kind of booster which considerably enhances the mechanical vibration, particularly at higher ultrasonic frequencies.



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