



MARTIN WALTER
ULTRASCHALLTECHNIK

A Crest Group Company

TAILOR-MADE FOR A PERFECT FIT



POWERSONIC®
COMPONENTS
FOR MECHANICAL
ENGINEERING

EXCELLENCE OF SONIC POWER

MAXIMUM FLEXIBILITY AND ADAPTABILITY – SIMPLY INTEGRATE



POWERSONIC® GENERATORS & COMPONENTS

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 192 kHz possible	25, 40, 58, 75, 132, 192 kHz	25, 40, 58, 75, 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

D OR SUPPLEMENTED

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.



PUSHPULL®- TRANSDUCERS

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

SUBMERSIBLE TRANSDUCERS

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

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

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

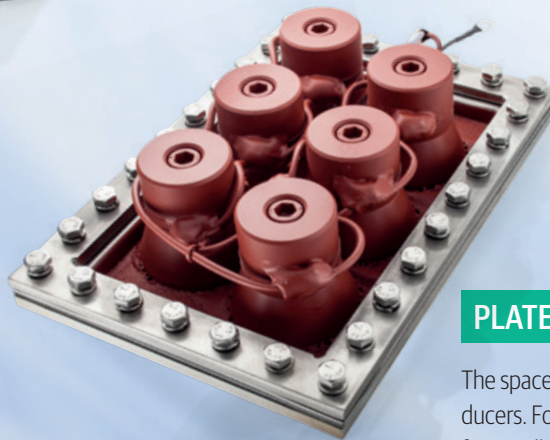


PLATE TRANSDUCERS

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.

HIGH-PERFORMANCE CONNECTORS



POWERSONIC® WELDING COMPONENTS

WELDING COMPONENTS

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.

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.

Fields of application

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

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

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