

25 kHz

Push-Pull®	Generator Model	Overall Length in. (A)	Radiating Length in. (B)	Radiating Diameter in. (C)	Overall Diameter in. (D)
06.25.198	MW 600 GPI 25	17.24	7.80	2	2.75
06.25.297	MW 600 GPI 25	21.14	11.69	2	2.75
10.25.297	MW 1000 GPI 25	21.14	11.69	2	2.75
10.25.495	MW 1000 GPI 25	28.94	19.49	2	2.75
15.25.495	MW 1500 GPI 25	28.94	19.49	2	2.75
15.25.693	MW 1500 GPI 25	36.73	27.28	2	2.75
15.25.891	MW 1500 GPI 25	44.53	35.08	2	2.75
20.25.891	MW 2000 GPI 25	44.53	35.08	2	2.75
20.25.1089	MW 2000 GPI 25	52.32	42.87	2	2.75
20.25.1287	MW 2000 GPI 25	60.12	50.67	2	2.75
20.25.1485	MW 2000 GPI 25	67.91	58.46	2	2.75

30 kHz

06.30.240	MW 600 GPI	16.54	9.45	1.18	2.17
06.30.320	MW 600 GPI	19.69	12.60	1.18	2.17
10.30.400	MW 1000 GPI	22.83	15.75	1.18	2.17
10.30.480	MW 1000 GPI	25.99	18.90	1.18	2.17
10.30.560	MW 1000 GPI	29.13	22.05	1.18	2.17
15.30.640	MW 1500 GPI	32.28	25.20	1.18	2.17
15.30.720	MW 1500 GPI	35.43	28.35	1.18	2.17

45 kHz

05.45.255	MW 500 GPI	16.14	10.04	1.18	1.88
05.45.365	MW 500 GPI	20.47	14.37	1.18	1.88
10.45.417	MW 1000 GPI	22.52	16.42	1.18	1.88

Generator Chassis (High power, compact size)

- 84 TE-----Holds a maximum of 5 modules up to 1500 watts per module.
- 42 TE-----Holds a maximum of 2 modules up to 1500 watts per module.
- 28 TE-----Holds a maximum of 1 module up to 2000 watts per module.



Push-Pull® Transducers for Industrial Cleaning



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The International Group of Crest Ultrasonics Cleaning and Technology Companies

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| Crest Ultrasonics, Thailand | Uthe Technology, Singapore |
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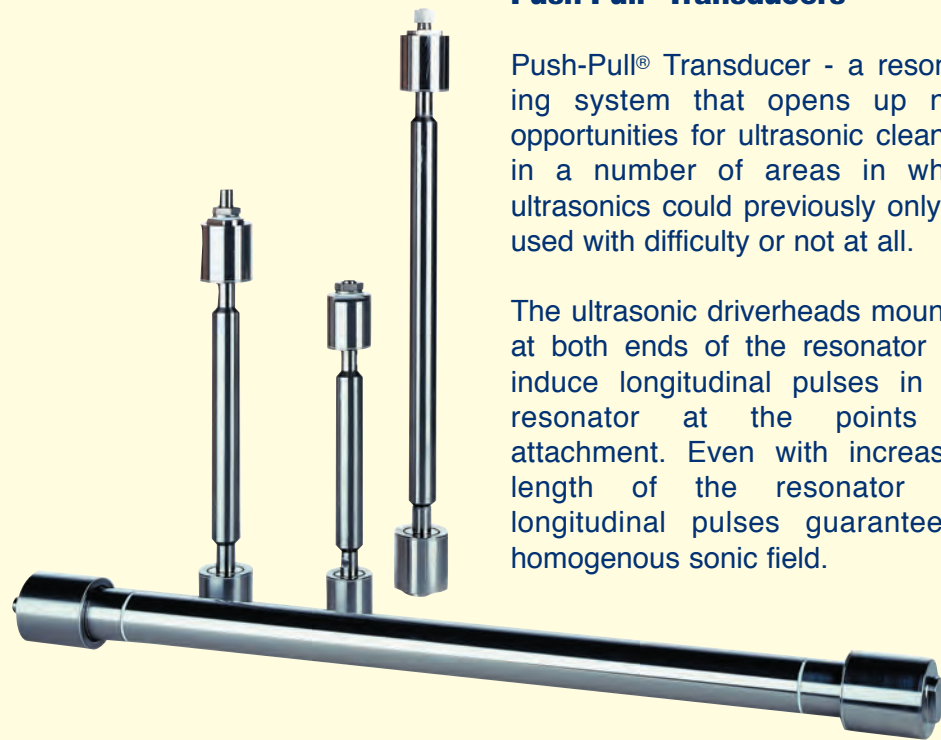


Push-Pull® Transducers for Industrial Cleaning

Push-Pull® Transducers

Push-Pull® Transducer - a resonating system that opens up new opportunities for ultrasonic cleaning in a number of areas in which ultrasonics could previously only be used with difficulty or not at all.

The ultrasonic driverheads mounted at both ends of the resonator rod induce longitudinal pulses in the resonator at the points of attachment. Even with increasing length of the resonator the longitudinal pulses guarantee a homogenous sonic field.



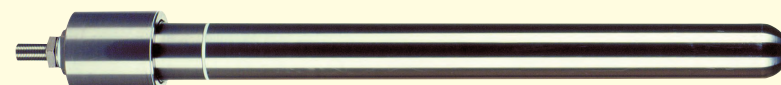
Advantages:

- Exceptionally long life time assured by solid resonator.
- Very high efficiency (>97%). This permits cost savings through the reduction in energy consumption
- Installation in vacuum or over pressure environment possible
- Automatic internal identification for dry-running condition without additional wiring

The following frequencies are available:

25 kHz, 30 kHz, 40 kHz and 45 kHz.

We offer the Push-Pull® Transducer in different materials so we can meet a variety of needs.



Multi-functional for Process Flexibility

The Push-Pull® technology comes into its own in the following applications:

- Ultrasonic cleaning
- Environmental applications (e.g. sewage sludge treatment)
- Sono-chemistry (Supporting chemical processes)
- Emulsifying and dispersing

Single-Push® Transducers

The Single Push® Transducer with only one driverhead is the less expensive version of the Push-Pull® Transducer. Only one driverhead has to create the total power.

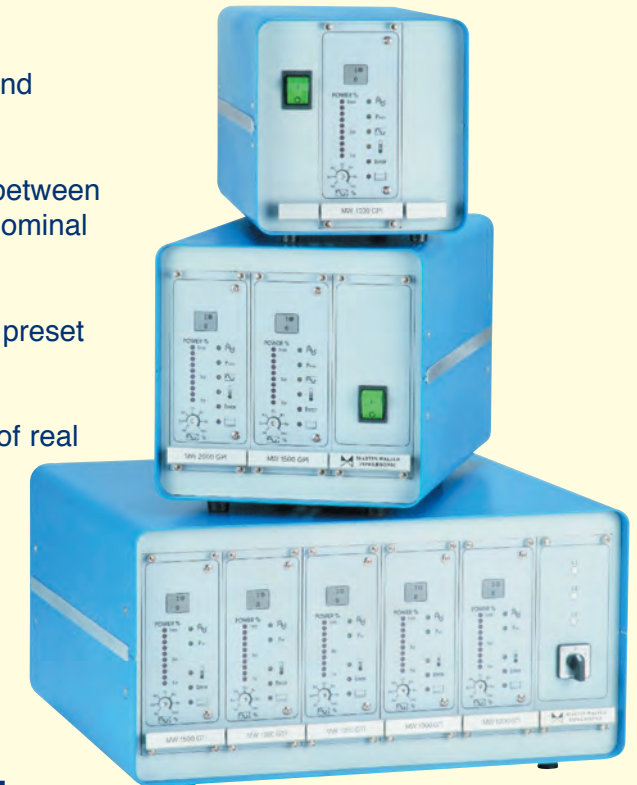
Generators

By using the latest semiconductor technology, complex integrated circuits and robust power electronics, we are able to offer a series of modular 19" generators which meet all the requirements of industrial users.

Thanks to their exceptional compactness, they require very little space, even in complex plans. All the generators are individually matched to the users applications.

Technical features

- Automatic impedance and frequency control
- Output power variable between 40% and 100% of the nominal output power
- Automatic regulation to preset constant output power
- Monitoring and display of real RMS output power



Microprocessor based ultrasonic generator MI-series

Through the special generator software there are comfortable adjustment features that could be an easy match to superior process control systems.

Display for plain text messages shows the operating parameters. The adjustment and control of the operating parameters can also be made via the integrated interface. You can choose either the serial interface RS-232 or RS-485. Last one allows a bus operating of up to 247 generators. A corresponding PC software for configuration of the generators is available on request.

Technical features

- Microprocessor based control with comfortable adjustment features and different user level.
- Frequency from 25 kHz up to 350 kHz
- Display for plain text messages of operating parameters