



 **SYSTEMS,
COMPONENTS &
APPLICATION DEVELOPMENT
FOR ULTRASONIC CLEANING**



MARTIN WALTER ULTRASCHALLTECHNIK AG - SUCCESSFUL WITH SYSTEM SINCE 1967

Martin Walter Ultraschalltechnik AG is a leading company in cleaning technology, the mixing and separation of liquids, joining technique and special processes in industry and environmental protection using ultrasound.

From specific components to ready for use all-in-one devices we develop and deliver technology which meets your requirement regarding cleaning, separating, mixing and welding.

APPLICATION DEVELOPMENT

Solutions are our strength, in our in-house laboratory we daily face new challenges from the industry and environmental protection. We design products which set tomorrow's ecological and economical standards.

A team of technicians and engineers is available in service and in development to answer your specific questions and to provide the appropriate solution for you based on their wealth of experience.

We offer the opportunity to carry out experiments in our laboratory with different ultrasonic cleaning equipment. Together, we will define the parameters and select the ultrasonic components for the best possible result.



COMPONENTS FOR MECHANICAL ENGINEERING



We supply components such as converters, racks, generators, submersible transducers and rod transducers for mechanical engineering.

Our components are used in many different special machines, for example in

- Electroplating
 - Electronics manufacturing
 - Air and filter technology
 - Wastewater treatment
 - Food industry
 - Medical engineering
 - Laboratory technology
 - Mixing and separating methods
- and many more

Use of our components in mechanical engineering



ECONOMIC SOLUTIONS

Our application-specific developments and the adaptation of existing components lead to economic solutions.

The strength our customers appreciate in us most.

IN TOP QUALITY

Highest quality means maximum stability of value.

We develop and manufacture system-related components such as the ceramics of ultrasonic elements and due to our manufacturing depth we ensure the highest reliability of your system.



Inventory of standard components



ULTRASOUND & ULTRASONIC CLEANING

If ultrasonic energy is introduced into a liquid medium, zones of high overpressure and underpressure are generated in the liquid. Microscopic vacuum bubbles are produced in the underpressure phase. These small bubbles implode again in the subsequent overpressure phase. This physical effect is called cavitation.

The implosion of the vacuum bubbles produces a very high pressure, blasting off the dirt from the surfaces to be cleaned without damaging the surface.

In addition, microstreaming is produced that washes away the dissolved dirt from the part to be cleaned.

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.

Benefits of multi-frequency

- Gentle cleaning
- Combination of energy and depth effect
- Variable combination options of frequencies
- Frequencies may be operated separately or together



WE, AS YOUR PARTNER, ARE CLOSE TO YOU

Our highly specialized mobile service team will be at your side during installation and commissioning. You can reach our mobile 24-hour service through our service hotline: 0800-MWALTER (0800-6925837).

As a member of the Crest Group, one of the largest specialists in ultrasound technology worldwide, we have access to solutions from cross-industry applications, provide security of investment through quality, manpower and global after-sales service.