

Application example

Intermediate cleaning of components for engines

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING





Ultrasonic tube resonators, 25 & 40 kHz frequency, and a DCG module generator, built into a multi-chamber cleaning system.

Task

Engines comprise many individual high-precision components. A wide range of process steps are required to manufacture these components. In many cases, intermediate cleaning is required between manufacturing steps to remove oil, protective coats, machining chips, etc.

Solution

Single-chamber cleaning systems are often used for intermediate cleaning, generally with ultrasonic components fitted in the chamber. The chamber volume dictates the number of integrated tube resonators, which are supplied with energy via DCG module generators. (DCG = Digital Cleaning Generator) The generators are housed in the control cabinet of the cleaning system.

Configuration advantages

Using ultrasonics makes it possible to achieve deep cleaning. Even recesses, drill holes and undercuts can be cleaned as a result of the cavitation effect. Thanks to the radial radiation surface, the ultrasonic resonators produce an intensive and homogeneous ultrasonic field to meet the highest standards of cleaning. The tried-and-tested design and high quality requirements for the materials used guarantee the high efficiency and durability of the tube resonators and DCG generators.