

Application example

Final cleaning of pistons and connecting rods

PLASTIC WELDING

METAL WELDING

CUTTING

CLEANING

SCREENING



The final cleaning of the parts takes place in a multi-chamber cleaning system fitted with ultrasonic tube resonators and DCG generators.

Task

When pistons and connecting rods for engines are finished and ready for delivery, they must meet the highest standards. The elimination of residual soiling and other impurities incurred during production is extremely important so that the parts can be fitted after delivery without requiring additional cleaning.

Solution

Ultrasonic solutions make an important contribution here thanks to utmost cleanliness, short throughput times and simple handling. Introducing ultrasonic waves into a cleaning fluid leads to cavitation as a result of pressure fluctuations. This forms micro-bubbles which implode again, thus creating the cleaning effect. Tube resonators are installed in a multi-chamber system with the corresponding DCG generators. (DCG = Digital Cleaning Generator)

Configuration advantages

Thanks to the cavitation effect in the cleaning fluid, even problematic, hard-to-reach areas undergo deep cleaning. The tube resonators can be installed in a cleaning chamber in any direction depending on the application in question. The 360° radiation produces an extremely efficient, homogeneous cavitation field which reliably removes residual dirt. Ultrasonic tube resonators are easy to install and remove, feature a robust, durable design and demonstrate high energy efficiency.