

# **Design of an ultrasonic cleaning system.**

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**Abstract:** In production and industrial practice, effective cleaning is an important issue to ensure product quality. This topic focuses on designing an advanced cleaning system using ultrasonic waves with the goal of optimizing the cleaning process. Through theoretical and experimental research, the essay will propose new methods based on the characteristics of ultrasonic waves to improve efficiency and save energy. The expected result is to provide an advanced technical solution with wide application in many industrial fields, while contributing to the development of surface treatment technology.

**Keywords:** Ultrasound, cleaning, surface treatment technology