

UWM-PROFI

Ultrasonic wash modul







Key facts

- Significant lower power, compressed air & chemical addition consumption compared to traditional washing operations. Accordingly also much lower water upcycling efforts which lowers the overall consumptions as well.
- Our UWM module can work as stationary machine or can be implemented in existing traditional washing systems

Description

- Ultrasound has a washing effect by its 20,000 vibrations per second directly into the textile materials and mechanically knocks the substances to be removed out of the fabric.
 - What is particularly sophisticated about ultrasonic washing is that the excess substances are not only removed from the material purely mechanically, but also **by cavitation**.
 - Ultrasound generates a periodic compression and expansion of the liquor absorbed by the material. Due to these pressure fluctuations, microscopic cavities form in the liquid.
 - The subsequent *implosion of these cavitation bubbles* filled with gas and water vapor leads to extreme local conditions, so that shear forces are created by the collapsing bubbles, which loosen the excess substances from the textile material at *high speed*.

Technical specifications

- Material width: 0 6.000mm
- Ultrasonic technology: 20kHz
- Water tank with deflection rollers
- Adjustable immersion depth
- Adjustable water runoff & intake
- Water heating system / max. 60°C incl. water temperatur sensor
- Deflection rollers at input and output / height adjustable
- Optional squeezing roller system / pneumatically liftable









