



# CAVITUBE<sup>®</sup>

## ULTRASONIC REACTOR TECHNOLOGY

### TECHNICAL STATUS

Ultrasonic reactors are used, among other things, to support chemical processes. Chemical liquids, for example, are subjected to strong, uniform vibrations in the ultrasonic range.

These intense vibrations in the liquid create an infinite number of micro-vacuum bubbles, which repeatedly collapse like an implosion, releasing high levels of energy. This local energy release in the micro range is estimated at up to 1000 atm.

This process is called acoustic cavitation.

### CAVITUBE LUBRICANTS

REKTOL oils consist of up to 12 different chemical compounds that are processed into a homogeneous liquid. This means that these oil products should have the same density, composition and function in every area, no matter how small. This is usually done using temperature-controlled mixing processes (e.g. intensive stirrers), which are very time-consuming and energy-intensive.

Our CAVITUBE technology is carried out at room temperature and results in improved homogeneity in the micro range of the oils, which ensures an improved and consistent function of the oil mixture. In addition, our CAVITUBE homogenisation technology not only saves process time, but also replaces the fossil thermal energy from heating oil and gas used in conventional temperature mixing processes (up to 70% of total energy) with regenerative electrical energy (ultrasonic).



**FASTER**



**HOMOGENEOUS**



**MORE ENERGY EFFICIENT**

All REKTOL oil products have been successfully manufactured using this technology since 2020. Pay attention to the corresponding product labeling:

