

The use of ultrasound to control bacteria, fungi and algae in aquatic systems

Introduction

The purpose of this document is to supply a reference list of successful applications of ultrasound in support of the supply of ultrasound equipment for various applications in the control of waterborne disease and fouling organisms.

Low power ultrasound of frequencies between 30 and 50 KHz has been used for a number of years for cleaning and disinfecting materials (Mason, 1999; Mason et al. 2003), food processing (Oulahal et al. 2003, 2004), large scale surface sterilisation (Mazzola et al. 1995), control of E. coli (Scouten & Beuchat, 2002; Ugarte-Romero et al. 2006), fungi (Detachment, 1991, Idrissi et al. 1991) and algae (Tang et al. 2003, Zhang et al. 2004, 2006).

The following published scientific papers support the use of low power ultrasound for control of various organisms, including fungi, bacteria, algae, biofouling organisms, bacterial biofilms and large scale industrial fouling problems.

Reference List

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