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Measuring the Cavitation Cloud by Electrical Impedance Tomography

Authors : Michal Malik, Jiri Primas, Darina Jasikova, Michal Kotek, Vaclav Kopecky

Abstract : This paper is a case study dealing with the viability of using Electrical Impedance Tomography for measuring cavitation clouds in a pipe setup. The authors used a simple passive cavitation generator to cause a cavitation cloud, which was then recorded for multiple flow rates using electrodes in two measuring planes. The paper presents the results of the experiment, showing the used industrial grade tomography system ITS p2+ is able to measure the cavitation cloud and may be particularly useful for identifying the inception of cavitation in setups where other measuring tools may not be viable.

Keywords : cavitation cloud, conductivity measurement, electrical impedance tomography, mechanically induced cavitation
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