Mahendra Prasad, Development of wire mesh type probe for void measurement, M. Tech. Thesis, Department of Energy Systems Engineering, Indian Institute of Technology Bombay, 2001.

Supervisor(s): Prof. Kannan N. Iyer and Prof. P. C. Pandey

Abstract - The knowledge of void fraction (fraction by volume of gas phase to a total given volume) forms an important part of two-phase analysis. This kind of flow occurs widely in industries, in a number of forms that depend upon the prevailing conditions. A number of techniques have been developed and tested by different researchers so far, The complexity of two-phase flow has made it difficult to develop a wire mesh probe, which should overcome some of the problems associated with void measurement. Chapters 1 and 2 present a detailed literature survey on void fraction measurement techniques. In the third chapter, the electronic circuit development for the wire mesh probe is described. Finally, measurements detail using the probe is outlined.