

MEMO

From: F. Baneyx
Subject: Orifice Characterization

Orifice meters are commonly used to measure flow rates and we would like to establish the accuracy of such measurements for orifices of various sizes and shapes. To this end, we have built a test station suitable for measuring flow rates and pressure drops through an orifice.

Please determine if we can reproduce the results of Fig. 10.15 in Perry's Handbook 8th Edition using square orifices of various dimensions. Avoid using any taps that appears damaged.

We also have rectangular orifices. Please determine whether and how the orifice coefficient changes as a function of flow rate, and if the coefficient depends on the orientation of the rectangular slit.