STUDY OF INFLUENCE OF WATER METER ACCURACY ON WATER LOSSES

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Abstract

Water meter is a tool to measure the amount of water distributed by water utilities to its customers, so it can be determined amount of money to be paid. The measurement of water meter accuracy can be used to compare the amount of water that produced and water that delivered to customers, which can identify the leaks happen at the distribution process. The measurement of water meter accuracy intended has its purpose to analyze the error of water meters. This study is conducted by analyzing the accuracy of 1, 2, 3, and 6 years old water meter with the discharge varies at 0.4, 0.8, and 3.3 liters/minute. This study includes analyzing the error of water meters, the influence of the pressure of distribution system and the age of water meter to its accuracy, and the influence of water meter accuracy to water losses. The result shows that the accuracy of water meters influence the rate of water losses rate measured is indeed influenced by the accuracy of water meter. The meter with smallest error is the 1 year old water meter. Water meter that has the smallest loss of water is also the 1 year old water meter.

Keyword : Water meter, accuracy, pressure, water losses.