

**Uji Kinerja Pompa Air Sentrifugal Untuk Optimasi Kinerja Dan Efisiensi Energi Pompa** (Centrifugal Water Pump Performance Test For Performance Optimization And Pump Energy Efficiency)

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**ABSTRACT**

*Testing centrifugal water pumps using Shimizu PS-128 Bit water pumps, which are installed singly, series or parallel, with the treatment of pipes with curves and straight pipes and the influence of valve opening area as a variation of head load testing. Pump performance is indicated by the pump discharge and head which will be interpreted into the pump operating curve. The optimal operating point of the pump is shown at the junction between the head-discharge graph and the efficiency-discharge graph. Tests show that the level of the valve opening and the treatment of the curve affects the pump head, where the higher the head, the lower the pump efficiency. The highest pump efficiency is obtained in the treatment of a fully open valve with a straight pipe treatment for a single pump circuit, and fully open valves with turn pipe treatment for series or parallel pump circuits.*

*Keywords: pump, head, discharge, efficiency*