

DEVELOPMENT OF MODEL OF SERIES AND PARALLELS PUMPS FOR LABORATORY TO SUPPORT LEARNING MECHANICS FLUID AT MECHANICAL ENGINEERING VOCASIONAL DEPARTMENT OF ENGINEERING FACULTY OF YSU

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ABSTRACT

This study aims to produce model of two or more pumps in series and parallel for laboratory. The model is expected to be simple and compact, so that in use is not through the process of disassembly. By using the process design, product development and product testing, can be generated model of two pumps connected in series and parallel for laboratory, which is compact, and consists of two pumps Shimizu PS-116 BIT, three rotameter Wiebrock capacity of 60 lpm (liters per minute) and three manometer of 90 psi. The model is also equipped with three valves to regulate the relationship series / parallel, and a valve to regulate flow rate and pressure. From the test results, obtained satisfactory results so that this model can be used for learning tools for students to learn the properties of flow of two pumps or more connected in series and / or parallel.

Kata Kunci: *Labor-scale model, series pumps, parallels pumps*