

PELATIHAN SISTEM KENDALI MOTOR INDUKSI TIGA FASA MENGGUNAKAN VARIABEL SPEED DRIVE DI SMKN 1 PUNDONG

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ABSTRACT

This training activity is a PkM activity in the non-productive sector, namely schools as PkM partners. The need for learning aids which is very much needed by the world of education, especially SMKN1 Pundong for the Electrical Power Installation Engineering (TITL) skills program, is a very important and urgent need. Props are used as miniatures of work processes in the industrial world. In the Electric Motor Installation subject, variable speed drive (VSD) based electric motor starting, there is no tool available that is able to provide an overview of VSD based starting technology. This activity aims to 1) develop a VSD training kit unit, 2) determine the performance of the VSD training kit unit, and 3) determine the response of participants in the VSD training kit unit training. VSD trainer props are the focus of training material in PkM activities. The output product from PkM is a VSD trainer for three-phase induction electric motor control and a VSD trainer operating guide module. The target participants for the training are teachers, laboratory assistants and students at SMKN 1 Pundong for the TITL skills program. The results of the development show that the design of the training kit unit is made in the form of a portable teaching aid that is flexible and easy for learning mobility. The training kit unit is equipped with external control features including push buttons and potentiometers as a reference for motor rotation speed. The results of the performance show that the training kit unit has functioned well. The response from the training participants was very good and enthusiastic about participating in the VSD training kit unit training. The follow-up to this training is a cooperation script (IA) and IPR certificate for the training kit unit that has been developed.

Kata Kunci: *variable speed drive, trainer, induction motor*