

## **ABSTRACT**

### **GERINDA DESIGN SITE FOR EFFECTIVENESS OF CUTTING IN MANUFACTURING PROCESS MANAGEMENT (Case Study: On The Laboratory Manufacturing Process Engineering Industry UKMC)**

*College (PT) is a service industry that produces graduates who have certain competencies in cognitive or skill. One of the skills taught is the machining process, and in the form of its activities is a manufacturing practice. In practice the manufacturing process one of them is the process of cutting the metal. The problem that lies in the manufacturing process practically occurs in the cutting process, which is where the cuts are inaccurate and neat and during the process of cutting the occurrence of vibration in the hand. This research aims to design and develop the product on the grinding process, the product is grinding seats and to know the result of precision of neatness, vibration of the tool produced by Appropriate Technology approach, is the steps in general use observation Observe Modification (ATM). ATM observation steps are as follows: see the existing sitting grinding product in the field directly and perform the measurement of the tool, see the weakness found in the sitting grinder that is in the market, the process of designing the product with the same size with the grinding seated on the market and looking solution of the weakness of the grinding wheel, analyzing the design of grinding wheels by considering the economic and technical aspects. The result of cutting the material on 30 samples by using the existing grinding wheels in the manufacturing process laboratory and the grinding result of the design there is a difference shown by the F test and the result of T arithmetic > t column ( $1,699 > 0,383$ ), where the results of the analysis show the grinding seats designed by the authors are more specific at the level of neatness and precision than the existing grinding wheels laboratory.*

*Keywords : Higher Education, Grinding, Packing Technology. level of precision.*