

Quick change tool post development for Ciamix lathe to support learning of turning process

by Achmad Arifin, Surono

ABSTRACT

The purposes of this study were: (1) product development of Quick Change Toolpost Sets and Holders that can be used on a lathe Ciamix SP 6230 T, (2) getting the product Quick Change Toolpost Sets and Holders are eligible for use in the practice of turning learning. This study uses the approach of Research and Development at the development stages, namely: (1) a preliminary study, (2) production, (3) evaluation of product, and (4) dissemination. Validation of products were with due diligence by learning experts and practitioners machining lathe, while product testing by students by questionnaire. Data analysis technique used is descriptive statistical analysis techniques. The results of this research and development is the a product of the Quick Change Toolpost Sets and Holders that have specifications and advantages, namely: it can be used on a lathe Ciamix SP series 6230 T, it has two holders chisel mounted on toolpost, and chisel holder height setting is done simply by turning the screw regulator, so that the tip of the cutting chisel will be easily set as high as center lathe. This product makes easily a lathe operator in a high set chisel, do not need to use the mounting plate and more efficient working time in high chisel set. This product has eligibility with a score of 3.64, which means "GOOD", so it can be used with both functional and operational, able to withstand the vibration caused by engine speed at the turning process, and the result of turning with a few variations and depth feeds has shown good results.

Kata Kunci: *quick change toolpost, Ciamix turning machine, practice of turning learning*