

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF
ARBOR CLAMPER USING 3D
PRINTER ENDER 800**

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ABSTRACT

This research is about the design and fabrication of Arbor clamper using 3D Printer Ender 800. The objectives of this research are to design the prototype model of Arbor clamper by using SolidWorks Software and to fabricate the prototype model of Arbor clamper using 3D Printer Ender 800. In the meantime, keep in mind that, the current issues, unmatching dimension of clamper to the Arbor will make it unable to perform its function properly, which is to clamp to the Arbor, and poor design of Arbor clamper could cause harm to the Arbor, and the clamper itself as well as to the worker. In order to outcome the problem, the dimension of current arbor clamper is measured, and new design of arbor clamper with bigger dimension is developed by using SolidWorks Software. Moreover, research considering arbor clamper was done, to aid the design and fabrication of the arbor clamper. Following that, the prototype was built by aid of the Ender 800 3D Printer. This project discovered that the design of arbor clamper is crucial, especially the clamper and body design, in order for the arbor clamper do the work properly. This project teaches how to properly design the model of arbor clamper, based on the current arbor clamper, and the manufacturing process of the prototype of arbor clamper model.

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