

DESIGN AND CONVENTIONAL WOODEN LATHE MACHINE

Student Name : Badrul Amin
Student number : 2103161036
Counsellor lecturer : Suhardiman, S.T., M.T.

ABSTRACT

A lathe is one type of machine tool made of metal, the point is to cut the workpiece, the main movement of a lathe is to rotate the workpiece. In the industrial sector, the existence of a lathe plays an important role, especially in the machining industry and the wood industry. The main parts of a wood lathe are the fixed head, the head, the anvil, the chisel holder, and the motor. Therefore it is necessary to make an effort to create a conventional wood lathe, to make a pattern on the workpiece as a form of mold in a metal casting course. After the manufacture of the tool is complete, the tool is tested and the results are in accordance with the planning results and are able to form patterns on the workpiece. The design results of a conventional wood lathe using a motor power of 1 hp and an output rotating power of 1440 rpm, this machine is able to rotate a workpiece with a diameter of 40 mm and a length of 600 mm and the torque generated from an electric motor = 2,720.82 Nm.

Keywords: *Design, pattern shape, wood lathe.*