

MODIFIKASI MESIN BOBOK KAYU UNTUK PENINGKATAN PRODUKTIVITAS MEBEL INDUSTRI KECIL

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ABSTRACT

The problems of the furniture industry target are about the effectiveness of the use of wood chisel and bit machine because it hasn't fix machine bench for wood laying and the machine position that not ergonomic. These problems make setting time longer, wood position unstable because of unfix bench, the vice easy to broken because of instability of wood, imprecision of hole position, and the exhausted operator because of the machine position.

The main goal of this voucher program is to modify wood chisel and bit machine for preparing the connection between pin and its hole at U.D. TANGGUH, small scale furniture industry, so that productivity and quality of the furniture will be improved. For mass production, every step must be done perfectly and carefully so that every part can be connected and constructed correctly. Because of the reason above wood and chisel machine that strong, easy to operate, easy to lay wood accurately, and ergonomic must be developed.

Wood and chisel machine that be developed has 220 cm length and 30 cm width of its bench so that the wood with 200 cm length or more can be supported accurately especially at its parallel position to the machine vice. For operating the machine easily, the machine bench is made approximately 50 cm height so that the operator with sit down position can operate the machine without exhausted. The wood chisel and bit machine can make the hole approximately 7 cm depth and 1 cm width.

The result of the machine performance test show that the machine can be operated easily without exhausted. The hole is easily to be made on wood with 200 cm length without setting wood position. The hole position is automatically perpendicular to the horizontal line of the wood so that in accordance with the hole position on the wood. There is no vibration on bench and the machine. This condition shows that the construction design is strong enough to the vibration of the motor revolution and the hole feeding.

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