The main purpose of making chainsaw wood shaft is to assist in the process of making a bird cage. Thus, wood saws machines can simplify the process of making a bird cage with a large number. It is expected that this wood saws machines can simplify the craftsmen of the bird cage.

The method used in the production of wood saws spindle machine begins with the concept design, presentation drawings, identify materials. Materials used in the process of making wood saws spindle is mild steel ST 37. Equipment used in the manufacturing process of wood saws spindle lathes among others, support equipment such as chain saw, vise, gauges and other tools, as well as HSS chisel. Process of the axis of the saw timber was the preparation of materials, cutting materials, the manufacture of facing, on turning, and finishing. The stages in the manufacture of wood saws spindle were: needs analysis, technical analysis, creation of working drawings and runtest (testing tools).

From some of the process obtained the final results chainsaw wood shaft is the shaft $\varnothing$ 30 mm with a length of 185 mm. The time needed to make the chainsaw wood shaft is 3 hours 53 minutes. Thus, from the testing machine for the manufacture of saws wood birdhouse is generated every 2 minutes depending on your needs cutting thin thick wood, so the first hour produced 30 pieces of wood pieces. Machinery wood saws are capable of working a day for 8 hours. Where known to use the power of 0.25 HP motor with 700 rounds of functional testing performed rpm.Setelah chainsaw wood shaft, the engine works according to function. Security level is strong enough in construction, driving source used is not noisy, and qualified operator safety.