

THE PRODUCTION PROCESS OF LINEAR GUIDEWAY BASE ON THE COMPONENT OF CNC LATHE MACHINE

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ABSTRACT

The purpose of this final project is to complete the part of CNC lathe machine. The spare part of lathe machine that will be completed is its base. That base functions as the part which linear guideway stick on the parallel and perpendicular plane with the main spindle on CNC lathe machine.

The production process of the base of linear guide way used some methods such as first, identifying the material and the used material was mild steel; second, identifying the working drawing; third, identifying the tools and machine that are used, such as: grindstone, milling machine and its equipment, end mill, collating machine, drill bit ($\text{Ø} 5 \text{ mm}$, $\text{Ø} 7 \text{ mm}$, and $\text{Ø} 15 \text{ mm}$), vise, drill, tap (M 6 x 1, M 8 x 1,25), and plastic hammer.

The result of the production of linear guideway base had functioned well. This result obtained after doing performance test of CNC lathe machine can make flat lathing and stratified lathing with the depth of cutting is 0.5 mm. The result of its cutting can be parallel, perpendicular toward the main spindle on CNC lathe machine, and it can make *konis*.

Key words: *linear guide way base*