

ABSTRACT

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MAINTENANCE PROCESS OF TAKISAWA TCC-200 CNC MACHINE AT PT. HOWASKA MACHINE INDONESIA

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2022

Keywords : Automation Systems, CNC Machines, Process Maintenance, Causes And Repairs.

(xiv + 41 + Attachment)

The automation system continues to grow and there are lots of the latest technologies, which can be useful to meet all human needs, especially for the industrial world. One of the machines that are widely used in industry is the CNC machine. CNC machines are often used for the manufacturing process of various goods. Due to frequent use, maintenance or maintenance is needed so that operational activities can continue. The process of identifying the cause of damage to the Takisawa TCC-200 CNC machine is carried out in two ways, namely leveling which measures the condition of the foundation or machine legs in a state that is not aligned or does not meet standards and parallelism of spindle, namely checking the straightness of the spindle which aims to determine the condition of the alignment of the spindle to the axis on the machine. The process of repairing damage to the Takisawa TCC-200 CNC machine is the base slide axis by shaving (sarase) or scraping the surface area of the base slide. After the scraping process using a hand grinder, the next process is to measure the surface alignment of the base slide axis using a steel ruler (master), before measuring the straightness of the base slide surface, the surface of the base slide and the steel ruler (master) is colored with dye (debtor), and when the results of the base slide surface are close to the desired standard size, the next process is to measure the parallelism of the base slide using a dial indicator measuring instrument. This treatment is carried out using a corecorrective maintenance system, namely maintenance is carried out if the tool is damaged and is required to replace the components on the machine. The main focus of this research is to examine the possibility of component damage on the Takisawa TCC-200 CNC machine which has the potential to disrupt the production process, and will result in product failure or the emergence of defective products and delays in the product reaching the consumer or customer.

Bibliography (1995 s/d 2021)