

ABSTRAK

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Proses Pemeriksaan Akurasi dan Perbaikan Base Slide Axis pada Mesin CNC Takisawa TC-200

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Kata kunci : *Pemeriksaan Akurasi, Base slide Axis, Pengecekan, Abnormal,*

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Takisawa TC-200 CNC Lathe that has three axes. Apart from that, the Takisawa TC-200 CNC Lathe is capable of achieving high speeds with high accuracy and compactness. This writing aims to determine the backlash inspection values and condition in tables when there are repairs to a CNC machine, such as the base slide, a dismantling and cleaning process is carried out, then a machine accuracy checking process is carried out such as checking backlash and spindle run out. The accuracy check aims to check the condition of the machine's geometry in accordance with the machine's standards. The backlash inspection values in tables X and Z show measurement results of 0.008, 0.004, 0.006, and 0.002 mm. This means that the condition of the Takisawa TC-200 CNC X and Z tables is in good condition and meets the machine standards (tolerances). The straightness check value of the spindle (spindle run out) at the top and sides is 0.020 mm. This means that the straightness of the spindle is not in good condition or does not meet the machine's tolerance limit, namely 0.010 mm. Then the process of repairing the base slide axis is by scraping the base slide surface area and the sarawase planing technique, and when the base slide surface results are close to the standard size, the next process is to measure the parallelism of the base slide using the dial indicator tool. When repairing the basic slide depth, the tolerance size is 0.0010 – 0.0020 mm.

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