

R-Test Static Measurement of The 5-axis CNC Machining Centre Rotary Axis Kinematic Centre Error

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This paper presents static measurements results of the kinematic pair centre of the C-rotary axis of the 5-axis machine tool at digitised angle positions of the machine rotary table. The measurements were conducted with the application of R-test calibration and measuring system. The article discusses the test sequence as well as the evaluation of the kinematic centre location of the rotary axis, relative to linear X, Y-axis. The summary formulates guidelines covering the compensation of the axis location. Measurement results were presented in diagrams and tables.

Keywords: manufacturing, errors of CNC machine tool, diagnostic systems, calibration, R-test

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