

## Industrial Robot Accuracy Testing with QC20-W Ballbar Diagnostic System

Jerzy Józwik<sup>1</sup>, Ivan Kuric<sup>2</sup>, Dawid Ostrowski<sup>3</sup>, Krzysztof Dziedzic<sup>4</sup>

<sup>1</sup>Department of Production Engineering, Mechanical Engineering Faculty, Lublin University of Technology, 36 Nadbystrzycka Street, 20-816 Lublin, Poland, e-mail: j.jozwik@pollub.pl

<sup>2</sup>University of Žilina, Faculty of Mechanical Engineering, Department of Automation and Production Systems, Univerzitná Street 1,010-26 Žilina, Slovakia, e-mail: ivan.kuric@fstroj.utc.sk

<sup>3</sup>The State School of Higher Education, The Institute of Technical Sciences and Aviation, 54 Pocztowa Street, 22-100 Chełm, Poland, e-mail: dostrowski@pwsz.chelm.pl

<sup>4</sup>Fundamentals of Technology Faculty, Lublin University of Technology, 38 Nadbystrzycka Street, 20-618 Lublin, Poland, e-mail: k.dziedzic@pollub.pl

**An important characteristic of industrial robots is their accuracy. It is of particularly importance in high-precision tasks, e.g. mounting or machining of elements. In order to meet the requested quality demands for products, as well as appropriate working conditions, it is absolutely essential to regularly inspect the technical condition of robots, e.g. their accuracy. The following paper aims at identification of accuracy errors of an industrial robot MOTOMAN HP20. The selected measuring method was the roundness test with the use of the telescopic, kinematic QC20W – Ballbar. The paper presents the methodology of experimental tests. The influence of the radius of the interpolation circle, as well as the influence of the set motion speed on the value of chosen accuracy errors was determined. The results were presented graphically and analysed.**

**Keywords:** diagnostic, accuracy, robots, ballbar system

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