

Errors diagnosed using partial arc analysis

Overview

Partial arc analysis allows quicker, single set-up ballbar checks to be performed. The Renishaw analysis is able to diagnose most of the machine errors identified using 360° tests.

	360 deg analysis	Partial arc
Backlash	✓	√ *
Reversal spikes	✓	√ *
Circularity	✓	✓
Lateral play	✓	✓
Cyclic error	✓	√
Centre offset	√	✓
Servo mismatch	✓	✓
Squareness	✓	✓
Straightness	✓	×
Scale mismatch	✓	×
Cyclic pitch	✓	✓
Calculated feedrate	✓	✓
* Only for sections of arc covered by tool path.		

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About Renishaw

Renishaw is an established world leader in engineering technologies, with a strong history of innovation in product development and manufacturing. Since its formation in 1973, the company has supplied leading-edge products that increase process productivity, improve product quality and deliver cost-effective automation solutions.

A worldwide network of subsidiary companies and distributors provides exceptional service and support for its customers.

Products include:

- Dental CAD/CAM scanning and milling systems.
- Encoder systems for high accuracy linear, angle and rotary position feedback.
- Laser and ballbar systems for performance measurement and calibration of machines.
- Medical devices for neurosurgical applications.
- Probe systems and software for job set-up, tool setting and inspection on CNC machine tools.
- Raman spectroscopy systems for non-destructive material analysis.
- Sensor systems and software for measurement on CMMs (co-ordinate measuring machines).
- Styli for CMM and machine tool probe applications.

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