

ISO 230-2:2014-05 (E)

Test code for machine tools - Part 2: Determination of accuracy and repeatability of positioning of numerically controlled axes

Contents		Page
Foreword		iv
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Test conditions	6
4.1	Environment	6
4.2	Machine to be tested	7
4.3	Warm-up	7
5	Test programme	7
5.1	Mode of operation	7
5.2	Selection of target position	8
5.3	Measurements	8
6	Evaluation of the results	10
6.1	Linear axes up to 2 000 mm and rotary axes up to 360°	10
6.2	Linear axes exceeding 2 000 mm and rotary axes exceeding 360°	10
7	Points to be agreed between manufacturer/supplier and user	10
8	Presentation of results	11
8.1	Method of presentation	11
8.2	Parameters	12
Annex A (informative)	Measurement uncertainty estimation for linear positioning measurement -- Simplified method	19
Annex B (informative)	Step cycle	36
Annex C (informative)	Periodic positioning error	37
Annex D (informative)	Linear positioning error measurements using calibrated ball array or step gauge	40
Bibliography		43