

ISO/TS 15530-1:2013-09 (E)

Geometrical product specifications (GPS) - Coordinate measuring machines (CMM): Technique for determining the uncertainty of measurement - Part 1: Overview and metrological characteristics

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Metrological characteristics	2
4.1	General	2
4.2	Commerce	2
4.3	Internal use in an organization	2
4.4	Identification, definition, and choice of metrological characteristics	2
4.5	Calibration of metrological characteristics	3
5	Task-specific uncertainty	3
5.1	General	3
5.2	Instrumentation factors	4
5.3	Measurement plan factors	4
5.4	Extrinsic factors	4
6	Techniques to determine task-specific measurement uncertainty components	4
6.1	General issues	4
6.2	Sensitivity analysis	4
6.3	Use of calibrated workpieces or standards (ISO 15530-3)	5
6.4	Use of computer simulation (ISO/TS 15530-4)	5
Annex A (informative)	Relationship between CMM metrological characteristics, the ISO 10360 series of standards and the ISO 15530 series of standards	6
Annex B (informative)	Sources of error and uncertainty of measurement when using a CMM	7
Annex C (informative)	Relation to the GPS matrix model	12
Bibliography		14