

First edition
2006-07-15

**Geometrical product specifications
(GPS) — Guidelines for the evaluation
of coordinate measuring machine
(CMM) test uncertainty**

*Spécification géométrique des produits (GPS) — Lignes directrices pour
l'estimation de l'incertitude d'essai des machines à mesurer
tridimensionnelles (MMT)*



Reference number
ISO/TS 23165:2006(E)

© ISO 2006

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 General	2
5 Test probing error	3
6 Test of size	3
6.1 General	3
6.2 Analysis of the uncertainty contributors	4
6.3 Graphical representation of the test results	6
Annex A (normative) Background and more detailed information	8
Annex B (normative) Using an alternative material standard of size	20
Annex C (informative) Examples of uncertainty budgeting	21
Annex D (informative) Relation to the GPS matrix model	30
Bibliography	31