

BS EN ISO 10579:2013



BSI Standards Publication

Geometrical product specifications (GPS) — Dimensioning and tolerancing — Non-rigid parts

bsi.

...making excellence a habit.
AVA **Documents**
Document Sharing Hub

National foreword

This British Standard is the UK implementation of EN ISO 10579:2013. It is identical to ISO 10579:2010. It supersedes BS ISO 10579:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TDW/4, Technical Product Realization.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013.
Published by BSI Standards Limited 2013

ISBN 978 0 580 81091 6

ICS 01.100.20

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2010.

Amendments/corrigenda issued since publication

Date	Text affected
30 September 2013	This corrigendum renumbers BS ISO 10579:2010 as BS EN ISO 10579:2013

English Version

Geometrical product specifications (GPS) - Dimensioning and
tolerancing - Non-rigid parts (ISO 10579:2010 including Cor
1:2011)

Spécification géométrique des produits (GPS) - Cotation et
tolérancement - Pièces non rigides (ISO 10579:2010, Cor
1:2011 inclus)

Geometrische Produktspezifikation (GPS) - Bemaßung und
Tolerierung - Nicht-formstabile Teile (ISO 10579:2010 +
Cor 1:2011)

This European Standard was approved by CEN on 11 July 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 10579:2010 including Cor 1:2011 has been prepared by Technical Committee ISO/TC 213 “Dimensional and geometrical product specifications and verification” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 10579:2013 by Technical Committee CEN/TC 290 “Dimensional and geometrical product specification and verification” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10579:2010 including Cor 1:2011 has been approved by CEN as a EN ISO 10579:2013 without any modification.

Introduction

This International Standard is a geometrical product specification (GPS) standard and is to be regarded as a global GPS standard (see ISO/TR 14638)^[4]. It influences chain links 1, 2 and 3 of the chain of standards on form of line independent of datum, form of line dependent on datum, form of surface independent of datum, form of surface dependent on datum, orientation, location, circular run-out and total run-out in the general GPS matrix.

For more detailed information on the relation of this standard to other standards and the GPS matrix model, see Annex B.

Certain parts, when removed from their manufacturing environment, may deform significantly from their defined limits owing to their weight, flexibility or the release of internal stresses resulting from the manufacturing processes.

These parts are defined as “non-rigid parts” and the deformation is acceptable provided that the parts may be brought within the indicated tolerance by applying reasonable force to facilitate inspection and assembly.

Depending on the design function and the part's interface with its mating components, instead of, or in addition to, assessing the part conventionally (in its free state condition), it may be necessary to assess the part when subject to restraint that is no greater than those accepted in the assembled condition.

Parts in this category include both those of inherently rigid material (such as thin metal parts) and those of inherently flexible material (such as rubber, plastics, etc.).