

Semi-finished metallic products — Methods of measuring form deviations

The European Standard EN 3848:2001 has the status of a British Standard

ICS 49.035

National foreword

This British Standard is the official English language version of EN 3848:2001. The UK participation in its preparation was entrusted to Technical Committee ACE/61, Inspection and testing requirements for aerospace metallic materials, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 23 October 2001

Summary of pages

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Aerospace series - Semi-finished metallic products - Methods of measuring form deviations

Série aérospatiale - Demi-produits métalliques - Méthodes de mesure des défauts de forme

Luft- und Raumfahrt - Metallisches Halbzeug - Meßverfahren für Formabweichungen

This European Standard was approved by CEN on 2 May 2001.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

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 March 2002, and conflicting national standards shall be withdrawn at the latest by March 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard specifies the methods of measuring deviations from the nominal form of semi-finished metallic products for aerospace applications.

This standard does not apply to:

- extruded sections: see EN 2066;
- folded sections: see EN 2065.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 2065	Folded profiles - Aluminium alloys - General tolerances - Aerospace series
EN 2066	Aerospace series - Extruded sections in aluminium alloys - General tolerances
ISO 1101	Technical drawings, geometrical tolerancing; tolerances of form, orientation, location and runout; generalities, definitions, symbols of drawings

3 Measuring condition

The dimensions shall be measured using measuring instruments which are of the accuracy required by the dimensions and the dimensional tolerances.

All dimensions shall be checked at the ambient temperature of the workshop or laboratory, and, in the event of dispute, at a temperature between 15 °C and 25 °C.

Surface plates used for the measurement of form deviations shall be flat to within ≤ 1 % of the requisite product form deviation being measured.

4 Sheet and plate

4.1 Squareness

The squareness deviation shall be measured as the difference in length of diagonals *AA* and *BB* as shown in figure 1.

4.2 Lateral curvature

The lateral curvature (*F*) shall be measured as indicated in figure 2, with the sheet or plate resting on a horizontal surface plate.