SLOVENSKI STANDARD
SIST EN 2046:2004

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Aerospace series - Hexagonal bars, drawn in aluminium and aluminium alloys - Tolerance class h 11 - Width across flats 7 mm < a < 50 mm - Dimensions

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Luft- und Raumfahrt - Sechskantstangen, gezogen aus Aluminium und Aluminiumlegierungen - Toleranzklasse h 11 - Schlüsselweite 7 mm < a < 50 mm - Maße

Série aérospatiale - Barres hexagonales, étirées en aluminium et alliages d'aluminium - Classe de tolérance h 11 - Surplats 7 mm < a < 50 mm - Dimensions

Ta slovenski standard je istoveten z: EN 2046:2001

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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English version

Aerospace series - Hexagonal bars, drawn in aluminium and aluminium alloys - Tolerance class h 11 - Width across flats 7 mm ≤ a ≤ 50 mm - Dimensions

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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 Management Centre has the same status as the official versions.

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.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.

0 Introduction

This standard is part of the series of EN metallic material standards for aerospace applications. The general organization of this series is described in EN 4258.

1 Scope

This standard specifies the dimensions and tolerances of:

Hexagonal bars, drawn
in aluminium and aluminium alloys
Tolerance class h 11
Width across flats 7 mm ≤ a ≤ 50 mm

for aerospace applications.

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 3848 Aerospace series – Semi-finished metallic products – Method of measuring form deviations

EN 4258 Aerospace series – Metallic materials – General organization of standardization – Links between types of EN standards and their use

3 Form

See figure 1.

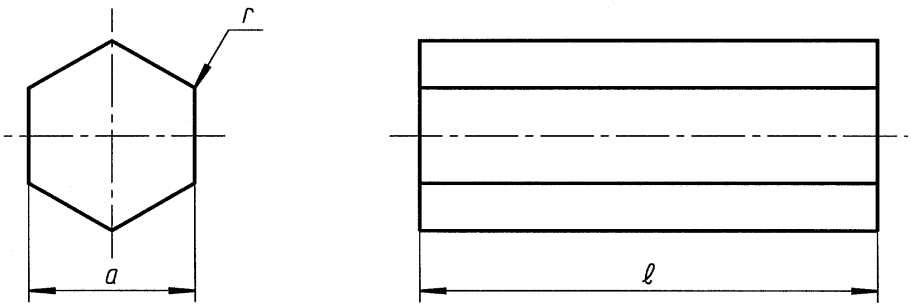

Figure 1

4 Recommended dimensions and mass

4.1 Width across flats and mass

See table 1.

Table 1

Nominal ***a*** mm	**Linear mass** [a] kg/m
7	0,12
8	0,16
10	0,24
11	0,29
12	0,35
13	0,41
14	0,48
16	0,62
17	0,70
19	0,88
20	0,97
22	1,2
24	1,4
25	1,5
27	1,8
30	2,2
32	2,5
36	3,1
41	4,1
46	5,1
50	6,1

[a] For information, calculated with a density of 2,8 kg/dm^3

4.2 Length

The order shall specify if bars are to be supplied in fixed or in random lengths. In the event of a supply of random lengths the minimum and maximum values for the lengths shall be specified on the order.

5 Tolerances

5.1 Dimensional tolerances

5.1.1 Width across flats

See table 2.

Table 2

Dimensions in millimetres

Width across flats	Tolerance class
$7 \leq a \leq 50$	h 11

5.1.2 Length

See table 3, only applicable to bars supplied in fixed lengths.

Table 3

Dimensions in millimetres

Length	Tolerances
$\ell \leq 6\,000$	$^{+6}_{0}$
$\ell > 6\,000$	$^{+10}_{0}$

5.1.3 Corner radii

See table 4.

Table 4

Dimensions in millimetres

Width across flats	Corner radii *r*
$7 \leq a \leq 8$	$\leq 0{,}2$
$8 < a \leq 40$	$\leq 0{,}4$
$40 < a \leq 50$	$\leq 0{,}6$

5.2 Geometric tolerances

5.2.1 Straightness

5.2.1.1 Method of measurement and symbols

See EN 3848.

5.2.1.2 Tolerances

See table 5.

Table 5

Dimensions in millimetres

Width across flats	Straightness deviation:	
	Y_1 per metre	Y_2 on any length X_2 [a]
$7 \leq a \leq 50$	≤ 2	$\leq 0{,}6$
[a] $X_2 = 400$		

5.2.2 Twist

5.2.2.1 Method of measurement and symbol

See EN 3848.

5.2.2.2 Tolerances

See table 6.

Table 6

Dimensions in millimetres

Width across flats	Twist v:	
	per metre	on total length [a]
$7 \leq a \leq 30$	$\leq 1{,}5$	≤ 3
$30 < a \leq 50$	≤ 2	≤ 4
[a] May be required if $\ell \leq 6\ 000$		

5.2.3 Surface flatness

5.2.3.1 Method of measurement

See EN 3848.

5.2.3.2 Tolerances

The surface flatness tolerance shall be included in the width across flats tolerances.