



SLOVENSKI STANDARD
SIST EN 3342:2006

01-julij-2006

5 YfcbUj H UË5`i a]b]Yj Un`HbU5 @D* \$* %!`H(`U]`H(&ËJ`Y YbY`U]`]nHg_UbY
dU]W]b`dfcZ]`!`U]`8 ``3`%`\$`a a

Aerospace series - Aluminium alloy AL-P6061 - T4 or T42 - Drawn or extruded bar and section - a or D \leq 150 mm

Luft- und Raumfahrt - Aluminiumlegierung AL-P6061-T4 oder T42 - Gezogene oder strangepresste Stangen und Profile - a oder D \leq 150 mm

Série aérospatiale - Alliage d'aluminium AL-P6061 - T4 ou T42 - Barres et profilés étirés ou filés - a ou D \leq 150 mm

Ta slovenski standard je istoveten z: EN 3342:2005

ICS:

49.025.20 Aluminij Aluminium

SIST EN 3342:2006 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3342:2006

<https://standards.iteh.ai/catalog/standards/sist/58a3cf9d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 3342

October 2005

ICS 49.025.20

English Version

**Aerospace series - Aluminium alloy AL-P6061 - T4 or T42 -
Drawn or extruded bar and section - a or D \leq 150 mm**

Série aérospatiale - Alliage d'aluminium AL-P6061 - T4 ou
T42 - Barres et profilés étirés ou filés - a ou D \leq 150 mm

Luft- und Raumfahrt - Aluminiumlegierung AL-P6061 - T4
oder T42 - Gezogene oder Stranggepreßte Stangen und
Profile - a oder D \leq 150 mm

This European Standard was approved by CEN on 19 September 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

(standards.iteh.ai)
SIST EN 3342:2006

<https://standards.iteh.ai/catalog/standards/sist/58a3cf9d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006>



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

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

Contents		Page
Foreword		3
Introduction		4
1 Scope		4
2 Normative references		4

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3342:2006

<https://standards.iteh.ai/catalog/standards/sist/58a3cf9d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006>

Foreword

This European Standard (EN 3342:2005) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-STAN).

After enquiries 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 April 2006, and conflicting national standards shall be withdrawn at the latest by April 2006.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

ITeH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3342:2006

<https://standards.iteh.ai/catalog/standards/sist/58a3cf9d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006>

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.

This standard has been prepared in accordance with EN 4500-2.

1 Scope

This standard specifies the requirements relating to:

Aluminium alloy AL-P6061-
T4 or T42
Drawn or extruded bar and section
a or $D \leq 150$ mm

for aerospace applications.

The order shall state whether the extruded or drawn condition is required.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use.*

EN 4400-3, *Aerospace series — Aluminium and aluminium alloy wrought products — Technical specification — Part 3: Bar and section.* ¹⁾

EN 4500-2, *Aerospace series — Metallic materials — Rules for drafting and presentation of material standards — Part 2: Specific rules for aluminium, aluminium alloys and magnesium alloys.* ¹⁾

¹⁾ Published as AECMA Prestandard at the date of publication of this standard.

1	Material designation		Aluminium alloy AL-P6061-										
2	Chemical composition %	Element	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
											Each	Total	
		min.	0,40	-	0,15	-	0,8	0,04	-	-	-	-	Base
max.	0,8	0,7	0,40	0,15	1,2	0,35	0,25	0,15	0,05	0,15			
3	Method of melting		-										
4.1	Form		Bar and section										
4.2	Method of production		Drawn or Extruded										
4.3	Limit dimension(s)	mm	a or $D \leq 150$										
5	Technical specification		EN 4400-3										

6.1	Delivery condition	F	O	T4
	Heat treatment	-	-	$520\text{ °C} \leq \theta \leq 540\text{ °C}$ / WQ $\theta \leq 40\text{ °C}$ $+ \theta = \text{ambient} / t \geq 5d$
6.2	Delivery condition code	F	A	U
7	Use condition	T42		T4
	Heat treatment	Delivery condition $+ 520\text{ °C} \leq \theta \leq 540\text{ °C}$ / WQ $\theta \leq 40\text{ °C}$ $+ \theta = \text{ambient} / t \geq 5d$		Delivery condition

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Characteristics

8.1	Test sample(s)		See EN 4400-3.									
8.2	Test piece(s)		See EN 4400-3. https://standards.iteh.ai/catalog/standards/sist/58a3c19d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006									
8.3	Heat treatment		Use condition									
9	Dimensions concerned	mm	a or $D \leq 150$									
10	Thickness of cladding on each face	%	-									
11	Direction of test piece		L									
12	Temperature	θ	°C	Ambient								
13	T	Proof stress	$R_{p0.2}$	MPa	≥ 110							
14		Strength	R_m	MPa	≥ 210							
15		Elongation	A	%	A or $A_{50mm} \geq 14$							
16		Reduction of area	Z	%	-							
17	Hardness		-									
18	Shear strength	R_c	MPa	-								
19	Bending	k	-	-								
20	Impact strength		-									
21	Temperature	θ	°C	-								
22	Time		h	-								
23	C	Stress	σ_a	MPa	-							
24		Elongation	a	%	-							
25		Rupture stress	σ_R	MPa	-							
26		Elongation at rupture	A	%	-							
27	Notes (see line 98)		-									

EN 3342:2005 (E)

44	External defects	–	See EN 4400-3.		
61	Internal defects	–	See EN 4400-3.		
82	Batch uniformity	–	See EN 4400-3.		
		5	T4		
		7	Hardness	HB	60 (Typical value)
	$\delta \leq 16$ per product	$\Delta \leq 24$ per batch			
87	Extrusion back-end defect	–	See EN 4400-3.		
<p>ITeh STANDARD PREVIEW (standards.iteh.ai)</p> <p>SIST EN 3342:2006 https://standards.iteh.ai/catalog/standards/sist/58a3cf9d-9018-4bc0-ae1c-cfb649c4b806/sist-en-3342-2006</p>					
95	Marking inspection	–	See EN 4400-3.		
96	Dimensional inspection	–	See EN 4400-3.		
98	Notes	–	–		
99	Typical use	–	–		