



**SLOVENSKI STANDARD  
SIST EN 2114:2019**

**01-september-2019**

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**Aeronavtika - Aluminij 1050A-H14 - Žica za polne kovice -  $D \leq 10$  mm**

Aerospace series - Aluminium 1050A-H14 - Wire for solid rivets -  $D \leq 10$  mm

Luft- und Raumfahrt - Aluminium 1050A-H14 - Nietdrähte für Vollniete -  $D \leq 10$  mm

Série aérospatiale - Aluminium 1050A-H14 - Fils pour rivets pleins -  $D \leq 10$  mm

**Ta slovenski standard je istoveten z: EN 2114:2019**

[SIST EN 2114:2019](https://standards.iteh.ai/catalog/standards/sist/ab20e2d1-a2ac-4616-bb81-ee4bb88ed0cd/sist-en-2114-2019)

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**ICS:**

49.025.20	Aluminij	Aluminium
77.150.10	Aluminijski izdelki	Aluminium products

**SIST EN 2114:2019**

**en,fr,de**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 2114**

May 2019

ICS 49.025.20

English Version

**Aerospace series - Aluminium 1050A-H14 - Wire for solid  
rivets -  $D \leq 10$  mm**

Série aérospatiale - Aluminium 1050A-H14 - Fils pour  
rivets pleins -  $D \leq 10$  mm

Luft- und Raumfahrt - Aluminium 1050A-H14 -  
Nietdrähte für Vollniete -  $D \leq 10$  mm

This European Standard was approved by CEN on 28 August 2017.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 2114:2019) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-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 ASD, 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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**EN 2114:2019 (E)**

## **Introduction**

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

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## 1 Scope

This document specifies the requirements relating to:

Aluminium 1050A-H14  
Wire for solid rivets  
 $D \leq 10$  mm

for aerospace applications.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 2070-1, *Aerospace series — Aluminium and aluminium alloy wrought products — Technical specification — Part 1: General requirements*

EN 2070-6, *Aerospace series — Aluminium and aluminium alloy wrought products — Technical specification — Part 6: Rivet wire*

EN 2615, *Aerospace series — Wire to close tolerance in aluminium and aluminium alloys —  $1,6 \leq D \leq 9,6$  mm — Dimensions* <sup>1)</sup>

EN 2616, *Aerospace series — Wire for rivets in aluminium and aluminium alloys, large tolerances —  $D \leq 10$  mm — Dimensions* <sup>1)</sup>

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

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* <sup>1)</sup>

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

## 4 Requirements

See Table 1.

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1) Published as ASD-STAN Prestandard at the date of publication of this standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN), [www.asd-stan.org](http://www.asd-stan.org)

## EN 2114:2019 (E)

Table 1 — Requirements relating to Aluminium 1050A-H14

1	Material designation		Aluminium 1050A-H14									
2	Chemical composition %	Element	Si	Fe	Cu	Mn	Mg	Zn	Ti	Others		Al
		min.	-	-	-	-	-	-	-	-	-	
		max.	0,25	0,40	0,05	0,05	0,05	0,07	0,05	0,03	-	-
3	Method of melting		-									
4.1	Form		Wire for solid rivets									
4.2	Method of production		Drawn									
4.3	Limit dimension(s)	mm	$D \leq 10$									
5	Technical specification		EN 2070-1 and EN 2070-6 EN 2615 and EN 2616									

6.1	Delivery condition		H14									
	Heat treatment		-									
6.2	Delivery condition code		-									
7	Use condition		H14									
	Heat treatment		Delivery condition									

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Characteristics  
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8.1	Test sample(s)		H14									
8.2	Test piece(s)		SIST EN 2114:2019 -									
8.3	Heat treatment		<a href="https://standards.itech.ai/catalog/standards/sist/ab20e2d1-a2ac-4616-bb81-ee4bb88ed0ed/sist-en-2114-2019">https://standards.itech.ai/catalog/standards/sist/ab20e2d1-a2ac-4616-bb81-ee4bb88ed0ed/sist-en-2114-2019</a>									
9	Dimensions concerned	mm	$\leq 10$									
10	Thickness of cladding on each face	%	-									
11	Direction of test piece		L									
12	Temperature	$\theta$	°C	Ambient temperature								
13	Proof stress	$R_{p0,2}$	MPa*	-								
14	T Strength	$R_m$	MPa*	$\geq 100$								
15	Elongation	A	%	-								
16	Reduction of area	Z	%	-								
17	Hardness		-									
18	Shear strength	$R_c$	MPa*	$\geq 60$								
19	Bending	k	-	-								
20	Impact strength		-									
21	Temperature	$\theta$	°C	-								
22	Time		h	-								
23	Stress	$\sigma_a$	MPa*	-								
24	C Elongation	a	%	-								
25	Rupture stress	$\sigma_R$	MPa*	-								
26	Elongation at rupture	A	%	-								
27	Notes (see line 98)		*									



28	-	-	-
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95	Marking inspection	-	-
96	Dimensional inspection	-	-
98	Notes	-	* 1 MPa = 1 N/mm <sup>2</sup> .
99	Typical use	-	-