SLOVENSKI STANDARD
SIST EN 2117:2009

01-maj-2009

Aeronavtika - Aluminijeva zlitina AL-P5056A (5056A)-H32 - Žica za polne kovice - D Ò10 mm

Aerospace series - Aluminium alloy AL-P5056A (5056A)-H32 - Wire for solid rivets - D Ò 10 mm

Luft- und Raumfahrt - Aluminiumlegierung AL-P5056A (5056A)-H32 - Nietdrähte für Vollniete - D Ò10 mm

Série aérospatiale - Alliage d'aluminium AL-P5056A (5056A)-H32 - Fils pour rivets pleins - D Ò10 mm

Ta slovenski standard je istoveten z: **EN 2117:2009**

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49.025.20	Aluminij	Aluminium

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EUROPEAN STANDARD

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English Version

Aerospace series - Aluminium alloy AL-P5056A (5056A)-H32 - Wire for solid rivets - D ≤ 10 mm

Série aérospatiale - Alliage d'aluminium AL-P5056A (5056A)-H32 - Fils pour rivets pleins - D ≤ 10 mm

Luft- und Raumfahrt - Aluminiumlegierung AL-P5056A (5056A)-H32 - Nietdrähte für Vollniete - D ≤ 10 mm

This European Standard was approved by CEN on 16 August 2008.

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

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Foreword

This document (EN 2117:2009) 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of an identical text or by endorsement, at the latest by August 2009, and conflicting national standards shall be withdrawn at the latest by August 2009.

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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-P5056A (5056A)-H32
Wire for solid rivets
$D \leq 10$ mm

for aerospace applications.

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 2032-2, *Aerospace series — Metallic materials — Part 2: Coding of metallurgical condition in delivery condition*

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

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* [1)]

TR 2410, *Aerospace series — Metallic materials — Relationship between dimensional standards and material standards* [2)]

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

2) Published as ASD Technical Report at the date of publication of this standard.

1	Material designation		Aluminium alloy AL-P5056A (5056A)-H32 [a]											
2	Chemical composition %	Element	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Cr + Mn	Others		Al
												Each	Total	
		min.	–	–	–	0,10	4,50	–	–	–	0,10	–	–	Base
		max.	0,40	0,50	0,10	0,60	5,60	0,20	0,20	0,20	0,60	0,05	0,15	
3	Method of melting		–											
4.1	Form		Wire											
4.2	Method of production		Cold drawn											
4.3	Limit dimension(s)	mm	$D \leq 10$											
5	Technical specification		EN 2070-6											

6.1	Delivery condition	H32
	Heat treatment	–
6.2	Delivery condition code	U [b]
7	Use condition	H32
	Heat treatment	Delivery condition

Characteristics

8.1	Test sample(s)				See EN 2070-6.
8.2	Test piece(s)				See EN 2070-6.
8.3	Heat treatment				–
9	Dimensions concerned			mm	$D \leq 10$
10	Thickness of cladding on each face			%	–
11	Direction of test piece				L
12	T	Temperature	θ	°C	Ambient
13	T	Proof stress	$R_{p0,2}$	MPa	–
14	T	Strength	R_m	MPa	$280 \leq R_m \leq 360$
15	T	Elongation	A	%	–
16	T	Reduction of area	Z	%	–
17	Hardness				–
18	Shear strength		R_c	MPa	≥ 170
19	Bending		k	–	–
20	Impact strength				–
21	C	Temperature	θ	°C	–
22	C	Time		h	–
23	C	Stress	σ_a	MPa	–
24	C	Elongation	a	%	–
25	C	Rupture stress	σ_R	MPa	–
26	C	Elongation at rupture	A	%	–
27	Notes (see line 98)				a, b

44	External defects	–	See EN 2070-6.
95	Marking inspection	–	See EN 2070-6.
96	Dimensional inspection	–	See EN 2070-6.
		1	Measuring equipment and procedures suitable for the tolerances shall be used.
		7	Dimensions and tolerances shall conform to the requirements of the order or the relevant standard given in TR 2410.
98	Notes	–	a The material designation of AL-P5056A (5056A) is per Aluminium Association (AA) is 5019. b See EN 2032-2.
99	Typical use	–	–

100	–	Product qualification	–	–
				Qualification programme to be agreed between manufacturer and purchaser.