

Aluminium alloy AL-W42201 — Filler metal for welding — Rod

The European Standard EN 4324:2001 has the status of a
British Standard

ICS 49.025.20; 25.160.20

National foreword

This British Standard is the official English language version of EN 4324:2001. The UK participation in its preparation was entrusted to Technical Committee ACE/24, Wrought and cast light alloys for aerospace, 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.

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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 25 January 2002

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 6, an inside back cover and a back cover.

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Amendments issued since publication

Amd. No.	Date	Comments

ICS 49.025.20

English version

Aerospace series - Aluminium alloy AL-W42201 - Filler metal for welding - Rod

Série aérospatiale - Alliage d'aluminium AL-W42201 -
Métal d'apport de soudage - Baguette

Luft- und Raumfahrt - Aluminiumlegierung AL-W42201 -
Schweißzusatz - Stäbe

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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

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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.

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

1 Scope

This standard specifies the requirements relating to:

Aluminium alloy AL-W42201
Filler metal for welding
Rod

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 2043	Aerospace series – Metallic materials – General requirements for semi-finished product qualification (excluding forgings and castings) ¹⁾
EN 3879	Aerospace series – Metallic materials – Filler metal for welding – Technical specification ¹⁾
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⁾

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

1	Material designation		Aluminium alloy AL-W42201												
2	Chemical composition %	Element	Si	Fe	Cu	Mn	Mg	Zn	Ti	Be	H ₂	Others		Al	
												Each	Total		
		min.	6,5	–	–	–	0,50	–	0,05	–	–	–	–	–	Base
max.	7,5	0,20	0,20	0,10	0,8	0,10	0,20	0,07	^a	0,05	0,15				
3	Method of melting		–												
4.1	Form		Rod												
4.2	Method of production		Cast												
4.3	Limit dimension(s)	mm	–												
5	Technical specification		EN 3879												

6.1	Delivery condition		As cast												
	Heat treatment		–												
6.2	Delivery condition code		U												
7	Use condition		Delivery condition												
	Heat treatment		–												

Characteristics

8.1	Test sample(s)		–												
8.2	Test piece(s)		–												
8.3	Heat treatment		–												
9	Dimensions concerned	mm	–												
10	Thickness of cladding on each face	%	–												
11	Direction of test piece		–												
12	T	Temperature	θ	°C	–										
13		Proof stress	R _{p0,2}	MPa	–										
14		Strength	R _m	MPa	–										
15		Elongation	A	%	–										
16		Reduction of area	Z	%	–										
17	Hardness		–												
18	Shear strength	R _c	MPa	–											
19	Bending	k	–	–											
20	Impact strength		–												
21	C	Temperature	θ	°C	–										
22		Time		h	–										
23		Stress	σ_a	MPa	–										
24		Elongation	a	%	–										
25		Rupture stress	σ_R	MPa	–										
26		Elongation at rupture	A	%	–										
27	Notes (see line 98)		a												

100	-	Product qualification	-	<p>For the purposes of this cast standardized product form the requirements of EN 2043 shall be applied.</p> <p>Qualification programme to be agreed between manufacturer and purchaser.</p>

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