

Aerospace series –
Aluminium alloy AL-P7475-T761 –
Sheet and strip - $0,6 \text{ mm} \leq a \leq 6 \text{ mm}$

Europastandarden EN 2802:2005 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 2802:2005.

The European Standard EN 2802:2005 has the status of a Swedish Standard. This document contains the official English version of EN 2802:2005.

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EUROPEAN STANDARD
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English version

Aerospace series - Aluminium alloy AL-P7475-T761 - Sheet and strip - $0,6 \text{ mm} \leq a \leq 6 \text{ mm}$

Série aérospatiale - Alliage d'aluminium AL-P7475-T761 -
Tôles et bandes - $0,6 \text{ mm} \leq a \leq 6 \text{ mm}$

Luft- und Raumfahrt - Aluminiumlegierung AL-P7475-T761 -
Bleche und Bänder - $0,6 \text{ mm} \leq a \leq 6 \text{ mm}$

This European Standard was approved by CEN on 22 April 2005.

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

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EN 2802:2005 (E)

Foreword

This document (EN 2802:2005) 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of an identical text or by endorsement, at the latest by December 2005, and conflicting national standards shall be withdrawn at the latest by December 2005.

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.

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-P7475-
T761
Sheet and strip
 $0,6 \text{ mm} \leq a \leq 6 \text{ mm}$

for aerospace application.

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 4400-2, *Aerospace series — Aluminium and aluminium alloy wrought products — Technical specification — Part 2: Sheet and strip.*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.

EN 2802:2005 (E)

1	Material designation		Aluminium alloy AL-P7475-										
2	Chemical composition %	Element	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
											Each	Total	
		min.	–	–	1,2	–	1,9	0,18	5,2	–	–	–	Base
max.	0,10	0,12	1,9	0,06	2,6	0,25	6,2	0,06	0,05	0,15			
3	Method of melting		–										
4.1	Form		Sheet and strip										
4.2	Method of production		Rolled										
4.3	Limit dimension(s)	mm	$0,6 \leq a \leq 6$										
5	Technical specification		EN 4400-2										

6.1	Delivery condition		T761										
	Heat treatment		$460\text{ °C} \leq \theta \leq 485\text{ °C}^a / \text{WQ } \theta \leq 40\text{ °C}$ $+ 115\text{ °C} \leq \theta \leq 125\text{ °C} / 3\text{ h} \leq t \leq 6\text{ h}$ $+ 158\text{ °C} \leq \theta \leq 178\text{ °C} / 14\text{ h} \leq t \leq 70\text{ h}$										
6.2	Delivery condition code		U										
7	Use condition		T761										
	Heat treatment		Delivery condition										

Characteristics

8.1	Test sample(s)		See EN 4400-2.										
8.2	Test piece(s)		See EN 4400-2.										
8.3	Heat treatment		Use condition										
9	Dimensions concerned	mm	$0,6 \leq a \leq 6$										
10	Thickness of cladding on each face	%	–										
11	Direction of test piece		LT										
12	Temperature	θ	°C	Ambient									
13	Proof stress	$R_{p0,2}$	MPa	≥ 415									
14	T Strength	R_m	MPa	≥ 490									
15	Elongation	A	%	$A_{50\text{ mm}} \geq 9$									
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)		a										