

Filler rods and filler wires for welding in titanium and titanium alloys — Diameter $0,5 \text{ mm} \leq D \leq 5,0 \text{ mm}$ — Dimensions

The European Standard EN 4058:2000 has the status of a
British Standard

ICS 49.025.30

National foreword

This British Standard is the official English language version of EN 4058:2000. The UK participation in its preparation was entrusted to Technical Committee ACE/61, Inspection and testing requirements for aerospace metallic materials, which has the responsibility to:

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- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 5 and a back cover.

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Amendments issued since publication

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ICS 49.025.30

English version

Aerospace series - Filler rods and filler wires for welding in
titanium and titanium alloys - Diameter $0,5 \text{ mm} \leq D \leq 5,0 \text{ mm}$ -
Dimensions

Série aérospatiale - Baguettes et fils d'apport de soudage
en titane et alliages de titane - Diamètres $0,5 \text{ mm} \leq D \leq 5,0$
mm - Dimensions

Luft- und Raumfahrt - Schweißzusatzstäbe und -drähte aus
Titan und Titanlegierungen - Durchmesser $0,5 \text{ mm} \leq D \leq$
5,0 mm - Maße

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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of an identical text or by endorsement, at the latest by March 2002, and conflicting national standards shall be withdrawn at the latest by March 2002.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

1 Scope

This standard specifies the dimensions and tolerances of:

Filler rods and filler wires for welding
in titanium and titanium alloys
Diameter $0,5 \text{ mm} \leq D \leq 5,0 \text{ mm}$

for aerospace applications.

2 Normatives 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 4258 Aerospace series – Metallic materials – General organization of standardization – Links between types of EN standards and their use

3 Form

See figure 1.

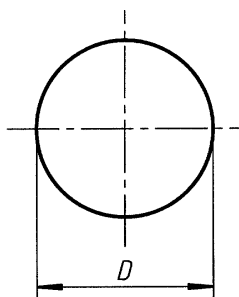


Figure 1

4 Recommended dimensions and mass

4.1 Diameter and mass

See table 1.

Table 1

Rod	Nominal <i>D</i> mm		Section mm ²	Linear mass ^a g/m
		Wire		
–		0,5	0,20	9
–		0,6	0,28	13
0,8		0,8	0,50	23
–		0,9	0,64	29
1,0		1,0	0,79	36
1,2		1,2	1,13	51
1,6		1,6	2,01	91
2,0		2,0	3,14	141
2,4		–	4,52	203
3,0		3,0	7,07	318
3,2		3,2	8,04	362
4,0		–	12,57	566
5,0		–	19,63	883

^a For information, calculated with a density of 4,5 kg/dm³

4.2 Length

The order shall specify if bars are to be supplied in fixed or in random lengths. In the event of a supply of random lengths the minimum and maximum values for the lengths shall be specified on the order.

Length of rods $\leq 1\ 000$ mm.

Length of wires: to be specified on the order.

5 Tolerances

5.1 Dimensional tolerances

5.1.1 Diameter

5.1.1.1 Rods

See table 2.

Table 2

Dimensions in millimetres

Diameter	Tolerance
$0,8 \leq D \leq 5,0$	$\pm 0,1$

5.1.1.2 Wires

See table 3.

Table 3

Dimensions in millimetres

Diameter	Tolerances
$0,5 \leq D < 0,8$	+ 0,01 - 0,03
$0,8 \leq D < 2,8$	+ 0,01 - 0,04
$2,8 \leq D \leq 3,2$	+ 0,01 - 0,07

5.1.2 Length

Tolerances on length of rods: ± 5 mm.

5.2 Geometric tolerances – Roundness

Roundness shall be contained within the diameter tolerances.

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