

**Aerospace series —
Filler rods and filler
wires for welding in
steel — Diameter
 $0,5 \text{ mm} \leq D \leq 5,0 \text{ mm}$ —
Dimensions**

The European Standard EN 4059:2001 has the status of a
British Standard

ICS 49.025.01; 25.160.20

National foreword

This British Standard is the official English language version of EN 4059:2001. 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:

- 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.

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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 49.025.10

English version

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

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

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

This European Standard was approved by CEN on 2 May 2001.

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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of an identical text or by endorsement, at the latest by December 2001, and conflicting national standards shall be withdrawn at the latest by December 2001.

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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 steel
Diameter $0,5 \text{ mm} \leq D \leq 5,0 \text{ mm}$

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

3 Form

See figure 1.

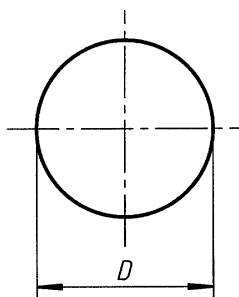


Figure 1

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	16
–	0,6		0,28	22
0,8	0,8		0,50	39
–	0,9		0,64	50
1,0	1,0		0,79	62
1,2	1,2		1,13	89
1,6	1,6		2,01	158
2,0	2,0		3,14	247
2,4	–		4,52	355
3,0	3,0		7,07	555
3,2	3,2		8,04	631
4,0	4,0		12,57	987
5,0	5,0		19,63	1 541

^a For information, calculated with a density of 7,85 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 ≤ 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
$0,8 \leq D \leq 5,0$	± 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
$2,8 \leq D \leq 5,0$	+ 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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