INTERNATIONAL STANDARD

ISO 16124

Second edition
2015-03-15

Steel wire rod — Dimensions and tolerances

Fil machine en acier — Dimensions et tolérances

Reference number
ISO 16124:2015(E)

© ISO 2015



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**

1 Scope **1**

2 Dimensions and tolerances on dimensions **1**

2.1 Round wire rod 1

2.2 Square wire rod 4

2.3 Hexagonal wire rod 5

2.4 Rectangular wire rod 7

3 Inspection on the cross-sectional dimensions **9**

4 Mass of coils **9**

Bibliography **10**

© ISO 2015 – All rights reserved

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 17, *Steel*, Subcommittee SC 17, *Steel wire rod and wire products*.

This second edition cancels and replaces the first edition (ISO 16124:2004), which has been technically revised.

© ISO 2015 – All rights reserved

Steel wire rod — Dimensions and tolerances

1 Scope

This International Standard specifies dimensions and tolerances to the dimensions applicable to steel wire rod as defined in ISO 6929.

2 Dimensions and tolerances on dimensions

The dimensions and tolerances applicable to the dimensions of hot-rolled steel wire rod shall be as specified in 2.1 to 2.4.

2.1 Round wire rod

The preferred nominal sizes and tolerances on diameters shall be as specified in Table 1 and Table 2, respectively. Four levels of tolerance are standardized: T1, T2, T3 and T4.

The maximum permissible out-of-round for all sizes, measured as the difference between the maximum and the minimum diameter of the same cross-section, shall be 80 % of the total tolerance specified on the diameter (see Table 2).

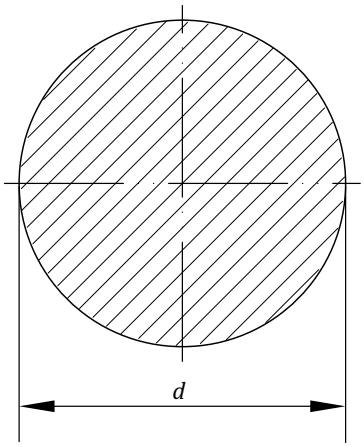


Table 1 — Preferred diameter, nominal section, and nominal mass of round wire rod

Preferred diameter, d mm	**Cross-sectional area**[a] mm^2	**Mass per unit length**[a] kg/m
5	19,63	0,154
5,5	23,76	0,187
6	28,27	0,222
6,5	33,18	0,260
7	38,48	0,302
7,5	44,18	0,347
8	50,26	0,395

[a] For information only.

NOTE 1 Cross-sectional area: $S = 0{,}7854d^2$

NOTE 2 Mass/m = $0{,}00785S$.

© ISO 2015 – All rights reserved