INTERNATIONAL STANDARD

ISO 15637-1

First edition
2002-11-15

Holding fixtures of cylindrical abrasive sleeves —

Part 1: Holding fixtures with shank for hand-held grinding machines

Porte-manchons pour manchons abrasifs cylindriques —

Partie 1: Porte-manchons à queue pour meuleuses portatives

Reference number
ISO 15637-1:2002(E)

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.ch
Web www.iso.ch

Printed in Switzerland

Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 15637 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 15637-1 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 5, *Grinding wheels and abrasives*.

ISO 15637 consists of the following parts, under the general title *Holding fixtures of cylindrical abrasive sleeves*:

— *Part 1: Holding fixtures with shank for hand-held grinding machines*

— *Part 2: Holding fixtures for stationary machines*

Holding fixtures of cylindrical abrasive sleeves —

Part 1:
Holding fixtures with shank for hand-held grinding machines

1 Scope

This part of ISO 15637 applies to holding fixtures with shank for use with cylindrical abrasive sleeves with $D \leqslant 100$ mm in accordance with ISO 2421. Holding fixtures with shank having a diameter $D \leqslant 100$ mm mostly have lamellar cores and are used on hand-held grinding machines. The impact of centrifugal forces on the lamellae result in an increase in diameter and thereby clamp the abrasive sleeve on to the holding fixture.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this part of ISO 15637. For dated references, subsequent amendments to, or revisions of, this publication do not apply. However, parties to agreements based on this part of ISO 15637 are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2421:—[1)], *Coated abrasives — Cylindrical sleeves*

3 Design and dimensions

3.1 Design

The shape and design of the holding fixtures with shank are at the manufacturer's discretion; only the specified dimensions and tolerances shall be observed. See Figure 1.

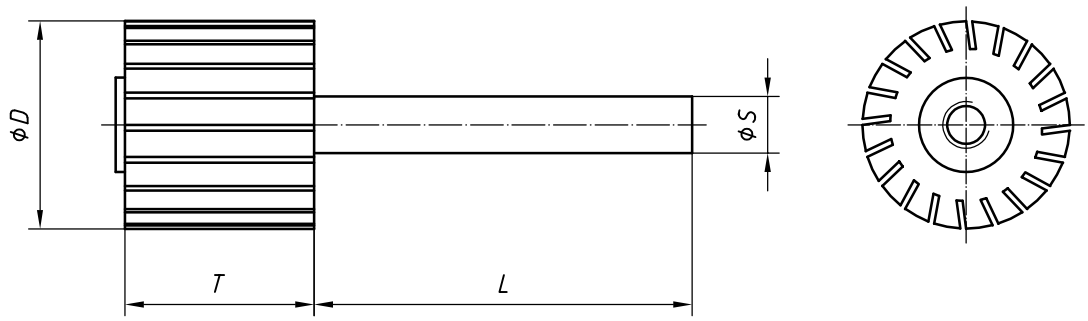

Figure 1

1) To be published. (Revision of ISO 2421:1972)

3.2 Dimensions

See Table 1.

Table 1 — Dimensions

Dimensions in millimetres

D		T	S	L
Nominal	Limit deviations	$\pm$ 1	h9	$\pm$ 3
10	$^{+0,5}_{0}$	10	6	40
		20		
15	$^{+0,5}_{0}$	10		
		30		
22	$^{+0,4}_{-0,1}$	20		
		40		
30	$^{+0,4}_{-0,1}$	20		
		30		
		40		
		50		
45	$^{+0,4}_{-0,1}$	30		
		40		
		50		
60	$\pm$ 0,3	30	6 or 8	
		40		
		50		
75	$^{+0,4}_{-0,3}$	30	8	
		40		
		50		
100	$^{+0,4}_{-0,3}$	40		

4 Requirements

4.1 Holding fixtures

These shall be made of rubber the type of which is left to the manufacturer's discretion.

4.2 Shank

This shall be made of steel having a minimum yield strength, $R_{\mathrm{e}} = 300$ N/mm^2 and whose class is left to the manufacturer's discretion.

5 Designation

A holding fixture conforming to this part of ISO 15637 shall be designated by

a) “Holding fixture”;

b) reference to this part of ISO 15637, i.e. ISO 15637-1;

c) its dimensions D, T and S, in millimetres;

d) its maximum operating speed v_{s}, in metres per second.

EXAMPLE A holding fixture with diameter $D = 45$ mm, thickness $T = 30$ mm, shank diameter $S = 6$ mm and maximum operating speed $v_s = 40$ m/s is designated as follows:

Holding fixture ISO 15637-1 - 45 $\times$ 30 $\times$ 6/40

6 Marking

The marking of holding fixtures with shank is left to the manufacturer's discretion.

ICS 25.100.70

Price based on 3 pages