

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery –

Part 2-1: Particular requirements for hand-held drills and impact drills

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses –

Partie 2-1: Exigences particulières pour les perceuses portatives et les perceuses à percussion



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CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 General requirements	7
5 General conditions for the tests	7
6 Radiation, toxicity and similar hazards	7
7 Classification	7
8 Marking and instructions	7
9 Protection against access to live parts	8
10 Starting	8
11 Input and current	8
12 Heating	8
13 Resistance to heat and fire	9
14 Moisture resistance	9
15 Resistance to rusting	9
16 Overload protection of transformers and associated circuits	9
17 Endurance	9
18 Abnormal operation	10
19 Mechanical hazards	11
20 Mechanical strength	13
21 Construction	14
22 Internal wiring	14
23 Components	14
24 Supply connection and external flexible cords	15
25 Terminals for external conductors	15
26 Provision for earthing	15
27 Screws and connections	15
28 Creepage distances, clearances and distances through insulation	15
Annexes	26
Annex I (informative) Measurement of noise and vibration emissions	26
Annex K (normative) Battery tools and battery packs	34
Annex L (normative) Battery tools and battery packs provided with mains connection or non-isolated sources	39
Bibliography	41
Figure 101 – Example of a testing apparatus	16
Figure 102 – Locating point “S” on different power switch and handle designs	17
Figure 103 – Locating point “F” on different flange designs	18
Figure 104 – Reaction torque measurement of single handle tools (1)	19
Figure 105 – Reaction torque measurement of single handle tools (2)	21

Figure 106 – Reaction torque measurement of multi handle tools (1)	22
Figure 107 – Reaction torque measurement of multi handle tools (2)	23
Figure 108 – Example torque of a tool with a stable signal region	24
Figure 109 – Example torque of a tool without a stable signal region	24
Figure 110 – Example torque of a tool with an overload clutch	25
Figure I.101 – Application of load.....	32
Figure I.102 – Positions of transducers for drills and impact drills	33
Figure I.103 – Positions of transducers for diamond core drills	33
Table 4 – Required performance levels	35
Table I.101 – Concrete formulation for impact drills (per cubic metre)	27
Table I.102 – Noise test conditions for impact drills	27
Table I.103 – Noise test conditions for diamond core drills.....	28
Table I.104 – Vibration test conditions for drills	29
Table I.105 – Drill bit diameter and feed force for drills	29
Table I.106 – Vibration test conditions for impact drills.....	30
Table I.107 – Vibration test conditions for diamond core drills.....	30
Table I.108 – Concrete specifications	31
Table I.109 – Concrete formulation for diamond core drills (per cubic metre) Detailed example of a concrete formulation that fulfil the requirements of Table I.108.....	31
Table 4 – Required performance levels	35

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 2-1: Particular requirements for hand-held drills and impact drills

FOREWORD

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 62841-2-1 edition 1.1 contains the first edition (2017-06) [documents 116/321/FDIS and 116/330/RVD] and its amendment 1 (2021-11) [documents 116/519/FDIS and 116/525/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 62841-2-1 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2-1 is to be used in conjunction with the first edition of IEC 62841-1 (2014).

This Part 2-1 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for hand-held drills and impact drills.

Where a particular subclause of Part 1 is not mentioned in this Part 2-1, that subclause applies as far as relevant. Where this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

The terms defined in Clause 3 are printed in **bold typeface**.

Subclauses, notes and figures which are additional to those in Part 1 are numbered starting from 101.

A list of all parts of the IEC 62841 series, under the general title: *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety*, can be found on the IEC website.

The committee has decided that the content of the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under webstore.iec.ch in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication.

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ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 2-1: Particular requirements for hand-held drills and impact drills

1 Scope

This clause of Part 1 is applicable, except as follows:

Addition:

This part of IEC 62841 applies to hand-held **drills** and **impact drills**, including **diamond core drills**. This ~~standard~~ document also applies to **drills** that can be used for driving screws by attaching screwdriver bits.

This ~~standard~~ document does not apply to rotary hammers, screwdrivers, impact wrenches and ratchet drivers even if they can be used as a **drill**.

NOTE 101 Rotary hammers are covered by IEC 62841-2-6.

NOTE 102 Screwdrivers, impact wrenches and ratchet drivers are covered by IEC 62841-2-2.

2 Normative references

This clause of Part 1 is applicable, except as follows:

Addition:

ISO 185:2005, *Grey cast irons – Classification*

ISO 630-2:2011, *Structural steels – Part 2: Technical delivery conditions for structural steels for general purposes*

3 Terms and definitions

This clause of Part 1 is applicable, except as follows:

Additional definitions:

3.101

drill

tool equipped with either a typical three jaw chuck or a machine taper, specifically designed to bore holes in various materials such as metal, plastics, wood, etc.

Note 1 to entry: Besides drill bits, it is possible that other **accessories** such as bits for deburring and screwdriving are used with **drills**.

3.102

impact drill

tool equipped with a chuck specifically designed to bore holes in concrete, stone and other materials, being similar in appearance and construction, to a **drill**, but which has a built-in percussion system which gives an axial percussion movement to rotating output spindle