

Dit document mag slechts op een stand-alone PC worden geïnstalleerd. Gebruik op een netwerk is alleen toestaan als een aanvullende licentieovereenkomst voor netwerkgebruik met NEN is afgesloten. This document may only be used on a stand-alone PC. Use in a network is only permitted when a supplementary license agreement for us in a network with NEN has been concluded.

Vervangt NEN-EN 792-5:1995 2e Ontw.

Nederlandse norm

# **NEN-EN 792-5 (en)**

Handgereedschap met niet-elektrische  
aandrijving - Veiligheidseisen -  
Deel 5: Slagboormachines

Hand-held non electric power tools - Safety requirements -  
Part 5: Rotary percussive drills

ICS 25.140.10; 25.140.99

juli 2000

Als Nederlandse norm is aanvaard:  
 - EN 792-5:2000, IDT

Voorbeeld  
 Preview

Normcommissie 341 017 "Gereedschappen"

---

Apart from exceptions provided by the law, nothing from this publication may be duplicated and/or published by means of photocopy, microfilm, storage in computer files or otherwise, which also applies to full or partial processing, without the written consent of the Netherlands Standardization Institute.

The Netherlands Standardization Institute shall, with the exclusion of any other beneficiary, collect payments owed by third parties for duplication and/or act in and out of law, where this authority is not transferred or falls by right to the Reproduction Rights Foundation.

---

Auteursrecht voorbehouden. Behoudens uitzondering door de wet gesteld mag zonder schriftelijke toestemming van het Nederlands Normalisatie-instituut niets uit deze uitgave worden veeveelvoudigd en/of openbaar gemaakt door middel van fotokopie, microfilm, opslag in computerbestanden of anderszins, hetgeen ook van toepassing is op gehele of gedeeltelijke bewerking.

Het Nederlands Normalisatie-instituut is met uitsluiting van ieder ander gerechtigd de door derden verschuldigde vergoedingen voor veeveelvoudiging te innen en/of daartoe in en buiten rechte op te treden, voor zover deze bevoegdheid niet is overgedragen c.q. rechtens toekomt aan de Stichting Reprorecht.

---

Although the utmost care has been taken with this publication, errors and omissions cannot be entirely excluded. The Netherlands Standardization Institute and/or the members of the committees therefore accept no liability, not even for direct or indirect damage, occurring due to or in relation with the application of publications issued by the Netherlands Standardization Institute.

---

Hoewel bij deze uitgave de uiterste zorg is nagestreefd, kunnen fouten en onvolledigheden niet geheel worden uitgesloten. Het Nederlands Normalisatie-instituut en/of de leden van de commissies aanvaardden derhalve geen enkele aansprakelijkheid, ook niet voor directe of indirecte schade, ontstaan door of verband houdend met toepassing van door het Nederlands Normalisatie-instituut gepubliceerde uitgaven.

## Nederlands voorwoord

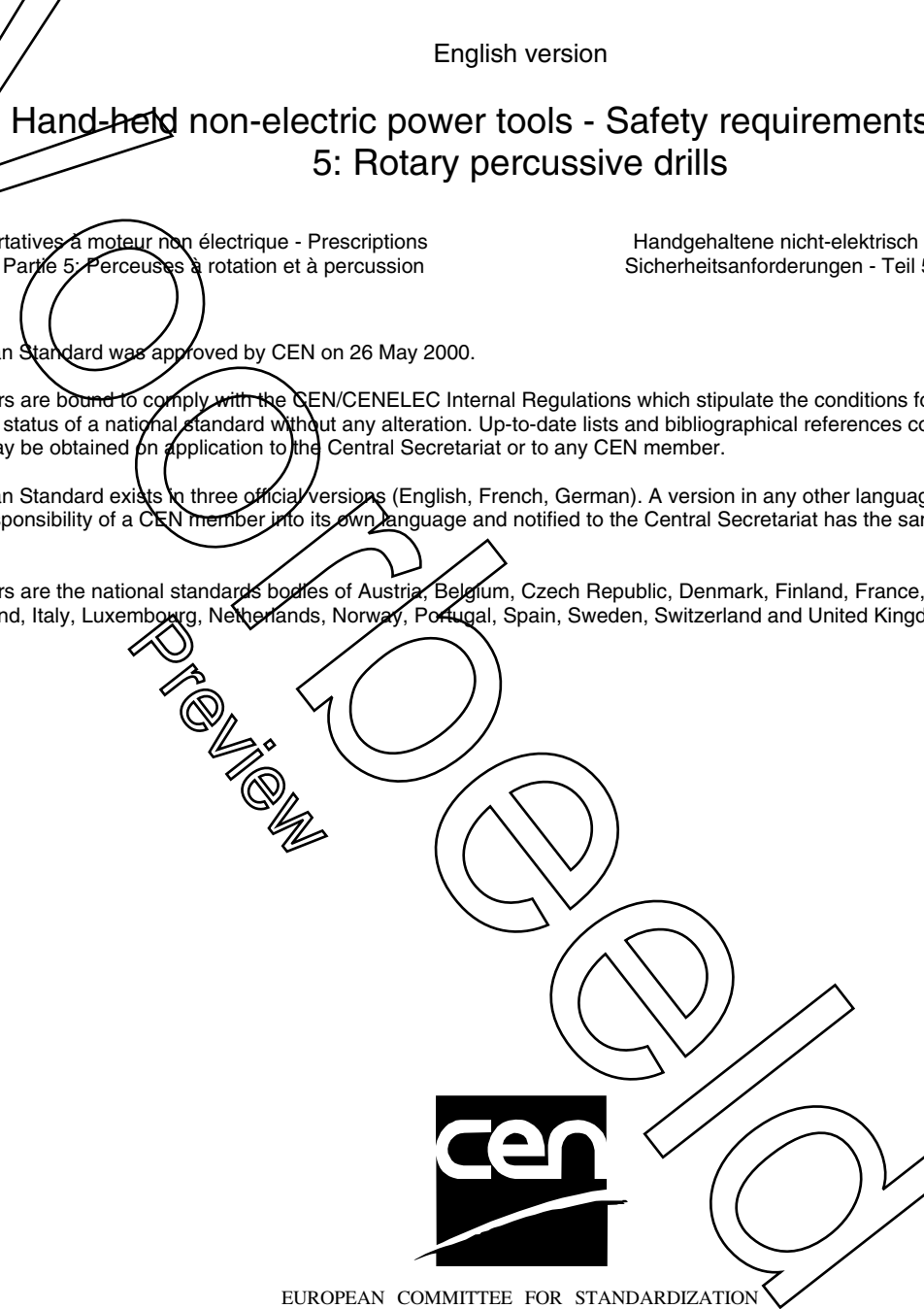
Voor de in deze norm vermelde normatieve verwijzingen bestaan in Nederland de volgende equivalenten:

<u>vermelde norm</u>	<u>Nederlandse norm</u>	<u>titel</u>
EN 292-1:1991	NEN-EN 292-1:1994	Veiligheid van machines - Basisbegrippen, algemene ontwerpbeginselen - Deel 1: Basisterminologie, methodologie (en,nl)
EN 292-2:1991	NEN-EN 292-2:1996	Veiligheid van machines - Basisbegrippen, algemene ontwerpbeginselen - Deel 2: Technische beginselen en beschrijvingen (en,nl)
EN 563	NEN-EN 563	Veiligheid van machines - Temperaturen van aan te raken oppervlakken - Ergonomische gegevens om temperatuurgrenswaarden voor hete oppervlakken vast te stellen. (en,nl)
EN 614-1	NEN-EN 614-1	Veiligheid van machines - Ergonomische ontwerpprincipes - Deel 1: Terminologie en algemene principes (en,nl)
EN 1070	NEN-EN 1070	Veiligheid van machines - Termen en definities (en,fr,de)
EN 12096	NEN-EN 12096	Mechanische trillingen - Opgaven en controle van trillingskengetallen (en)
EN ISO 4871	NEN-EN-ISO 4871	Akoestiek - Opgave en verificatie van geluidemissiewaarden van machines en apparaten (en)
prEN ISO 15744:1999	NEN-EN-ISO 15744:1999 Ontw.	Niet-elektrische aangedreven handgereedschap - Geluidmeetcode - Praktijkmethode (klasse 2) (en)
EN 28662-1	NEN-ISO 28662-1	Draagbaar mechanisch handgereedschap - Meting van trillingen aan het handvat - Deel 1: Algemeen (nl)
EN 28662-3	NEN-ISO 28662-3	Draagbare handgereedschappen met motoraandrijving - Meting van mechanische trillingen aan het handvat - Deel 3: Steenboormachines en boorhamers (en)
ISO 3857-3	-	-
ISO 5391	-	-
ISO 9158	-	-
ISO 9159	-	-



ICS 25.140.10; 25.140.99

English version



## Hand-held non-electric power tools - Safety requirements - Part 5: Rotary percussive drills

Machines portatives à moteur non électrique - Prescriptions de sécurité - Partie 5: Perceuses à rotation et à percussion

Handgehaltene nicht-elektrisch betriebene Maschinen - Sicherheitsanforderungen - Teil 5: Schlagbohrmaschinen

This European Standard was approved by CEN on 26 May 2000.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

<b>CONTENTS</b>		<b>page</b>
	<b>Foreword</b>	<b>3</b>
<b>0</b>	<b>Introduction</b>	<b>4</b>
<b>1</b>	<b>Scope</b>	<b>5</b>
<b>2</b>	<b>Normative references</b>	<b>5</b>
<b>3</b>	<b>Terms and definitions</b>	<b>6</b>
3.1	General terms and definitions	6
3.2	Terms and definitions related to rotary percussive power tools	7
<b>4</b>	<b>List of hazards</b>	<b>8</b>
<b>5</b>	<b>SAFETY REQUIREMENTS AND MEASURES</b>	<b>9</b>
5.1	Mechanical safety	9
5.2	Thermal safety	9
5.3	Noise	9
5.4	Vibration	10
5.5	Materials and substances processed, used or exhausted	10
5.6	Ergonomics	10
5.7	Safety related measures and means	11
<b>6</b>	<b>Information for use</b>	<b>12</b>
6.1	Marking, signs and written warnings	12
6.2	Instruction for use	12
<b>7</b>	<b>Verification</b>	<b>14</b>
7.1	Noise	14
7.2	Vibration	14
7.3	Unintentional start	14
7.4	Structure of verification	15
	<b>Annex A (informative) Examples of rotary percussive drills covered by this part</b>	<b>16</b>
	<b>Annex B (informative) Symbols for labels and signs</b>	<b>17</b>
	<b>Annex C (normative) Safety requirements related to the internal combustion engines</b>	<b>18</b>
	<b>Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives</b>	<b>21</b>
	<b>Bibliography</b>	<b>22</b>

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 255 "Hand-held, non electric power tools - Safety ", the secretariat of which is held by SIS.

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 2000 and conflicting national standards shall be withdrawn at the latest by December 2000.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The standard has been created in close co-operation with CENELEC/TC 61F with the aim of achieving requirements for mechanical safety in the EN 50 144 series, which are similar for hand-held electric and non-electric power tools.

The annexes to this part of the standard are:

Annex A (informative) Examples of power tools covered by this part

Annex B (informative) Labels, signs and tags

Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.

This standard also contains a Bibliography.

## 0 Introduction

This European standard is a type C standard as stated in EN 1070.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of other standards, for machines that have been designed and built according to the provisions of this type C standard.

The European Standard, EN 792, consists of a number of independent parts for individual types of hand-held non-electric power tools.

Other EN standards deal with safety rules for hand-held power tools used in e. g. the following fields:

- agriculture and forestry such as chain saws, hedge-trimmers, brush cutters, grass trimmers
- construction and building such as cutting-off power tools, concrete vibrators
- food industry, such as fowl secateurs, sheep shears.

Endeavours have been made to achieve co-ordination with the relevant Technical Committees so that the safety requirements are compatible.

This standard is divided in the following parts:

- Part 1 - Assembly power tools for non-threaded mechanical fasteners ( former part 14)
- Part 2 - Cutting-off and chipping power tools (former part 15)
- Part 3 - Drills and tappers
- Part 4 - Non-rotary percussive power tools
- Part 5 - Rotary, percussive power drills
- Part 6 - Assembly power tools for threaded fasteners
- Part 7 - Grinders
- Part 8 - Sanders and polishers
- Part 9 - Die grinders
- Part 10 - Compression power tools
- Part 11 - Nibblers and shears
- Part 12 - Small circular, small oscillating and reciprocating saws
- Part 13 - Fastener driving tools

Certain parts of EN 792 cover hand-held non-electric power tools, driven by internal combustion engines powered by gaseous or liquid fuel. In these parts, the safety aspects relating to internal combustion engines are found in a normative annex.

The parts are type C standards and refer to pertinent European Standards of type A and B where such standards are applicable.



## 1 Scope

The standard EN 792 applies to hand-held non-electric power tools driven by rotary or linear motors, powered by compressed air, hydraulic fluid and intended to be used by one operator and supported by:

- the operator's hand or hands
- a harness
- a suspension, e. g. a balancer.

This part, EN 792-5, applies to hand-held, non-electric, power tools used for making holes in hard materials like rock and concrete. This part lists the significant hazards caused by such power tools and specifies safety requirements valid for different aspects of safety during their foreseeable lifetime.

Power tools covered by this part of the standard:

- plug hole drills
- rock drills
- rotary hammers.

Special requirements and modifications on a hand-held power tool for the purpose of mounting it in a fixture are not covered by this part.

For those power tools which are driven by an internal combustion engine the particular safety requirements related to the engine are dealt with in annex C.

## 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 the publications referred to in this European Standard are valid only when they are incorporated in this standard by amendment or revision. For undated references the latest edition of the publication referred to, applies (including amendments).

EN 292-1:1991	Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology
EN 292-2:1991	Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications
EN 563	Safety of machinery - Temperatures of touchable surfaces - Ergonomics data to establish temperature limit values for hot surfaces
EN 614-1	Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles
EN 1070	Safety of machinery - Terminology
EN 12096	Mechanical vibration - Declaration and verification of vibration emission values

# Bestelformulier

## Stuur naar:

NEN Standards Products & Services  
t.a.v. afdeling Klantenservice  
Antwoordnummer 10214  
2600 WB Delft



**NEN** Standards Products & Services

Postbus 5059  
2600 GB Delft

Vlinderweg 6  
2623 AX Delft

T (015) 2 690 390  
F (015) 2 690 271

[www.nen.nl/normshop](http://www.nen.nl/normshop)

## Ja, ik bestel

\_\_ ex. NEN-EN 792-5:2000 en Handgereedschap met niet-elektrische aandrijving - Veiligheidseisen - Deel 5: Slagboormachines € 50.00

**Wilt u deze norm in PDF-formaat? Deze bestelt u eenvoudig via [www.nen.nl/normshop](http://www.nen.nl/normshop)**

### Gratis e-mailnieuwsbrieven

Wilt u op de hoogte blijven van de laatste ontwikkelingen op het gebied van normen, normalisatie en regelgeving? Neem dan een gratis abonnement op een van onze e-mailnieuwsbrieven. [www.nen.nl/nieuwsbrieven](http://www.nen.nl/nieuwsbrieven)

## Gegevens

Bedrijf / Instelling \_\_\_\_\_

T.a.v. \_\_\_\_\_ O M O V

E-mail \_\_\_\_\_

Klantnummer NEN \_\_\_\_\_

Uw ordernummer \_\_\_\_\_ BTW nummer \_\_\_\_\_

Postbus / Adres \_\_\_\_\_

Postcode \_\_\_\_\_ Plaats \_\_\_\_\_

Telefoon \_\_\_\_\_ Fax \_\_\_\_\_

**Factuuradres** (indien dit afwijkt van bovenstaand adres)

Postbus / Adres \_\_\_\_\_

Postcode \_\_\_\_\_ Plaats \_\_\_\_\_

Datum \_\_\_\_\_ Handtekening \_\_\_\_\_

### Retourneren

Fax: 015 2 690 271

E-mail: [klantenservice@nen.nl](mailto:klantenservice@nen.nl)

Post: NEN Standards Products & Services,

t.a.v. afdeling Klantenservice  
Antwoordnummer 10214,  
2600 WB Delft

(geen postzegel nodig).

### Voorwaarden

- De prijzen zijn geldig tot 31 december 2018, tenzij anders aangegeven.
- Alle prijzen zijn excl. btw, verzend- en handelingskosten en onder voorbehoud bij o.m. ISO- en IEC-normen.
- Bestelt u via de normshop een pdf, dan betaalt u geen handeling en verzendkosten.
- Meer informatie: telefoon 015 2 690 391, dagelijks van 8.30 tot 17.00 uur.
- Wijzigingen en typfouten in teksten en prijsinformatie voorbehouden.
- U kunt onze algemene voorwaarden terugvinden op: [www.nen.nl/leveringsvoorwaarden](http://www.nen.nl/leveringsvoorwaarden).