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**HAND-HELD NON-ELECTRIC POWER
TOOLS - SAFETY REQUIREMENTS - PART 7:
GRINDERS**

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EN 792-7:2001 (E)

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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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.

This European Standard supersedes EN 68:1977.

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.

The "European Committee of Manufacturers of Compressors, Vacuum Pumps and Pneumatic Tools", PNEUROP, has given substantial contributions to this standard.

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 50144 series, which are similar for hand-held electric and non-electric power tools.

NOTE Other technical committees in CEN dealing with hand-held power tools have been asked to follow the safety requirements as in EN 792.

The annexes to this part of the standard are:

- Annex A (informative) Examples of grinders covered by this standard
- Annex B (informative) Symbols for labels and signs
- Annex C (informative) List of abrasive products for hand-held grinders
- Annex D (normative) Design, material and thickness of guards
- Annex E (informative) Example of calculating procedure of clamping force
- Annex F (informative) Example of flanges
- Annex ZA (informative) Relationship of this European Standard with EC Directives.

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.

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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.

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

Other European 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 crimping 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

This European Standard applies to hand-held non-electric power tools driven by rotary or linear motors, powered by compressed air or 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 European Standard applies to hand-held non-electric power tools intended for grinding and cutting-off, with bonded, coated and super abrasive products for use on all kinds of materials.

This European Standard lists the significant hazards caused by such power tools and specifies safety requirements valid for different aspects of safety during their foreseeable lifetime.

This part of the standard covers power tools used with:

- abrasive products with a peripheral operating speed less than or equal to 80 m/s;
- cutting-off wheels with a peripheral operating speed less than or equal to 100 m/s;
- abrasive products with outside nominal diameter less than or equal to 230 mm;
- cutting-off wheels with outside nominal diameter less than or equal to 300 mm;
- wire brushes.

This Part of the standard does not apply to:

- die grinders with collets which are treated in EN 792-9;
- polishers and sanders which are treated in EN 792-8;
- cutting-off machines used for construction, rescue purposes which are driven by an internal combustion engine which are treated in EN 1454.

There are no grinders covered by this Part of this European Standard driven by internal combustion engines.

Typical abrasive products used together with hand-held grinders are listed in annex C.

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.

NOTE At the date of publication no grinders driven by internal combustion engines are known.

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).

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