

National Standards Authority of Ireland

IRISH STANDARD

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## MACHINE TOOLS - SAFETY -

#### MULTI-SPINDLE AUTOMATIC TURNING

### MACHINES

National Standards Authority of Ireland Dublin 9 Ireland

Tel. (01) 807 3800 Tel: (01) 807 3838

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# EN 13788

November 2001

ICS

English version

# Machine tools - Safety - Multi-spindle automatic turning machines

Machines-outils - Sécurité - Machines de tournage automatiques multibroches Werkzeugmaschinen - Sicherheit - Mehrspindle-Drehautomaten

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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#### EN 13788:2001 (E)

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#### Foreword

This European standard has been prepared by technical Committee CEN /TC 143, "Machine-tools - Safety", the secretariat of which is held by SNV.

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of an identical text or by endorsement, at the latest by June 2002, and conflicting national standards shall be withdrawn at the latest by June 2002.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 document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directive(s), see informative annex ZA, which is an integral part of this document.

The European standards produced by CEN/TC 143 are particular to machine-tools and complement the relevant A and B standards on the subject of general safety (see introduction of EN 292-1:1991 for a description of A, B and C standards).

Annexes B and D are normative, annexes A, C and E are informative.

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

#### EN 13788:2001 (E)

#### 0 Introduction

This European Standard has been prepared to be a Harmonised Standard to provide one means of conforming to the Essential Safety Requirements of the Machinery Directive and associated EFTA regulations.

This European Standard is a type C standard as defined in EN 292:1991 and EN 1070:1998.

The machinery concerned and the extent to which hazards, hazardous situation and events are covered is indicated in the scope of this standard. In addition multi-spindle automatic turning machines shall comply as appropriate with EN 292-1:1991 and EN 292-2 for hazards which are not covered by this standard. When provisions of this C type standard are different from those which are stated in type A or B standards, the provision of this C type standard take precedence over the provisons of the other standards for machines that have been designed and built according to the provisions of this C type standard.

The requirements of this European Standard concern designers, manufacturers, suppliers and importers of machines described in the scope.

This standard also includes information to be provided by the manufacturer to the user.

#### 1 Scope

This European Standard specifies the requirements and/or measures to remove the hazards and limit the risks on general purpose horizontal multi-spindle and vertical multi-spindle automatic turning machines which are designed primarily to work cold metal as defined in 3.1 and hereafter referred to as "machines".

NOTE Hazards arising from other metal processes (e.g. grinding, laser processing) are covered by other standards (see Bibliography).

Horizontal single spindle and vertical single spindle automatic turning machines are covered by EN 12415:2000.

This standard covers the significant hazards, listed in clause 4.

--- This standard applies to numerically and/or mechanically controlled multi-spindle automatic turning machines;

The standard also applies to ancillary devices, e.g. collets, power operated chucks, bar/workpiece handling devices and swarf handling equipment which are integral to the machine.

This standard also applies to machines which are integrated into an automatic production line or turning cell in as much as the hazards and risks arising are comparable to those of machines working separately.

This European Standard is not applicable to NC turning machines with machining facilities under manual control which are dealt with in EN 12840:2001.

This standard applies to machines which are manufactured after the date of issue of this standard.

#### 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 these publications apply to this European Standard only when incorporated in it 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.



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