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## Irish Standard I.S. EN 14070:2003+A1:2009

# Safety of machine tools - Transfer and special-purpose machines

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#### I.S. EN 14070:2003+A1:2009

Incorporating amendments/corrigenda issued since publication: EN 14070:2003/A1:2009 EN 14070:2003+A1:2009/AC:2010

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## EUROPEAN STANDARD NORME EUROPÉENNE

## EN 14070:2003+A1:2009/AC

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February 2010 Février 2010 Februar 2010

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English version Version Française Deutsche Fassung

Safety of machine tools - Transfer and special-purpose machines

Sécurité des machines-outils - Machines transfert et machines spéciales

Sicherheit von Werkzeugmaschinen -Transfer- und Einzweck- oder Sondermaschinen

This corrigendum becomes effective on 17 February 2010 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 17 février 2010 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 17.Februar 2010 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.



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

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#### 1 Modification to Clause 2

Replace "EN 954-1" with "EN 954-1:1996".

#### 2 Modifications to 5.2

Table 2, 2nd column, entry "14.1.1", 3rd line, replace "EN 954-1" with "EN 954-1:1996".

Table 2, 2nd column, entry "14.1.1", 6th and 7th lines, replace "EN 954-1" with "EN 954-1:1996".

## EUROPEAN STANDARD NORME EUROPÉENNE

## EN 14070:2003+A1

## **EUROPÄISCHE NORM**

February 2009

ICS 25.080.01

Supersedes EN 14070:2003

**English Version** 

## Safety of machine tools - Transfer and special-purpose machines

Sécurité des machines-outils - Machines transfert et machines spéciales

Sicherheit von Werkzeugmaschinen - Transfer- und Einzweck- oder Sondermaschinen

This European Standard was approved by CEN on 24 July 2003 and includes Amendment 1 approved by CEN on 29 December 2008.

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## EN 14070:2003+A1:2009 (E)

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## Foreword

This document (EN 14070:2003+A1:2009) 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 August 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-12-29.

This document supersedes EN 14070:2003.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\square$   $\square$ .

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential safety requirements of the Machinery Directive to determine safety for new transfer and special purpose machines.

For relationship with EC Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. (A)

Annexes A and D are normative. Annexes B and C are informative.

This document includes a Bibliography.

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

## 0 Introduction

This European Standard is a type C standard as stated in 6.3.2 of EN 1070:1998.

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.

Transfer and special purpose machines present a wide range of hazards due to the variety of processes and configurations with possible obstructions to vision on these machines, in particular, those hazardous events which result from contact with:

- Moving tools especially when being rapidly rotated in spindles;
- Fast moving machine parts;
- Fast moving workpieces;
- Power operated mechanisms for workpiece handling, load or unload.

The figures in annex C (informative) are examples only and are not intended to illustrate the only interpretation of the text.

A list of standards related to EN 14070 is given in the bibliography.

#### 1 Scope

**1.1** This standard specifies the technical safety requirements and protective measures to be adopted by persons undertaking the design, construction and supply (including information which must be provided for installation and dismantling, with arrangements for transport and maintenance) of transfer and special purpose machines (see 3.1). These machines are designed to process only a pre-specified metal or analogous material workpiece, or limited family of similar workpieces by means of a predetermined sequence of machining operations and process parameters.

**1.2** This standard takes account of intended use, including reasonably foreseeable misuse, maintenance, cleaning, and setting operations. It specifies access arrangements to machining positions and manual load/unload stations (see 3.4). It presumes access to the machine from all directions. It describes means to reduce risks to operators and other exposed persons.

**1.3** This standard also applies to transport devices for workpiece load/unload when they form an integral part of the machine.

**1.4** This standard deals with significant hazards relevant to transfer and special purpose machines when they are used as intended and under the conditions foreseen by the manufacturer (see clause 4). The safety requirements and/or protective measures to prevent or minimise those hazards identified in Table 1 and procedures for verification of these requirements or measures are found in clause 5. Safety requirements and/or measures are not specified for: Fire and Explosion

**1.5** Where machines employ processes which are covered by other standards (e.g. grinding, turning, forming, EDM, laser processing), the requirements of those standards should be applied (see Bibliography).

**1.6** This standard applies to machines which are manufactured after publication of this standard by CEN.



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