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Irish Standard I.S. EN 12957:2001+A1:2009

## Machine tools - Safety - Electro discharge machines

*Incorporating amendments/corrigenda issued since publication:* EN 12957:2001/A1:2009

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# EUROPEAN STANDARD

### EN 12957:2001+A1

## NORME EUROPÉENNE

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February 2009

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**English Version** 

### Machine tools - Safety - Electro discharge machines

Machine-outils - Sécurité - Machines d'électroérosion

Werkzeugmaschinen - Sicherheit -Funkenerodiermaschinen

This European Standard was approved by CEN on 9 May 2001 and includes Amendment 1 approved by CEN on 29 December 2008.

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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 CEN Management Centre has the same status as the official versions.

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

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#### EN 12957:2001+A1:2009 (E)

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#### Foreword

This document (EN 12957:2001+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of an identical text or by endorsement, at the latest by August 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.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 12957:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $A_{2}$  (A).

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).

Annexes A, ZA and ZB of this standard are informative, Annex B is normative.

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

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.

#### Introduction

This standard applies to equipment using the process of Electro Discharge Machining (EDM) as defined in clause 3. 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.

Complementary guidance is given in type A and B Standards to which reference is made in the text.

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 the other standards, for machines that have been designed and built according to the provisions of this type C Standard. It provides one means of conforming with the Essential Health and Safety Requirements (EHSR's) of the "Machinery Directive" (98/37/EC).

#### 1 Scope

**1.1** This standard specifies technical safety requirements and measures, applicable to EDM equipment and EDM system (e.g. for spark erosion-sinking, spark erosion-wire cutting), to be adopted by persons undertaking the design, construction, installation and/or supply of such equipment. This standard also includes information to be provided by the manufacturer to the user.

**1.2** The design requirements of this standard shall not apply to arc eroding and electro chemical machining equipment.

**1.3** This standard takes account of the intended use in normal workshop environment and non explosive atmospheres including installation, setting, maintenance, repair and dismantling for removal or disposal of EDM equipment.

**1.4** This standard also applies to auxiliary devices essential for EDM processing.

**1.5** This standard deals with specific hazards defined in clause 4, Table 1, and the measures of prevention in clause 5, Table 2.

**1.6** This standard applies to machines built after its date of issue.

NOTE Directive 94/9/EC concerning equipment and protective systems intended for use in potentially explosive atmospheres can be applicable to the type of machine or equipment covered by this European Standard. The present standard is not intended to provide means of complying with the essential health and safety requirements of Directive 94/9/EC.

#### 2 Normative references

This European Standard contains dated or not dated references on 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).



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