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Údarás um Chaighdeán Náisiúnta na hÉireann

IRISH STANDARD

**I.S. EN 13035-1:2008**

ICS 81.100

**MACHINES AND PLANTS FOR THE  
MANUFACTURE, TREATMENT AND  
PROCESSING OF FLAT GLASS - SAFETY  
REQUIREMENTS - PART 1: STORAGE,  
HANDLING AND TRANSPORTATION  
EQUIPMENT INSIDE THE FACTORY**

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**EUROPEAN STANDARD**

**EN 13035-1**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

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ICS 81.100

English Version

**Machines and plants for the manufacture, treatment and  
processing of flat glass - Safety requirements - Part 1: Storage,  
handling and transportation equipment inside the factory**

Machines et installations pour la production, le façonnage  
et la transformation du verre plat - Exigences de sécurité -  
Partie 1 : Stockage, manutention et transport à l'intérieur de  
l'usine

Maschinen und Anlagen für die Herstellung, Be- und  
Verarbeitung von Flachglas - Sicherheitsanforderungen -  
Teil 1: Einrichtungen zum Lagern, Handhaben und  
Transportieren innerhalb des Werks

This European Standard was approved by CEN on 28 December 2007.

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## **Foreword**

This document (EN 13035-1:2008) has been prepared by Technical Committee CEN/TC 151 “Construction equipment and building material machines — Safety”, the secretariat of which is held by DIN.

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 EU Directive(s). It is one of a series concerning machinery for the manufacture, treatment and processing of flat glass (see Bibliography).

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

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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

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 the United Kingdom.

## Introduction

This document is a type C standard as stated in EN ISO 12100.

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

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.

In this European Standard it is assumed that:

- negotiation occurs between the manufacturer and the user/purchaser concerning particular conditions of use not dealt with in this standard and specific interfaces consideration (e.g. Annex C – Clearances for interfacing equipment);
- the floors inside the factory used for glass charging and discharging processes are virtually horizontal and without significant asperities.

## 1 Scope

**1.1** This standard contains the requirements for safety for the design and installation of equipment intended for the storage, handling and transportation of flat glass inside the factory as described in Clause 3. It applies to stationary, movable and mobile storage equipment (see 3.2), mechanical and pneumatic handling equipment (see 3.3) and transportation equipment (see 3.4) (see overview in Annex A).

**1.2** Additional requirements for dealing with specific hazards due to the use outside the factory are dealt with in prEN 13035-2.

**1.3** This standard only deals with the devices which are directly in contact with the glass. Tractors, cranes, hoists and fork lifts are out of the scope as well as parts of other powered vehicles that are not in contact with the glass (see 3.4.1). This standard does not apply to manual handling equipment as defined in 3.3.1.

**1.4** This standard deals with all significant hazards, hazardous situations and events relevant to equipment for the storage, handling and transportation of flat glass, when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 4). This standard specifies the appropriate technical measures to eliminate or reduce risks arising from the significant hazards during commissioning, the operation and maintenance. Noise has not been considered to be a significant hazard for any type of equipment in the scope of this standard.

**1.5** This document is not applicable to storage, handling or transportation equipment for flat glass inside the factory, which is manufactured before the date of its publication as EN.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 294:1992, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs*

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