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Standards

Irish Standard  
I.S. EN 620:2002+A1:2010

# Continuous handling equipment and systems - Safety and EMC requirements for fixed belt conveyors for bulk materials

## I.S. EN 620:2002+A1:2010

*Incorporating amendments/corrigenda/National Annexes issued since publication:*  
EN 620:2002/A1:2010

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**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie

W NSAI.ie

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

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English Version

## Continuous handling equipment and systems - Safety and EMC requirements for fixed belt conveyors for bulk materials

Equipements et systèmes de manutention continue -  
Prescriptions de sécurité et de CEM pour les transporteurs  
à courroie fixes pour produits en vrac

Stetigförderer und Systeme - Sicherheits- und EMW-  
Anforderungen für ortsfeste Gurtförderer für Schüttgutt

This European Standard was approved by CEN on 16 november 2001 and includes Amendment 1 approved by CEN on 9 November 2010.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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-CENELEC Management Centre has the same status as the official versions.





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**Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (EN 620:2002+A1:2010) has been prepared by Technical Committee CEN /TC 148, "Continuous handling equipment and systems - Safety", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

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.

This document includes Amendment 1, approved by CEN on 2010-11-09.

This document supersedes EN 620:2002.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{A_1}$   $\triangleleft A_1$ .

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).

$\boxed{A_1}$  For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document.  $\triangleleft A_1$

This  $\boxed{A_1}$  standard  $\triangleleft A_1$  forms part of a series of five  $\boxed{A_1}$  standards  $\triangleleft A_1$  the titles of which are given below:

- EN 617 "Continuous handling equipment and systems — Safety and EMC requirements for the equipment for the storage of bulk materials in silos, bunkers, bins and hoppers" ;
- EN 618 "Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of bulk materials except fixed belt conveyors" ;
- $\boxed{A_1}$  EN 619  $\triangleleft A_1$  "Continuous handling equipment and systems — Safety and EMC requirements for equipment for mechanical handling of unit loads" ;
- EN 620 "Continuous handling equipment and systems — Safety and EMC requirements for fixed belt conveyors for bulk material" ;
- EN 741 "Continuous handling equipment and systems — Safety requirements for systems and their components for pneumatic handling of bulk materials".

$\boxed{A_1}$  *deleted text*  $\triangleleft A_1$

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, Croatia, 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 European Standard is a type C Standard as stated in EN 1070:1998.

The products concerned and the extent to which hazards are covered are indicated in the scope of this standard.

While producing this standard it was assumed that:

- negotiations occur between the manufacturer and the purchaser concerning particular conditions for the use and places of use for the machinery related to health and safety;
- only suitably trained persons will operate this machinery;
- the machinery will be kept in good repair and working order, in accordance with the manufacturer's instructions, to retain specified health and safety characteristics throughout its working life;
- the place of installation is adequately lit.
- the place of installation will allow safe use of the machinery;
- by design of the load bearing elements, the safe operation of the system and components is assured for loading ranging from zero to 100 % of the rated capacities and during testing;
- all parts of the machinery without specific requirements, will be:
  - a) made from materials of adequate strength and durability and of suitable quality for their intended purpose;
  - b) of sound mechanical construction;
  - c) designed in accordance with the usual engineering practice and engineering codes, taking account of all failure modes and incorporating appropriate safety factors.

EN 617, EN 618 and EN 741 need to be considered for a complete continuous handling system (machine).

## 1 Scope

**1.1** This European standard deals with the technical requirements to minimise the risks due to the hazards listed in clause 4, which can arise during operation and maintenance of fixed belt conveyors and systems as defined in 3.1 to 3.2.4 and designed for continuously conveying loose bulk materials from the loading point(s) to the unloading point(s). Requirements for electromagnetic compatibility are also covered.

**1.2** This standard applies to use in ambient air temperatures of  $-15^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ .

**1.3** This standard does not cover:

- a) use in open cast lignite mining or use underground, such as in mines or tunnels;
- b) use in public areas or for man-riding;
- c) floating, dredging and ship mounted equipment;
- d) conveyors requiring a high level of cleanliness for hygiene reasons, e.g. in direct contact with foodstuffs or pharmaceuticals;
- e) conveyors using a moving belt with other than a continuous rubber or polymeric surface for the conveying medium;
- f) transportation of the conveyor;
- g) the design of the supporting structure which is not part of a conveyor (see 3.2);
- h) the effects of wind;
- i) hazards resulting from handling specific hazardous materials, (e.g. explosives, radiating material);
- j) hazards resulting from contact with or inhalation of harmful fluids, gases, mists, fumes or dust;
- k) biological and micro-biological (viral or bacterial) hazards;
- l) hazards due to heat radiation from the materials handled;
- m) hazards caused by operation in electromagnetic fields outside the range of EN 61000-6-2:1999;
- n) hazards caused by operation subject to special regulations (e.g. explosive atmospheres);
- o) hazards caused by noise;
- p) hazards caused by the use of ionising radiation sources;
- q) hazards caused by hydraulic equipment.

The safety requirements of this standard apply to equipment and systems placed on the market after the date of publication of this standard.

**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.

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