# Masinate ohutus. Püsijuurdepääsuvahendid masinatele. Osa 2: Tööplatvormid ja läbikäigud

Safety of machinery - Permanent means of access to machinery - Part 2: Working platforms and walkways



## **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO
14122-2:2003 sisaldab Euroopa standardi
EN ISO 14122-2:2001 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 14122-2:2003 consists of the English text of the European standard EN ISO 14122-2:2001.

Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

EN ISO 14122 defines the general requirements for safe access to machines mentioned in EN 292-2. Part 1 of EN ISO 14122 gives advice about the correct choice of access means when the necessary access to the machine is not possible directly from the ground level or from a floor.

This part of EN ISO 14122 applies to working platforms and walkways which are a part of a machine.

### Scope:

EN ISO 14122 defines the general requirements for safe access to machines mentioned in EN 292-2. Part 1 of EN ISO 14122 gives advice about the correct choice of access means when the necessary access to the machine is not possible directly from the ground level or from a floor.

This part of EN ISO 14122 applies to working platforms and walkways which are a part of a machine.

ICS 13.110

**Võtmesõnad:** industrial facilities, machines, mechanical engineering, occupational safety, plant, safety, safety engineering, safety requirements, site equipment, specification (approval), specifications, staging, stationary, testing, work spaces, working platforms, workroom

# EUROPEAN STANDARD

# **EN ISO 14122-2**

# NORME EUROPÉENNE EUROPÄISCHE NORM

May 2001

ICS 13.110

#### **English version**

# Safety of machinery - Permanent means of access to machinery - Part 2: Working platforms and walkways (ISO 14122-2:2001)

Sécurité des machines - Moyens d'accès permanents aux machines - Partie 2: Plates-formes de travail et passerelles (ISO 14122-2:2001) Sicherheit von Maschinen - Ortsfeste Zugänge zu maschinellen Anlagen - Teil 2: Arbeitsbühnen und Laufstege (ISO 14122-2:2001)

This European Standard was approved by CEN on 14 February 2000.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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

# Contents

	ord	_
Introdu	uction	
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4 4.1 4.1.1 4.1.2 4.2 4.2.1 4.2.2 4.2.3 4.2.4 4.2.5	General requirements	6 7 7 7 7 8 8
5	Assembly instructions	
	A (informative) Different methods of determining levels of slip-resistance	
	ZA (informative) Relationship of this European standard with EC Directives	

# **Foreword**

The text of EN ISO 14122-2:2001 has been prepared by Technical Committee CEN/TC 114 "Safety of machinery", the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 199 "Safety of machinery".

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 November 2001, and conflicting national standards shall be withdrawn at the latest by November 2001.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following ean Italy, 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.

# Introduction

EN ISO 14122 consists of the following parts, under the general title "Safety of machinery - Permanent means of access to machinery":

Part 1: Choice of a fixed means of access between two levels

Part 2: Working platforms and walkways

Part 3: Stairs, stepladders and guard-rails

Part 4: Fixed ladders.

This part of EN ISO 14122 is a type B standard as stated in EN 1070.

This document is to be read in conjunction with clause 1.6.2 "Access to operating position and servicing points" and 1.5.15 "Risk of slipping, tripping or falling" of the essential safety requirements expressed in annex A of EN 292-2:1991/A1:1995. See also 6.2.4 "Provision for safe access to machinery" of EN 292-2:1991.

For the significant hazards covered by this standard, see clause 4 of EN ISO 14122-1.

The provisions of this document may be supplemented or modified by a type C standard.

For machines which are covered by the scope of a type C standard and which have been designed and built according to the provisions of that standard, the provisions of that type C standard take precedence over the provisions of this type B standard.

The dimensions specified are consistent with established ergonomic data given in EN 547-3 "Safety of machinery - Human body dimensions - Part 3: Anthropometric data".

The use of materials other than metals (composite materials, so-called "advanced" materials, etc.) does not alter the application of the present standard.

Annexes A and ZA are for information only.

This part of EN ISO 14122 contains a Bibliography.

## 1 Scope

EN ISO 14122 defines the general requirements for safe access to machines mentioned in EN 292-2. Part 1 of EN ISO 14122 gives advice about the correct choice of access means when the necessary access to the machine is not possible directly from the ground level or from a floor.

This part of EN ISO 14122 applies to all machinery (stationary and mobile) where fixed means of access are necessary.

This part of EN ISO 14122 applies to working platforms and walkways which are a part of a machine.

This part of EN ISO 14122 may also apply to working platforms and walkways to that part of the building where the machine is installed, providing the main function of that part of the building is to provide a means of access to the machine.

NOTE This part of EN ISO 14122 may be used also for means of access which are outside the scope of this standard. In those cases the possible relevant national or other regulations should be taken into account.

This part of EN ISO 14122 applies also to working platforms and walkways specific to the machine which are not permanently fixed to the machine and which may be removed or moved to the side for some operations of the machine (e.g. changing tools in a large press).

This part of EN ISO 14122 does not apply to lifts, to moveable elevating platforms or other devices specially designed to lift persons between two levels.

#### 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 (ISO/TR 12100-1), Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology

EN 292-2/A1 (ISO/TR 12100-2), Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications

EN 294 (ISO 13852), Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs

EN 547-1, Safety of machinery — Human body dimensions — Part 1: Principles for determining the dimensions required for openings for whole body access into machinery

EN 547-2, Safety of machinery — Human body dimensions — Part 2: Principles for determining the dimensions required for access openings

EN 547-3, Safety of machinery — Human body dimensions — Part 3 : Anthropometric data

EN 1070, Safety of machinery — Terminology

#### Page 6

EN ISO 14122-2:2001

EN ISO 14122-1, Safety of machinery — Permanents means of access to machinery — Part 1: Choice of fixed means of access between two levels

EN ISO 14122-3:2001, Safety of machinery — Permanents means of access to machinery — Part 3: Stairs, stepladders and guard-rails

#### 3 Terms and definitions

For the purposes of this part of EN ISO 14122, the terms and definitions stated in EN 1070 "Safety of machinery - Terminology" and of EN ISO 14122-1 apply.

The following additional definitions particularly required for this standard apply:

#### 3.1

#### flooring

assembly of elements making up the floor of a walkway or a working platform and being in direct contact with footwear

#### 3.2

#### walkway

level surface used for moving from one point to another

#### 3.3

#### working platform

level surface used for the operation, maintenance, inspection, repair, sampling and other phases of work in connection with the machinery

#### 3.4

#### slip resistant surface

flooring surface designed for improving the grip of footwear

#### 4 General requirements

Walkways and working platforms shall comply with the following general safety requirements:

#### 4.1 General

The working platforms and walkways shall be designed, constructed, located and where necessary protected so that the operators are safe when having access to the working platforms and when they are on them for the operation, setting, monitoring, repairing or any other work involved with the machinery.

## 4.1.1 Construction and materials

Working platforms and walkways shall be designed and constructed and the materials selected so that they withstand the foreseeable conditions of use. In particular, at least the following details shall be considered:

- a) dimensioning and selection of components (including fixings, connections, supports and foundations) to ensure sufficient rigidity and stability;
- b) resistance of all parts to environmental effects (such as climate, chemical agents, corrosive gases) e.g. by the use of a corrosion resistant material or with the aid of a suitable protective coating;
- c) positioning of constructional elements so that water cannot be accumulated e.g. in the joints;
- d) use of compatible materials e.g. to minimise galvanic action or differential thermal expansion;
- e) dimension of walkways and working platforms shall be according to available anthropometric data (see 4.2.2 of this standard, see also EN 547-1 and EN 547-3);