

**Masinate ohutus. Kuvarite ja juhtseadiste
konstruktsiooni ergonoomianõuded. Osa 1:
Inimese ja kuvari ning juhtseadiste vastastikuse
mõju üldpõhimõtted KONSOLIDEERITUD TEKST**

Safety of machinery - Ergonomics requirements for the
design of displays and control actuators - Part 1:
General principles for human interactions with displays
and control actuators CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 894-1:1999+A1:2008 sisaldab Euroopa standardi EN 894-1:1997+A1:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 10.11.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.10.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 894-1:1999+A1:2008 consists of the English text of the European standard EN 894-1:1997+A1:2008.

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Võtmesõnad: ergonoomiline masinaehitus, juhtseadised, konstruktsioon, oht, seadmeohutus, signaalseadised, töökohad, töötajad, vastastikune mõju

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English Version

**Safety of machinery - Ergonomics requirements for the design of
displays and control actuators - Part 1: General principles for
human interactions with displays and control actuators**

Sécurité des machines - Spécifications ergonomiques pour
la conception des dispositifs de signalisation et des
organes de service - Partie 1: Principes généraux des
interactions entre l'homme et les dispositifs de signalisation
et organes de service

Sicherheit von Maschinen - Ergonomische Anforderungen
an die Gestaltung von Anzeigen und Stellteilen - Teil 1:
Allgemeine Leitsätze für Benutzer-Interaktion mit Anzeigen
und Stellteilen

This European Standard was approved by CEN on 3 January 1997 and includes Amendment 1 approved by CEN on 14 August 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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Contents

Page

Foreword.....	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Definitions	4
4 Design principles for operator-task relationships	5
4.1 Suitability for the task	5
4.1.1 Principle of function allocation	6
4.1.2 Principle of complexity	6
4.1.3 Principle of grouping.....	6
4.1.4 Principle of identification.....	7
4.1.5 Principle of operational relationship	7
4.2 Self-descriptiveness.....	7
4.2.1 Principle of information availability.....	7
4.3 Controllability.....	7
4.3.1 Principle of redundancy.....	8
4.3.2 Principle of accessibility.....	8
4.3.3 Principle of movement space.....	8
4.4 Conformity with user expectations.....	8
4.4.1 Principle of compatibility with learning.....	8
4.4.2 Principle of compatibility with practice.....	9
4.4.3 Principle of consistency	9
4.5 Error tolerance	9
4.5.1 Principle of error correction	9
4.5.2 Principle of error handling time	9
4.6 Suitability for individualisation and learning.....	10
4.6.1 Principle of flexibility.....	10
Annex A (informative) Human information processing.....	11
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by 98/79/EC	18
Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	19

Foreword

This document (EN 894-1:1997+A1:2008) has been prepared by Technical Committee CEN/TC 122 "Ergonomics", the secretariat of which is held by DIN.

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 April 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2008-08-14.

This document supersedes EN 894-1:1997.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**

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).

A1 For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. **A1**

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 has been prepared to be a harmonized standard in the sense of the Machinery Directive and associated EFTA regulations.

1 Scope

This European Standard applies to the design of displays and control actuators on machinery. It specifies general principles for human interaction with displays and control actuators, to minimise operator errors and to ensure an efficient interaction between the operator and the equipment. It is particularly important to observe these principles when an operator error may lead to injury or damage to health.

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 reference 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.

EN 292-1, *Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology.*

EN 292-2, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles and specifications.*

EN 418, *Safety of machinery – Emergency stop equipment, functional aspects – Principles for design.*

EN 614-1, *Safety of machinery – Ergonomics design principles – Part 1: Terminology and general principles.*

prEN 894-2, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 2: Displays.*

prEN 894-3, *Safety of machinery – Ergonomics requirements for the design of displays and control actuators – Part 3: Control actuators.*

EN ISO 9241-10, *Ergonomic requirements for office work with visual display terminals (VDTs) – Part 10: Dialogue principles.*

3 Definitions

For the purposes of this European Standard, the following definitions apply:

3.1

control actuator

the part of the control actuating system that is directly actuated by the operator, e.g. by applying pressure