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Ergonomic principles related to mental work-load - Part 1: General terms and definitions

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 10075-1:2000 sisaldab Euroopa standardi EN ISO 10075-1:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.12.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 10075-1:2000 consists of the English text of the European standard EN ISO 10075-1:2000.</p> <p>This document is endorsed on 18.12.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This International Standard defines terms in the field of mental work-load, covering mental stress and mental strain, and specifies the relations between the concepts involved. It applies to the design of working conditions with respect to mental work-load and is intended to promote a common usage of terminology between experts and practitioners in the field of ergonomics as well as in general.</p>	<p>Scope: This International Standard defines terms in the field of mental work-load, covering mental stress and mental strain, and specifies the relations between the concepts involved. It applies to the design of working conditions with respect to mental work-load and is intended to promote a common usage of terminology between experts and practitioners in the field of ergonomics as well as in general.</p>
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ICS 01.040.13, 13.180

Võtmesõnad:

ICS 01.040.13; 13.180

English version

Ergonomic principles related to mental workload

Part 1: General terms and definitions
(ISO 10075 : 1991)

Principes ergonomiques concernant
la charge de travail mental – Partie 1:
Termes généraux et leurs définitions
(ISO 10075 : 1991)

Ergonomische Grundlagen bezüglich
psychischer Arbeitsbelastung –
Teil 1: Allgemeines und Begriffe
(ISO 10075 : 1991)

This European Standard was approved by CEN on 2000-06-18.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 10075 : 1991 Ergonomic principles related to mental workload – General terms and definitions, which was prepared by ISO/TC 159 'Ergonomics' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 122 'Ergonomics', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by January 2001 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 10075 : 1991 was approved by CEN as a European Standard without any modification.

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Introduction

This International Standard represents an extension of ISO 6385:1981, *Ergonomic principles of the design of work systems*, 3.7 to 3.9 — with special respect to mental work-load, describing terms and concepts in more detail because of the specific consequences that have to be taken into account in this domain.

1 Scope

This International Standard defines terms in the field of mental work-load, covering mental stress and mental strain, and specifies the relations between the concepts involved.

It applies to the design of working conditions with respect to mental work-load and is intended to promote a common usage of terminology between experts and practitioners in the field of ergonomics as well as in general.

It does not address methods of measurement and principles of task design, which are or will be dealt with in other International Standards.

2 General concepts

Any activity — even a predominantly physical one — can impose mental stress¹⁾. “Mental stress” in this case is a term employed to designate any external influence impinging upon human beings and affecting them mentally. Mental stress induces processes of increasing or decreasing mental strain within human beings. The immediate consequences of mental strain are facilitating effects on the one hand, and mental fatigue and/or fatigue-like states on the other. As an indirect consequence of mental strain there may be practice and training effects. The consequences of mental strain mentioned here may differ in form and intensity, depending on individual and situational preconditions.

In this International Standard the expression “mental” is used wherever processes of human experience and behaviour are referred to. “Mental” in this sense refers to cognitive, informational, and emotional processes in the human being. The term mental is used because these aspects occur interrelatedly and can and should not be dealt with separately in practice.

3 Definitions

3.1 mental stress: The total of all assessable influences impinging upon a human being from external sources and affecting it mentally²⁾.

3.2 mental strain: The immediate effect of mental stress within the individual (not the long-term effect) depending on his/her individual habitual and actual preconditions²⁾, including individual coping styles.

3.3 consequences of mental strain³⁾

3.3.1 facilitating effects

3.3.1.1 warming-up effect: A frequent consequence of mental strain which soon after the activity has started results in a reduction of the effort required to perform that activity relative to the effort required initially.

1) See annex A, clause A.4.

2) See annex A.

3) The order of defining the following terms does not imply any functional relationship.