

Mullatöömasinad. Mugavustsoonid ja juhtimisseadisteni ulatumine

Earth-moving machinery - Zones of comfort and
reach for controls

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 6682:1999 sisaldab Euroopa standardi EN ISO 6682:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 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 6682:1999 consists of the English text of the European standard EN ISO 6682:1995.</p> <p>This document is endorsed on 23.11.1999 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:</p> <p>Käesolev standard määratleb mugavus- ning juhtimisseadisteni ulatumise tsoonid, milles on nii suure- kui ka väikesekasvulistel istuvas asendis kasutajatel võrdsed võimalused mugavalt juhtimisseadmeid käsitseda.</p>	<p>Scope:</p>
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ICS 53.100

Võtmesõnad: asend, avad, inimteguriga arvestamine konstrueerimisel, juhtimisseadmed, mullatööseadmed, mõõtmised, täiteluugid, töökohad

ICS 13.180; 53.100

Descriptors: Earth-moving machinery, controls, ergonomics.

English version

Earth-moving machinery
Zones of comfort and reach for controls
(ISO 6682:1986, including Amendment 1:1989)

Engins de terrassement; zones de confort
et d'accessibilité des commandes
(ISO 6682:1986, Amendement 1:1989
inclus)

Erdbaumaschinen; Stellteile; Bequemlich-
keitsbereiche und Reichweitenbereiche
(ISO 6682:1986, einschließlich
Änderung 1:1989)

This European Standard was approved by CEN on 1995-01-09 and is identical to the ISO Standard referred to.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

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 6682:1995 Earth-moving machinery; zones of comfort and reach for controls

which was prepared by ISO/TC 127 'Earth-moving machinery' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 151 'Construction equipment and building material machines' 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 July 1995 at the latest.

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

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

Endorsement notice

The text of the International Standard ISO 6682:1986, including Amendment 1:1989, was approved by CEN as a European Standard without any modification.

1 Scope

This International Standard defines zones of comfort and reach for controls derived from the overlapping reach capability of large and small operators in the seated position.

2 Field of application

This document is intended as a guide for the design of the operator compartment controls for earth-moving machinery.

3 References

ISO 3411, *Earth-moving machinery — Human physical dimensions of operators and minimum operator space envelope*.

ISO 5353, *Earth-moving machinery — Seat index point (SIP)*.

ISO 6746/1, *Earth-moving machinery — Definitions of dimensions and symbols — Part 1: Base machine*.

4 Definitions

4.1 SIP: Seat Index Point as defined by ISO 5353 (fixed at nominal seat adjustments).

4.2 control displacement: Travel or movement of a control through its operational range.

4.3 control location: Positions of a control, including the corresponding control displacement, defined from the SIP.

4.4 primary controls: Controls that are used frequently or continuously by the operator, such as:

- a) Machine controls: transmission, brakes, steering, engine speed, etc.
- b) Working tool controls: blade controls, bucket controls, ripper controls, etc.

4.5 secondary controls: Controls that are infrequently used by the operator, such as lights, windscreen wipers, starter, heater, air conditioner, etc.

4.6 zones of comfort: Preferred control location zones for primary hand and foot controls. Both large and small operators should be able to reach controls comfortably in these zones.

4.7 zones of reach: Control location zones for secondary hand and foot controls. Both large and small operators should be able to reach controls in these zones from the seated position, but the operator may be required to rotate or lean forward and to each side.

4.8 XYZ coordinate system: Coordinate system used to define the control zone locations:

- a) Origin at the SIP.
- b) X-axis; fore-aft, positive to front of the SIP.
- c) Y-axis; lateral, positive to right of the SIP.
- d) Z-axis; vertical, positive upward from the SIP.

See ISO 6746/1.

4.9 flexion: Movement that changes the angle between body parts.

4.10 adduction: Movement in a plane normal to the plane of flexion and directed towards or past the mid-axis (XZ plane) of the body.

4.11 abduction: Movement in a plane normal to the plane of flexion and directed away from the mid-axis (XZ plane) of the body.

4.12 circumduction: Movement about an axis that circumscribes a cone.