SLOVENSKI STANDARD

SIST EN 12525:2000/A1:2006

01-oktober-2006

Kmetijski stroji – Sprednji nakladalnik – Varnost

Agricultural machinery - Front loaders - Safety

Landmaschinen - Frontlader - Sicherheit

Matériel agricole - Chargeurs frontaux - Sécurité

Ta slovenski standard je istoveten z: EN 12525:2000/A1:2006

ICS:

65.060.10	Kmetijski traktorji in prikolice	Agricultural tractors and trailed vehicles

SIST EN 12525:2000/A1:2006 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12525:2000/A1

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ICS 65.060.10

English Version

Agricultural machinery - Front loaders - Safety

Matériel agricole - Chargeurs frontaux - Sécurité

Landmaschinen - Frontlader - Sicherheit

This amendment A1 modifies the European Standard EN 12525:2000; it was approved by CEN on 16 March 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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, 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.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Ref. No. EN 12525:2000/A1:2006: E

Foreword

This document (EN 12525:2000/A1:2006) has been prepared by Technical Committee CEN/TC 144 “Tractors and machinery for agriculture and forestry”, the secretariat of which is held by AFNOR.

This Amendment to the European Standard EN 12525:2000 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2006, and conflicting national standards shall be withdrawn at the latest by October 2006.

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).

This amendment to EN 12525:2000 includes additional specifications for front loaders if designed for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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.

1 Scope

Delete the 4th paragraph.

2 Clause 2

Amend the standard paragraph to read as follows:

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE EN 292-1 and EN 292-1 need to be replaced by EN ISO 12100-1 and EN ISO 12100-2 in Clause 2 and where appearing in the text.

4.4 Hydraulic circuit

Add the following sub-clause:

"4.4.4 Protection against unintended lowering

If the front loader is also designed for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position the hydraulic system of the lifting arm cylinder(s) shall be equipped with the safety device according to Annex E to avoid unintentional lowering of the lifting arm which shall remain active in case of failure of the energy supply of the control circuit.

If this safety device can be switched on/off or be (de)activated for operations that do not require the presence of a person near to the load the following additional requirements apply:

— it shall be possible to switch on/off or to (de)activate the safety device from the driving position;

— it shall be possible to switch on or activate the safety device from the ground without being near to the load;

— manual control to switch off or to deactivate the safety device shall be designed and located so that it cannot be actuated unintentionally by the operator;

— condition (on/off or (de)activated) of the safety device shall be clearly indicated and clearly visible from the driving position and from the loading area.

The correct method of operation including warnings shall be explained in the instruction handbook in accordance with 7.1.2.

The front loader shall be equipped with a warning that for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position the safety device shall be switched on (activated) (see 7.2).

The information for use of front loaders which are not designed for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position shall comply with 7.1.4 and 7.2.

NOTE The characteristics of the safety device will be reviewed during the next revision of EN 12525 in order to take into account the state of the art and the results of research."

7.1.2 Manual controls

Add the following 3rd indent:

"— information on the correct operation of the safety device as required in 4.4.4."

7.1.3 Hydraulic circuit

Add the following 2nd indent:

"— information related to the possible overloading of the hydraulic system due to heavy attachments or driving on rough terrain."

7.1.4 Mounting attachments

Replace **"7.1.4 Mounting attachments"** *by* **"7.1.4 Mounting of attachments"** *(English version only)*

Add the following indent as 2nd indent:

"— in case of front loaders which are not designed for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position the intended use shall exclude the use of the front loader in combination with attachments designed for such lifting operations.

NOTE Handling of big bags and handling of pallets may require the presence of a person near to the load when the front loader is in the raised position."

7.2 Marking

Add the following clause after the 3rd clause:

"In addition and depending on the intended use of the front loader one of the following warnings shall be given:

— for front loaders equipped with the safety device according to 4.4.4: warning that for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position the safety device shall be switched on (activated) to prevent persons near the load being crushed between the load and the ground or between the load and adjacent objects in case of failure of the energy supply of the control circuit; or

— for front loaders not equipped with the safety device according to 4.4.4: warning that the front loader shall not be used for lifting operations requiring the presence of a person near to the load when the front loader is in the raised position to prevent persons near the load being crushed between the load and the ground or between the load and adjacent objects in case of failure of the energy supply of the control circuit."

Annex A
(normative)
List of hazards

Replace **"Solutions given by this standard"** *with* **"Relevant clauses of this standard"** *in the header of Tables A.1, A.2 and A.3.*

Replace 10.3 of Table A.1 "List of hazards" with the following:

10.3	Failure, malfunction of control system (unexpected start up, unexpected overrun, unexpected lowering of the front loader)	3.1.5, 3.1.6, 3.1.7	3.7	dealt with in 4.4.4, 4.5; 4.5.1; 7.1; 7.2

Replace 16.4 of Table A.3 "List of hazards due to load lifting" with the following:

16.4	Hazards caused by uncontrolled movement of the front loader caused by unintentional actuation of the control	dealt with in 4.5; 7.1; 7.2

Add Annex E

"Annex E
(normative)
Test method and acceptance criteria for means to avoid unintended lowering

E.1 Terms and definitions

E.1.1
failure-simulating device
hydraulic valve(s) used for simulating a hydraulic line rupture in the loader circuit

E.1.2
test load
mass (50 ± 10) % of the rated lift capacity specified by the loader manufacturer

E.2 Test procedure

The test specified in E.2.1 to E.2.2 shall be made under each of the following conditions:

— holding position after lowering of the test load to (1 ± 0,1) m height (static test);

— holding position after raising of the test load to (1 ± 0,1) m height (static test);

and at oil temperatures of the hydraulic system during the test between 40 °C and 50 °C.

E.2.1 The failure-simulating device between the lift cylinders and the control valve shall be opened.

E.2.2 The total drop of the load shall be measured at the attachment pivot point.

E.3 Acceptance criteria

The total drop measured in E.2.2 during the initial 10 s shall not exceed:

— 100 mm, in case of manually switched off or deactivated safety device;

— 300 mm, in case of permanently activated safety device.

After 5 min, the drop shall not exceed additional 100 mm."