



SLOVENSKI STANDARD SIST EN 17750:2023

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Kmetijski in gozdarski stroji - Namestitev naprav za svetlobno signalizacijo na priključke

Agricultural and forestry machinery - Installation of lighting and light signalling devices on mounted implements

Land- und Forstmaschinen - Lichtsignaleinrichtungen und Anbau an Anbaugeräten

Matériel agricole et forestier - Installation des dispositifs de signalisation lumineuse sur outils portés

Ta slovenski standard je istoveten z: **EN 17750:2023**

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Land- und Forstmaschinen - Lichtsignaleinrichtungen und Anbau an Anbaugeräten

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN 17750:2023) 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 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of an identical text or by endorsement, at the latest by April 2024, and conflicting national standards shall be withdrawn at the latest by April 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

The visibility of agricultural vehicles is of great importance for road safety.

Lighting and light-signalling devices such as lights, light-signalling devices, reflectors, conspicuity markings, signalling foils, etc. are used for this purpose. Their number and kind of installation to mounted implements is usually regulated in the respective national road traffic regulations.

Whereas there is an EU type-approval procedure for agricultural tractors, trailers and towed interchangeable equipment with corresponding harmonized requirements, there is no harmonized set of regulations for mounted implements. Mounted implements are also not covered by the relevant UN Regulation No 86 because they are not vehicles, systems, components and separate technical units within the meaning of UN/WP.29 Resolution R.E.3.

The respective national regulations for the lighting and marking of mounted implements are very similar within the EU Member States, but nevertheless differ slightly in detail.

For these reasons, this document is intended to provide a basis for a uniform approach to the installation of lighting and light-signalling devices to mounted implements. It has been prepared on the basis of the requirements of UN Regulation No 86, as these requirements cannot be applied directly to mounted implements for formal reasons.

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1 Scope

This document applies to front and rear-mounted implements on agricultural or forestry tractors, self-propelled machines, trailers or on towed machinery.

This document specifies the requirements for lighting and light-signalling devices to be installed on the implement for safe on-road use.

NOTE Mounted implements are considered to be interchangeable equipment and become part of the tractor, self-propelled machine, trailer or towed machine to which they are attached.

This document describes the installation of lighting and light signalling devices on mounted implements when the vehicle's lighting and signalling devices cannot comply with the applicable road regulation requirements.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1724:2003, *Road vehicles — Connectors for the electrical connection of towing and towed vehicles — 7-pole connector type 12 N (normal) for vehicles with 12 V nominal supply voltage*

ISO 1185:2003, *Road vehicles — Connectors for the electrical connection of towing and towed vehicles — 7-pole connector type 24 N (normal) for vehicles with 24 V nominal supply voltage*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org>

3.1

mounted implement

device or machine that performs a specific operation and which is normally attached to an agricultural or forestry vehicle, and that is fully raised from the ground or that cannot articulate around a vertical axis in relation to the vehicle

3.2

rear mounted implement

mounted implement attached to the rear of the vehicle

3.3

front mounted implement

mounted implement attached to the front of the vehicle

3.4

direction indicator

lamp used to indicate to other road-users that the driver intends to change direction to the right or to the left

3.5**front position lamp**

lamp used to indicate the presence and the width of the mounted implement when viewed from the front

3.6**end-outline marker lamp**

lamp fitted near to the extreme outer edges and as close as possible to the top of the mounted implement and intended to indicate clearly the vehicle's overall width

Note 1 to entry: For certain vehicles, this lamp is intended to complement the vehicle's position lamps and draw special attention to its outline.

3.7**retro-reflector**

device used to indicate the presence of a vehicle by reflection of light emanating from a light source unconnected with the vehicle, the observer being situated near that source

3.8**signalling panel or signalling foil**

device used to indicate to other road users the presence of a wide or long vehicle when viewed from the front, rear or side

3.9**rear registration plate illuminating device**

device for the illumination of rear registration plates by means of reflection

Note 1 to entry: The illuminating device is fitted in relation to the space to be occupied by the registration plate, and the outlines of the area adequately illuminated.

3.10**stop lamp**

lamp used to indicate to other road-users to the rear of the vehicle that the vehicle is decelerating

3.11**rear position lamp**

lamp used to indicate the presence and the width of the vehicle when viewed from the rear

3.12**side-marker lamp**

lamp used to indicate the presence of the vehicle when viewed from the side

3.13**lamp**

device designed to illuminate the road or to emit a light signal

Note 1 to entry: Rear registration plate illuminating devices and retro-reflectors are likewise regarded as lamps.

3.14**independent lamp**

device having separate apparent surface in the direction of the reference axis, separate light source, and separate lamp body

EN 17750:2023 (E)**3.15****grouped lamps**

devices having separate lenses and separate light sources, but a common lamp body

3.16**combined lamps**

devices having separate apparent surfaces in the direction of the reference axis, but a common light source and a common lamp body

3.17**reciprocally incorporated lamp**

device having separate light source or a single light source operating under different conditions (for example, optical, mechanical, electrical differences), totally or partially common apparent surface in the direction of the reference axis and a common lamp body

3.18**category**

classification for lighting devices which have certain common features easy to identify in the traffic stream

Note 1 to entry: Categories are stated in UN ECE R148, 3.2.4.

3.19**conspicuity marking**

device intended to increase the conspicuity of a vehicle, when viewed from the front, side or rear, by the reflection of light emanating from a light source not connected to the vehicle, the observer being situated near the source

3.20**vehicle**

tractor, self-propelled machine, trailer or towed machine or combination of those with implement(s)

4 Lighting and light signalling devices requirements

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4.1 General requirements

4.1.1 When lighting and light signalling devices are installed on a mounted implement, they shall comply with this document.

4.1.2 When light and light signalling devices are installed, the operator's manual of the mounted implement shall specify how to perform an assessment and how to equip and adjust the implement with the lighting and light-signalling devices. See also Clause 5.

If the mounted implement is equipped with lighting and light-signalling devices, then the manufacturer shall define a range of the height of the lower link attachment for road transport, at which the lighting and light-signalling devices comply with this document. See also Clause 5.

4.1.3 The dimensional requirements shall be measured with the mounted implement adjusted at the height position for road transport prescribed by the manufacturer in the operator's manual of the mounted implement (see Clause 5) and all components shall be in the position for road transport.

4.1.4 The appropriate general specifications of Annex A apply.

4.1.5 In order to facilitate the operations of working use, the lighting and light-signalling devices may be pivotable or removable.

4.2 Devices for front-mounted implements

4.2.1 Direction-indicator lamps

Direction-indicator lamps shall comply with Annex B.

NOTE In the case of failure of any one of the direction-indicator lamps of mounted implements, it is not necessary to indicate it by means of an operational tell-tale.

4.2.2 Front position lamps

Front position lamps shall comply with Annex C.

4.2.3 End-outline marker lamps

End-outline marker lamps shall comply with Annex D.

4.2.4 Front retro-reflectors, non-triangular

Non-triangular front retro-reflectors shall comply with Annex E.

The presence of front retro-reflectors is optional when signalling panels or signalling foils are provided to indicate the presence of the implement when circulating on public road, if:

- they are installed according to 4.2.5, and
- they are positioned at minimum height lower edge 300 mm and maximum height upper edge 1 500 mm.

4.2.5 Signalling panels and signalling foils

Signalling panels and signalling foils shall comply with Annex F.

4.2.6 Rear retro-reflectors

If any, rear retro-reflectors shall comply with 4.3.8.

4.2.7 Rear position lamps

Rear position lamps shall comply with Annex H.

4.3 Devices for rear-mounted implements

4.3.1 Direction-indicator lamps

Direction-indicator lamps shall comply with Annex B.

NOTE In the case of failure of any one of the direction-indicator lamps of mounted implements, it is not necessary to indicate it by means of an operational tell-tale.

4.3.2 Stop lamps

Stop lamps shall comply with Annex G.

4.3.3 Front position lamps

Front position lamps shall comply with Annex C.

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4.3.4 Rear position lamps

Rear position lamps shall comply with Annex H.

4.3.5 End-outline marker lamps

End-outline marker lamps shall comply with Annex D.

4.3.6 Front retro-reflectors, non-triangular

Non-triangular front retro-reflectors shall comply with Annex E, except of the position in length as specified in E.4.3.

The presence of front retro-reflectors is optional when signalling panels or signalling foils are provided to indicate the presence of the implement when circulating on public road, if:

- they are installed according to 4.3.7, and
- they are positioned at minimum height lower edge 300 mm and maximum height upper edge 1 500 mm.

4.3.7 Signalling panels and signalling foils

Signalling panels and signalling foils shall comply with Annex F.

4.3.8 Rear retro-reflectors

4.3.8.1 General

The presence of rear retro-reflectors is optional when signalling panels or signalling foils are provided to indicate the presence of the implement when circulating on public road, if:

- they are installed according to 4.3.7, and
- they are positioned at minimum height lower edge 300 mm and maximum height upper edge 1 500 mm.

When triangular or non-triangular rear retro-reflectors are installed, they shall comply with 4.3.8.2 or 4.3.8.3 respectively.

4.3.8.2 Non-triangular

Non-triangular rear retro-reflectors shall comply with Annex I. Non-triangular rear retro-reflectors are accepted on all mounted implements, even when they are designed for installation onto a trailer or towed machine. Non-triangular rear retro-reflectors are not required if triangular rear retro-reflectors (4.3.8.3) are present.

4.3.8.3 Triangular

Triangular rear retro-reflectors shall comply with Annex J. Triangular rear retro-reflectors are accepted on all mounted implements, even when they are designed for installation onto a tractor. Triangular rear retro-reflectors are not required if non-triangular rear retro-reflectors (4.3.8.2) are present.

4.3.9 Rear registration plate illuminating device

If any, illuminating device shall comply with Annex K.