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Forestry machinery - Requirements for sling gear and deflection pulleys for forestal hauling operations

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Forestry machinery - Requirements for sling gear and deflection pulleys for forestal hauling operations

Machines forestières - Exigences relatives aux élingues et poulies de renvoi pour les opérations de transport forestier

Forstmaschinen - Sicherheitsanforderungen für Anschlagmittel und Umlenkrollen für die Holzurückung

This European Standard was approved by CEN on 2 January 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EN 17822:2023 (E)

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European foreword

This document (EN 17822:2023) 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of an identical text or by endorsement, at the latest by August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

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EN 17822:2023 (E)**Introduction**

When performing forestal hauling operations, tree trunks, stalks or logs, etc. need to be fastened to a towing rope using sling gear (e.g. choker chains, choker ropes) in order to haul them out of the stand. Such gear can be of various designs.

Test and condition requirements need to be defined in a standard for such sling gear so that when they are fulfilled the sling gear can absorb the forces acting on it without breaking. Sling gear for forestal hauling operations is subject to loads different from those acting on sling gear for lifting applications or cranes. It is necessary to formulate requirements for sling gear for forestal hauling operations in order to meet the needs of this situation.

1 Scope

This document specifies basic test and condition requirements for deflection pulleys and sling gear which are attached to ropes and rope end connectors in forestal applications.

It is applicable to forestal hauling operations including rope-assisted felling.

This document is applicable to the following elements, sling gear and fastening elements:

- deflection pulleys used in forestal hauling operation (see 3.22);
- choker ropes;
- choker chains;
- radio-controlled chokers;
- shackles;
- round slings/tree protectors;
- tree towing ropes;
- rope slide hooks/rope sliders/choker hooks.

It is not applicable to the following sling gear:

- the functional safety of radio-controlled chokers;
- non-sheathed tree towing ropes made of synthetic fibres;
- slings and deflection pulleys for the function and structure of mobile yarders as defined in EN 16517:2021 (e.g. for the installation of the haul-back line).

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.

EN 13889:2003+A1:2008, *Forged steel shackles for general lifting purposes — Dee shackles and bow shackles — Grade 6 — Safety*

EN 14492-1:2006+A1:2009¹, *Cranes — Power driven winches and hoists — Part 1: Power driven winches*

EN 16517:2021, *Agricultural and forestry machinery — Mobile yarders for timber logging — Safety*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

ISO 19472:2006, *Machinery for forestry — Winches — Dimensions, performance and safety*

¹ As impacted by EN 14492-1:2006+A1:2009/AC:2010.

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ISO 4309, *Cranes — Wire ropes — Care and maintenance, inspection and discard*

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