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Hardwood round timber - Qualitative classification - Part 1: Oak and beech

Laub-Rundholz - QualitätsSortierung - Teil 1: Eiche und Buche

Bois ronds feuillus - Classement qualitatif - Partie 1: Chêne et hêtre

Ta slovenski standard je istoveten z: EN 1316-1:1997

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ICS:

79.040 Les, hlodovina in žagan les Wood, sawlogs and sawn timber

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en

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EUROPEAN STANDARD

EN 1316-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 1997

ICS 79.040

Descriptors: wood, sawlogs, hardwood timber, oak wood, beech wood, grading, quality classes

English version

**Hardwood round timber - Qualitative classification
- Part 1: Oak and beech**Bois ronds feuillus - Classement qualitatif
Partie 1: Chêne et hêtreLaub Rundholz - Qualitäts-Sortierung - Teil 1:
Eiche und Buche**ITEN STANDARD PREVIEW**
(standards.iteh.ai)SIST EN 1316-1:2003<https://standards.iteh.ai/catalog/standards/sist/823fd0a5-3a0f-4e59-8ba5-f0e6cd6a210a/sist-en-1316-1-2003>

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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.

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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.

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

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

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Foreword

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This European Standard has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", the secretariat of which is held by AFNOR.

This standard is one of a series of standards concerning round timber (softwoods and hardwoods).

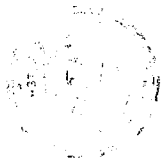
Other parts of this standard are :

EN 1316-2 : Hardwood round timber - Qualitative classification - Part 2 : Poplar

prEN 1316-3 : Hardwood round timber - Qualitative classification - Part 3 : Ash and maples

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 1997, and conflicting national standards shall be withdrawn at the latest by August 1997.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of 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 the United Kingdom.



1 Scope

This European Standard specifies a qualitative classification and grade designations for felled round timber of oak and beech presented in the form of long poles or logs.

The classifications describe quality classes of round timbers for which the intended use is not known.

The classification applies for the following species : Oaks, *Quercus sessiliflora* SALISB. (or *Quercus petraea* LIEBL.), *Quercus robur* L. (or *Quercus pedunculata* EHRH.) and Beech (*Fagus sylvatica* L).

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this European Standard, only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- EN 844-1 Round and sawn timber - Terminology - Part 1 : General terms common to round and sawn timber.
- EN 844-2 Round and sawn timber - Terminology - Part 2 : General terms relating to round timber.
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- EN 844-5 Round and sawn timber - Terminology - Part 5 : Terms relating to dimensions of round timber.
- EN 844-7 Round and sawn timber - Terminology - Part 7 : Terms relating to anatomical structure of timber.
- EN 844-8 Round and sawn timber - Terminology - Part 8 : Terms relating to features of round timber.
- prEN 1309:1994 Round and sawn timber - Method of measurement of dimensions.¹⁾
- EN 1310 Round and sawn timber - Method of measurement of features.
- EN 1311 Round and sawn timber - Method of measurement of biological degradations.

3 Definitions

For the purpose of this standard, the definitions in the standards EN 844-1, EN 844-2, EN 844-5, EN 844-7 and EN 844-8 apply.

¹⁾ EN 1309 has been divided into two parts: Part 1 is already published and is applicable to sawntimber; Part 2, still in preparation, will be applicable to round timber.

4 Qualitative classification

4.1 Grading principles

Each long pole, log or portion of a round timber individualized by a theoretical crosscut point, is qualified according to its dimensions and to the presence, size, and distribution of specific characteristics.

4.2 Designation of grades

Standardized designation of classes includes 2 characters separated by a dash :

- the first character is the genus initial in Latin ;
- the second character indicates the quality class.

4.2.1 Oak (Quercus)

The qualitative classification of oak is divided into four quality classes :

- Q-A is an exceptional quality class ;
- Q-B is a normal quality class ;
- Q-C is a less valuable quality class ;
- Q-D is a quality class which includes long pole, log or portion of long pole not permitted in the other quality classes.

For all the characteristics, in class Q-D, more than 40 % of the volume of the wood shall be useable.

4.2.2 Beech (Fagus)

The qualitative classification of beech is divided into four quality classes :

- F-A is an exceptional quality class ;
- F-B is a normal quality class ;
- F-C is a less valuable quality class ;
- F-D is a quality class which includes long pole, log or portion of long pole not permitted in the other quality classes.

For all the characteristics, in class F-D, more than 40 % of the volume of the wood shall be useable.

4.3 Characteristics to be taken into account for the classification

Tables 1 and 2 give the characteristics taken into account and these shall be measured according to prEN 1309:1994, EN 1310 and EN 1311.

A long pole or log or portion of round timber shall be downgraded by its failure to meet the requirements of any single characteristic.

Length and diameter shall be measured using the method stated in prEN 1309:1994.

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5 Tables of rules of grading

Table 1 : Grading rules for oak

Characteristics	Class			
	Q-A	Q-B	Q-C	Q-D (5)
MINIMUM DIMENSIONS minimum length (m) (1)	2,5 (2)	3 (2)	2 (2)	without limit (2)
minimum mid diameter under bark (cm) (1)	40 (2)	35 (2)	30 (2)	without limit (2)
SAPWOOD (cm) (along the radius)	≤ 3	≤ 4	allowed	allowed
RATE OF GROWTH (mm)	≤ 4	allowed	allowed	allowed
COLOUR	homogeneous (2)	allowed (2)	allowed	allowed
UNCOVERED SOUND KNOT (mm/m)	≤ 15/ 2,5 (3)	(4)	allowed	allowed
UN SOUND KNOT (uncovered) (mm/m)	not allowed		≤ 50/2	allowed
MARKS ON BARK (epicormic shoot, covered knots, burl) (number/m)	1 epicormic shoot/2,5 (3)		allowed	allowed
SPIRAL GRAIN (cm/m)	≤ 5	≤ 9	allowed	allowed
ECCENTRIC PITH (%)	< 10	< 20	allowed	allowed
INCLUDED SAPWOOD	not allowed	not allowed	not allowed	allowed
SIMPLE SWEEP (cm/m)	≤ 2	≤ 4	≤ 10	allowed
OVALITY (%)	< 10	allowed	allowed	allowed

(continued)

Table 1 (concluded)

Characteristics	Class			
	Q-A	Q-B	Q-C	Q-D (5)
SIMPLE HEART SHAKE	allowed in the central third of diameter	no through shake	allowed	allowed
STAR SHAKE	not allowed	allowed in the central fifth of diameter	allowed in the central 2/3 diameter	allowed
FROST CRACK	not allowed	not allowed	not allowed (2)	allowed
RING SHAKE	not allowed	allowed in the central fifth of diameter on the butt end only	allowed on the butt end only	allowed
CHECKS	not allowed	allowed	allowed	allowed
GRUB HOLES	not allowed	not allowed	allowed in sapwood	allowed
SOFT ROT	not allowed	not allowed	not allowed	allowed
BROWN SPOTS	not allowed	allowed in 15% of diameter in center	allowed	allowed
BROWN HEART	not allowed	not allowed	allowed in the central 1/3 of diameter	allowed

NOTES :

(1) : Length and diameter shall be measured using the method stated in prEN 1309:1994.

(2) : Except clauses stipulated by contract.

(3) : Only if there is no other downgrading characteristic.

(4) : Sum maximum : 100 mm/ 3 m of knots (other characteristics included). A sound uncovered knot shall not be > 60 mm and the sum of the rotten knots shall be ≤ 20 mm. An epicormic shoot is considered as a knot of 5 mm diameter.

(5) : For all the characteristics, in class Q-D, > 40% of the volume of the wood shall be useable.