Qualitative classification of softwood round timber —

Part 2: Pines

ICS 79.040



National foreword

This British Standard is the UK implementation of EN 1927-2:2008. It supersedes DD ENV 1927-2:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/543, Round and sawn timber.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 May 2008

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ISBN 978 0 580 56623 3

Amendments/corrigenda issued since publication

Date	Comments

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1927-2

March 2008

ICS 79.040

Supersedes ENV 1927-2:1998

English Version

Qualitative classification of softwood round timber - Part 2: Pines

Classement qualitatif des bois ronds résineux - Partie 2 : Pins

Qualitäts-Sortierung von Nadel-Rundholz - Teil 2: Kiefern

This European Standard was approved by CEN on 23 February 2008.

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Foreword

This document (EN 1927-2:2008) has been prepared by Technical Committee CEN/TC 175 "Round and sawn timber", 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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

This document will supersede ENV 1927-2:1998.

EN 1927 consists of the following parts with the main title Qualitative classification of softwood round timber.

- EN 1927-1, Spruces and firs
- EN 1927-2, Pines
- EN 1927-3, Larches and Douglas fir

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

1 Scope

This European Standard specifies the qualitative classification for the roundwood of pines. It applies to Scots pine (*Pinus sylvestris*), Corsican or Austrian pine (*Pinus nigra*), maritime pine (*Pinus pinaster*) and radiata pine (*Pinus radiata*). The classification is made either using Clauses 4 and 5 or using Annex A. Clauses 4 and 5 describe the qualitative classification of round timber for which the intended use is unknown.

Informative Annex A gives a list of characteristics which serves as a guideline for contracts describing qualities for round timber of pines where the intended use is known.

2 Normative references

The following referenced documents are indispensable for the application 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 844-1:1995, Round and sawn timber — Terminology — Part 1: General terms common to round timber and sawn timber

EN 844-2:1997, Round and sawn timber — Terminology — Part 2: General terms relating to round timber

EN 844-5:1997, Round and sawn timber — Terminology — Part 5: Terms relating to dimensions of round timber

EN 844-7:1997, Round and sawn timber — Terminology — Part 7: Terms relating to anatomical structure of timber

EN 844-8:1997, Round and sawn timber — Terminology — Part 8: Terms relating to features of round timber

EN 844-9:1997, Round and sawn timber — Terminology — Part 9: Terms relating to features of sawn timber

EN 844-10:1998, Round and sawn timber — Terminology — Part 10: Terms relating to stain and fungal attack

EN 844-12:2000, Round and sawn timber— Terminology — Part 12: Additional terms and general index

EN 1309-2, Round and sawn timber — Method of measurement of dimensions — Part 2: Round timber — Requirements for measurement and volume calculation rules

EN 1310, Round and sawn timber — Method of measurement of features

EN 1311, Round and sawn timber — Method of measurement of biological degrade

ISO 2036, Wood for manufacture of wood flooring — Symbols for marking according to species

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 844-1:1995, EN 844-2:1997, EN 844-5:1997, EN 844-7:1997, EN 844-8:1997, EN 844-9:1997, EN 844-10:1998 and EN 844-12:2000 apply.

4 Qualitative classification for which the intended use is unknown

The qualitative grading has four classes: A, B, C and D. The grading is based on the following general description of quality classes:

Quality class A

First quality timber. Generally corresponding to a butt log with clear timber, without defects or with only minor defects and with few restrictions to its use.

— Quality class B

Timber of average to first quality, with no specific requirements for clear wood. Knots are permitted to such an extent as is considered to be average for each species.

Quality class C

Timber of average to low quality, allowing all quality characteristics which do not seriously reduce the natural characteristics of the wood.

Quality class D

Timber which can be sawn into usable wood, which, because of its characteristics, falls into none of the quality classes A, B or C.

The classes are defined more precisely in Table 1. All the listed qualitative characteristics in Table 1 shall be taken into account when a class is assigned, and measurements shall be made according to EN 1309-2, EN 1310 and EN 1311.

This classification shall be completed with the Latin name of specified species. The abbreviation of this Latin name can also be used instead of the full name.

- EXAMPLE 1 Scots pine: *Pinus sylvestris* class B or PINS-B¹.
- EXAMPLE 2 Corsican or Austrian pine: *Pinus nigra* class B or PINN-B¹.
- EXAMPLE 3 Maritime pine: *Pinus pinaster* class B or PINP-B¹.
- EXAMPLE 4 Radiata pine: *Pinus radiata* class B or PINR-B¹.

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¹ Symbols given in ISO 2036

5 Rules for grading

Table 1 — Grading of pines

Observatorista		Classes				
Characteristics		Α	В	С	D	
knots						
intergrown, sound		not permitted ^a	≤ 5 cm	≤ 8 cm	permitted	
dead		not permitted	≤ 4 cm	≤ 7 cm	permitted	
unsound		not permitted	not permitted	≤ 4 cm	permitted	
buckle		not permitted	permitted ^b	permitted	permitted	
resin pocket		not permitted ^a	1 per cross- section	permitted	permitted	
rate of growth						
Pinus radiata, Pinus pinaster		≤ 6 mm	≤ 8 mm	unlimited	unlimited	
Pinus sylvestris, P	Pinus nigra	≤ 4 mm	≤ 7 mm	unlimited	unlimited	
growth						
spiral grain		≤ 3 cm/m	≤ 7 cm/m	≤ 10 cm/m	unlimited	
eccentric pith		≤ 10 %	≤ 20 %	unlimited	unlimited	
reaction wood ^c		not permitted	≤ 10 %	≤ 33 %	unlimited	
sweep						
Pinus radiata, Pinus pinaster		≤ 2 cm/m	≤ 2 cm/m	≤ 4 cm/m	≤ 6 cm/m	
Pinus sylvestris, Pinus nigra		≤ 1 cm/m	≤ 1,5 cm/m	≤ 3 cm/m	≤ 4,5 cm/m	
taper ^d						
	< 35 cm	unlimited	≤ 1,5 cm/m	≤ 2,5 cm/m	unlimited	
	≥ 35 cm	unlimited	≤ 2 cm/m	≤ 4 cm/m	unlimited	
shakes						
heart shakes	< 35 cm	not permitted	not permitted	≤ 1/2 ∅	permitted	
(except check) d	≥ 35 cm	≤ 1/4 Ø	≤ 1/3 Ø	≤ 1/2 ∅	permitted	
ring shakes ^d	< 35 cm	not permitted	not permitted	not permitted	≤ 1/2 ∅	
	≥ 35 cm	not permitted	≤ 1/4 Ø	≤ 1/3 Ø	≤ 1/2 ∅	
insect attack						
< 2 mm (e.g. <i>Trypodendron lineatum</i>)		not permitted	not permitted	not permitted ^e	permitted	
≥ 2 mm (e.g. <i>Sirex</i> , <i>Cerambycidae</i>)		not permitted	not permitted	not permitted	small scale attack permitted	

Table 1 (continued)

Characteristics	Classes			
Citatacteristics	Α	В	С	D
rot	not permitted	not permitted	not permitted f	permitted
stain	not permitted	not permitted	permitted in the sap area ⁹	permitted

- Specific contract regulations may be necessary.
- b Refer to the general description of quality classes.
- c Method of measurement: width of reaction wood as a function of the cross section diameter (in addition to EN 1310).
- d Mid diameter under bark.
- e Initial stages of Trypodendron lineatum attack permitted.
- f Small areas of surface rot are permitted in the area of the butt swelling.
- g Specific contract regulations are recommended.

6 Additional criteria

In case of doubt, any externally visible or possible hidden flaws (e.g. knots under buckles, overgrown shakes, stripping damage) shall be laid bare and the revealed flaws assessed according to the quality specifications. Foreign bodies (e.g. shrapnel) are not dealt with in this standard.

Where some characteristics of roundwood of the classes A and B do not fulfil the quality criteria on agreement, they can be compensated by higher quality in other characteristics.

Generally, the following characteristics cannot be compensated: insect attack (especially *Trypodendron lineatum*), rot and stain. If there is compensation for minor rot of little consequence, an agreement is necessary.

Each log can be graded either in a single class or in more than one class by using theoretical crosscut points. The minimum length, accepted for a theoretical crosscut point, is 3 m for Scots pine, Corsican or Austrian pine and radiata pine, and 2 m for maritime pine.

Annex A

(informative)

Qualitative classification for which the intended use is known

The following list of characteristics should be considered for contracts where the intended use is known. EN 1309-2, EN 1310 and EN 1311 shall be used as a reference.

NOTE The following list is not exhaustive. Additional characteristics may be considered.

— butt swelling;

—	butt swelling;
_	eccentric pith;
_	foreign body;
	insect attack;
	knots;
—	rate of growth;
	reaction wood;
—	resin pocket;
	rot;
—	shakes;
_	spiral grain;

stain;sweep;

— sweep;

taper;tapping cut;

- undercut.

Annex B (informative)

A-deviations

A- deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/ CENELEC national member.

This European Standard does not fall under any Directive of the EU. In the relevant CEN/ CENELEC countries these A- deviations are valid instead of the provisions of the European Standard until they have been removed.

Lithuania

• Apvaliosios medienos apskaitos tvarkos aprašas

Order of description for registration of round timber (Žin., (Official Gazette) 21-12-2007, No. 135-5502; valid since 01-01-2008).

· Apvaliosios medienos klasifikavimo ir ženklinimo taisyklės

Rules for classification and marking of round timber (Žin., (Official Gazette) 13-07-2001, No. 61-2198; valid since 14-07-2001).

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