

Woodworking saws for hand use —

Part 2: Specification for tenon and dovetail saws

Confirmed
January 2011

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Machine, Engineers and Hand Tools Standards Policy Committee (MTE/-) to Technical Committee MTE/15, upon which the following bodies were represented:

- British Telecommunications plc
- Consumer Policy Committee of BSI
- Federation of British Hand Tool Manufacturers
- Handle Manufacturers' Association
- Institute of Carpenters

This British Standard, having been prepared under the direction of the Machine, Engineers and Hand Tools Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 April 1993

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First edition December 1962
Second edition April 1993

The following BSI references relate to the work on this standard:
Committee reference MTE/15
Draft for comment 90/81931 DC

ISBN 0 580 21375 7

Amendments issued since publication

Amd. No.	Date	Comments

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Foreword

This Part of BS 3159 has been prepared under the direction of the Machine, Engineers and Hand Tools Standards Policy Committee. It supersedes BS 3159-2:1962, which is withdrawn.

In this British Standard the specific requirements are given for four classes of tenon saw, two for the use of craftsmen, one for the first grade general duty, and one for general duty in the do-it-yourself environment. One class of dovetail saw is specified.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard classifies types and specifies certain dimensional aspects of tenon and dovetail saws for cutting timber. The hardness levels and finish of the saw blades are specified and provision is made for testing the qualities of the complete saw. Four classes of tenon saw are specified and, in each class, saws from 200 mm to 350 mm in length are available.

This Part of BS 3159 applies to dovetail saws of 200 mm length.

2 References

2.1 Normative references

This Part of BS 3159 incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on the inside back cover. Subsequent amendments to, or revisions of, any of these publications apply to this Part of BS 3159 only when incorporated in it by updating or revision.

2.2 Informative references

This Part of BS 3159 refers to other publications that provide information or guidance. Editions of these publications current at the time of issue of this standard are listed on the inside back cover, but reference should be made to the latest editions.

3 Definitions

For the purposes of this Part of BS 3159, the following definitions apply.

3.1

tenon saw

a brass backed saw with fine pitch teeth for precision sawing, especially of tenons

3.2

dovetail saw

generally a finer toothed, thin bladed version of a tenon saw, and used for cutting dovetails and other fine work

3.3 blade

3.3.1

nominal size

the overall length of the blade, including any rounding of the toe (see Figure 1)

3.3.2

blade depth out of back

the depth measured across the saw from the tips of the teeth to the bottom edge of the back (see Figure 1)

3.4 teeth

NOTE The nominal tooth form, including gullet, rake and flank angles, is shown in Figure 2.

3.4.1

pitch

the number of tooth points contained in a 25 mm length of the toothed edge (see Table 1 and Figure 2)

Table 1 — Number of points per 25 mm

Nominal size of saw (length of blade) mm	Tenon (Classes 1, 2, 3 and 4)	Dovetail
200	15 to 20	20
250	12 to 16	—
300	12 to 16	—
350	11 to 15	—

3.4.2

full cross sharpening of the teeth

a technique where the rake and flank faces of each outwardly set tooth are sharpened to a vanishing edge at an acute angle to the central axis of the saw (see Figure 3 and Figure 4)

NOTE In this method a saw-sharpening file is held at an angle to the blade and every alternate tooth is filed from one side of the saw. The blade is then turned around and the remaining teeth filed at the same angle (see Figure 4).

3.4.3

half cross sharpening of the teeth

a technique where the rake face of each outwardly set tooth is sharpened to a vanishing edge at an acute angle to the central axis of the saw (see Figure 3 and Figure 4)

NOTE This method is similar to cross sharpening except that all sharpening is done from the same side of the blade, the teeth being filed at the angle alternately from left to right.

3.4.4

straight sharpening of the teeth

a technique where the cutting edge is normal, to the side face of the saw (see Figure 3)

NOTE In this method all sharpening is done from the same side of the blade with the file at 90° to the line of the blade.

3.4.5

hardpoint

a tooth which has increased hardness at the tooth tip, achieved by for example induction or impulse hardening methods

3.5 backs

3.5.1

nominal length

the overall length, including any rounding at the front end (see Figure 1)