

Specification for

Metal cutting bandsaw blades

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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/20, upon which the following bodies were represented:

- Advanced Manufacturing Technology Research Institute
- British Hacksaw and Bandsaw Manufacturers' Association
- Gauge and Tool Makers' Association

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 31 October 1991

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Foreword

This British Standard has been prepared under the direction of the Machine, Engineers and Hand Tools Standards Policy Committee in cooperation with the British Hacksaw and Bandsaw Manufacturers' Association. It supersedes BS 3877 : 1979 which is withdrawn.

BS 3877 : 1991 takes into consideration agreements of the International Organization for Standardization (ISO) reached on this subject as contained in ISO 4875-1, ISO 4875-2 and ISO 4875-3, but differs from these specifications in some respects, mainly insofar as types and listed sizes are concerned and the respective tolerances on widths and flatness. It also differs from the ISO standards in that additional clauses have been added to cover testing and general quality requirements.

This revision now covers only three basic types of metal cutting bandsaw blades, carbon steel flexible, carbon steel toughened and bimetallic bandsaws; other types have been excluded.

One essential feature of this revision that has been retained is the main metric physical dimensions (widths, thicknesses and pitches of tooth) which follow a recognized Renard series of preferred numbers (see BS 2045). Imperial dimensions are no longer included.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Specification

1 Scope

This British Standard specifies dimensions and tolerances for the following types of metal cutting bandsaw blades supplied either in coil form or cut to length and joined ready for use:

- a) carbon steel flexible bandsaw;
- b) carbon steel toughened bandsaw;
- c) bimetallic bandsaw.

This standard includes a clause on testing but only insofar as a bend or flexing test is concerned. It also includes some other characteristics of the bandsaw.

Safety recommendations are given in appendix A.

NOTE. The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard, the following definitions apply:

2.1 bandsaw

An endless blade manufactured from a continuous strip of steel having one toothed edge.

NOTE. See figure 1 (a).

2.2 Elements of the blade

2.2.1 body

That part of the blade between the bottom of the gullet and the back edge.

NOTE. See figure 1 (a).

2.2.2 teeth

The serrations formed across the thickness of the blade to provide cutting edges.

NOTE. See figure 1 (a).

2.2.3 toothed edge

The longitudinal edge along which the teeth have been formed.

NOTE. See figure 1 (a).

2.2.4 back edge

The longitudinal edge parallel to the toothed edge.

NOTE. See figure 1 (a).

2.2.5 side

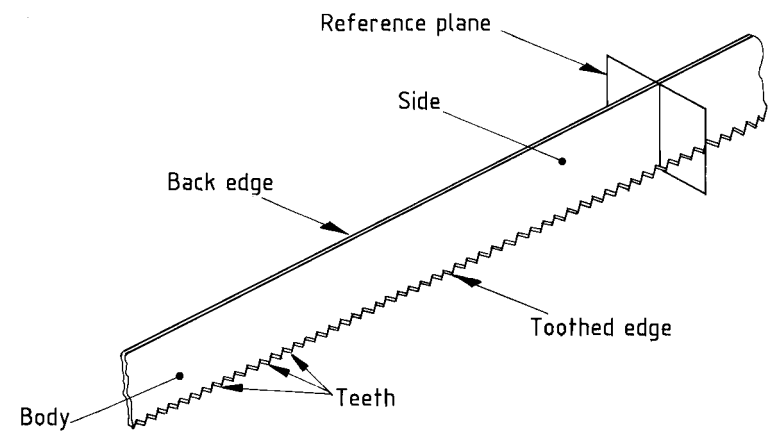
The flat surface between the toothed edge and the back edge.

NOTE. See figure 1 (a).

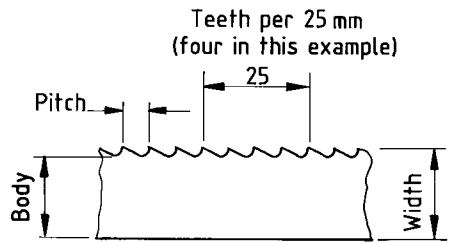
2.2.6 width

The overall distance between the point of the non-set tooth and the back edge.

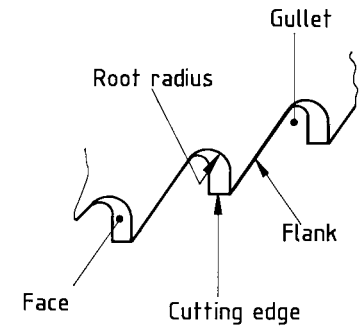
NOTE. See figure 1 (b).



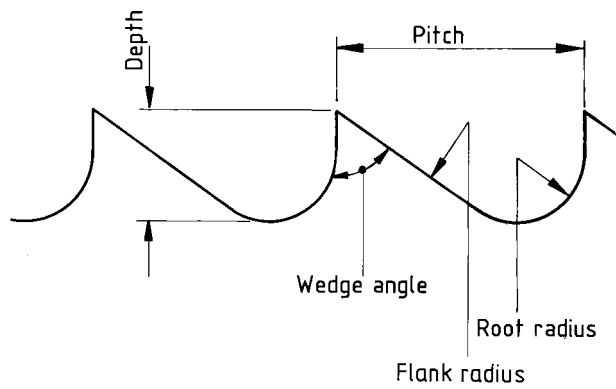
(a)



(b)



(c)



(d)

Figure 1. Nomenclature