INTERNATIONAL STANDARD ISO 4875/II

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Metal cutting band saw blades — Part II : Basic dimensions and tolerances

Lames de scies à ruban à métaux — Partie II : Dimensions de base et tolérances

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FOREWORD

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Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 4875/II was developed by Technical Committee ISO/TC 29, *Small tools*, and was circulated to the member bodies in August 1976.

It has been approved by the member bodies of the following countries :

Australia	Israel	Switzerland
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Metal cutting band saw blades — Part II : Basic dimensions and tolerances

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the basic dimensions and some tolerances for metal cutting band saw blades.

The combinations of nominal dimensions x pitch for each type of blade are contained in ISO 4875/III.

The various terms used for metal cutting band saw blades are defined in ISO 4875/I.

2 REFERENCES

ISO 4875/I, *Metal cutting band saw blades — Part I : Definitions and terminology.*

ISO 4875/III, *Metal cutting band saw blades — Part III : Characteristics relating to each type of blade.*

3 BASIC DIMENSIONS AND TOLERANCES

The metric widths (table 1), thicknesses (table 2) and pitches (table 3) of the blades are selected from the R 40 series of preferred numbers. Table 3 also gives the relationship between the pitch and the number of teeth per 25 mm (1 in).

3.1 Widths

TABLE 1 — Blade widths

Dimensions in millimetres		Dimensions in inches	
Width	Tolerance	Width	Tolerance
3,15	0 −0,4	1/8	0 −0.016
4,75		3/16	
6,3		1/4	
8,0		5/16	
9,5		3/8	
12,5		1/2	
16,0	0 −0,5	5/8	0 −0.020
19,0		3/4	
25,0		1	
31,5		1 1/4	
37,5		1 1/2	
40,0		1 5/8	
50,0		2	

3.2 Thicknesses

TABLE 2 – **Blade thicknesses**

Dimensions in millimetres		Dimensions in inches	
Thickness	Tolerance	Thickness	Tolerance
0,63	± 0,025	0.025	± 0.001 0
0,80	± 0,038	0.032	± 0.001 5
0,90		0.035	
1,06		0.042	
1,25		0.050	

3.3 Pitches

TABLE 3 – **Blade pitches**

Pitch (mm)	Number of teeth per 25 mm (1 in)
0,8	32
1,0	24
1,4	18
1,8	14
2,5	10
3,15	8
4,0	6
6,3	4
8,0	3
12,5	2

4 OTHER TOLERANCES

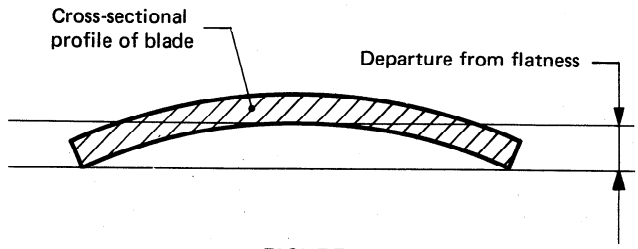
4.1 Tooth set tolerance

The overall set is left at the option of the manufacturer.

The set at each side of the blade shall be equal and maintained within the limits of ± 0,05 mm (± 0.002 in) or ± 0,10 mm (± 0.004 in) overall.

4.2 Flatness tolerances

The blade shall be flat across the sectional profile exclusive of set (see figure) within the tolerances of table 4.



FIGURE

TABLE 4 – **Flatness tolerances**

Dimensions in millimetres		Dimensions in inches	
Blade width	Permissible departure from flatness	Blade width	Permissible departure from flatness
up to and including 12,5	0,025	up to and including 1/2	0.001 0
16	0,040	5/8	0.001 5
19	0,050	3/4	0.002 0
25		1	
31,5		1 1/4	
37,5		1 1/2	
40,0		1 5/8	
50,0	0,075	2	0.003 0