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# INTERNATIONAL STANDARD



# 5421

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION · МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ · ORGANISATION INTERNATIONALE DE NORMALISATION

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## Ground high speed steel tool bits

*Barreaux rectifiés en acier rapide*

**First edition — 1977-08-01**

ISO 5421-1977 (E)

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**Ref. No. ISO 5421-1977 (E)**

**Descriptors :** tools, power-operated tools, tool bits, specifications, dimensions, dimensional tolerances.

Price based on 2 pages

## FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

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 5421 was developed by Technical Committee ISO/TC 29, *Small tools*, and was circulated to the member bodies in March 1976.

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

Australia	India	Romania
Belgium	Israel	South Africa, Rep. of
Brazil	Italy	Spain
Bulgaria	Korea, Rep. of	Sweden
Czechoslovakia	Mexico	Switzerland
France	Netherlands	Turkey
Germany	Philippines	U.S.S.R.
Hungary	Poland	Yugoslavia

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Austria  
Japan  
United Kingdom

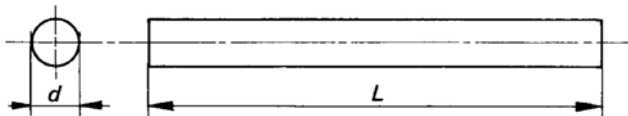
# Ground high speed steel tool bits

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the dimensions of ground high speed steel tool bits of :

- round section (clause 2)
- square section (clause 3)
- rectangular section (clause 4)
- trapezoidal section (clause 5)

## 2 ROUND SECTION TOOL BITS

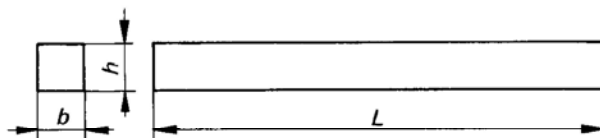


Dimensions in millimetres

$d$ h9	63	80	$L \pm 2$ 100	160	200
4	X	X	X		
5	X	X	X		
6	X	X	X	X	
8		X	X	X	
10		X	X	X	X
12			X	X	X
16			X	X	X
20					X

## 3 SQUARE SECTION TOOL BITS

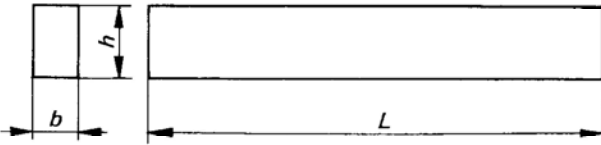
NOTE — By agreement between user and supplier, tool bits may have slanted ends, but in such cases the overall length  $L$  shall be equal to the length  $L$  specified in the table.



Dimensions in millimetres

$h$ h13	$b$ h13	63	80	$L \pm 2$ 100	160	200
4	4	X				
5	5	X				
6	6	X	X	X	X	X
8	8	X	X	X	X	X
10	10	X	X	X	X	X
12	12	X	X	X	X	X
16	16			X	X	X
20	20				X	X
25	25					X

4 RECTANGULAR SECTION TOOL BITS



Dimensions in millimetres

Ratio $h/b \approx$	$h$ h13	$b$ h13	$L \pm 2$		
			100	160	200
1,6	6	4	X		
	8	5	X		
	10	6		X	X
	12	8		X	X
	16	10		X	X
	20	12		X	X
	25	16			X
2	8	4	X		
	10	5	X		
	12	6		X	X
	16	8		X	X
	20	10		X	X
	25	12			X

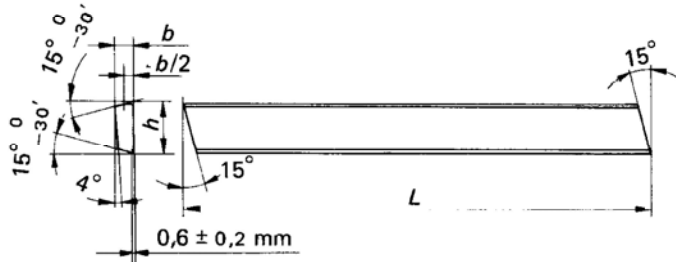
Second choice dimensions :

Dimensions in millimetres

Ratio $h/b \approx$	$h$ h13	$b$ h13	$L$ $\pm 2$
2,33	14	6	140
2,5	10	4	120

5 TRAPEZOIDAL SECTION TOOL BITS (Parting-off blades with side clearance but without longitudinal clearance)

NOTE – By agreement between user and supplier, this tool bit may be produced with one square end.



Dimensions in millimetres

$h$ h13	$b$ h13	$L \pm 2$				
		85	120	140	200	250
12	3	X	X			
12	5	X	X			
16	3			X	X	
16	4			X		
16	6			X		
18	4			X		
20	3			X		
20	4			X		X
25	4					X
25	6					X