

Spiral Mill-Thread



Advantages of Spiral Mill-Thread Tools

- The spiral designed tools enable a smooth cutting operation at a high feed rate and reduced machining time.
- The tools suit a wide range of applications, from machining small components in small machining centers to heavy-duty applications in high power milling machines.
- Spiral fluted toolholders hold 2 or 9 inserts in a comparatively small cutting diameter.
- The unique clamping method enables optimal indexability.
- Spiral tools reduce vibration and chatter.
- High grade finish is achieved in all applications: threading, roughing and finishing.
- Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminium Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, which can be used with all materials.

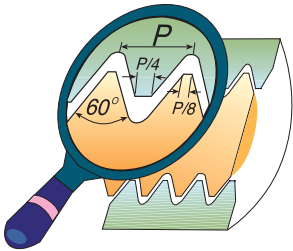
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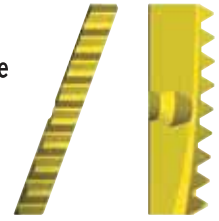
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ISO



Spiral inserts have one cutting edge



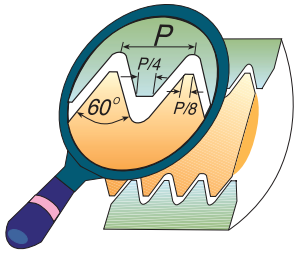
Pitch mm		Insert Size H23	Thread Size	Insert Size H32	Thread Size	Insert Size H45	Thread Size	Insert Size H63	Thread Size
1.0	Ext.	H23 E 1.0 ISO							
1.0	Int.	H23 I 1.0 ISO	≥ M26	H32 I 1.0 ISO	≥ M34				
1.5	Ext.	H23 E 1.5 ISO		H32 E 1.5 ISO		H45 E 1.5 ISO			
1.5	Int.	H23 I 1.5 ISO	≥ M27	H32 I 1.5 ISO	≥ M35	H45 I 1.5 ISO	≥ M50	H63 I 1.5 ISO	≥ M68
2.0	Ext.	H23 E 2.0 ISO		H32 E 2.0 ISO		H45 E 2.0 ISO			
2.0	Int.	H23 I 2.0 ISO	≥ M28	H32 I 2.0 ISO	≥ M36	H45 I 2.0 ISO	≥ M50	H63 I 2.0 ISO	≥ M70
3.0	Ext.	H23 E 3.0 ISO		H32 E 3.0 ISO					
3.0	Int.	H23 I 3.0 ISO	≥ M30	H32 I 3.0 ISO	≥ M38	H45 I 3.0 ISO	≥ M52	H63 I 3.0 ISO	≥ M70
3.5	Ext.								
3.5	Int.	H23 I 3.5 ISO	≥ M30	H32 I 3.5 ISO		H45 I 3.5 ISO			
4.0	Ext.			H32 E 4.0 ISO					
4.0	Int.	H23 I 4.0 ISO	≥ M36	H32 I 4.0 ISO	≥ M40	H45 I 4.0 ISO	≥ M56	H63 I 4.0 ISO	≥ M72
4.5	Ext.								
4.5	Int.			H32 I 4.5 ISO	≥ M42	H45 I 4.5 ISO			
5.0	Ext.								
5.0	Int.			H32 I 5.0 ISO	≥ M48	H45 I 5.0 ISO			
5.5	Ext.								
5.5	Int.					H45 I 5.5 ISO	≥ M56		
6.0	Ext.								
6.0	Int.					H45 I 6.0 ISO	≥ M64	H63 I 6.0 ISO	≥ M76

Toolholder	SRH23-2	SRH32-5	SRH45-6	SRH63-9
		SRH32-5 M	SRH45-6 M	

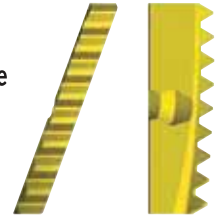
Spiral Mill - Thread Inserts



UN



Spiral inserts have one cutting edge

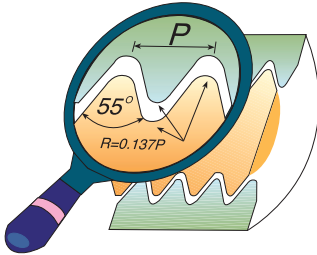


Pitch TPI		Insert Size H23	Thread Size	Insert Size H32	Thread Size	Insert Size H45	Thread Size	Insert Size H63	Thread Size
32	Ext.								
32	Int.	H23 I 32 UN	≥ 1"						
24	Ext.			H32 E 24 UN					
24	Int.	H23 I 24 UN	≥ 1"						
20	Ext.	H23 E 20 UN		H32 E 20 UN					
20	Int.	H23 I 20 UN	≥ 1"	H32 I 20 UN	≥ 1 3/8"				
18	Ext.	H23 E 18 UN		H32 E 18 UN					
18	Int.	H23 I 18 UN	≥ 1 1/16"	H32 I 18 UN	≥ 1 3/8"				
16	Ext.	H23 E 16 UN		H32 E 16 UN					
16	Int.	H23 I 16 UN	≥ 1 1/16"	H32 I 16 UN	≥ 1 3/8"	H45 I 16 UN	≥ 2"	H63 I 16 UN	≥ 2 3/4"
14	Ext.	H23 E 14 UN							
14	Int.	H23 I 14 UN	≥ 1 1/8"						
12	Ext.	H23 E 12 UN		H32 E 12 UN					
12	Int.	H23 I 12 UN	≥ 1 1/8"	H32 I 12 UN	≥ 1 7/16"	H45 I 12 UN	≥ 2"	H63 I 12 UN	≥ 2 3/4"
10	Ext.	H23 E 10 UN							
10	Int.	H23 I 10 UN	≥ 1 1/8"						
8	Ext.	H23 E 8 UN		H32 E 8 UN					
8	Int.	H23 I 8 UN	≥ 1 3/16"	H32 I 8 UN	≥ 1 1/2"	H45 I 8 UN	≥ 2 1/4"	H63 I 8 UN	≥ 3"
7	Ext.	H23 E 7 UN							
7	Int.	H23 I 7 UN	≥ 1 1/4"						
6	Ext.			H32 E 6 UN					
6	Int.			H32 I 6 UN	≥ 1 5/8"	H45 I 6 UN	≥ 2 1/4"	H63 I 6 UN	≥ 3"
5	Ext.								
5	Int.			H32 I 5 UN	≥ 1 3/4"				
4.5	Ext.								
4.5	Int.					H45 I 4.5 UN	≥ 2 1/4"		
4	Ext.								
4	Int.					H45 I 4 UN	≥ 2 1/2"	H63 I 4 UN	≥ 3"

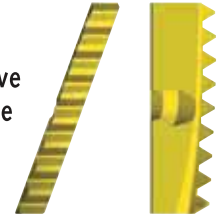
Toolholder	SRH23-2	SRH32-5	SRH45-6	SRH63-9
		SRH32-5 M	SRH45-6 M	

Whitworth

Same insert for internal and external thread



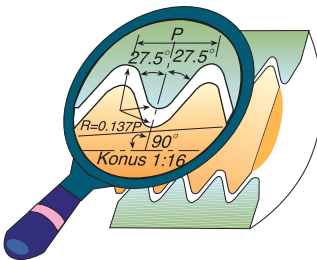
Spiral inserts have one cutting edge



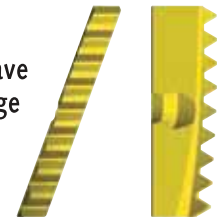
Pitch TPI	Insert Size H23	Thread Size	Insert Size H32	Thread Size	Insert Size H45	Thread Size	Insert Size H63	Thread Size
14	H23-14 W	Int. $\geq G\ 7/8''$ Ex. $\geq G\ 1/2''$	H32-14 W	Ex. $\geq G\ 1/2''$				
11	H23-11 W	$\geq G\ 1''$	H32-11 W	Int. $\geq G\ 11/8''$ Ex. $\geq G\ 1''$	H45-11 W	Int. $\geq G\ 1\ 5/8''$ Ex. $\geq G\ 1''$	H63-11 W	Int. $\geq G\ 2\ 3/8''$ Ex. $\geq G\ 1''$
Toolholder	SRH23-2		SRH32-5		SRH45-6		SRH63-9	
			SRH32-5 M		SRH45-6 M			

BSPT

Same insert for internal and external thread



Spiral inserts have one cutting edge



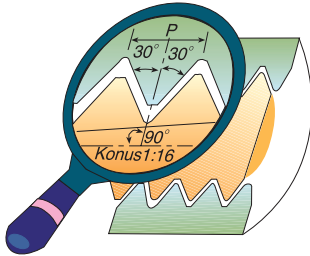
Pitch TPI	Insert Size H23	Thread Size	Insert Size H32	Thread Size	Insert Size H45	Thread Size	Insert Size H23	Thread Size
11	H23-11 BSPT	$\geq 1''$ BSPT	H32-11 BSPT	Int. $\geq 1\ 1/8''$ BSPT Ex. $\geq 1''$ BSPT	H45-11 BSPT	Int. $\geq 1\ 3/4''$ BSPT Ex. $\geq 1''$ BSPT	H63-11 BSPT	Int. $\geq 2\ 1/2''$ BSPT Ex. $\geq 1''$ BSPT
Toolholder	SRH23-2		SRH32-5		SRH45-6		SRH63-9	
			SRH32-5 M		SRH45-6 M			

Spiral Mill - Thread Inserts

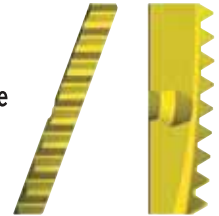


NPT

Same insert for internal and external thread



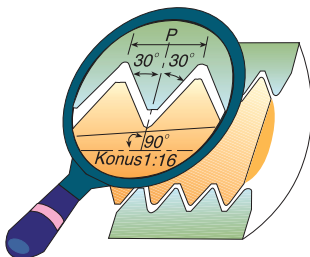
Spiral inserts have one cutting edge



Pitch TPI	Insert Size H23	Thread Size	Insert Size H32	Thread Size	Insert Size H45	Thread Size	Insert Size H63	Thread Size
11.5	H23-11.5 NPT	1" - 2" NPT	H32-11.5 NPT	Int. 1 1/4" - 2" NPT Ext. 1" - 2" NPT	H45-11.5 NPT	Int. 2" NPT Ext. 1" - 2" NPT	H63-11.5 NPT	Ext. 1" - 2" NPT
8					H45 - 8 NPT	2 1/2" - 3" NPT	H63 - 8 NPT	2 1/2" - 3" NPT
Toolholder	SRH23-2		SRH32-5		SRH45-6		SRH63-9	
			SRH32-5 M		SRH45-6 M			

NPTF

Same insert for internal and external thread



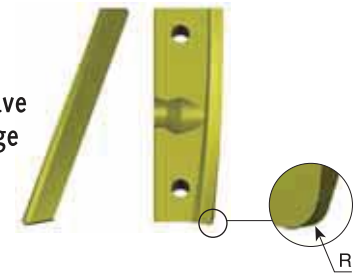
Spiral inserts have one cutting edge



Pitch TPI	Insert Size H23	Thread Size	Insert Size H32	Thread Size
11.5	H23-11.5 NPTF	1" - 2" NPTF	H32-11.5 NPTF	Int. 1 1/4" - 2" NPTF Ext. 1" - 2" NPTF
Toolholder	SRH23-2		SRH32-5	
			SRH32-5 M	

Spiral Finishing Inserts

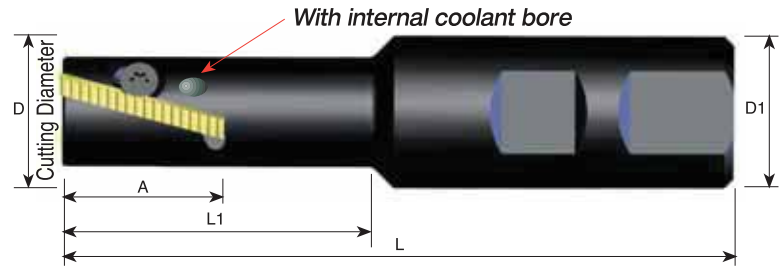
Spiral inserts have one cutting edge



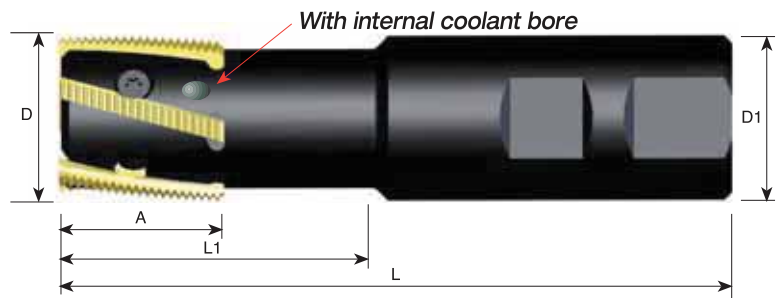
R	Insert Size H23	Insert Size H32	Insert Size H45	Insert Size H63
0.2	H23 F R 0.2	H32 F R 0.2	H45 F R 0.2	H63 F R 0.2
0.5	H23 F R 0.5	H32 F R 0.5	H45 F R 0.5	H63 F R 0.5
1.0	H23 F R 1.0	H32 F R 1.0	H45 F R 1.0	H63 F R 1.0
1.5			H45 F R 1.5	H63 F R 1.5
2.0			H45 F R 2.0	H63 F R 2.0

Toolholder	SRH23-2	SRH32-5	SRH45-6	SRH63-9
		SRH32-5 M	SRH45-6 M	

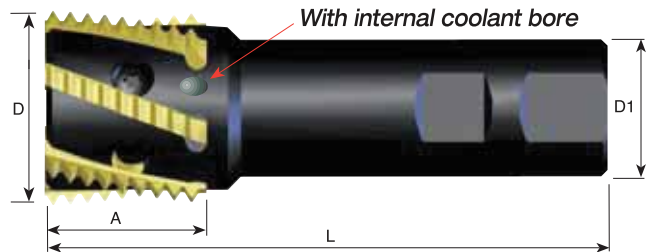
Spiral Toolholders



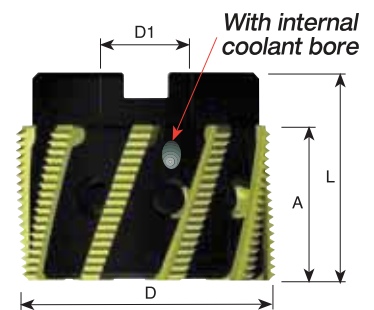
Ordering Code	Insert Size A	D	D1	L	L1	No. of Inserts	Screw	Key
SRH23-2	27	23	25	110	50	2	S23	K21



Ordering Code	Insert Size A	D	D1	L	L1	No. of Inserts	Screw	Key
SRH32-5	32	32	32	130	60	5	S32	K22



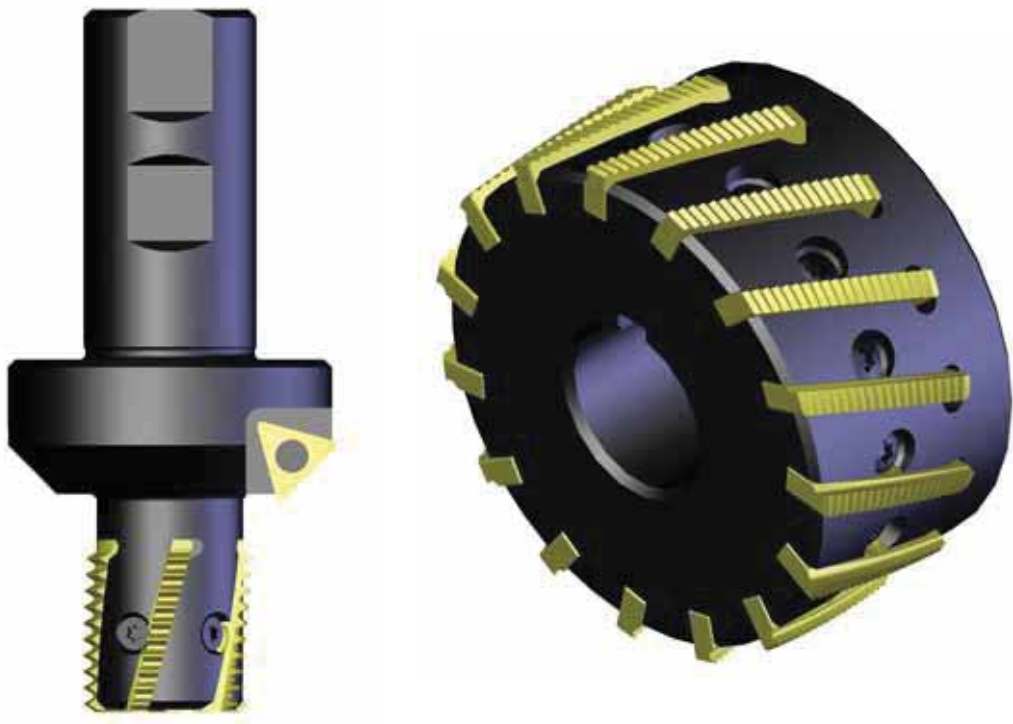
Ordering Code	Insert Size A	D	D1	L	No. of Inserts	Screw	Key
SRH45-6	37	45	32	130	6	S45	K40



Ordering Code	Insert Size A	D	D1	L	No. of Inserts	Screw	Key
SRH32-5 M	32	32	16	52	5	S32S	K22
SRH45-6 M	37	45	22	60	6	S45S	K40
SRH63-9	38	63	22	50	9	S63	K40

MT7 Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminium Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, which can be used with all materials.

Special Tools



In addition to standard products, C.P.T. manufactures special tools and inserts according to customers' requests. The toolholders are multi-purpose, making them suitable for both roughing and finishing inserts. Special tools are supplied in short delivery times.

