



# Spiral Mill-Thread



Spiral toolholders and inserts  
for smooth cutting



**Carmex**  
Precision Tools Ltd.

Inch

**NEW**

The new spiral designed tools enable smooth cutting operations at high feed rates and reduced machining time. The tools are suitable for a wide range of applications, from small components in small machining centers to heavy-duty applications in high power milling machines.

## H23 Toolholder

Ordering Code	Insert Size A	D	D1	L	L1	No. of Inserts	Screw	Key
SR091H23-2	1.06	0.91	1.0	5.0	2.0	2	S23	K21

## H23 Threading Inserts

### ISO

Pitch mm	Ordering Code	Thread Size
1.0	H23 I 1.0 ISO	≥ M26
1.5	H23 I 1.5 ISO	≥ M27
2.0	H23 I 2.0 ISO	≥ M28
3.0	H23 I 3.0 ISO	≥ M30

For internal thread

### UN

Pitch TPI	Ordering Code	Thread Size
24	H23 I 24 UN	≥ 1"
16	H23 I 16 UN	≥ 1 1/16"
12	H23 I 12 UN	≥ 1 1/8"
8	H23 I 8 UN	≥ 1 3/16"

For internal thread

### WHITWORTH

Pitch TPI	Ordering Code	Thread Size
11	H23-11 W	≥ G 1"

Same insert for internal and external thread

### BSPT

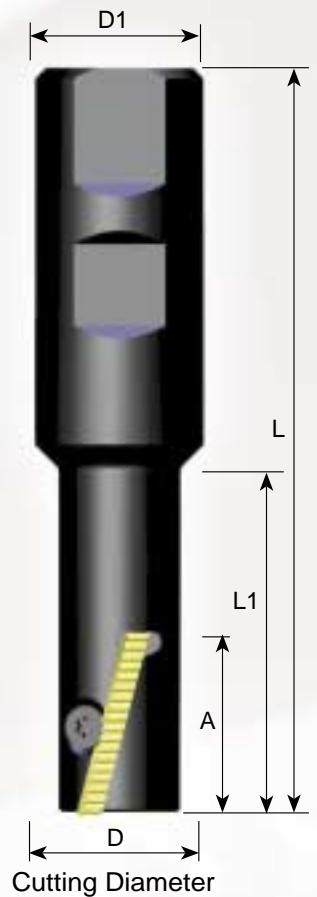
Pitch TPI	Ordering Code	Thread Size
11	H23-11 BSPT	≥ 1" BSPT

Same insert for internal and external thread

### NPT

Pitch TPI	Ordering Code	Thread Size
11.5	H23-11.5 NPT	1"-2" NPT

Same insert for internal and external thread



Spiral inserts have one cutting edge

# NEW

- Spiral fluted toolholders hold 2 to 9 inserts in a comparatively small cutting diameter.
- The unique clamping method enables optimal indexability.
- These tools reduce vibration and chatter.
- High grade finish is achieved in all applications: threading, roughing and finishing.
- 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.

## H32 Toolholder

Ordering Code	Insert Size A	D	D1	L	L1	No. of Inserts	Screw	Key
SR126H32-5	1.26	1.26	1.25	5.0	2.36	5	S32	K22

## H32 Threading Inserts

### ISO

Pitch mm	Ordering Code	Thread Size
1.5	H32 I 1.5 ISO	≥ M35
2.0	H32 I 2.0 ISO	≥ M36
3.0	H32 I 3.0 ISO	≥ M38
4.0	H32 I 4.0 ISO	≥ M40

For internal thread

### UN

Pitch TPI	Ordering Code	Thread Size
16	H32 I 16 UN	≥ 1 3/8"
12	H32 I 12 UN	≥ 1 7/16"
8	H32 I 8 UN	≥ 1 1/2"
6	H32 I 6 UN	≥ 1 9/16"

For internal thread

### WHITWORTH

Pitch TPI	Ordering Code	Thread Size
11	H32-11 W	Internal ≥ G 1 1/8" External ≥ G 1"

Same insert for internal and external thread

### BSPT

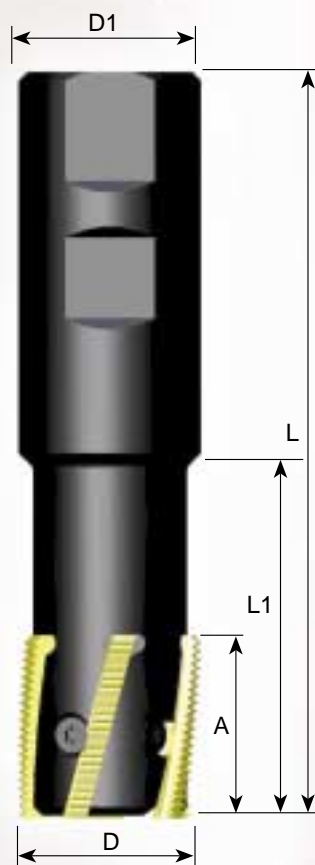
Pitch TPI	Ordering Code	Thread Size
11	H32-11 BSPT	Internal ≥ 1 1/8" BSPT External ≥ 1" BSPT

Same insert for internal and external thread

### NPT

Pitch TPI	Ordering Code	Thread Size
11.5	H32-11.5 NPT	Internal 1 1/4"-2" NPT External 1"-2" NPT

Same insert for internal and external thread



Spiral inserts have one cutting edge

## H45 Toolholder

Ordering Code	Insert Size A	D	D1	L	No. of Inserts	Screw	Key
SR177H45-6	1.46	1.77	1.25	5.0	6	S45	K40

## H45 Threading Inserts

### ISO

Pitch mm	Ordering Code	Thread Size
1.5	H45 I 1.5 ISO	≥ M50
2.0	H45 I 2.0 ISO	≥ M50
3.0	H45 I 3.0 ISO	≥ M56
4.0	H45 I 4.0 ISO	≥ M56

For internal thread

### UN

Pitch TPI	Ordering Code	Thread Size
16	H45 I 16 UN	≥ 2"
12	H45 I 12 UN	≥ 2"
8	H45 I 8 UN	≥ 2 1/4"
6	H45 I 6 UN	≥ 2 1/4"

For internal thread

### WHITWORTH

Pitch TPI	Ordering Code	Thread Size
11	H45-11 W	Internal ≥ G 1 3/4" External ≥ G 1"

Same insert for internal and external thread

### BSPT

Pitch TPI	Ordering Code	Thread Size
11	H45-11 BSPT	Internal ≥ 1 3/4" BSPT External ≥ 1" BSPT

Same insert for internal and external thread

### NPT

Pitch TPI	Ordering Code	Thread Size
11.5	H45-11.5 NPT	Internal 2" NPT External 1"-2" NPT

Same insert for internal and external thread



Spiral inserts have one cutting edge

## H63 Toolholder

Ordering Code	Insert Size A	D	D1	L	No. of Inserts	Screw	Key
SR248H63-9	1.50	2.48	0.75	2.0	9	S63	K40

## H63 Threading Inserts

### ISO

Pitch mm	Ordering Code	Thread Size
1.5	H63 I 1.5 ISO	$\geq M70$
2.0	H63 I 2.0 ISO	$\geq M70$
3.0	H63 I 3.0 ISO	$\geq M75$
4.0	H63 I 4.0 ISO	$\geq M75$

For internal thread

### UN

Pitch TPI	Ordering Code	Thread Size
16	H63 I 16 UN	$\geq 2 \frac{3}{4}$ "
12	H63 I 12 UN	$\geq 2 \frac{3}{4}$ "
8	H63 I 8 UN	$\geq 3$ "
6	H63 I 6 UN	$\geq 3$ "

For internal thread

### WHITWORTH

Pitch TPI	Ordering Code	Thread Size
11	H63-11 W	Internal $\geq G 2 \frac{1}{2}$ " External $\geq G 1$ "

Same insert for internal and external thread

### BSPT

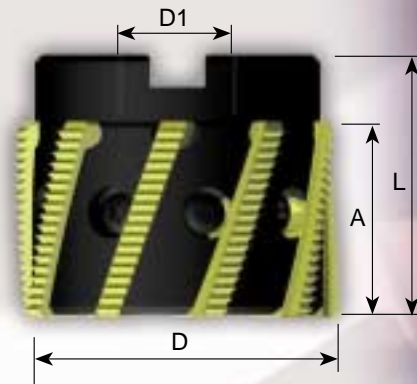
Pitch TPI	Ordering Code	Thread Size
11	H63-11 BSPT	Internal $\geq 2 \frac{1}{2}$ " BSPT External $\geq 1$ " BSPT

Same insert for internal and external thread

### NPT

Pitch TPI	Ordering Code	Thread Size
11.5	H63-11.5 NPT	External $\geq 1$ " NPT

For external thread



Spiral inserts have one cutting edge

# NEW

## Spiral inserts and toolholders for finishing

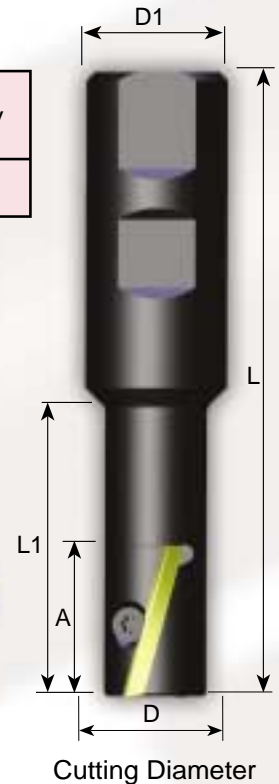
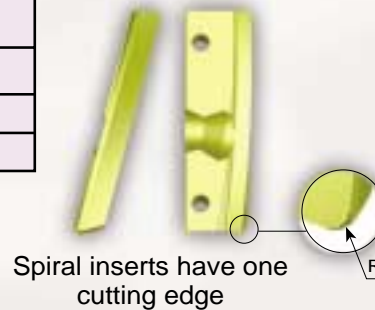
- Milling a 90° shoulder with variety of corner radiuses
- Maximum depth of cut - 37 mm

### H23 Toolholder

Ordering Code	Insert size A	D	D1	L	L1	No. of Insert	Screw	Key
SR091H23-2	1.06	0.91	1.0	5.0	2.0	2	S23	K21

### H23F Finishing Inserts

R	Ordering Code
0.2	H23 F R0.2
0.5	H23 F R0.5
1.0	H23 F R1.0

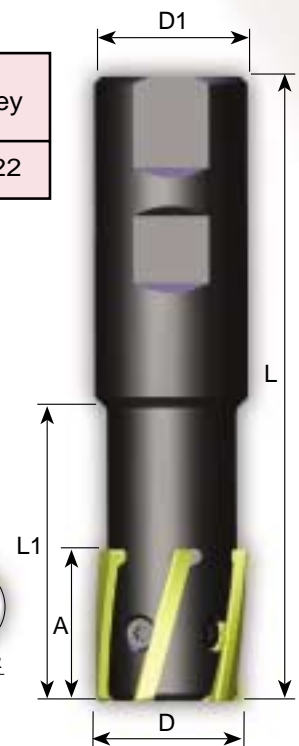
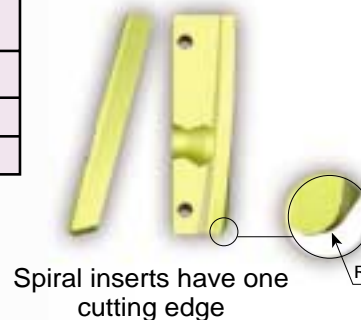


### H32 Toolholder

Ordering Code	Insert Size A	D	D1	L	L1	No. of Inserts	Screw	Key
SR126H32-5	1.26	1.26	1.25	5.0	2.36	5	S32	K22

### H32F Finish Inserts

R	Ordering Code
0.2	H32 F R0.2
0.5	H32 F R0.5
1.0	H32 F R1.0



# NEW

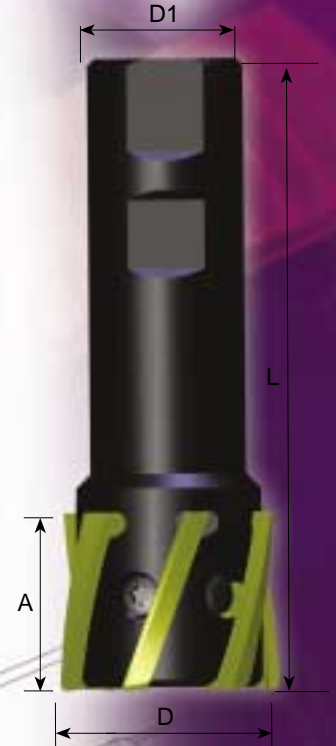
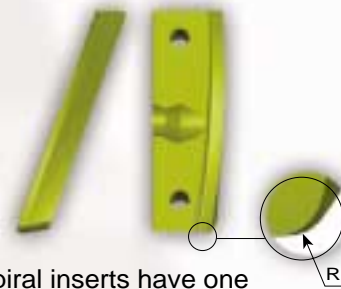
## H45 Toolholder

Ordering Code	Insert size A	D	D1	L	No. of Insert	Screw	Key
SR177H45-6	1.46	1.77	1.25	5.0	6	S45	K40

## H45F Finishing Inserts

R	Ordering Code
0.2	H45 F R0.2
0.5	H45 F R0.5
1.0	H45 F R1.0
1.5	H45 F R1.5
2.0	H45 F R2.0

Spiral inserts have one cutting edge



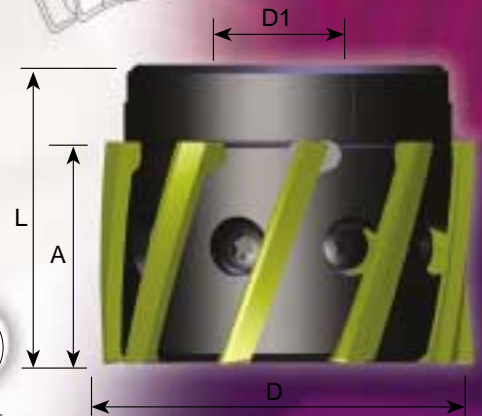
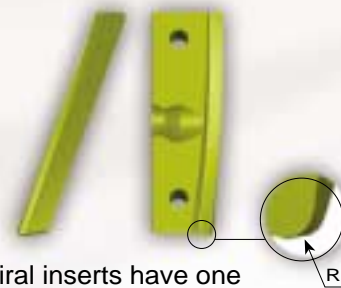
## H63 Toolholder

Ordering Code	Insert size A	D	D1	L	No. of Insert	Screw	Key
SR248H63-9	1.50	2.48	0.75	2.0	9	S63	K40

## H63F Finish Inserts

R	Ordering Code
0.2	H63 F R0.2
0.5	H63 F R0.5
1.0	H63 F R1.0
1.5	H63 F R1.5
2.0	H63 F R2.0

Spiral inserts have one cutting edge





# Special Tools

In addition to standard products, Carmex 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.



Carmex Precision Tools LLC  
2075 Hwy 175, Richfield, WI 53076, Phone: 888 628-5030, Fax: 888 628-5302  
E-Mail: sales@carmexusa.com Web Site: www.carmex.com

©Copyright CARMEX Precision Tools Ltd. 2006

Carmex Spiral MT Inch 09/2006 2nd edition

Spiral Mill - Finishing