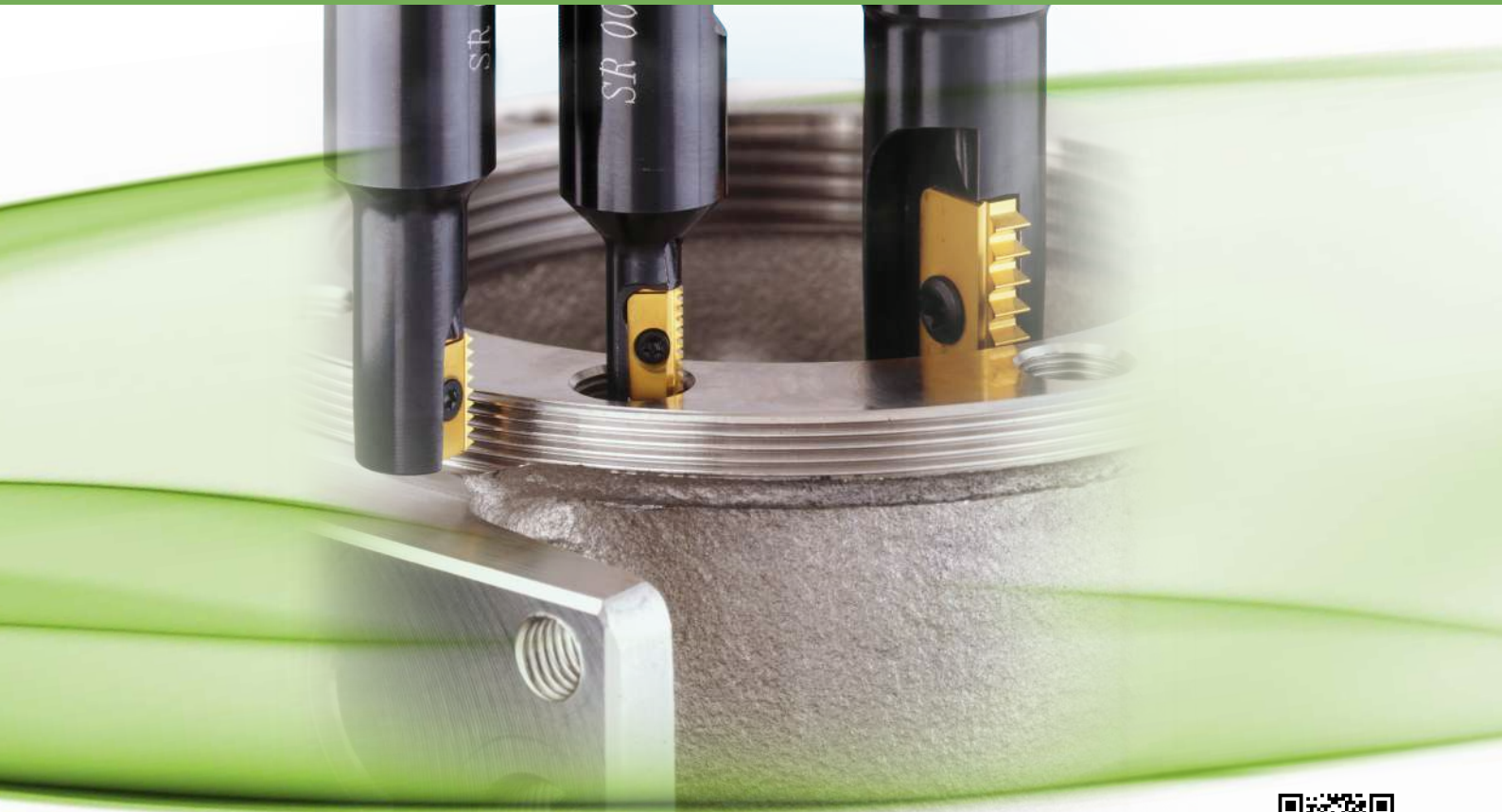




Demonstration

Mill-Thread tools for threading on CNC milling machines by using helical interpolation programs

Advantages of Mill-Thread Tools

- Same toolholder and insert can produce both right-hand and left-hand threads.
- A single insert & toolholder can produce a given thread on many diameters (External & Internal).
- Prismatic shape of insert's tail ensures exact and reliable clamping in the toolholder.
- Most inserts are double sided, having two cutting edges.
- Thread is produced in one tool pass.
- MT tools can produce tapered threads.
- Improved productivity thanks to increased cutting speeds and multitooth type carbide inserts.
- Threading to one pitch of a shoulder in a blind hole.
- Longer tool life thanks to a special multilayer coating process.
- Lower tooling costs, considerably less expensive than using taps and dies.
- Since lower machine power is required, a smaller machine can produce larger threads in a single operation with less idle time and tool changes.

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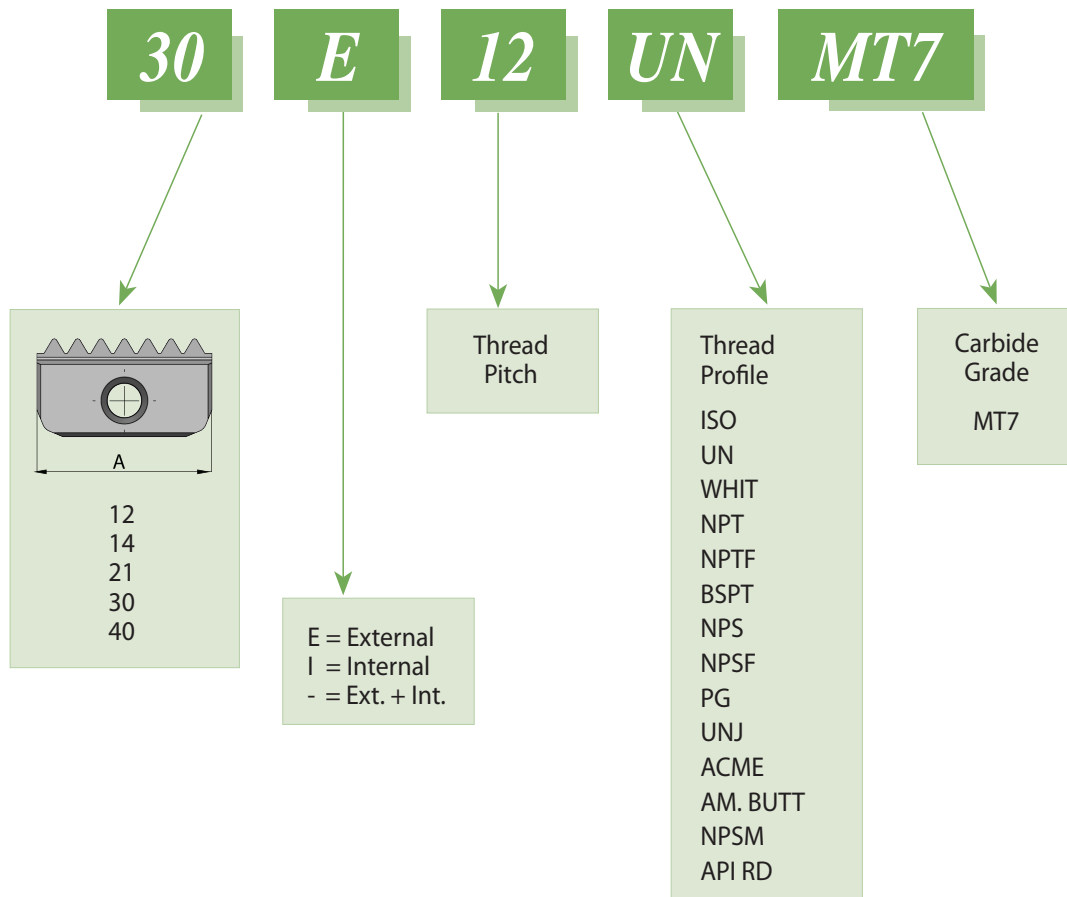
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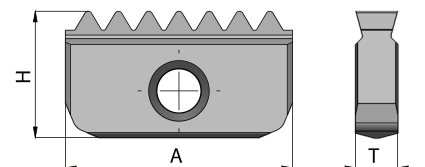
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Product Identification

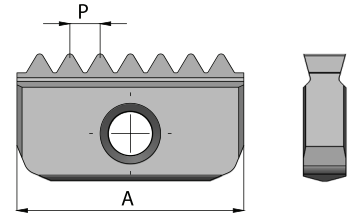
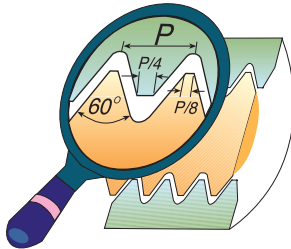
Mill-Thread Inserts Ordering Codes



	Insert Size = A				
	12	14	21	30	40
H	6.3	7.5	12	16	20
T	2.9	3.1	4.7	5.5	6.3



ISO

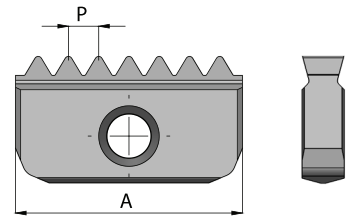
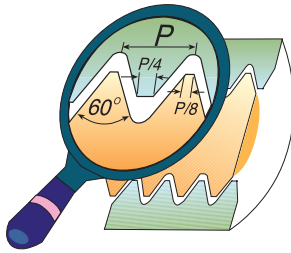


Pitch mm		Insert Size = A				
		12	14	21	30	40
0.5	Ext.					
0.5	Int.	* 12 I 0.5 ISO	14 I 0.5 ISO			
0.75	Ext.		14 E 0.75 ISO			
0.75	Int.	* 12 I 0.75 ISO	14 I 0.75 ISO			
1.0	Ext.		14 E 1.0 ISO	21 E 1.0 ISO		
1.0	Int.	* 12 I 1.0 ISO	14 I 1.0 ISO	21 I 1.0 ISO		
1.25	Ext.		14 E 1.25 ISO	21 E 1.25 ISO		
1.25	Int.	* 12 I 1.25 ISO	14 I 1.25 ISO	21 I 1.25 ISO		
1.5	Ext.		14 E 1.5 ISO	21 E 1.5 ISO	30 E 1.5 ISO	40 E 1.5 ISO
1.5	Int.	* 12 I 1.5 ISO	14 I 1.5 ISO	21 I 1.5 ISO	30 I 1.5 ISO	40 I 1.5 ISO
1.75	Ext.		14 E 1.75 ISO	21 E 1.75 ISO		
1.75	Int.		14 I 1.75 ISO	21 I 1.75 ISO		
2.0	Ext.		14 E 2.0 ISO	21 E 2.0 ISO	30 E 2.0 ISO	40 E 2.0 ISO
2.0	Int.		14 I 2.0 ISO	21 I 2.0 ISO	30 I 2.0 ISO	40 I 2.0 ISO
2.5	Ext.		14 E 2.5 ISO	21 E 2.5 ISO		
2.5	Int.		14 I 2.5 ISO	21 I 2.5 ISO		
3.0	Ext.			21 E 3.0 ISO	30 E 3.0 ISO	40 E 3.0 ISO
3.0	Int.			21 I 3.0 ISO	30 I 3.0 ISO	40 I 3.0 ISO
3.5	Ext.				30 E 3.5 ISO	
3.5	Int.			21 I 3.5 ISO	30 I 3.5 ISO	40 I 3.5 ISO
4.0	Ext.				30 E 4.0 ISO	40 E 4.0 ISO
4.0	Int.				30 I 4.0 ISO	40 I 4.0 ISO
4.5	Ext.					
4.5	Int.				30 I 4.5 ISO	40 I 4.5 ISO
5.0	Ext.					40 E 5.0 ISO
5.0	Int.				30 I 5.0 ISO	40 I 5.0 ISO
5.5	Ext.					
5.5	Int.				30 I 5.5 ISO	40 I 5.5 ISO
6.0	Ext.					40 E 6.0 ISO
6.0	Int.					40 I 6.0 ISO

Order example: 14 I 1.5 ISO MT7

* One cutting edge

UN UNC, UNF, UNEF, UNS



Pitch TPI		Insert Size = A				
		12	14	21	30	40
32	Ext.		14 E 32 UN			
32	Int.	* 12 I 32 UN	14 I 32 UN			
28	Ext.		14 E 28 UN			
28	Int.	* 12 I 28 UN	14 I 28 UN			
27	Ext.					
27	Int.		14 I 27 UN			
24	Ext.		14 E 24 UN	21 E 24 UN		
24	Int.	* 12 I 24 UN	14 I 24 UN	21 I 24 UN		
20	Ext.		14 E 20 UN	21 E 20 UN	30 E 20 UN	
20	Int.	* 12 I 20 UN	14 I 20 UN	21 I 20 UN	30 I 20 UN	
18	Ext.		14 E 18 UN	21 E 18 UN	30 E 18 UN	
18	Int.	* 12 I 18 UN	14 I 18 UN	21 I 18 UN	30 I 18 UN	
16	Ext.		14 E 16 UN	21 E 16 UN	30 E 16 UN	40 E 16 UN
16	Int.	* 12 I 16 UN	14 I 16 UN	21 I 16 UN	30 I 16 UN	40 I 16 UN
14	Ext.		14 E 14 UN	21 E 14 UN	30 E 14 UN	40 E 14 UN
14	Int.		14 I 14 UN	21 I 14 UN	30 I 14 UN	40 I 14 UN
13	Ext.		14 E 13 UN			
12	Ext.		14 E 12 UN	21 E 12 UN	30 E 12 UN	40 E 12 UN
12	Int.		14 I 12 UN	21 I 12 UN	30 I 12 UN	40 I 12 UN
11	Ext.		14 E 11 UN	21 E 11 UN		
11	Int.		14 I 11 UN			
10	Ext.		* 14 E 10 UN	21 E 10 UN	30 E 10 UN	40 E 10 UN
10	Int.		14 I 10 UN	21 I 10 UN	30 I 10 UN	40 I 10 UN
9	Ext.					
9	Int.		** 14 I 9 UN			
8	Ext.				30 E 8 UN	40 E 8 UN
8	Int.			21 I 8 UN	30 I 8 UN	40 I 8 UN
7	Ext.					
7	Int.			21 I 7 UN		
6	Ext.				30 E 6 UN	40 E 6 UN
6	Int.				30 I 6 UN	40 I 6 UN
5	Ext.					
5	Int.				30 I 5 UN	
4.5	Ext.					
4.5	Int.					40 I 4.5 UN
4	Ext.					40 E 4 UN
4	Int.					40 I 4 UN

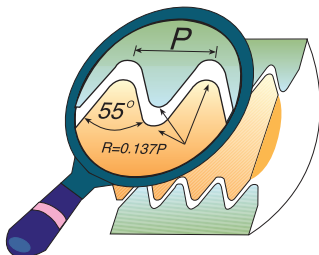
Order example: 21 I 18 UN MT7

* One cutting edge

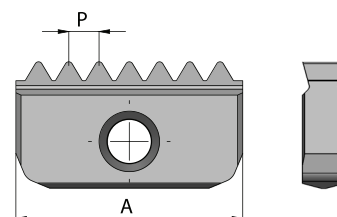
** Cannot be used with carbide shank Toolholders.

Mill - Thread Inserts

WHIT BSW, BSF, BSP



Same Insert for External and Internal thread.

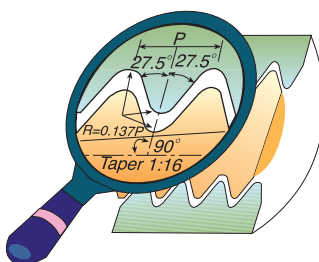


Pitch TPI	Insert Size = A				
	12	14	21	30	40
24		14-24 W			
20		14-20 W	21-20 W		
19	* 12 - 19 W	14-19 W	21-19 W		
18		14-18 W			
16		14-16 W	21-16 W	30-16 W	
14		14-14 W	21-14 W	30-14 W	
12		14-12 W	21-12 W		
11		*14-11 W	21-11 W	30-11 W	40-11 W
10			21-10 W		
8					40- 8 W

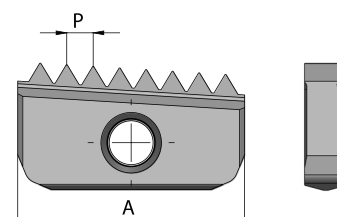
* One cutting edge

Order example: 21-11 W MT7

BSPT



Conical pipe thread inserts are one-sided and may be used for both External and Internal threading.

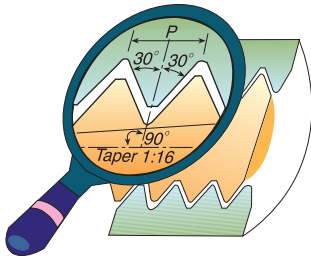


Pitch TPI	Insert Size = A				
	12	14	21	30	40
19	12-19 BSPT	14-19 BSPT			
14		14-14 BSPT	21-14 BSPT		
11			21-11 BSPT	30-11 BSPT	40-11 BSPT

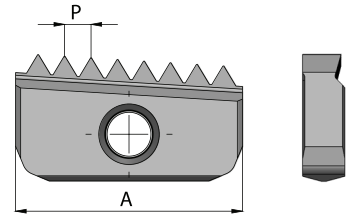
Order example: 14-19 BSPT MT7

For conical preparation end mills see page B08-23

NPT



Conical pipe thread inserts are one-sided and may be used for both External and Internal threading.

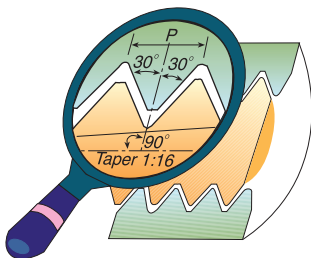


Pitch TPI	Insert Size = A				
	12	14	21	30	40
18	12-18 NPT	14-18 NPT			
14		14-14 NPT	21-14 NPT		
11.5			21-11.5 NPT	30-11.5 NPT	40-11.5 NPT
8				30- 8 NPT	40- 8 NPT

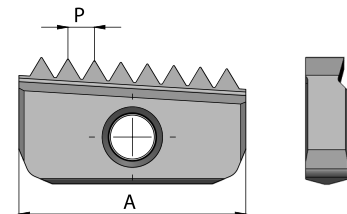
Order example: 30-11.5 NPT MT7

For conical preparation end mills see page B08-23

NPTF



Conical pipe thread inserts are one-sided and may be used for both External and Internal threading.

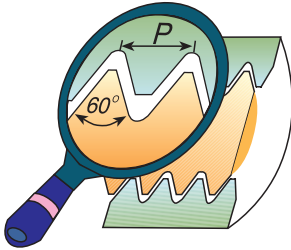


Pitch TPI	Insert Size = A				
	12	14	21	30	40
18	12-18 NPTF	14-18 NPTF			
14		14-14 NPTF	21-14 NPTF		
11.5			21-11.5 NPTF	30-11.5 NPTF	40-11.5 NPTF
8				30- 8 NPTF	40- 8 NPTF

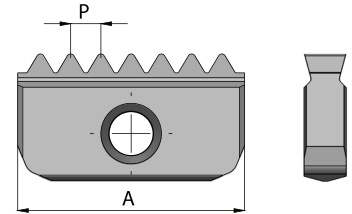
Order example: 21-14 NPTF MT7

For conical preparation end mills see page B08-23

NPS



Same Insert for External and Internal thread

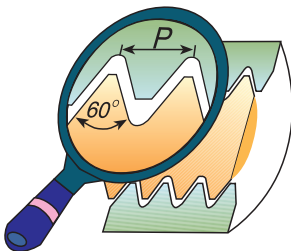


Pitch TPI	Insert Size = A				
	12	14	21	30	40
18	* 12-18 NPS	14-18 NPS			
14		14-14 NPS	21-14 NPS		
11.5			21-11.5 NPS	30-11.5 NPS	40-11.5 NPS
8				30- 8 NPS	40- 8 NPS

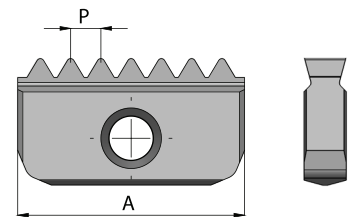
Order example: 30-11.5 NPS MT7

* One cutting edge

NPSF



Same Insert for External and Internal thread

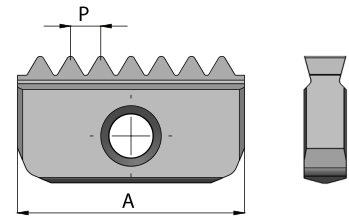
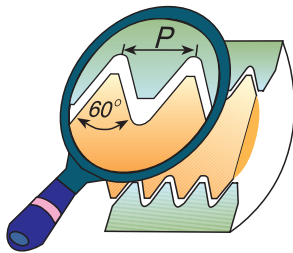


Pitch TPI	Insert Size = A				
	12	14	21	30	40
18	* 12-18 NPSF	14-18 NPSF			
14		14-14 NPSF	21-14 NPSF		
11.5			21-11.5 NPSF	30-11.5 NPSF	40-11.5 NPSF
8				30- 8 NPSF	40- 8 NPSF

Order example: 21-14 NPSF MT7

* One cutting edge

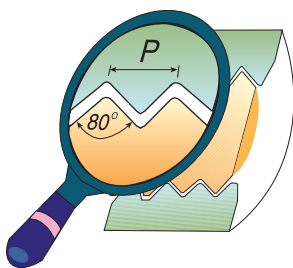
NPSM



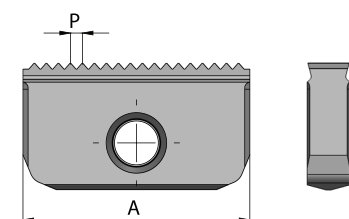
Pitch TPI		Insert Size = A				
		12	14	21	30	40
18	Ext.		14 E 18 NPSM			
18	Int.	12 I 18 NPSM	14 I 18 NPSM			
14	Ext.			21 E 14 NPSM		
14	Int.		14 I 14 NPSM	21 I 14 NPSM		
11.5	Ext.			21 E 11.5 NPSM	30 E 11.5 NPSM	40 E 11.5 NPSM
11.5	Int.			21 I 11.5 NPSM	30 I 11.5 NPSM	40 I 11.5 NPSM
8	Ext.				30 E 8 NPSM	40 E 8 NPSM
8	Int.				30 I 8 NPSM	40 I 8 NPSM

Order example: 21 I 11.5 NPSM MT7

PG - DIN 40430



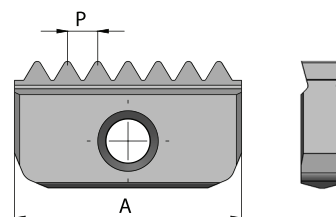
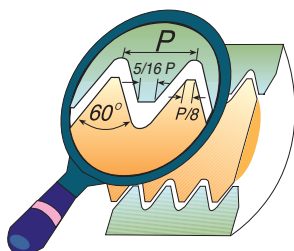
Same Insert for External and Internal thread



Pitch TPI	Insert Size = A		
	14	21	30
18	14-18 PG (PG 9, 11, 13.5, 16)	21-18 PG (PG 16)	
16		21-16 PG (PG 21, 29, 36, 42, 48)	30-16 PG (PG 36, 42, 48)

Order example: 21-18 PG MT7

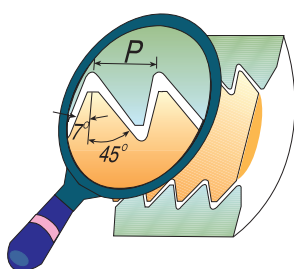
UNJ



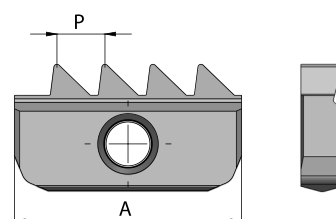
Pitch TPI		Insert Size = A	
		14	21
24	Ext.	14 E 24 UNJ	21 E 24 UNJ
24	Int.	14 I 24 UNJ	21 I 24 UNJ
20	Ext.	14 E 20 UNJ	21 E 20 UNJ
20	Int.	14 I 20 UNJ	21 I 20 UNJ
18	Ext.	14 E 18 UNJ	21 E 18 UNJ
18	Int.	14 I 18 UNJ	21 I 18 UNJ
16	Ext.	14 E 16 UNJ	21 E 16 UNJ
16	Int.	14 I 16 UNJ	21 I 16 UNJ
14	Ext.	14 E 14 UNJ	21 E 14 UNJ
14	Int.	14 I 14 UNJ	21 I 14 UNJ
12	Ext.	14 E 12 UNJ	21 E 12 UNJ
12	Int.	14 I 12 UNJ	21 I 12 UNJ

Order example: 21E 16 UNJ MT7

American Buttress



ABUT thread inserts are one-sided and may be used for both External and Internal threading

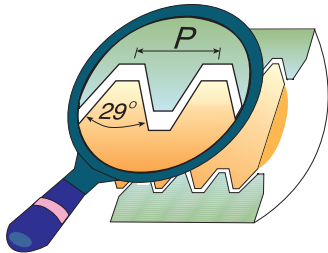


Pitch TPI	Insert Size = A		
	21	30	40
16	21 - 16 ABUT	30 - 16 ABUT	
12	21 - 12 ABUT	30 - 12 ABUT	
10	21 - 10 ABUT	30 - 10 ABUT	
8	21 - 8 ABUT	30 - 8 ABUT	
6		30 - 6 ABUT	
4		* 30 - 4 ABUT	40 - 4 ABUT

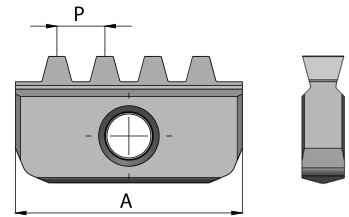
Order example: 30 - 6 ABUT MT7

* Inserts to be used only on Multi-Insert toolholders see page B02-5

ACME



Inserts for Internal threads



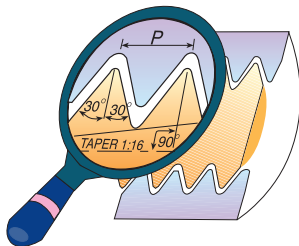
Pitch TPI		Insert Size = A		
		21	30	40
12	Int.	21 12 ACME	30 12 ACME	
10	Int.	21 10 ACME	30 10 ACME	
8	Int.	21 8 ACME	30 8 ACME	
6	Int.		30 6 ACME	
5	Int.		30 5 ACME	
4	Int.		* 30 4 ACME	40 4 ACME
3.5	Int.			40 3.5 ACME
3	Int.			** 40 3 ACME

Order example: 21 | 8 ACME MT7

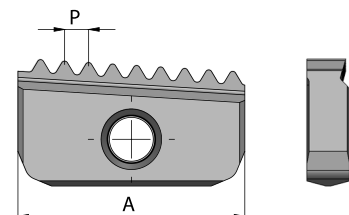
* Inserts to be used only on Multi-Insert toolholders see page B02-5

** One cutting edge

API RD



API RD thread inserts are one-sided and may be used for both External and Internal threading



Pitch TPI	Insert Size = A		
	21	30	40
10	21 - 10 API RD	30 - 10 API RD	
8		30 - 8 API RD	40 - 8 API RD

Order example: 30 - 8 API RD MT7

Internal ISO Kits



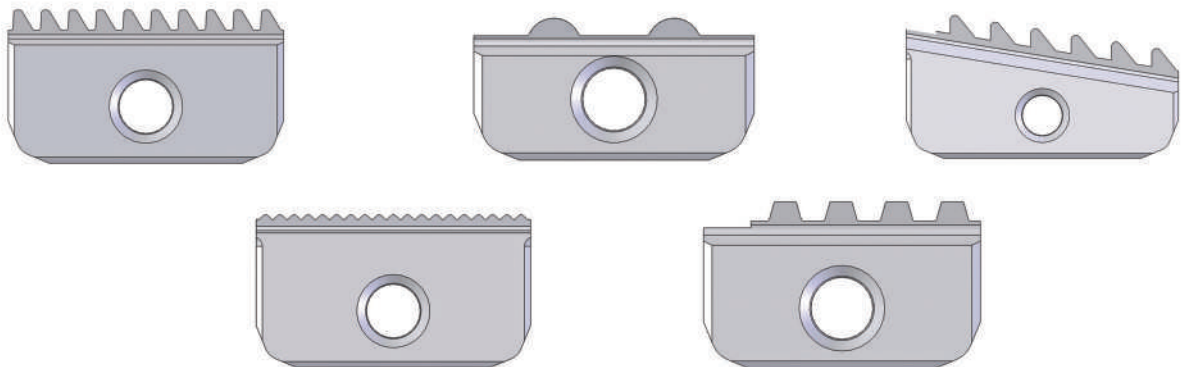
MTK 12 ISO	MTK 14 ISO
<u>INSERTS</u> 12 0.75 ISO 12 1.0 ISO 2 Pcs 12 1.25 ISO 12 1.5 ISO 2 Pcs	<u>INSERTS</u> 14 1.0 ISO 2 Pcs 14 1.5 ISO 2 Pcs 14 2.0 ISO 2 Pcs
<u>TOOLHOLDER</u> SR 0009 H12	<u>TOOLHOLDER</u> SR 0017 H14
<u>KEY</u> K12	<u>KEY</u> K14
<u>SCREW</u> S12	<u>SCREW</u> S14

Order example : MTK 14 | ISO

Special Tools



In addition to standard products,
CPT manufactures special tools and inserts
according to customers' requests.
Special tools are supplied in short delivery times.



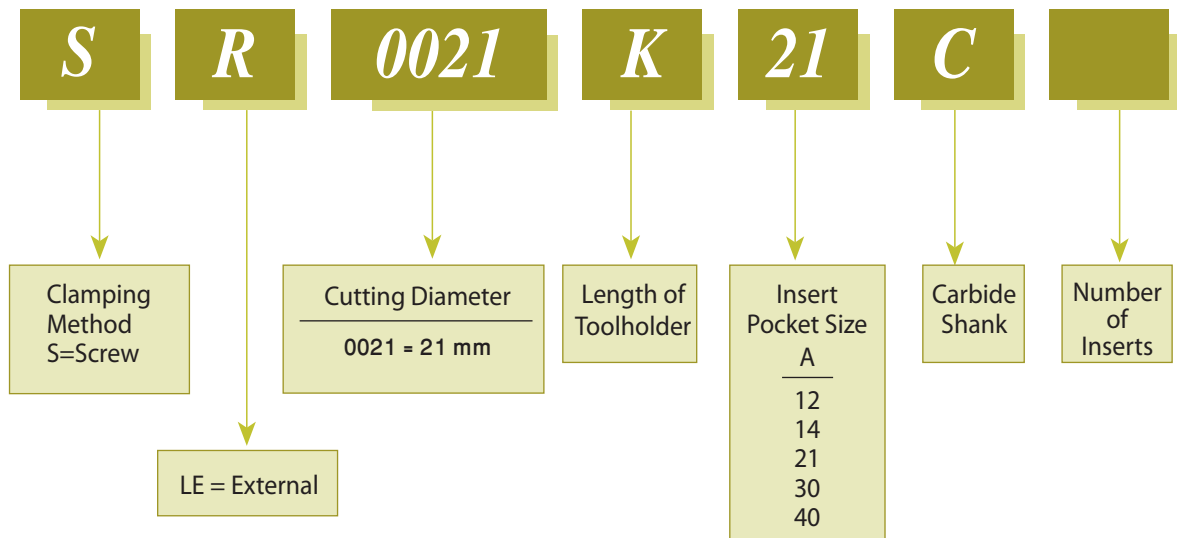


Demonstration

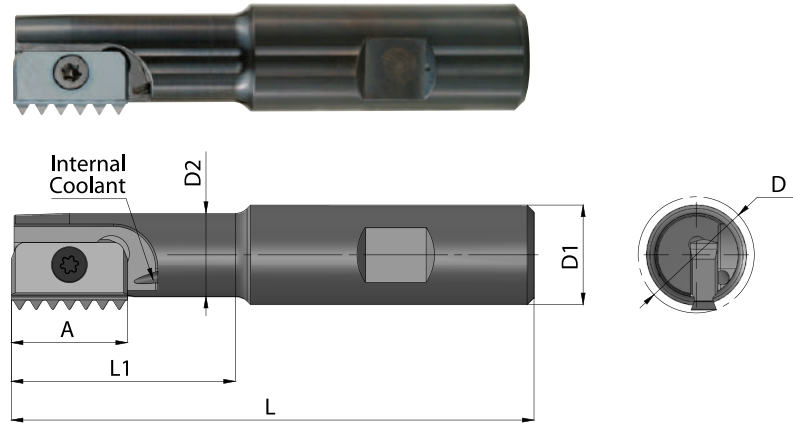
Contents:	Page:	Contents:	Page:
Product Identification	2	External Multi Insert Toolholder	5
Single Insert Toolholders	3	Long Carbide Shank Toolholders	6
Long Shank Toolholders	4	Carbide Shank Toolholders	6
Twin Insert Toolholders	4	for Single Point Threading	
Multi Insert Toolholders	5		

Product Identification

Mill-Thread Toolholders Ordering Codes



Single Insert Toolholders



Ordering Code	A	D	D1	D2	L	L1	Insert Screw	Torx Key
* SR0009H12	12	9.5	20	7.5	85	14	S12	K12
SR0010H12	12	9.9	20	7.6	85	16	S12	K12
SR0012F14	14	12.0	20	8.9	75	20	S14	K14
SR0014H14	14	14.5	20	11.2	85	25	S14	K14
SR0017H14	14	17.0	20	13.4	85	30	S14	K14
** SR0018H21	21	18.0	20	14.4	85	30	S21	K21
SR0021H21	21	21.0	20	16.5	94	40	S21	K21
SR0029J30	30	29.0	25	22.4	110	50	S30	K30
SR0048M40	40	48.0	40	35.0	153	78	S40	K40

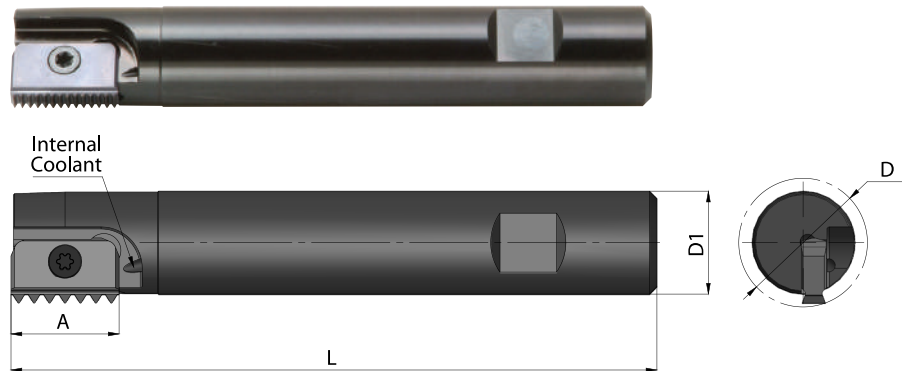
Order example: SR0029J30

* Not for conical inserts: 12-18 NPT, 12-18 NPTF, 12-19 BSPT

** Cannot be used with the following inserts:

21 I 3.5 ISO, 21 I 8 UN, 21 I 7 UN, 21-11 BSPT, 21-11.5 NPT, 21-11.5 NPTF

Long Shank Toolholders

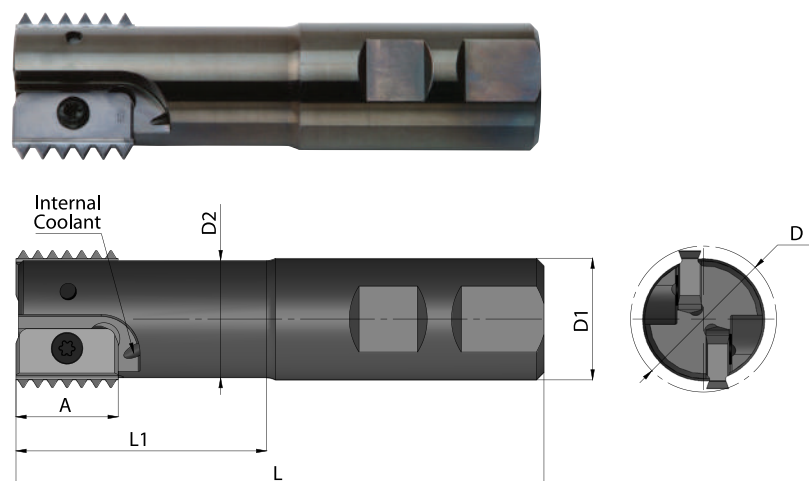


Ordering Code	A	D	D1	L	Insert Screw	Torx Key
SR0025K21	21	25	20	125	S21	K21
SR0031M30	30	31	25	150	S30	K30
SR0038M30	30	38	32	150	S30	K30
SR0048R40	40	48	40	210	S40	K40

Order example: SR0031M30

For holders with long overhang reduce the cutting speed and feed rate between 20% to 40% (depends on workpiece material, pitch and overhang)

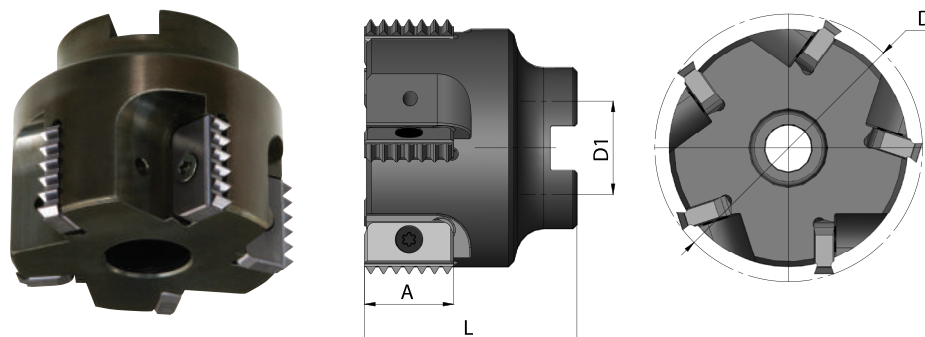
Twin Insert Toolholders



Ordering Code	A	D	D1	D2	L	L1	No. of Inserts	Insert Screw	Torx Key
SR0020H14-2	14	20	20	16	93	41	2	S14	K14
SR0030J21-2	21	30	25	24	108	52	2	S21	K21
SR0040L30-2	30	40	32	30	130	70	2	S30	K30
SR0050M40-2	40	50	40	38	153	78	2	S40	K40

Order example: SR0040L30-2

Multi Insert Toolholders



Ordering Code	A	D	D1	L	No. of Inserts	Insert Screw	Torx Key
SR0063C21-5	21	63	22	50	5	S21	K21
SR0063C30-4	30	63	22	50	4	S30	K30
SR0080D30-4	30	80	27	55	4	S30	K30
SR0100D30-4	30	100	32	60	4	S30	K30
SR0100D30-8	30	100	32	60	8	S30	K30
SR0080D40-4	40	80	27	65	4	S40	K40
SR0100E40-4	40	100	32	70	4	S40	K40
SR0100E40-6	40	100	32	70	6	S40	K40

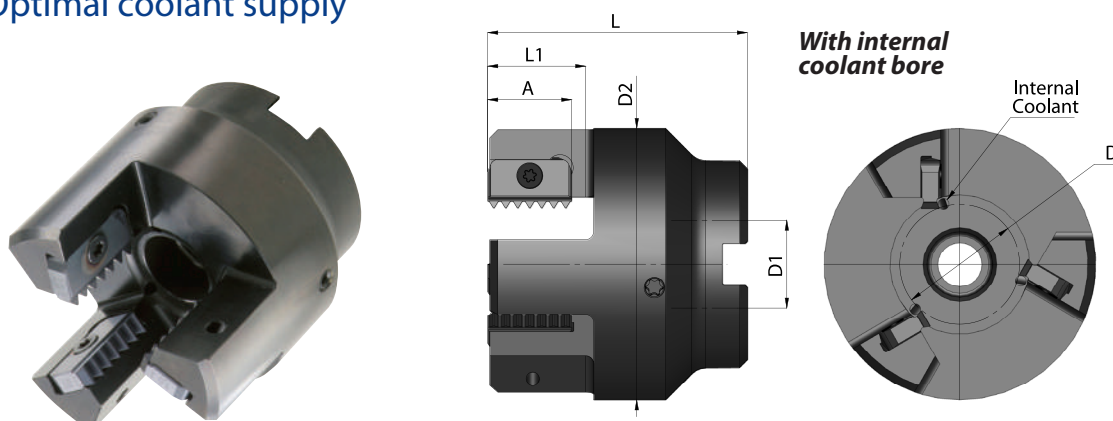
Order example: SR0080D30-4

External Multi Insert Toolholder



Demonstration

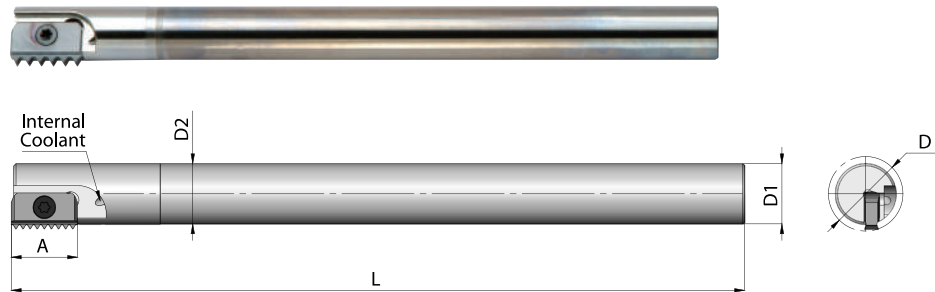
- Reduced machining time
- Optimal coolant supply



Ordering Code	A	D	D1	D2	L	L1	No. of Inserts	Insert Screw	Torx Key
SLE0020D21-3	21	20	22	58	65	25	3	S21	K21
SLE0030D21-3	21	30	22	68	65	25	3	S21	K21
SLE0045E21-4	21	45	27	83	70	25	4	S21	K21

Order example: SLE0030D21-3

Long Carbide Shank Toolholders

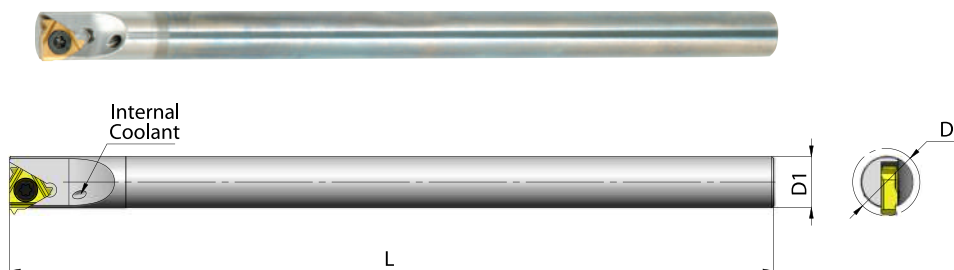


Ordering Code	A	D	D1	D2	L	Insert Screw	Torx Key
SR0010K12C	12	9.9	8	8	125	S12	K12
SR0013H14C	14	13.2	10	10	110	S14	K14
SR0013J14C	14	13.2	10	10	155	S14	K14
SR0015K14C	14	15.2	12	12	175	S14	K14
SR0021K21C	21	21.0	16	16	130	S21	K21
SR0021M21C	21	21.0	16	16	200	S21	K21
SR0027S30C	30	27.0	20	20	270	S30	K30

Order example: SR0015K14C

For holders with long overhang reduce the cutting speed and feed rate between 20% to 40% (depends on workpiece material, pitch and overhang)

Carbide Shank Toolholders for Single Point Threading



Ordering Code		Pitch Range		D	D1	L	Insert Screw	Torx Key
		mm	TPI					
SR0005D06C	6	0.5-1.25	48-20	6.8	5.0	63	S06	K06
SR0006H08C	8	0.5-1.75	48-14	8.8	6.0	100	S08	K08
* SR0010M11C	11	0.5-2.00	48-11	13.2	10.0	150	S11	K11

For Inserts see the Thread Turning Tools section of this catalog.

For an internal application use an internal R.H. insert.

* For an external application use an external L.H. insert.



Contents:	Page:	Contents:	Page:
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UN	5	Toolholders for Conical Threads	8
WHIT BSW, BSF, BSP	6	Carbide Shank Toolholders	9
NPT	6	Multi-Insert Toolholders	9
NPTF	7		

Slim MT

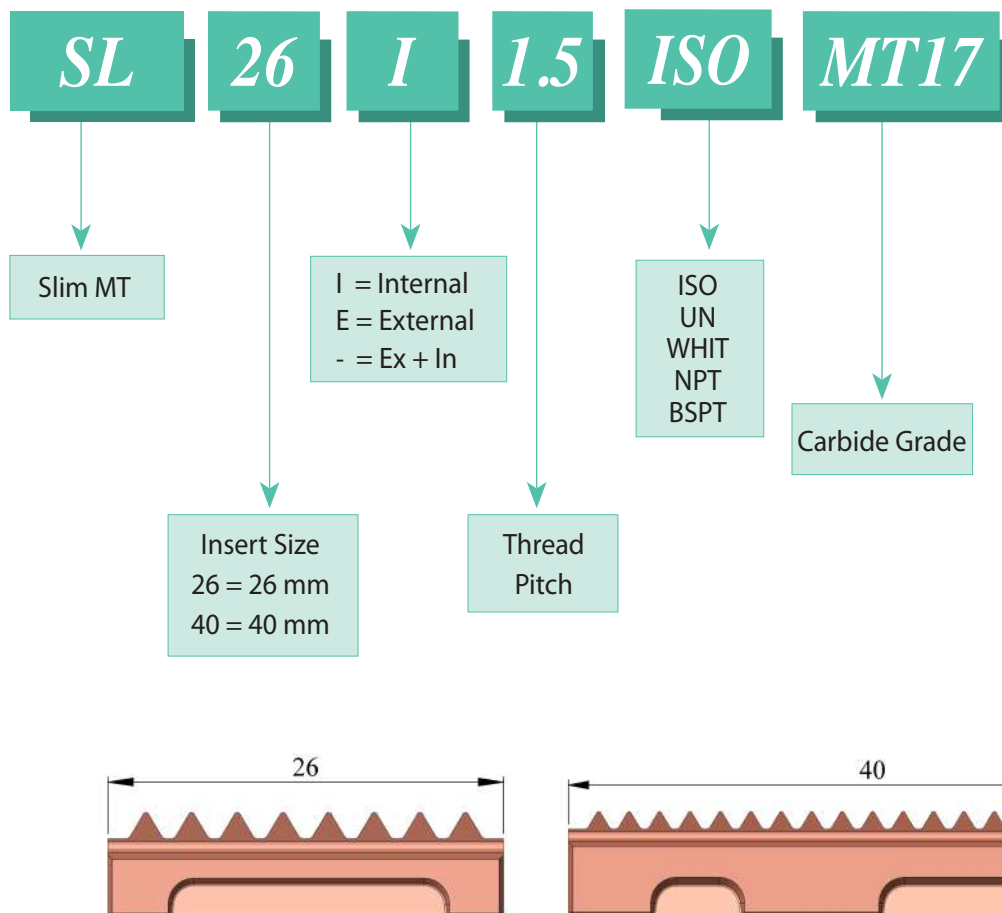
High productivity, Slim cost

A new product line of indexable Mill-Thread inserts and toolholders including multiple straight flutes for machining long threads from small to large diameters.

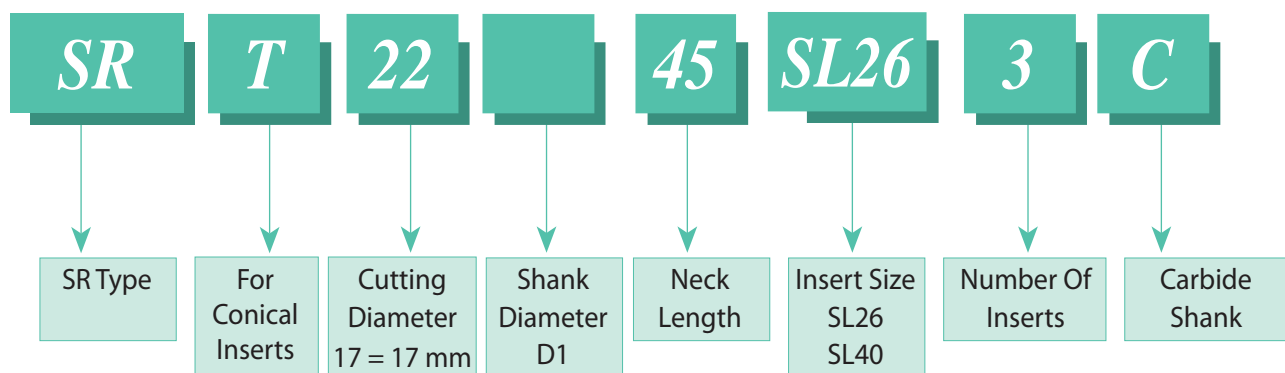
- **Advanced carbide and coating combination for extended tool life and improved productivity**
- **Most inserts are double sided**
- **Nickel coated holders for high wear resistance**
- **Unique clamping mechanism**
- **Large variety of holders & inserts in accordance to international standards**

Product Identification

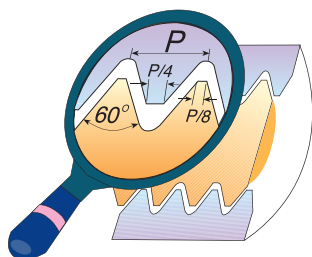
Inserts



Toolholders



ISO

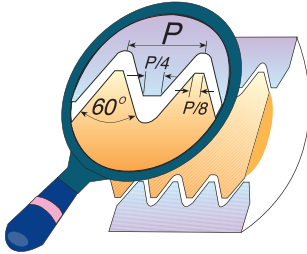


Insert size	Pitch mm	Ex/In	Ordering code	Toolholder
SL 26	0.5	In	SL26 I 0.5 ISO	SR - SL26 - ...
	0.75	In	SL26 I 0.75 ISO	
	1.0	In	SL26 I 1.0 ISO	
	1.0	Ex	SL26 E 1.0 ISO	
	1.5	In	SL26 I 1.5 ISO	
	1.5	Ex	SL26 E 1.5 ISO	
	2.0	In	SL26 I 2.0 ISO	
	2.0	Ex	SL26 E 2.0 ISO	
	2.5	In	SL26 I 2.5 ISO	
	2.5	Ex	SL26 E 2.5 ISO	
	3.0	In	* SL26 I 3.0 ISO	
	3.0	Ex	* SL26 E 3.0 ISO	
SL 40	1.5	In	SL40 I 1.5 ISO	SR - SL40 - ...
	2.0	In	SL40 I 2.0 ISO	
	2.5	In	SL40 I 2.5 ISO	
	3.0	In	SL40 I 3.0 ISO	

* Cannot be used with Toolholder SR17- ... -SL26-2

For Toolholders see pages B03-8 and 9

UN

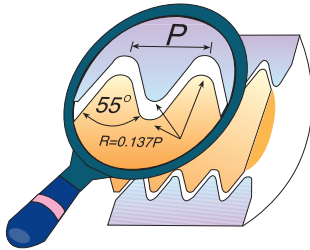


Insert size	Pitch TPI	Ex/In	Ordering code	Toolholder
SL 26	20	In	SL26 I 20 UN	SR - SL26 - ...
	20	Ex	SL26 E 20 UN	
	18	In	SL26 I 18 UN	
	18	Ex	SL26 E 18 UN	
	16	In	SL26 I 16 UN	
	16	Ex	SL26 E 16 UN	
	14	In	SL26 I 14 UN	
	14	Ex	SL26 E 14 UN	
	12	In	SL26 I 12 UN	
	12	Ex	SL26 E 12 UN	
	10	In	SL26 I 10 UN	
	10	Ex	SL26 E 10 UN	
	9	In	* SL26 I 9 UN	
	8	In	* SL26 I 8 UN	
SL 40	16	In	SL40 I 16 UN	SR - SL40 - ...
	14	In	SL40 I 14 UN	
	12	In	SL40 I 12 UN	
	10	In	SL40 I 10 UN	

* Cannot be used with Toolholder SR17- ... -SL26-2

For Toolholders see pages B03-8 and 9

WHIT BSW, BSF, BSP

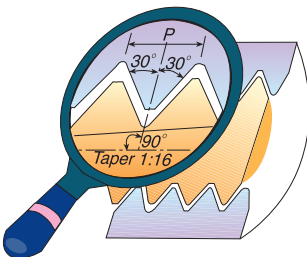


Same insert for External and Internal thread

Insert size	Pitch TPI	Ordering code	Toolholder
SL 26	14	SL 26 - 14 W	SR - SL26 - ...
	11	SL 26 - 11 W	
SL 40	14	SL 40 - 14 W	SR - SL40 - ...
	11	SL 40 - 11 W	

For Toolholders see pages B03-8 and 9

NPT



Conical pipe thread inserts are one-sided and may be used for both External and Internal threading

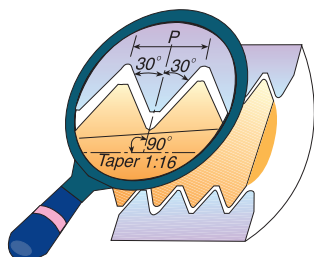
Insert size	Pitch TPI	Ordering code	Toolholder
SL 26	14	SL 26 - 14 NPT	SR - SL26 - ...
	11.5	* SL 26 - 11.5 NPT	

* Cannot be used with Toolholder SRT17-...-SL26-2

For Toolholders see pages B03-8 and 9

For carbide grade and cutting speed see page B12-6

NPTF



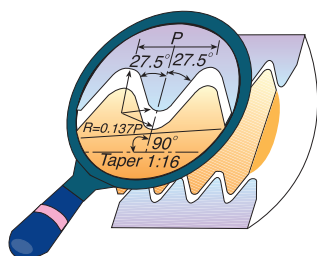
Conical pipe thread inserts are one-sided and may be used for both External and Internal threading

Insert size	Pitch TPI	Ordering code	Toolholder
SL 26	14	SL 26 - 14 NPTF	SR - SL26 - ...
	11.5	* SL 26 - 11.5 NPTF	

* Cannot be used with Toolholder SRT17-...-SL26-2

For Toolholders see pages B03-8 and 9

BSPT



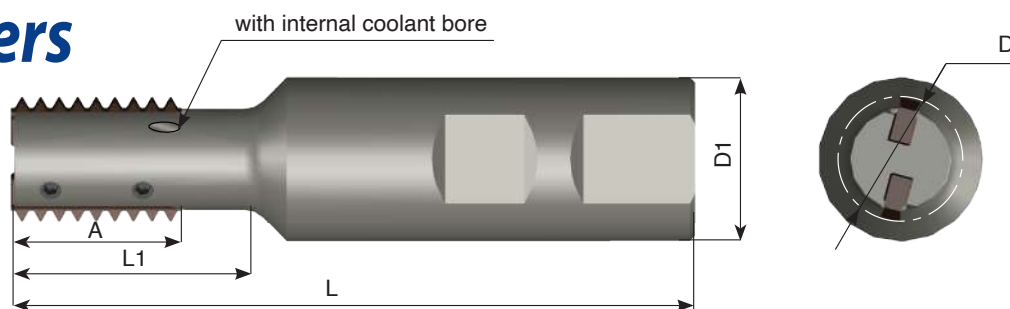
Conical pipe thread inserts are one-sided and may be used for both External and Internal threading

Insert size	Pitch TPI	Ordering code	Toolholder
SL 26	14	SL 26 - 14 BSPT	SR - SL26 - ...
	11	* SL 26 - 11 BSPT	

* Cannot be used with Toolholder SRT17-...-SL26-2

For Toolholders see pages B03-8 and 9

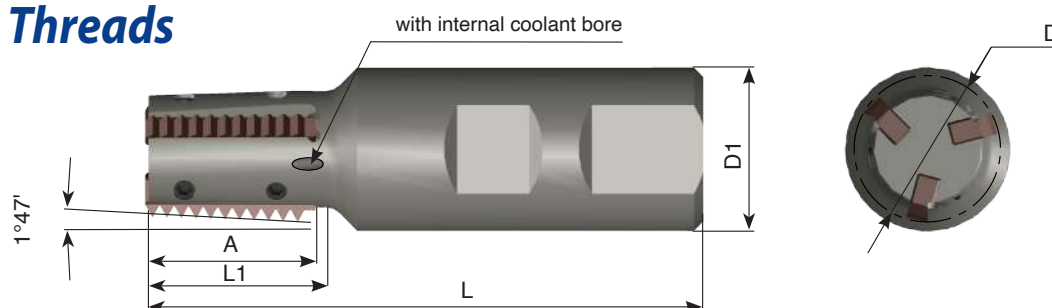
Toolholders



Ordering Code	Insert size=A	D	D1	L	L1	No. of Inserts	Screw	Key
* SR17-20-27-SL26-2	SL 26	17.0	20.0	95	27	2	S4P	K08P
* SR17-20-36-SL26-2		17.0	20.0	105	36	2	S4P	K08P
SR17-27-SL26-2		17.0	25.0	95	27	2	S4P	K08P
SR17-36-SL26-2		17.0	25.0	105	36	2	S4P	K08P
SR19-27-SL26-2		19.0	25.0	95	27	2	S4P	K08P
SR19-40-SL26-2		19.0	25.0	110	40	2	S4P	K08P
SR20-27-SL26-3		20.5	25.0	95	27	3	S4P	K08P
SR20-40-SL26-3		20.5	25.0	110	40	3	S4P	K08P
SR22-28-SL26-3		22.0	25.0	95	28	3	S4P	K08P
SR22-42-SL26-3		22.0	25.0	110	42	3	S4P	K08P
SR22-55-SL26-2		22.0	25.0	125	55	2	S4P	K08P
SR30-80-SL26-3		30.0	25.0	150	80	3	S4P	K08P
SR22-42-SL40-3	SL 40	22.0	25.0	110	42	3	S4P	K08P
SR22-65-SL40-2		22.0	25.0	135	65	2	S4P	K08P
SR30-42-SL40-4		30.0	32.0	125	42	4	S4P	K08P
SR30-80-SL40-3		30.0	32.0	160	80	3	S4P	K08P

* Straight shank Toolholder

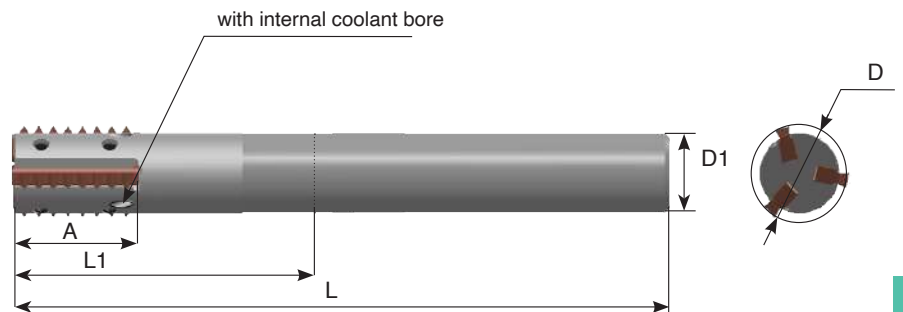
Toolholders for Conical Threads



Ordering Code	Insert size=A	D	D1	L	L1	No. of Inserts	Screw	Key
* SR T 17-20-27-SL26-2	SL 26	17.0	20.0	95	27	2	S4P	K08P
SR T 17-27-SL26-2		17.0	25.0	95	27	2	S4P	K08P
SR T 22-27-SL26-3		22.0	25.0	95	27	3	S4P	K08P
SR T 27-27-SL26-4		27.0	25.0	95	27	4	S4P	K08P

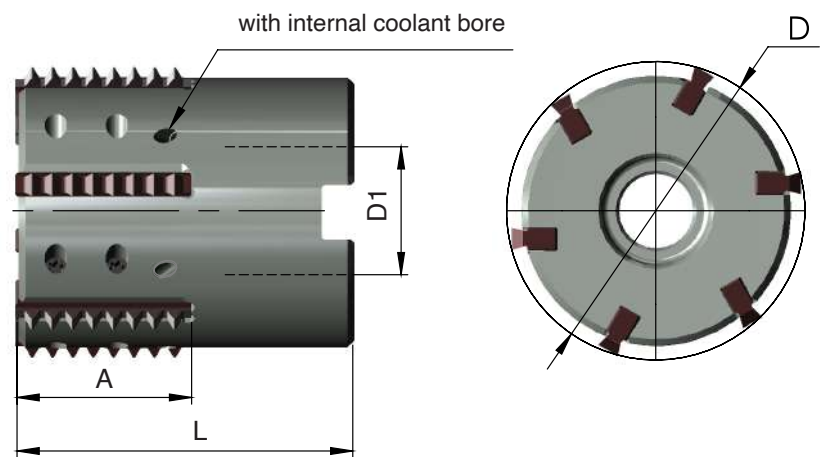
* Straight shank Toolholder

Carbide Shank Toolholders



Ordering Code	Insert size=A	D	D1	L	L1	No. of Inserts	Screw	Key
SR 19-70-SL26-2 C	SL 26	19.0	16.0	135	70	2	S4P	K08P
SR 20-70-SL26-3 C		20.5	16.0	135	70	3	S4P	K08P

Multi-Insert Toolholders



Ordering Code	Insert size=A	D	D1	L	No. of Inserts	Screw	Key
SR 36-16-SL26-5	SL 26	36.0	16	50	5	S4P	K08P
SR 44-22-SL26-6		44.0	22	50	6	S4P	K08P
SR 44-22-SL40-6	SL 40	44.0	22	65	6	S4P	K08P



Demonstration

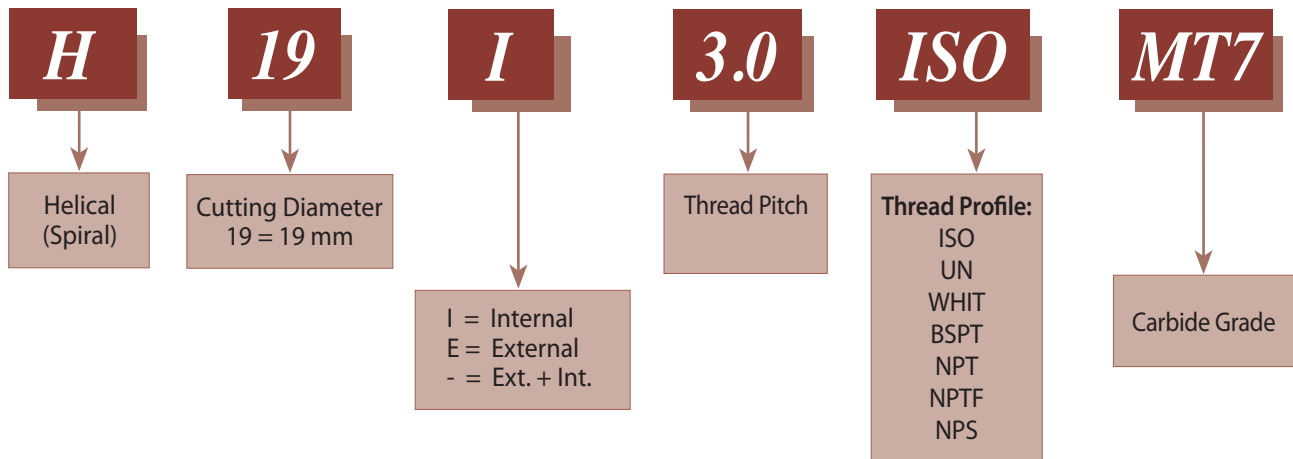
Advantages of Spiral Mill-Thread Tools

- 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 1 to 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, end milling roughing and finishing.
- Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, which can be used with all materials.

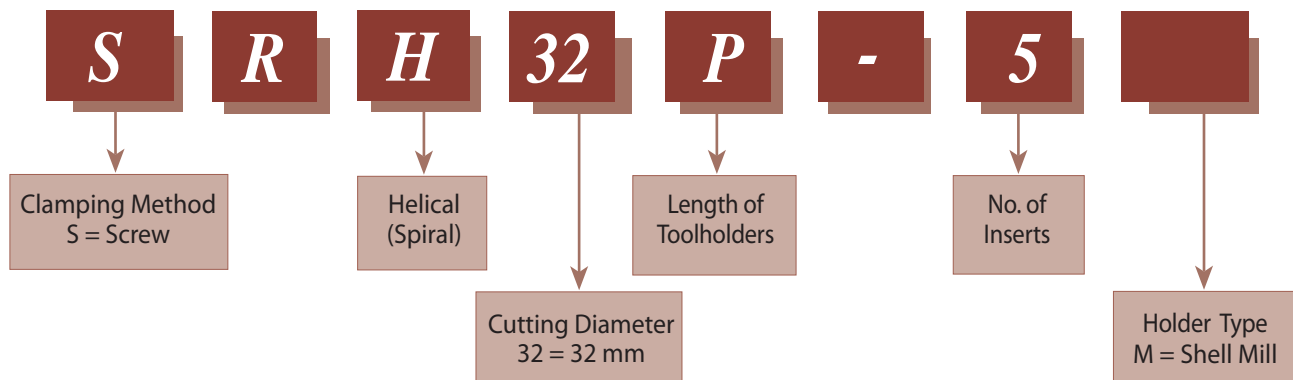
Contents:	Page:	Contents:	Page:
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Whitworth	5	Toolholders	9-10
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Product Identification - Ordering Codes

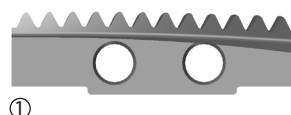
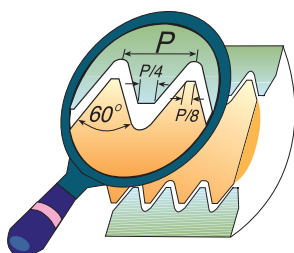
Spiral Mill - Thread Inserts



Spiral Mill - Thread Toolholders

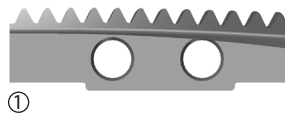
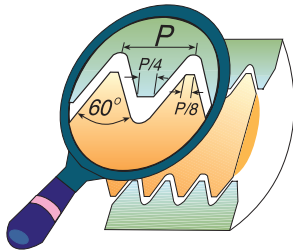


ISO



Insert Size	Fig.	Pitch mm	Ext./ Int.	M coarse	M fine	Ordering code	Toolholder
H13	1	1.0	Int.		≥ 15	H13 I 1.0 ISO	SRH13...
		1.5	Int.		≥ 16	H13 I 1.5 ISO	
		2.0	Int.	M16	≥ 17	H13 I 2.0 ISO	
H15	1	1.0	Int.		≥ 17	H15 I 1.0 ISO	SRH15...
		1.5	Int.		≥ 18	H15 I 1.5 ISO	
		2.0	Int.		≥ 19	H15 I 2.0 ISO	
		2.5	Int.	M18	≥ 20	H15 I 2.5 ISO	
H17	1	1.0	Int.		≥ 19	H17 I 1.0 ISO	SRH17...
		1.5	Int.		≥ 20	H17 I 1.5 ISO	
		2.0	Int.		≥ 21	H17 I 2.0 ISO	
		2.5	Int.	M20, M22	≥ 22	H17 I 2.5 ISO	
H19	1	1.5	Int.		≥ 22	H19 I 1.5 ISO	SRH19...
		2.0	Int.		≥ 23	H19 I 2.0 ISO	
		3.0	Int.	M24, M27	≥ 25	H19 I 3.0 ISO	
H23	2	1.0	Ext.			H23 E 1.0 ISO	SRH23...
		1.0	Int.		≥ 25	H23 I 1.0 ISO	
		1.5	Ext.			H23 E 1.5 ISO	
		1.5	Int.		≥ 26	H23 I 1.5 ISO	
		2.0	Ext.			H23 E 2.0 ISO	
		2.0	Int.		≥ 27	H23 I 2.0 ISO	
		3.0	Ext.			H23 E 3.0 ISO	
		3.0	Int.		≥ 29	H23 I 3.0 ISO	
		3.5	Int.	M30, M33	≥ 30	H23 I 3.5 ISO	
H28	2	4.0	Int.	M36, M39	≥ 31	H23 I 4.0 ISO	SRH28...
		4.0	Int.		≥ 40	H28 I 4.0 ISO	
H32	2	1.0	Int.		≥ 34	H32 I 1.0 ISO	SRH32...
		1.5	Ext.			H32 E 1.5 ISO	
		1.5	Int.		≥ 35	H32 I 1.5 ISO	
		2.0	Ext.			H32 E 2.0 ISO	
		2.0	Int.		≥ 36	H32 I 2.0 ISO	
		3.0	Ext.			H32 E 3.0 ISO	
		3.0	Int.		≥ 38	H32 I 3.0 ISO	
		3.5	Int.		≥ 39	H32 I 3.5 ISO	
		4.0	Ext.			H32 E 4.0 ISO	
		4.0	Int.	M39	≥ 40	H32 I 4.0 ISO	
H45	2	4.5	Int.	M42, M45	≥ 41	H32 I 4.5 ISO	SRH32...
		5.0	Int.	M48	≥ 42	H32 I 5.0 ISO	
		1.5	Ext.			H45 E 1.5 ISO	
		1.5	Int.		≥ 48	H45 I 1.5 ISO	
		2.0	Ext.			H45 E 2.0 ISO	
		2.0	Int.		≥ 49	H45 I 2.0 ISO	
		3.0	Int.		≥ 51	H45 I 3.0 ISO	
		3.5	Int.		≥ 52	H45 I 3.5 ISO	
		4.0	Int.		≥ 53	H45 I 4.0 ISO	
		4.5	Int.		≥ 54	H45 I 4.5 ISO	
H63	2	5.0	Int.	M52	≥ 55	H45 I 5.0 ISO	SRH45...
		5.5	Int.	M56, M60	≥ 56	H45 I 5.5 ISO	
		6.0	Int.	M64, M68	≥ 57	H45 I 6.0 ISO	
		1.5	Int.		≥ 66	H63 I 1.5 ISO	
		2.0	Int.		≥ 67	H63 I 2.0 ISO	
		3.0	Int.		≥ 69	H63 I 3.0 ISO	
		4.0	Int.		≥ 71	H63 I 4.0 ISO	
		6.0	Int.		≥ 75	H63 I 6.0 ISO	

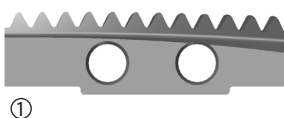
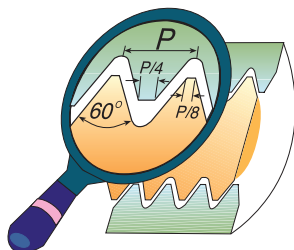
UN



Insert Size	Fig.	Pitch TPI	Ext./ Int.	UN	UNC	UNF	UNS	Ordering code	Toolholder
H13	1	16	Int.	5/8, 11/16				H13 I 16 UN	SRH13...
		14	Int.				5/8	H13 I 14 UN	
		12	Int.	11/16				H13 I 12 UN	
H15	1	16	Int.			3/4		H15 I 16 UN	SRH15...
		14	Int.				3/4	H15 I 14 UN	
		12	Int.	3/4, 13/16				H15 I 12 UN	
		10	Int.		3/4		7/8, 1	H15 I 10 UN	
H17	1	20	Int.	1 1/16, 1 1/8		*13/16 - 1		H17 I 20 UN	SRH17...
		16	Int.	13/16 - 1				H17 I 16 UN	
		14	Int.			7/8, 1		H17 I 14 UN	
		12	Int.	7/8				H17 I 12 UN	
H19	1	9	Int.		7/8			H17 I 9 UN	SRH19...
		12	Int.	15/16		1		H19 I 12 UN	
H23	2	8	Int.	1 1/16, 1 1/8	1			H19 I 8 UN	SRH23...
		32	Int.	1			1 - 1 1/4	H23 I 32 UN	
		24	Int.					H23 I 24 UN	
		20	Ext.					H23 E 20 UN	
		20	Int.	1 1/16 - 1 5/16				H23 I 20 UN	
		18	Ext.					H23 E 18 UN	
		18	Int.				1	H23 I 18 UN	
		16	Ext.					H23 E 16 UN	
		16	Int.	1 1/16 - 1 5/16				H23 I 16 UN	
		14	Ext.					H23 E 14 UN	
		14	Int.				≥1 1/8	H23 I 14 UN	
		12	Ext.					H23 E 12 UN	
		12	Int.	1 1/16 - 1 3/16		1 1/8		H23 I 12 UN	
		10	Ext.					H23 E 10 UN	
		10	Int.				≥1 1/8	H23 I 10 UN	
H28	2	8	Ext.					H23 E 8 UN	SRH28...
		8	Int.	1 3/16 - 1 5/16				H23 I 8 UN	
		7	Ext.					H23 E 7 UN	
		7	Int.		1 1/4			H23 I 7 UN	
		12	Int.	1 5/16		1 1/4, 1 3/8		H28 I 12 UN	
		8	Int.	1 3/8 - 1 7/16				H28 I 8 UN	
		6	Int.	1 7/16, 1 9/16	1 3/8, 1 1/2			H28 I 6 UN	
H32	2	24	Ext.				≥1 3/8	H32 E 24 UN	SRH32...
		20	Ext.					H32 E 20 UN	
		20	Int.	≥1 3/8				H32 I 20 UN	
		18	Ext.					H32 E 18 UN	
		18	Int.				≥1 3/4	H32 I 18 UN	
		16	Ext.					H32 E 16 UN	
		16	Int.	1 3/8 - 1 7/8				H32 I 16 UN	
		12	Ext.					H32 E 12 UN	
		12	Int.	1 7/16 - 1 7/8		1 1/2		H32 I 12 UN	
		8	Ext.					H32 E 8 UN	
		8	Int.	1 1/2 - 2				H32 I 8 UN	
		6	Ext.					H32 E 6 UN	
H40	2	6	Int.	1 5/8 - 1 7/8				H32 I 6 UN	SRH40...
		5	Int.		1 3/4			H32 I 5 UN	
		4.5	Int.	1 15/16, 2	2			H40 I 4.5 UN	

*Only UNEF

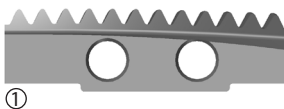
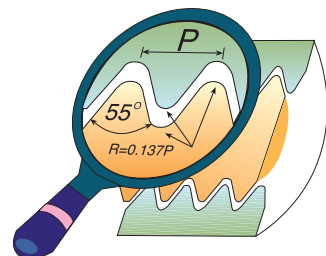
UN



Insert Size	Fig.	Pitch TPI	Ext./ Int.	UN	UNC	UNF	UNS	Ordering code	Toolholder
H45	2	16	Int.	1 15/16 - 2 1/2			2 1/16 - 2	H45 I 16 UN	SRH45...
		12	Int.	1 15/16 - 2 5/8				H45 I 12 UN	
		8	Int.	2 1/8 - 2 5/8				H45 I 8 UN	
		6	Int.	2 1/8 - 2 3/4				H45 I 6 UN	
		4.5	Int.		2 1/4			H45 I 4.5 UN	
H63	2	4	Int.		2 1/2 - 2 3/4			H45 I 4 UN	SRH63...
		16	Int.	≥ 2 5/8				H63 I 16 UN	
		12	Int.	≥ 2 3/4				H63 I 12 UN	
		8	Int.	≥ 2 3/4				H63 I 8 UN	
		6	Int.	≥ 2 7/8				H63 I 6 UN	
		4	Int.		≥ 3			H63 I 4 UN	

Whitworth

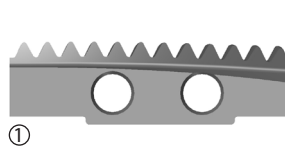
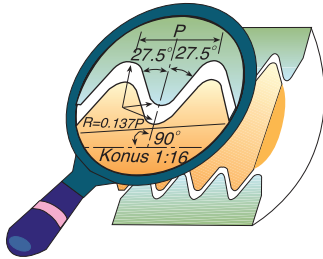
Same insert for internal and external thread



Insert Size	Fig.	Pitch TPI	Ordering code	Thread Size	Toolholder
H13	1	19	H13- 19 W	G 3/8	SRH13...
H15	1	14	H15- 14 W	G 1/2	SRH15...
H17	1	14	H17- 14 W	G 1/2 - 5/8	SRH17...
		11	H17- 11 W	G ≥ 1"	
H19	1	14	H19- 14 W	G 3/4 - 7/8	SRH19...
		11	H19- 11 W	G ≥ 1"	
H23	2	14	H23-14 W	Int. G 7/8" Ext. ≥ G 1/2"	SRH23...
		11	H23-11 W	≥ G 1"	
H32	2	14	H32-14 W	Ext. ≥ G 1/2"	SRH32...
		11	H32-11 W	Int. ≥ G 1 1/8" Ext. ≥ G 1"	
H45	2	11	H45-11 W	Int. ≥ G 1 3/4" Ext. ≥ G 1"	SRH45...
H63	2	11	H63-11 W	Int. ≥ G 2 1/2" Ext. ≥ G 1"	SRH63...

BSPT

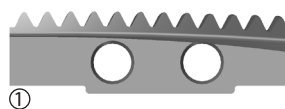
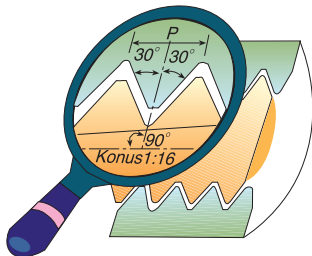
Same insert for internal and external thread



Insert Size	Fig.	Pitch TPI	Ordering code	Thread Size	Toolholder
H13	1	19	H13-19 BSPT	$\frac{3}{8}$	SRH13...
H15	1	14	H15-14 BSPT	$\frac{1}{2} - \frac{3}{4}$	SRH15...
H17	1	14	H17-14 BSPT	$\frac{1}{2} - \frac{3}{4}$	SRH17...
H23	2	11	H23-11 BSPT	$\geq 1"$	SRH23...
H32	2	11	H32-11 BSPT	Int. $\geq 1\frac{1}{8}"$ Ext. $\geq 1"$	SRH32...
H45	2	11	H45-11 BSPT	Int. $\geq 1\frac{3}{4}"$ Ext. $\geq 1"$	SRH45...
H63	2	11	H63-11 BSPT	Int. $\geq 2\frac{1}{2}"$ Ext. $\geq 1"$	SRH63...

NPT

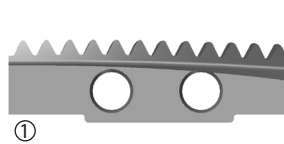
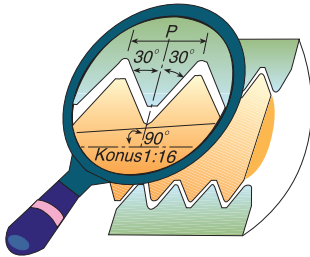
Same insert for internal and external thread



Insert Size	Fig.	Pitch TPI	Ordering code	Thread Size	Toolholder
H13	1	18	H13-18 NPT	$\frac{3}{8}$	SRH13...
H15	1	14	H15-14 NPT	$\frac{1}{2} - \frac{3}{4}$	SRH15...
H17	1	14	H17-14 NPT	$\frac{1}{2} - \frac{3}{4}$	SRH17...
H23	2	11.5	H23-11.5 NPT	1"-2"	SRH23...
H32	2	14	H32-14 NPT	Ext. $\frac{1}{2}" - \frac{3}{4}"$	SRH32...
		11.5	H32-11.5 NPT	Int. $1\frac{1}{4}" - 2"$ Ext. 1" - 2"	
H45	2	11.5	H45-11.5 NPT	Int. $\geq 2"$ Ext. $\geq 1"$	SRH45...
		8	H45- 8 NPT	$\geq 2\frac{1}{2}"$	
H63	2	11.5	H63-11.5 NPT	Ext. 1-2"	SRH63...
		8	H63- 8 NPT	$\geq 3"$	

NPTF

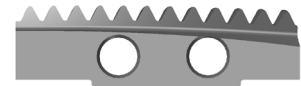
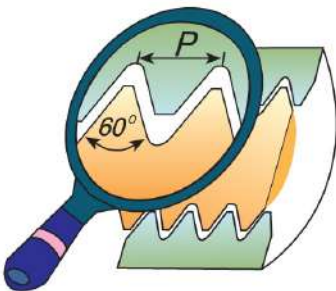
Same insert for internal and external thread



Insert Size	Fig.	Pitch TPI	Ordering code	Thread Size	Toolholder
H13	1	18	H13-18 NPTF	3/8	SRH13...
H15	1	14	H15-14 NPTF	1/2 - 3/4	SRH15...
H17	1	14	H17-14 NPTF	1/2 - 3/4	SRH17...
H23	2	11.5	H23-11.5 NPTF	1"-2"	SRH23...
H32	2	11.5	H32-11.5 NPTF	Int. 1 1/4"-2" Ext. 1" -2"	SRH32...

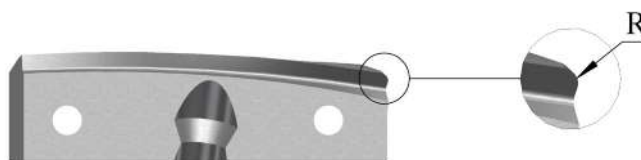
NPS

Same insert for internal and external thread



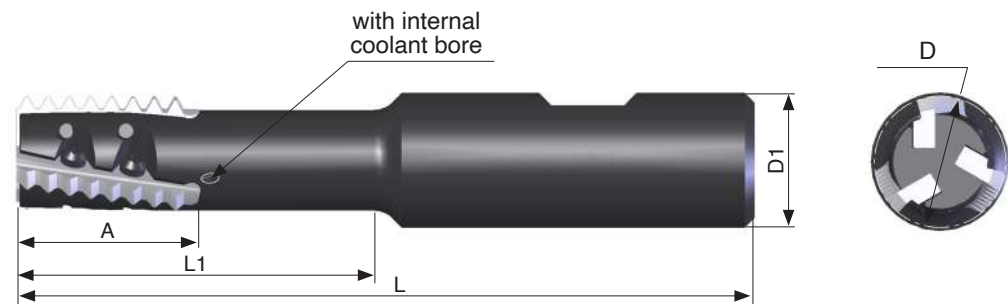
Insert Size	Pitch TPI	Ordering code	Thread Size	Toolholder
H13	18	H13- 18 NPS	3/8	SRH13...
H15	14	H15- 14 NPS	1/2 - 3/4	SRH15...
H17	14	H17- 14 NPS	1/2 - 3/4	SRH17...

Spiral Finishing Inserts



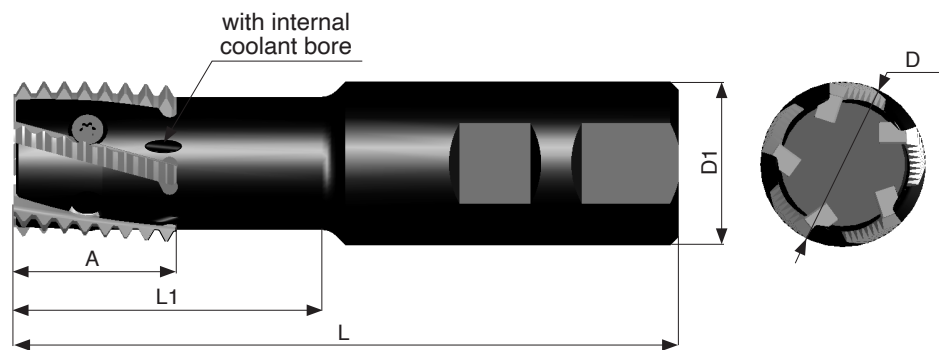
Insert Size	R	Ordering code	Toolholder
H23	0.2	H23 F R 0.2	SRH23...
	0.5	H23 F R 0.5	
	1.0	H23 F R 1.0	
H32	0.2	H32 F R 0.2	SRH32...
	0.5	H32 F R 0.5	
	1.0	H32 F R 1.0	
H45	0.2	H45 F R 0.2	SRH45...
	0.5	H45 F R 0.5	
	1.0	H45 F R 1.0	
	1.5	H45 F R 1.5	
	2.0	H45 F R 2.0	
H63	0.2	H63 F R 0.2	SRH63...
	0.5	H63 F R 0.5	
	1.0	H63 F R 1.0	
	1.5	H63 F R 1.5	
	2.0	H63 F R 2.0	

Toolholders

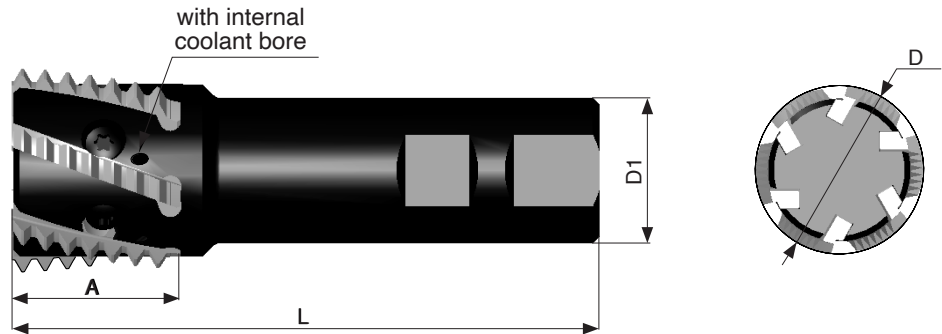


Ordering Code	Insert Type	Insert size A	D	D1	L	L1	No. of Inserts	Screw	Key
SRH13S-1	H13	27	13	20	80	26	1	S13	K11
SRH13-1	H13	27	13	20	90	35	1	S13	K11
SRH15-1	H15	27	15	20	95	40	1	S15	K11
* SRH17-2	H17	27	17	20	85	30	2	S17	K11
* SRH17J-2	H17	27	17	20	100	45	2	S17	K11
SRH19-2	H19	27	19	20	85	30	2	S19	K11
SRH19J-2	H19	27	19	20	110	55	2	S19	K11
SRH19-3	H19	27	19	20	85	30	3	S19	K11
SRH19J-3	H19	27	19	20	110	55	3	S19	K11

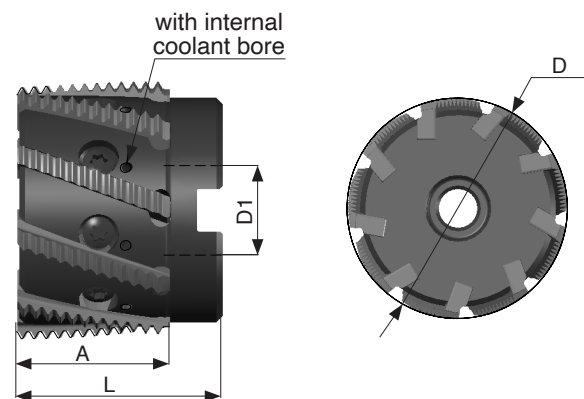
* When using NPT, NPTF, BSPT inserts the cutting diameter D = 18 mm



Ordering Code	Insert Type	Insert size A	D	D1	L	L1	No. of Inserts	Screw	Key
SRH23-2	H23	27	23	25	110	50	2	S23	K21
SRH23M-2	H23	27	23	25	150	75	2	S23	K21
SRH28-3	H28	32	28	32	150	75	3	S32S	K22
SRH32-5	H32	32	32	32	130	60	5	S32	K22
SRH32P-5	H32	32	32	32	180	90	5	S32	K22



Ordering Code	Insert Type	Insert size A	D	D1	L	No. of Inserts	Screw	Key
SRH40-4	H40	37	40	32	180	4	S45S	K40
SRH45-6	H45	37	45	32	130	6	S45	K40



Ordering Code	Insert Type	Insert size A	D	D1	L	No. of Inserts	Screw	Key
SRH32-5M	H32	32	32	16	52	5	S32S	K22
SRH45-6M	H45	37	45	22	60	6	S45S	K40
SRH63-9	H63	38	63	22	50	9	S63	K40

Special Tools

In addition to standard products, CPT 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.



Case Studies

Case Study no. 1

Thread	M56x1.5
Internal/External	Internal
Thread Length	33.0
Raw Material	Ductile Iron
Cutting Speed – Vc	130 m/min
Tooth Load – Fz	0.15 mm/tooth
Toolholder	SRH45 – 6
Insert	H45 I 1.5 ISO MT7
Result	600 pcs with 0.02 offset (Competitor – 40 pcs with 0.15 offset)



Case Study no. 2

Application	Grooves Milling
Internal/External	External
Raw Material	Cast Steel
Cutting Speed – Vc	195 m/min
Tooth Load – Fz	0.10 mm/tooth
Toolholder	SRH63 – 9
Insert	Taylor Made H63
Result	1350 pcs (Competitor – 540 pcs)





Demonstration

Mill-Thread Inserts and Toolholders for machining deep threads

- Improved productivity due to multi-insert toolholders.
- Partial Profile, standard or U-Type inserts for a wide range of threads.
- Inserts with three cutting edges, reduces tooling costs.
- Low cutting resistance due to the single point inserts.
- Holder allows for a long overhang and includes internal coolant.
- Same insert and toolholder for both external and internal thread.

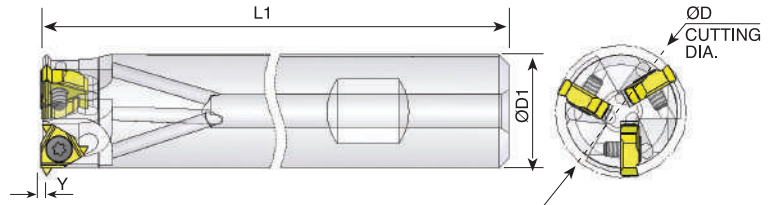
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Standard Toolholders and Inserts
U-Type Toolholders and Inserts

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D-Thread Mill-Thread Inserts & Toolholders for machining deep threads



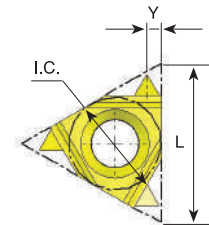
Ordering Code	Insert Size		Y	D	D1	L1	No. of Inserts	Insert Screw	Torx Key
	L	I.C							
SR0023Q11	11	1/4	1	23.5	20	190	3	SE11	K11

Partial 60° Size 11

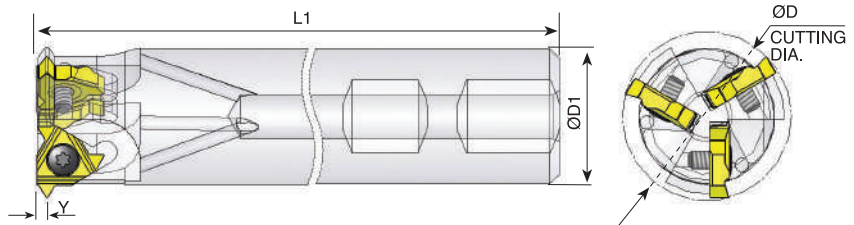
Ordering Code		Pitch	
		mm	TPI
11 60D	INT.	1.0 - 2.0	24 - 12
	EX.	0.75 - 1.5	32 - 14

Partial 55° Size 11

Ordering Code		Pitch TPI
11 55D	INT./EX.	24 - 14



Coated Grade: BMA



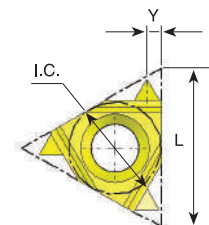
Ordering Code	Insert Size		Y	D	D1	L1	No. of Inserts	Insert Screw	Torx Key
	L	I.C							
SR0031R16	16	3/8	1.8	31	25	225	3	SE16	K16

Partial 60° Size 16

Ordering Code		Pitch	
		mm	TPI
16 60D	INT.	2.5 - 3.5	10 - 7
	EX.	2.0 - 3.0	12 - 8

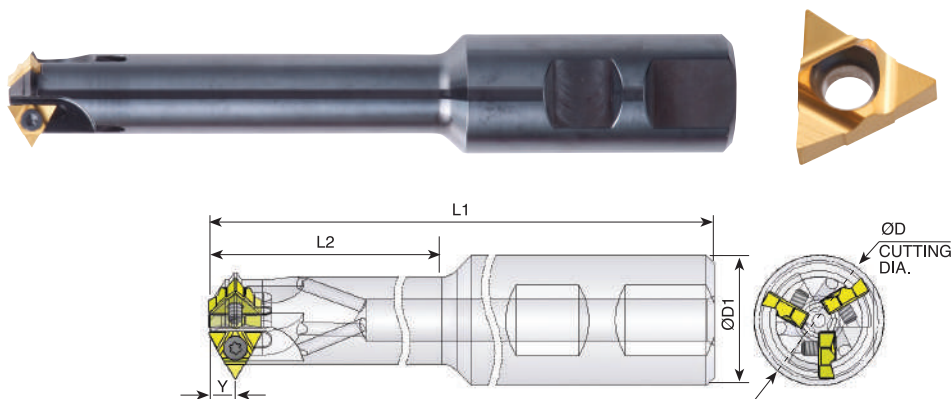
Partial 55° Size 16

Ordering Code		Pitch TPI
16 55D	INT./EX.	12 - 8



Coated Grade: BMA

D-Thread Mill-Thread Inserts & Toolholders for machining deep threads



Ordering Code	Insert Size		Y	D	D1	L1	L2	No. of Inserts	Insert Screw	Torx Key
	L	I.C								
*SR0015M11U	11U	1/4U	5	14.8	16	150	55	1	SE11	K11
**SR0021M11U	11U	1/4U	5	20.6	25	150	65	2	SE11	K11
SR0023M11U	11U	1/4U	5	23	25	150	88	3	SE11	K11

* Pitch limitations: for partial 60° - INT. - 10-9 TPI, EX. -12 - 10 TPI; for partial 55° - 12 - 9 TPI

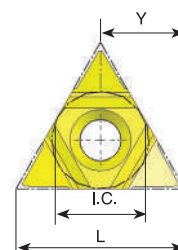
** Pitch limitations: for partial 60° - INT. - 10-8 TPI, EX. -12 - 9 TPI; for partial 55° - 12 - 9 TPI

Partial 60° Size 11U

Ordering Code		Pitch	
		mm	TPI
11U 60D	INT.	2.5 - 4.0	10 - 6
	EX.	2.0 - 3.0	12 - 8
11U 60D-18-12	INT.	1.5 - 2.0	18 - 12
	EX.	1.25 - 1.75	20 - 14

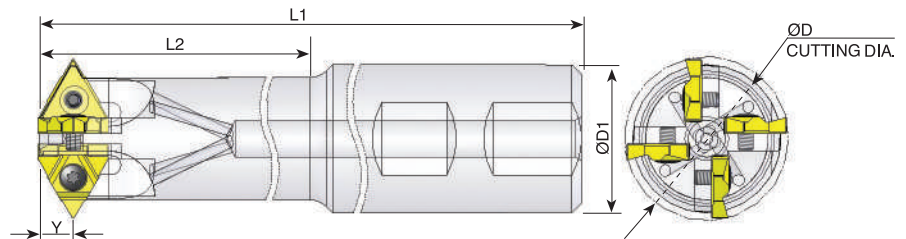
Partial 55° Size 11U

Ordering Code		Pitch TPI
11U 55D	INT./EX.	12 - 7

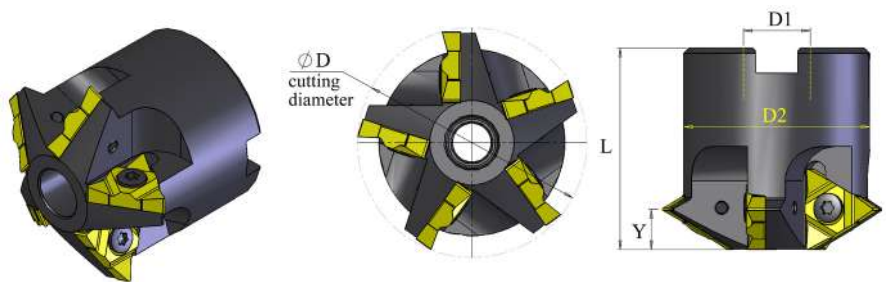


Coated Grade: BMA

D-Thread Mill-Thread Inserts & Toolholders for machining deep threads



Ordering Code	Insert Size		Y	D	D1	L1	L2	No. of Inserts	Insert Screw	Torx Key
	L	I.C								
SR0035R16U	16U	3/8U	7.6	35.5	32	220	155	4	SE16	K16



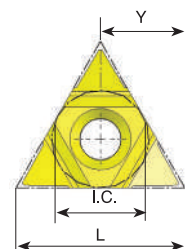
Ordering Code	Insert Size		Y	D	D1	D2	L	No. of Inserts	Insert Screw	Torx Key
	L	I.C								
SR0043B16U-5	16U	3/8U	7.6	43.4	16	35.3	38.1	5	SE16	K16

Partial 60° Size 16U

Ordering Code		Pitch	
		mm	TPI
16U 60D	INT.	4.0 - 6.0	6 - 4
	EX.	3.0 - 5.0	8 - 5
16U 60D-16-8	INT.	1.5 - 3.0	16 - 8
	EX.	1.5 - 2.5	18 - 10

Partial 55° Size 16U

Ordering Code		Pitch TPI
16U 55D	INT./EX.	6 - 4.5



Coated Grade: BMA



Demonstration

A Modular Line of Mill-Thread Toolholders

Contents:

Toolholders
Extensions

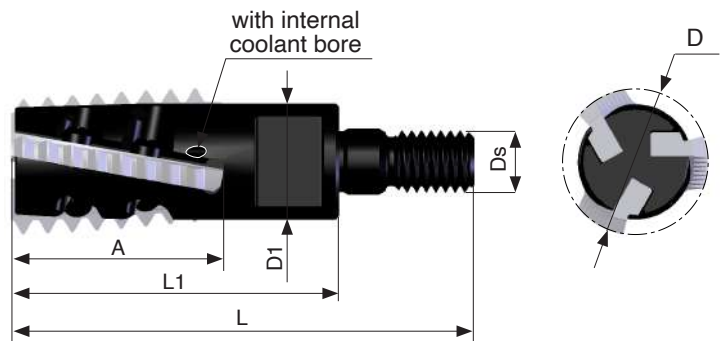
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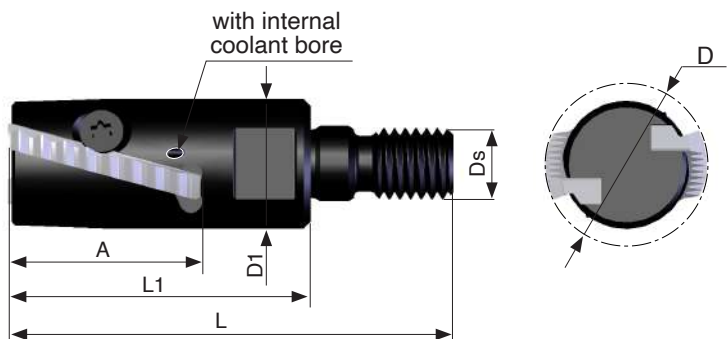
CPT presents a modular line of Mill-Thread toolholders

- CPT modular holders are ideal for deep reach applications.
- Unique clamping method enables optimal strength and indexability.
- Cost saving - Same shank can hold different heads.
- Toolholders with internal coolant bore.
- Screw connection allows long overhang.
- CPT standard thread milling inserts fit these toolholders.
- Different steel extensions are available.
- Toolholders are compatible with common toolholding systems.

Toolholders

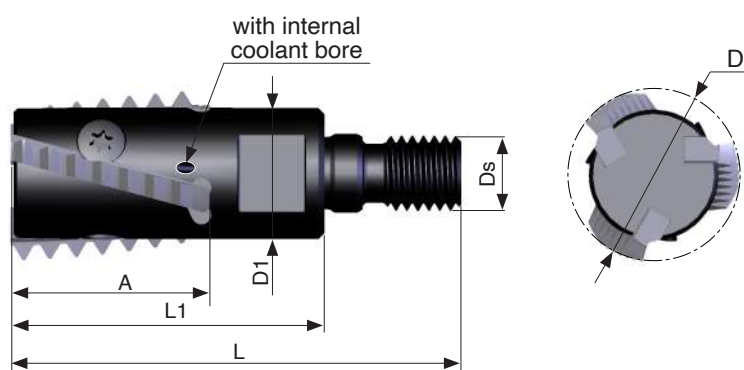


Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SRH19-3 S	H19	27	19	15	M8	42.5	60	3	S19	K11

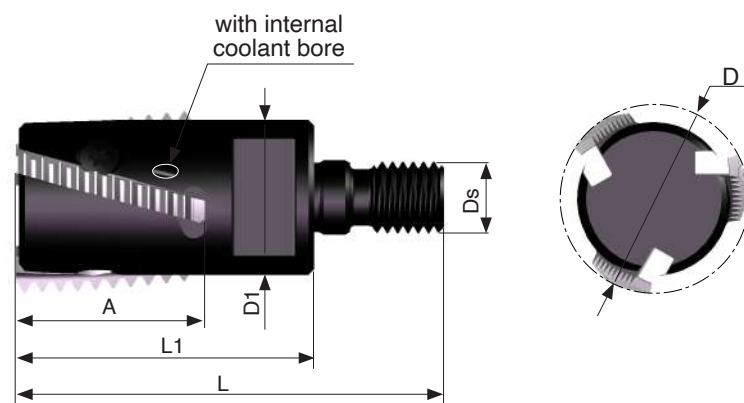


Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SRH23-2 S	H23	27	23	18	M10	42.5	62.5	2	S23	K16

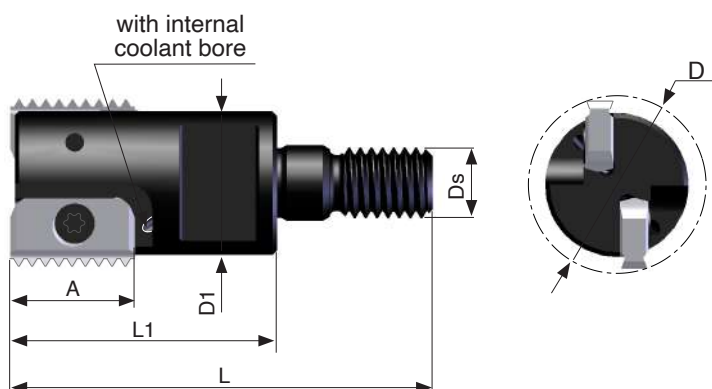
Deep Reach Mill-Thread



Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SRH28-3 S	H28	32	28	21	M12	50	72	3	S28	K16

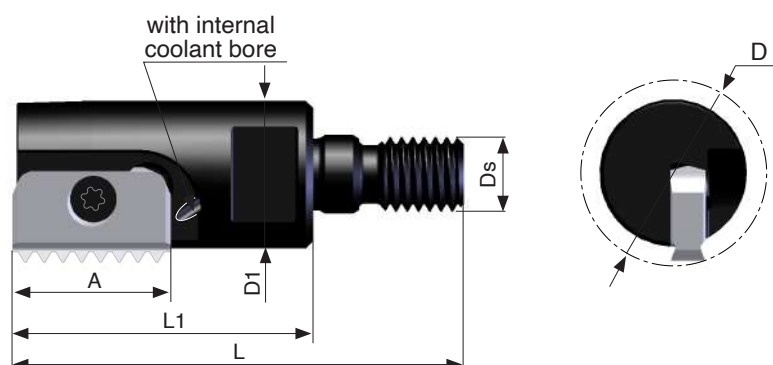


Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SRH32-3 S	H32	32	32	26	M12	50	72	3	S32S	K16

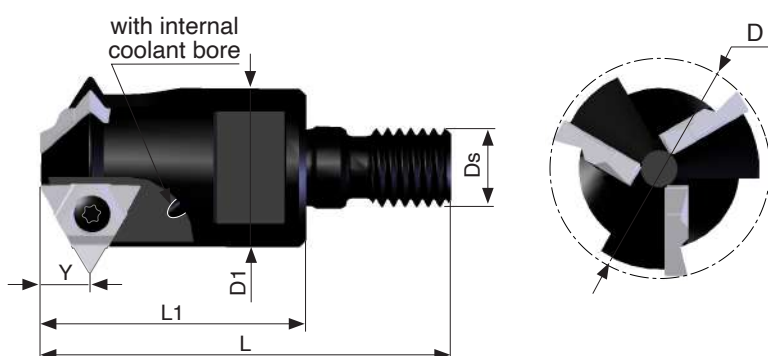


Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SR0020C14-2 S	MT14	14	20	16	M8	30.5	48	2	S14	K14

Toolholders

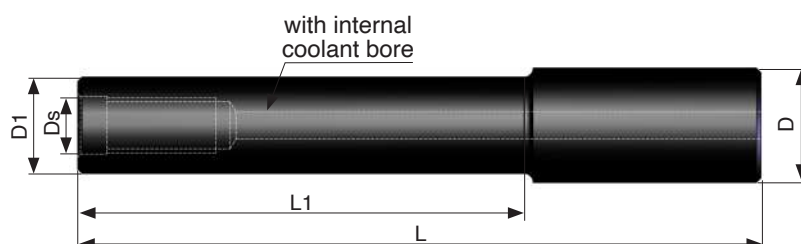


Ordering Code	Insert Type	Insert size A	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
SR0025D21-1 S	MT21	21	25	19.7	M10	40	60	1	S21	K21

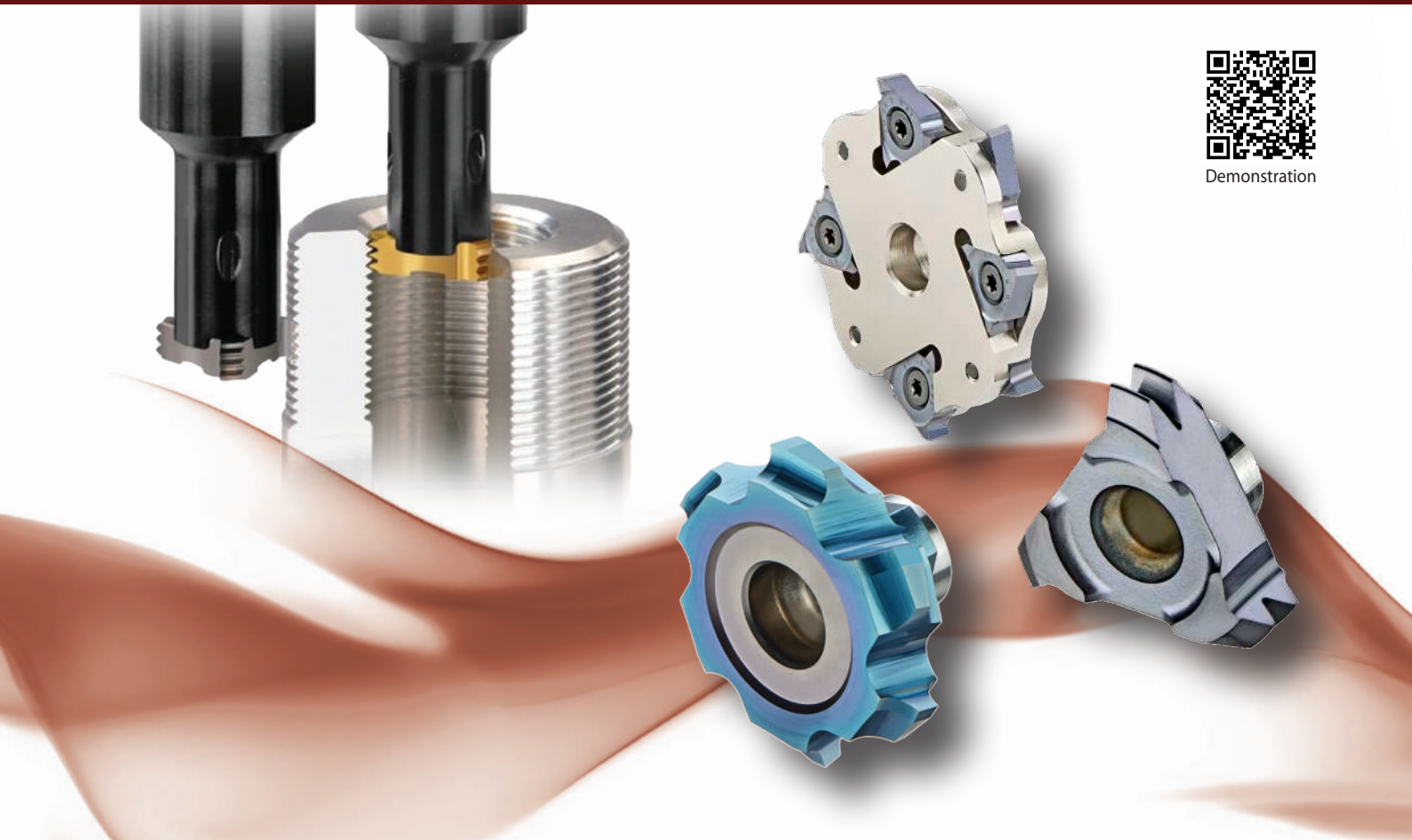


Ordering Code	Insert Type	Insert size		Y	D	D1	Ds	L1	L	No. of Inserts	Screw	Key
		L	I.C.									
SR0033D16U-3 S	16U	16U	3/8U	7.6	33	24	M12	40	60	3	S16	K16

Extensions



Ordering Code	D	D1	Ds	L	L1
E16 M08 L80	16	15	M08	80	30
E20 M10 L80	20	18	M10	80	30
E20 M10 L130	20	18	M10	130	80
E25 M12 L100	25	21	M12	100	50
E25 M12 L150	25	21	M12	150	100



Vertical milling indexable inserts and toolholders to perform a wide variety of threads, grooves, chamfers and more.

Advantages of CMT - Vertical Milling

- Ground profile inserts for high precision and excellent performance.
- Working at high machining parameters, with high surface quality.
- Solid and accurate clamping method enables full repeatability.
- Same insert for right-hand or left-hand threads.
- Toolholders include weldon shank and coolant bore.
- Chamfer inserts are also available.

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Introduction: CMT Vertical Milling

Product Identification

Inserts

Partial Profile 60° - ISO, UN

Partial Profile 60° - NPT

Partial Profile 55° - BSP(G), BSF, BSW

Full Profile - ISO

Full Profile - UN

G 55° BSW, BSF, BSP

Trapez - DIN 103

Acme

Round - DIN 405

Chamfering and Grooving

Chamfering, Grooving and Boring

Dovetail 45°

Groove Milling

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15-19

Face Milling and Finishing

Corner Rounding

Front and Back Corner Rounding

Toolholders

Steel Toolholders

Carbide Shank Toolholders

CMT Multi Insert Milling Cutters

Product Identification

Groove Milling

Chamfering

Partial Profile 60° - ISO, UN

Toolholders

Milling Cutter - Arbor

Milling Cutter - Shell Mill

Milling Cutter - Weldon Shank

Milling Cutter - Disc Milling

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CMT Vertical Milling

Advantages

- Ground profile inserts for high precision and excellent performance.
- Working at high machining parameters, with high surface quality.
- Solid and accurate clamping method enables full repeatability.
- Same insert and holder for right-hand or left-hand threads.
- Toolholders include weldon shank and coolant bore.

CMT Straight Flute Inserts

Carbide Grade: MT7

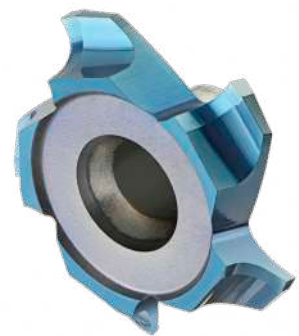
Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, covering a very wide range of materials.



CMT Spiral Multi Flute Inserts

- Multi flute: 4-8 cutting edges
- Spiral flute for smooth cutting

The new cutters are designed for large range of materials including hardened steel up to 62 HRC.



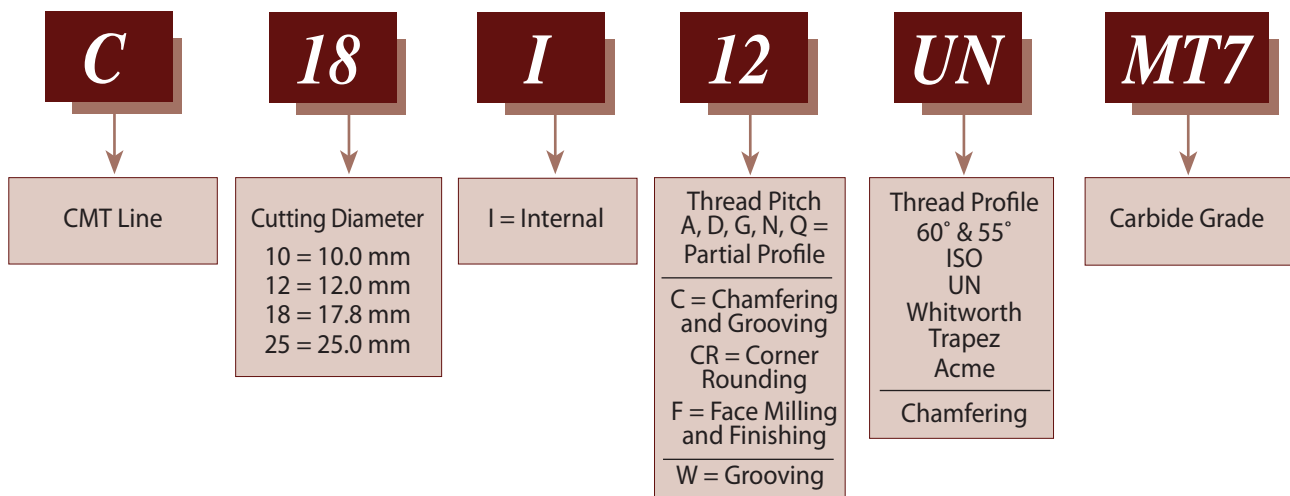
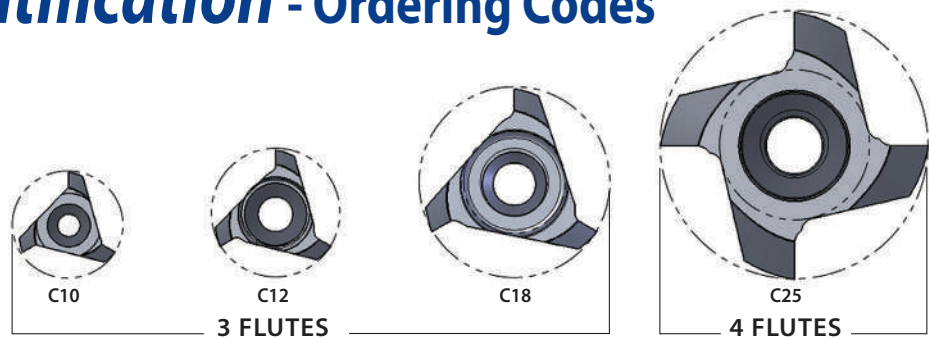
Advantages

- Longer tool life
- High material removal and higher feeds results increased productivity
- Excellent surface finish
- Reduced cycle time
- Low cutting forces due to the spiral multi flutes

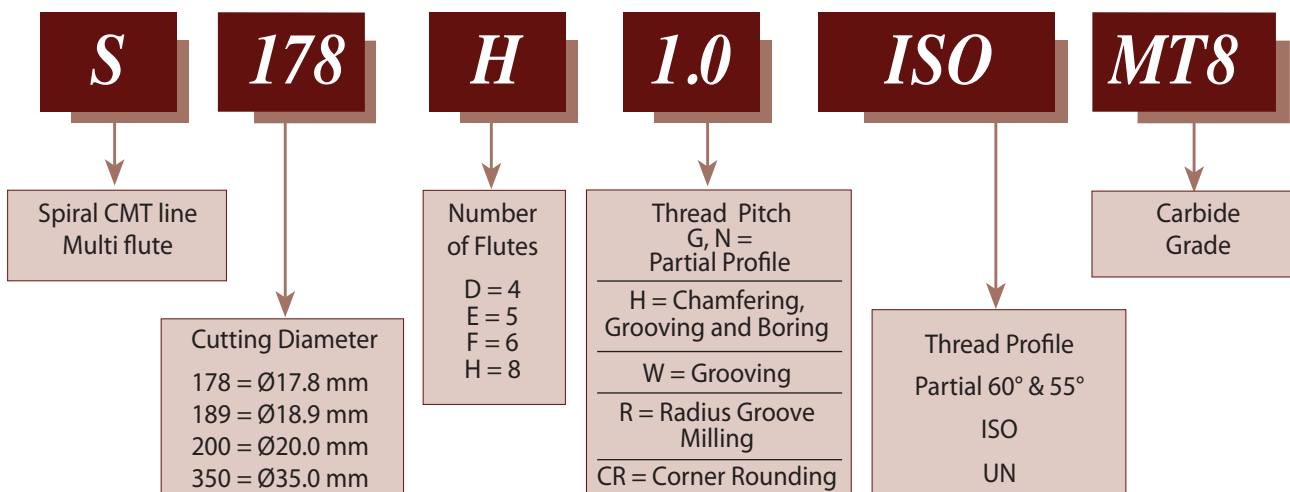
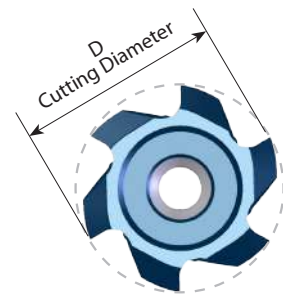
Carbide Grade: MT8

Sub Micron grade with advanced PVD triple coating (ISO K10-K20). Extremely high heat resistant and smooth cutting operation, high performance, for all machining conditions.

Product Identification - Ordering Codes

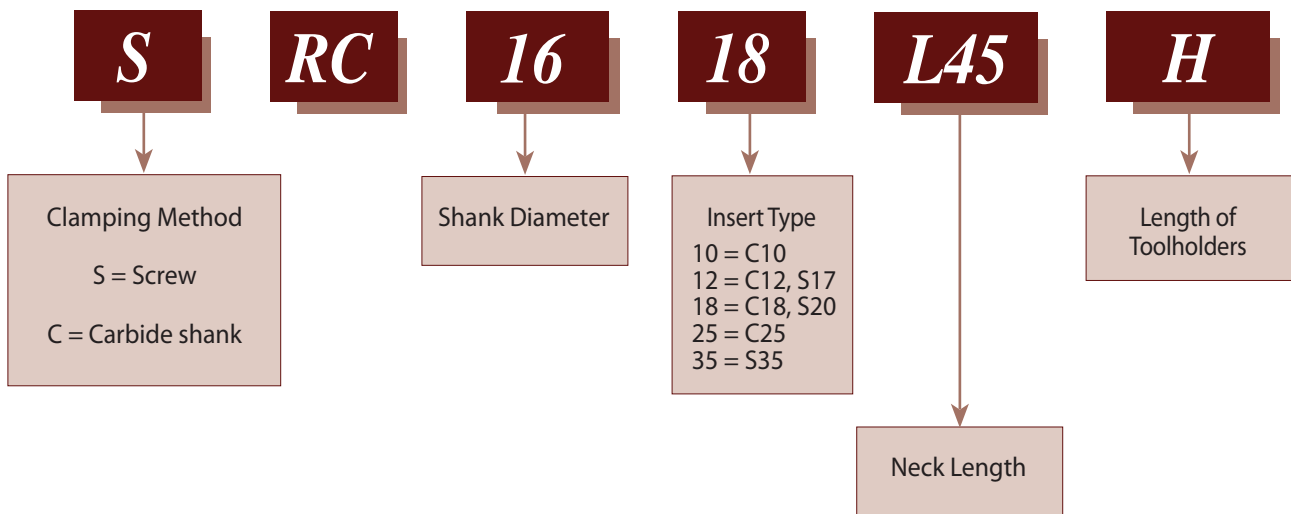


CMT Spiral Multi Flute Inserts



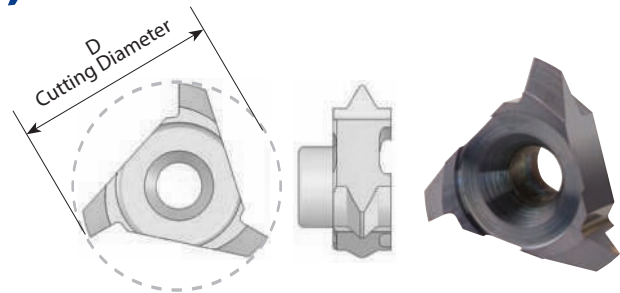
Product Identification - Ordering Codes

CMT Toolholders



Partial Profile 60° - ISO, UN

Same insert for internal and external thread



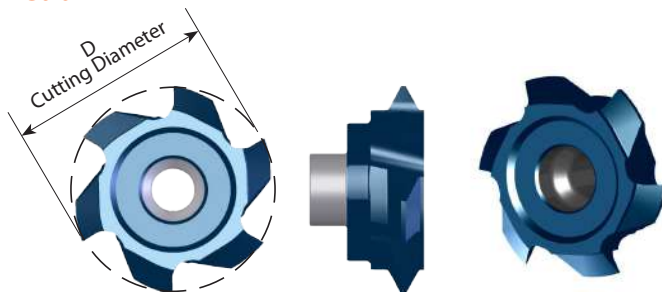
Insert Type	Ordering Code	Pitch Range mm	Pitch Range TPI	D	Thread Diameter (min)		Holder Code*
					Pitch Low Range	Pitch High Range	
C10	C10 A60	Int. 0.5 - 0.8	56 - 28	10.0	Ø ≥ 11	Ø ≥ 12	H1, 1.1, 2, 15, 16, 17
		Ex. 0.4 - 0.8	64 - 32				
	C10 G60	Int. 1.0 - 2.0	28 - 13	10.0	Ø ≥ 12	Ø ≥ 14	H1, 2, 15, 17
		Ex. 0.8 - 1.75	32 - 15				
C12	C12 A60	Int. 0.5 - 0.8	56 - 28	12.0	Ø ≥ 13	Ø ≥ 14	H3, 3.1, 4, 5, 18, 19, 20
		Ex. 0.4 - 0.8	64 - 32				
	C12 G60	Int. 1.0 - 2.0	28 - 13	12.4	Ø ≥ 14	Ø ≥ 16	H3, 4, 5, 18, 19, 20
		Ex. 0.8 - 1.75	32 - 15				
	C12 AG60	Int. 1.5 - 2.5	18 - 11	12.4	Ø ≥ 15	Ø ≥ 17	H3, 4, 5, 18, 20
		Ex. 1.25 - 2.0	24 - 13				
C18	C18 A60	Int. 0.5 - 0.8	56 - 28	17.8	Ø ≥ 19	Ø ≥ 19	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
		Ex. 0.4 - 0.8	64 - 32				
	C18 G60	Int. 1.0 - 1.75	28 - 14	17.8	Ø ≥ 20	Ø ≥ 21	
		Ex. 0.8 - 1.5	32 - 16				
	C18 D60	Int. 2.0 - 3.0	13 - 8	17.8	Ø ≥ 21	Ø ≥ 23	
		Ex. 1.75 - 2.5	15 - 10				
C25	C25 G60	Int. 1.5 - 2.5	16 - 10	25.0	Ø ≥ 28	Ø ≥ 30	H10, 11, 24, 25
		Ex. 1.0 - 2.0	28 - 13				
	C25 N60	Int. 3.0 - 5.0	8 - 5	25.0	Ø ≥ 30	Ø ≥ 34	
		Ex. 2.5 - 4.5	10 - 6				
	C25 Q60	Int. 5.0 - 6.0	5 - 4	25.0	Ø ≥ 34	Ø ≥ 35	
		Ex. 4.5 - 5.0	6 - 5				

* For complete toolholder description see pages B07-22 and 23

Partial Profile 60° - ISO, UN

Same insert for internal and external thread

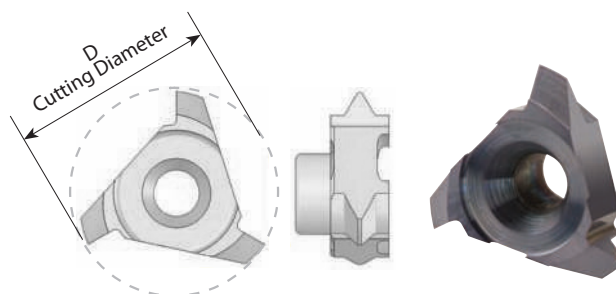
Multi Flute



Insert Type	Ordering Code	Pitch Range mm	Pitch Range TPI	D	No. of Flutes	Thread Dia (min)		Holder Code*
						Pitch Low range	Pitch High range	
S17	S160 F AG60	Int. 1.0-3.5	28-7	16.0	6	$\varnothing \geq 20$	$\varnothing \geq 22$	H3, 3.1, 4, 5, 18, 19, 20
		Ex. 0.8-3.0	32-8.5					
S20	S200 F G60	Int. 1.5-2.5	16-10	20.0	6	$\varnothing \geq 23$	$\varnothing \geq 25$	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
		Ex. 1.0-2.0	28-13					
	S200 D N60	Int. 3.0-5.0	8-5	20.0	4	$\varnothing \geq 25$	$\varnothing \geq 29$	H5.1, 5.2, 21
		Ex. 2.5-4.5	10-6					
S35	S350 F N60	Int. 3.0-5.0	8-5	35.0	6	$\varnothing \geq 38$	$\varnothing \geq 40$	H12, 13, 14, 26
		Ex. 2.5-4.5	10-6					
	S350 F Q60	Int. 5.0-6.0	5-4	35.0	6	$\varnothing \geq 40$	$\varnothing \geq 44$	H12, 13, 14, 26
		Ex. 4.5-5.0	6-5					

Partial Profile 60° - NPT

Same insert for internal and external thread

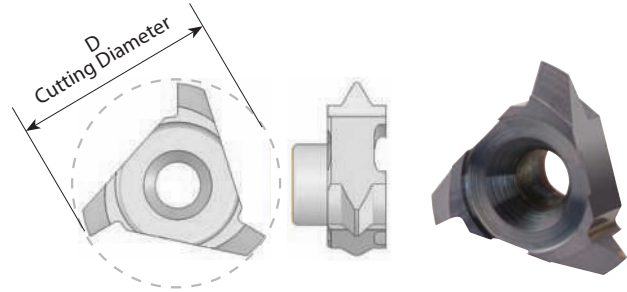


Insert Type	Ordering Code	Pitch TPI	Standard	D	Holder Code*
C10	C10 18 NPT	18	1/4 - 3/8	10.0	H1, 1.1, 2, 15, 17
C18	C18 14 NPT	14	1/2 - 3/4	15.8	H5.1, 5.2, 21
C25	C25 11.5NPT	11.5	1-2	25.0	H10, 11, 24, 25
	C25 8 NPT	8	$\geq 2 \frac{1}{2}$	25.0	

* For complete toolholder description see pages B07-22 and 23

Partial Profile 55° - BSP(G), BSF, BSW

Same insert for internal and external thread

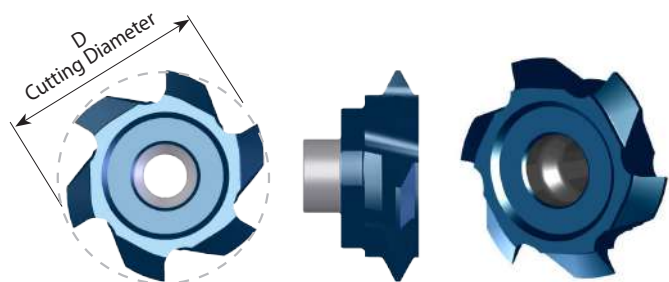


Insert Type	Ordering Code	Pitch Range TPI	D	Thread Dia. (min)	Holder Code*
C10	C10 G55	19-14	10.0	$\varnothing \geq 13$	H1, 2, 15, 17
C12	C12 G55	28-19	12.0	$\varnothing \geq 14$	H3, 3.1, 4, 5, 18, 19, 20
	C12 N55	14-11	12.2	$\varnothing \geq 16$	H3, 4, 5, 18, 20
C18	C18 G55	14-8	18.0	$\varnothing \geq 23$	H5.1, 5.2, 21
C25	C25 N55	7-5	25.0	$\varnothing \geq 31$	H10, 11, 24, 25

Partial Profile 55° - BSP(G), BSF, BSW

Same insert for internal and external thread

Multi Flute

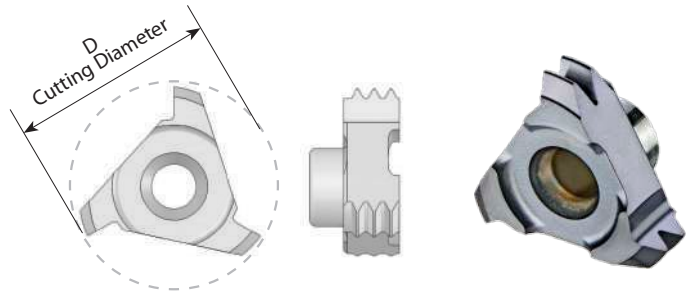


Insert Type	Ordering Code	Pitch Range TPI	D	No. of Flutes	Thread Dia (min)	Holder Code*
S17	S170 F G55	11-8	17.0	6	$\varnothing \geq 18.5$	H3, 3.1, 4, 5, 18, 19, 20
S20	S195 F G55	14	19.5	6	$\varnothing \geq 23$	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	S200 D N55	8-6	20.0	4	$\varnothing \geq 25$	

* For complete toolholder description see pages B07-22 and 23

Full Profile - ISO

Inserts for internal thread



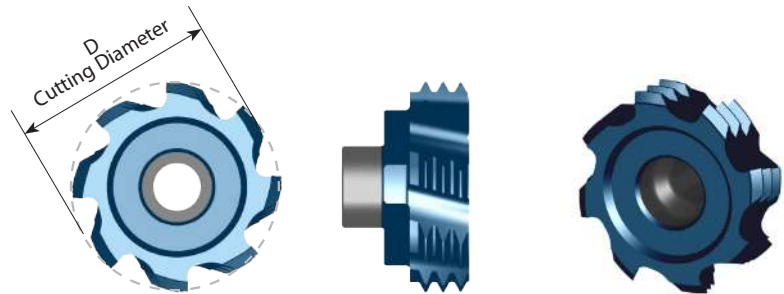
Insert Type	Ordering Code	Pitch mm	M coarse	M fine	Number of Teeth	D	Holder Code*
C10	C10 I 0.5 ISO	0.5		M10, M12	6	9.0	H1, 1.1, 2, 15, 16, 17
	C10 I 0.75 ISO	0.75		M12	4	10.0	
	C10 I 1.0 ISO	1.0		M12, M13	3	10.0	
	C10 I 1.5 ISO	1.5		M13, M14	2	10.0	
	C10 I 1.75 ISO	1.75	M12		1	9.6	H1, 2, 15, 17
	C10 I 2.0 ISO	2.0	M14	M18	1	10.0	
C12	C12 I 0.5 ISO	0.5		M13-M18	6	12.0	H3, 3.1, 4, 5, 18, 19, 20
	C12 I 0.75 ISO	0.75		M13-M18	4	12.0	
	C12 I 1.0 ISO	1.0		M14-M19	3	12.0	
	C12 I 1.5 ISO	1.5		M15-M19	2	12.0	
	C12 I 2.0 ISO	2.0	M16	M18, M20	1	12.4	H3, 4, 5, 18, 20
	C12 I 2.5 ISO	2.5	M18, M20		1	12.0	
	C12 I 3.0 ISO	3.0	M24		1	12.4	
C18	C18 I 0.5 ISO	0.5		M19-M60	9	17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 I 0.75 ISO	0.75		M19-M60	6	17.8	
	C18 I 1.0 ISO	1.0		M20-M60	5	17.8	
	C18 I 1.5 ISO	1.5		M20-M60	3	17.8	
	C18 I 2.0 ISO	2.0		M21-M60	2	17.8	
	C18 I 2.5 ISO	2.5	M22		2	17.8	
	C18 I 3.0 ISO	3.0	M24, M27	M28-M60	1	17.8	
	C18 I 3.5 ISO	3.5	M30, M33		1	17.8	
C25	C25 I 3.0 ISO	3.0	M32, M33	M30-M80	2	25.0	H10, 11, 24, 25
	C25 I 3.5 ISO	3.5	M33		1	25.0	
	C25 I 4.0 ISO	4.0	M36, M39	M48-M80	1	25.0	
	C25 I 4.5 ISO	4.5	M42, M45		1	25.0	
	C25 I 5.0 ISO	5.0	M48, M52		1	25.0	
	C25 I 5.5 ISO	5.5	M56, M60		1	25.0	
	C25 I 6.0 ISO	6.0	M64, M68	M70-M80	1	25.0	

* For complete toolholder description see pages B07-22 and 23

Full Profile - ISO

Inserts for internal thread

Multi Flute

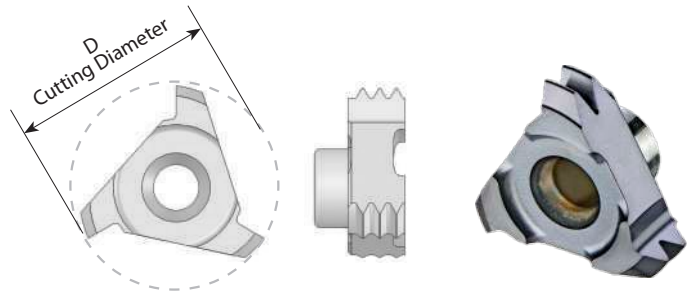


Insert Type	Ordering Code	Pitch mm	M coarse	M fine	Number of Teeth	D	No. of Flutes	Holder Code*
S17	S160 F 2.5 ISO	2.5	M20		1	16.0	6	H3, 3.1, 4, 5, 18, 19, 20
S20	S163 H 1.0 ISO	1.0		M18-M60	5	16.3	8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	S175 H 1.5 ISO	1.5		M20-M60	3	17.5	8	
	S186 F 2.0 ISO	2.0		M22-M60	2	18.6	6	
	S178 F 2.5 ISO	2.5	M22		2	17.8	6	
	S189 F 3.0 ISO	3.0	M24, M27	M28-M60	1	18.9	6	
	S200 F 3.5 ISO	3.5	M30, M33		1	20.0	6	
	S200 F 4.0 ISO	4.0	M36, M39	M40-M60	1	20.0	6	
	S200 E 4.5 ISO	4.5	M42		1	20.0	5	
	S200 D 5.0 ISO	5.0	M48, M52		1	20.0	4	
S35	S350 F 4.5 ISO	4.5	M45	M54	1	35.0	6	H12, 13, 14, 26
	S350 F 6.0 ISO	6.0	M64, M68		1	35.0	6	
	S350 F 8.0 ISO	8.0		M130-M200	1	35.0	6	

* For complete toolholder description see pages B07-22 and 23

Full Profile - UN

Inserts for internal thread



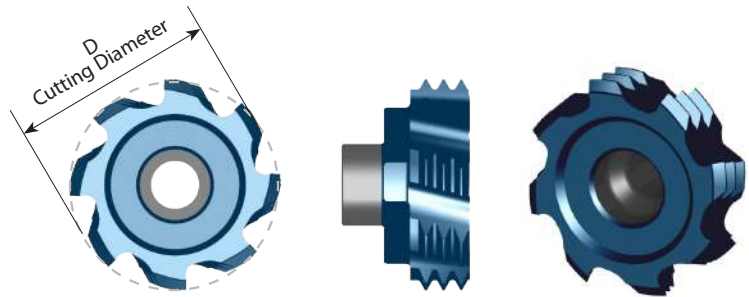
Insert Type	Ordering Code	Pitch TPI	Nominal Size	UNC	UNF	UNEF	Number of Teeth	D	Holder Code*
C10	C10 I 20 UN	20			1/2		2	10.0	H1, 1.1, 2, 15, 16, 17
	C10 I 18 UN	18			9/16		2	10.0	
	C10 I 13 UN	13		1/2			1	10.0	H1, 2, 15, 17
	C10 I 12 UN	12	5/8, 11/16, 3/4	9/16			1	10.0	
C12	C12 I 32 UN	32	9/16, 5/8				3	12.0	H3, 3.1, 4, 5, 18, 19, 20
	C12 I 28 UN	28	9/16, 5/8, 11/16				3	12.0	
	C12 I 24 UN	24				9/16, 5/8, 11/16	2	12.0	
	C12 I 20 UN	20	9/16, 5/8, 11/16			3/4	2	12.0	
	C12 I 18 UN	18			5/8		2	12.0	
	C12 I 16 UN	16	5/8, 11/16		3/4		1	12.0	
	C12 I 12 UN	12	5/8				1	12.4	H3, 4, 5, 18, 20
	C12 I 11 UN	11		5/8			1	12.0	
C18	C18 I 32 UN	32	3/4, 13/16, 7/8				6	17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 I 28 UN	28	3/4, 13/16, 7/8				5	17.8	
	C18 I 24 UN	24					4	17.8	
	C18 I 20 UN	20	11/16, 11/8			13/16, 7/8, 15/16	3	17.8	
	C18 I 18 UN	18					3	17.8	
	C18 I 16 UN	16	7/8, 1				3	17.8	
	C18 I 14 UN	14			7/8		2	17.8	
	C18 I 12 UN	12	7/8		1, 11/8		2	17.8	
	C18 I 11 UN	11					2	17.8	
	C18 I 9 UN	9		7/8			1	17.8	
C25	C25 I 8 UN	8	13/16, 11/4, 15/16				2	25.0	H10, 11, 24, 25
	C25 I 7 UN	7		11/4			1	25.0	
	C25 I 6 UN	6	17/16, 19/16	13/8, 11/2			1	25.0	
	C25 I 5 UN	5		1 3/4			1	25.0	
	C25 I 4 UN	4		2 1/2, 2 3/4			1	25.0	

* For complete toolholder description see pages B07-22 and 23

Full Profile - UN

Inserts for internal thread

Multi Flute

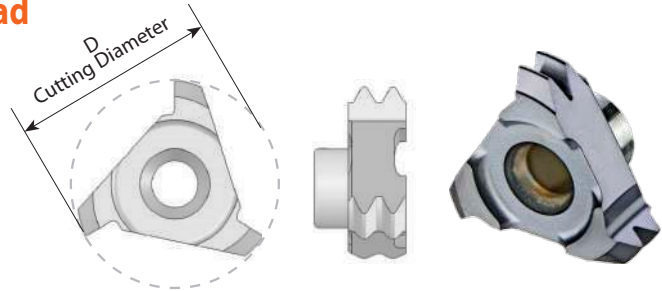


Insert Type	Ordering Code	Pitch TPI	Nominal size	UNC	UNF	UNEF	Number of Teeth	D	No. of Flutes	Holder Code*
S17	S150 F 10 UN	10		3/4			1	15.0	6	H3, 3.1, 4, 5, 18, 19, 20
S20	S160 H 24 UN	24				11/16	4	16.0	8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	S169 H 20 UN	20				3/4, 13/16, 7/8, 15/16, 1	4	16.9	8	
	S164 F 16 UN	16	7/8, 15/16, 1		3/4		3	16.4	6	
	S191 F 14 UN	14			7/8		2	19.1	6	
	S186 F 12 UN	12	7/8, 15/16		1		2	18.6	6	
	S178 F 9 UN	9		7/8			1	17.8	6	
	S200 F 8 UN	8	1 1/8	1			1	20.0	6	
	S200 F 7 UN	7		1 1/8, 1 1/4			1	20.0	6	
	S200 E 6 UN	6	1 7/16	1 3/8, 1 1/2			1	20.0	5	
	S200 D 5 UN	5		1 3/4			1	20.0	4	
S35	S350 F 8 UN	8	1 5/8, 1 3/4				2	35.0	6	H12, 13, 14, 26
	S350 F 4 UN	4		2 1/2, 2 3/4, 3			1	35.0	6	

* For complete toolholder description see pages B07-22 and 23

G 55° BSW, BSF, BSP

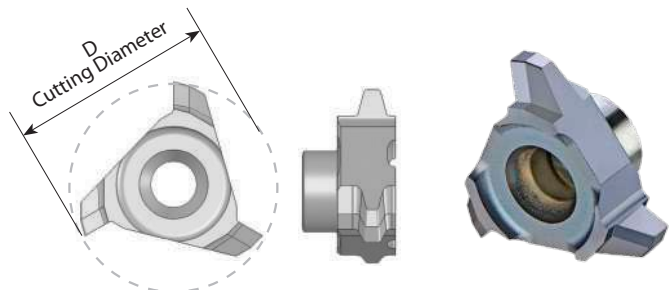
Same insert for internal and external thread



Insert Type	Ordering Code	Pitch TPI	Standard	Number of Teeth	D	Holder Code*
C10	C10 19 W	19	G 1/4	2	10.0	H1, 1.1, 2, 15, 16, 17
C12	C12 19 W	19	G 3/8	2	12.0	H3, 3.1, 4, 5, 18, 19, 20
C18	C18 14 W	14	G 1/2 - 7/8	2	17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 11 W	11	G ≥ 1	2	17.8	

Trapez - DIN 103

Inserts for internal thread

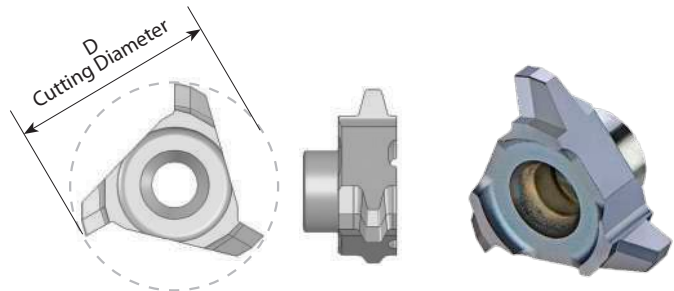


Insert Type	Ordering Code	Pitch mm	Standard	D	Holder Code*
C10	C10 I 2 TR	2.0	Tr16x2, Tr18x2	10.0	H1, 2, 15, 17
C12	C12 I 2 TR	2.0	Tr20x2	12.0	H3, 4, 5, 18, 20
C18	C18 I 3 TR	3.0	Tr24x3	17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 I 4 TR	4.0	Tr26x4	17.8	
	C18 I 5 TR	5.0	Tr28x5	17.8	
C25	C25 I 6 TR	6.0	Tr36x6	25.0	H10, 11, 24, 25

* For complete toolholder description see pages B07-22 and 23

Acme

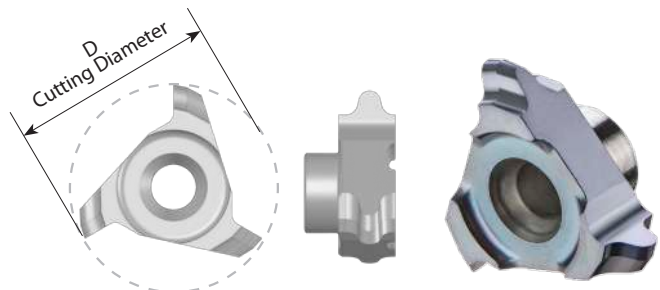
Inserts for internal thread



Insert Type	Ordering Code	Pitch TPI	Standard	D	Holder Code*
C18	C18 I 5 ACME	5	1 ¹ / ₈ , 1 ¹ / ₄	18.0	H5.1, 5.2, 21
C25	C25 I 4 ACME	4	1 ¹ / ₂ , 1 ³ / ₄ , 2	25.0	H10, 11, 24, 25

Round-DIN 405

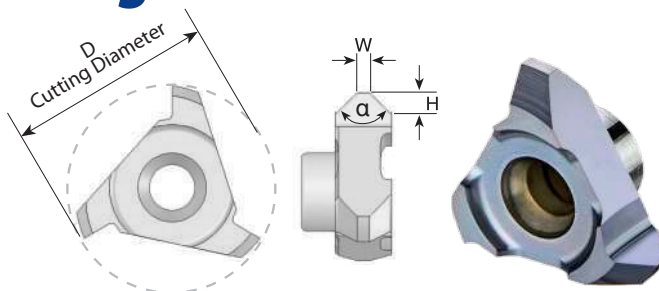
Inserts for internal thread



Insert Type	Ordering Code	Pitch TPI	Standard	D	Holder Code*
C18	C18 1/8RD	8	1/8RD	17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 1/6RD	6	1/6RD	17.8	H5.1, 5.2, 21
C25	C25 1/4RD	4	1/4RD	25.0	H10, 11, 24, 25

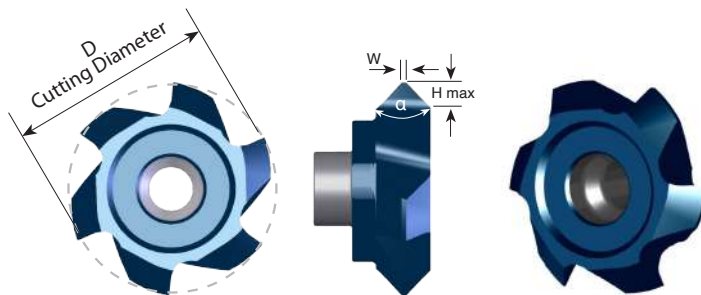
* For complete toolholder description see pages B07-22 and 23

Chamfering and Grooving



Insert Type	Ordering Code	D	H	W	α	Holder Code*
C10	C10 C90	10.0	1.30	0.4	90°	H1, 2, 15, 17
C12	C12 C90	12.0	1.35	0.3	90°	H3, 4, 5, 18, 20
C18	C18 C90	17.8	1.95	1.1	90°	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
C25	C25 C90	25.0	2.50	1.0	90°	H10, 11, 24, 25

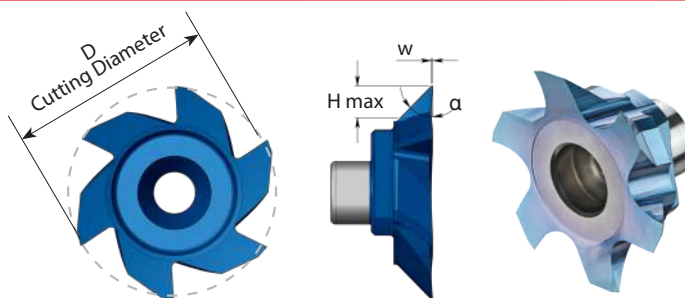
Chamfering, Grooving and Boring Multi Flute



Insert Type	Ordering Code	D	H max	W	α	No. of Flutes	Holder Code*
S17	SC160 E H14	16.0	1.35	0.2	90°	5	H3, 3.1, 4, 5, 18, 19, 20
S20	SC170 E H14	17.0	1.35	0.2	90°	5	H6, 7, 8, 9, 21, 22, 23
	SC200 F H14	20.0	1.35	0.2	90°	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	SC200 F H24	20.0	2.35	0.2	90°	6	
S35	SC350 F H42	35.0	4.20	0.2	90°	6	H12, 13, 14, 26
S20	SC200 F H20	20.0	1.95	1.0	90°	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	SC200 F H17	20.0	1.70	1.5	90°	6	
	SC200 F H15	20.0	1.50	2.0	90°	6	
	SC200 F H12	20.0	1.20	2.5	90°	6	

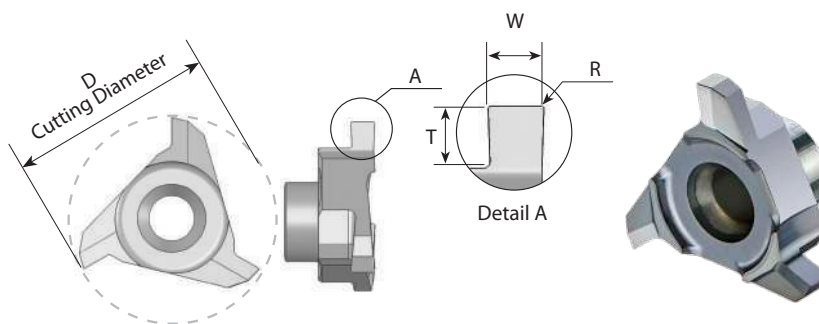
* For complete toolholder description see pages B07-22 and 23

Dovetail 45° Multi Flute



Insert Type	Ordering Code	D	H	W	α	No. of Flutes	Holder Code*
S17	SC170 F A45	17.0	2.5	0.1	45°	6	H3, 3.1, 4, 5, 18, 19, 20
S20	SC200 F A45	20.0	3.0	0.1	45°	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23

Groove Milling

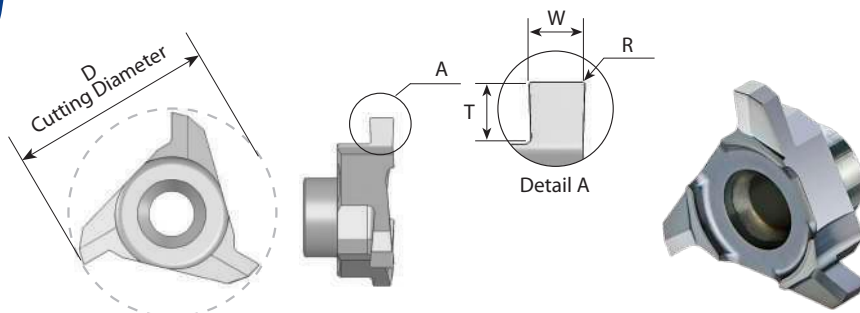


Insert Type	Ordering Code	D	W ±0.02	T max.	R	Groove Dia. (min.)	Holder Code*
C10	C10 W08	10.0	0.80	0.80	0.1	Ø > 10.0	H1, 1.1, 2, 15, 16, 17
	C10 W09	10.0	0.90	0.90	0.1	Ø > 10.0	
	C10 W10	10.0	1.00	0.90	0.1	Ø > 10.0	
	C10 W15	10.0	1.50	1.20	0.1	Ø > 10.0	H1, 2, 15, 17
	C10 W20	10.0	2.00	1.20	0.1	Ø > 10.0	
C12	C12 W08	12.0	0.80	0.80	0.1	Ø > 12.0	H3, 3.1, 4, 5, 18, 19, 20
	C12 W10	12.0	1.00	0.90	0.1	Ø > 12.0	
	C12 W10T	12.3	1.00	1.60	0.2	Ø > 12.3	
	C12 W15	12.4	1.50	1.60	0.1	Ø > 12.4	H3, 4, 5, 18, 20
	C12 W20	12.4	2.00	1.60	0.1	Ø > 12.4	
	C12 W25	12.4	2.50	1.60	0.1	Ø > 12.4	
C18	C18 W10	17.8	1.00	1.50	0.1	Ø > 17.8	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 W12	17.8	1.20	1.50	0.1	Ø > 17.8	
	C18 W15	17.8	1.50	1.95	0.1	Ø > 17.8	
	C18 W20	17.8	2.00	2.80	0.1	Ø > 17.8	H5.1, 5.2, 21
C25	C25 W20	25.0	2.00	3.00	0.2	Ø > 25.0	H10, 11, 24, 25
	C25 W25	25.0	2.50	3.00	0.2	Ø > 25.0	
	C25 W30	25.0	3.00	3.00	0.2	Ø > 25.0	
	C25 W35	25.0	3.50	3.50	0.2	Ø > 25.0	
	C25 W40	25.0	4.00	3.50	0.2	Ø > 25.0	
	C25 W50	25.0	5.00	3.50	0.2	Ø > 25.0	

* For complete toolholder description see pages B07-22 and 23

Groove Milling

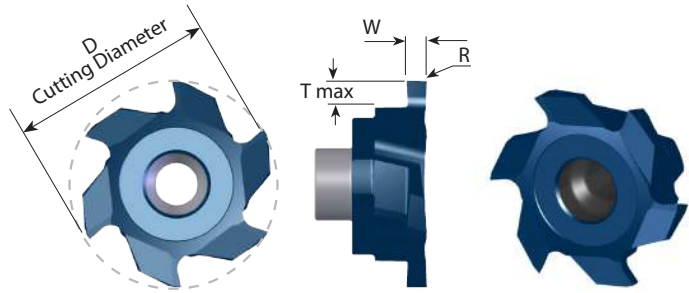
DIN 471/472



Insert Type	Ordering Code	D	Nom` groove width	W -0.04	T max.	R	Groove Dia. (min.)	Holder Code*
C10	C10 W087	10.0	0.8	0.87	1.3	0	Ø > 10.0	H1, 2, 15, 17
	C10 W097	10.0	0.9	0.97	1.3	0	Ø > 10.0	
	C10 W121	10.0	1.10	1.21	1.3	0	Ø > 10.0	
	C10 W141	10.0	1.30	1.41	1.3	0.1	Ø > 10.0	
	C10 W171	10.0	1.60	1.71	1.3	0.1	Ø > 10.0	
C12	C12 W121	12.4	1.10	1.21	1.7	0	Ø > 12.4	H3, 4, 5, 18, 20
	C12 W141	12.4	1.30	1.41	1.7	0.1	Ø > 12.4	
	C12 W171	12.4	1.60	1.71	1.7	0.1	Ø > 12.4	
C18	C18 W121	17.8	1.10	1.21	2.9	0.1	Ø > 17.8	H5.1, 5.2, 21
	C18 W141	17.8	1.30	1.41	2.9	0.1	Ø > 17.8	
	C18 W171	17.8	1.60	1.71	2.9	0.1	Ø > 17.8	
	C18 W196	17.8	1.85	1.96	2.9	0.15	Ø > 17.8	

* For complete toolholder description see pages B07-22 and 23

Groove Milling Multi Flute



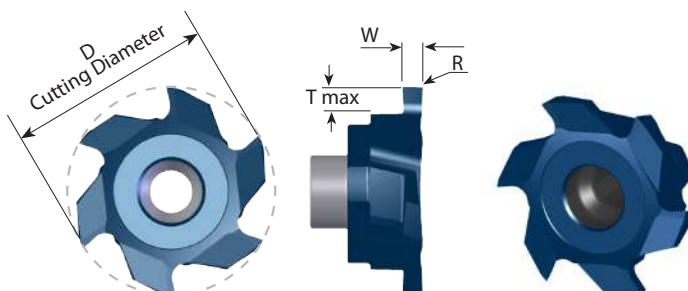
Insert Type	Ordering Code	D	W ±0.02	T Max.	R	Groove Dia. (min)	No. of Flutes	Holder Code*
S17	SG170 F W15	17.0	1.5	2.8	0.2	Ø > 17	6	H3, 3.1, 4, 5, 18, 19, 20
	SG170 F W20	17.0	2.0	2.8	0.2	Ø > 17	6	
	SG170 F W25	17.0	2.5	2.8	0.2	Ø > 17	6	
S20	SG200 F W15	20.0	1.5	2.9	0.2	Ø > 20	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	SG200 F W20	20.0	2.0	2.9	0.2	Ø > 20	6	
	SG200 F W25	20.0	2.5	2.9	0.2	Ø > 20	6	
	SG200 F W30	20.0	3.0	2.9	0.2	Ø > 20	6	
	SG200 F W40	20.0	4.0	2.9	0.2	Ø > 20	6	
	SG200 F W49	20.0	4.9	2.9	0.2	Ø > 20	6	
S20	SG200 E W20T	20.0	2.0	3.7	0.2	Ø > 20	5	H5.1, 5.2, 21
	SG200 E W25T	20.0	2.5	3.7	0.2	Ø > 20	5	
	SG200 E W30T	20.0	3.0	3.7	0.2	Ø > 20	5	
S35	SG350 F W30T	35.0	3.0	6.3	0.2	Ø > 35	6	H12, 13, 14, 26
	SG350 F W40T	35.0	4.0	6.3	0.2	Ø > 35	6	
	SG350 F W50T	35.0	5.0	6.3	0.2	Ø > 35	6	
	SG350 F W60T	35.0	6.0	6.3	0.2	Ø > 35	6	
	SG350 F W80T	35.0	8.0	6.3	0.2	Ø > 35	6	

* For complete toolholder description see pages B07-22 and 23

Groove Milling

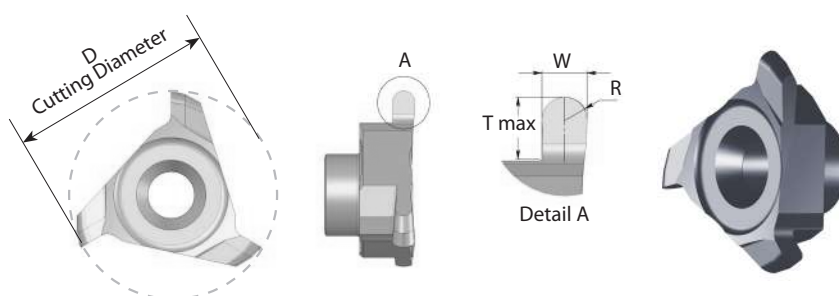
Multi Flute

DIN 471/472



Insert Type	Ordering Code	D	Nom` groove width	W -0.04	T Max.	R	Groove Dia. (min)	No. of Flutes	Holder Code*
S20	SG200 F W121	20.0	1.10	1.21	4.0	0	$\varnothing > 20$	6	H5.1, 5.2, 21
	SG200 F W141	20.0	1.30	1.41	4.0	0.1	$\varnothing > 20$	6	
	SG200 F W171	20.0	1.60	1.71	4.0	0.1	$\varnothing > 20$	6	
	SG200 F W196	20.0	1.85	1.96	4.0	0.1	$\varnothing > 20$	6	

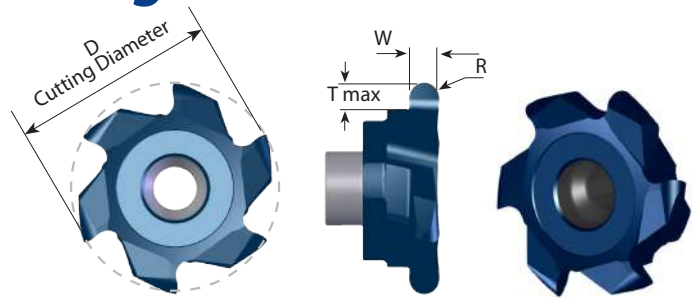
Full Radius Groove Milling



Insert Type	Ordering Code	D	R	W ± 0.02	T Max.	Groove Dia. (min)	Holder Code*
C12	C12 R11	12.4	1.1	2.2	1.7	$\varnothing > 12.4$	H3, 4, 5, 18, 20
C18	C18 R08	17.8	0.8	1.6	2.9	$\varnothing > 17.8$	H5.1, 5.2, 21
	C18 R11	17.8	1.1	2.2	2.9	$\varnothing > 17.8$	

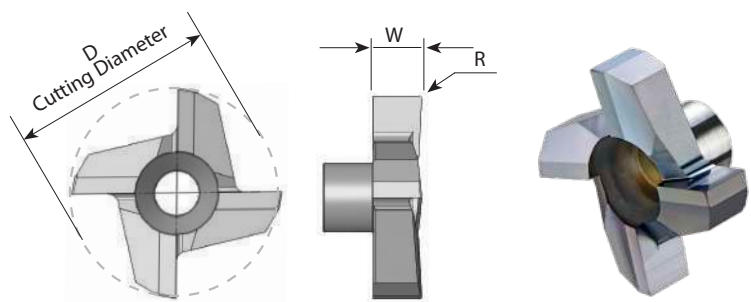
* For complete toolholder description see pages B07-22 and 23

Full Radius Groove Milling Multi Flute



Insert Type	Ordering Code	D	R	W ±0.02	T Max.	Groove Dia. (min)	No. of Flutes	Holder Code*
S20	SG200 F R10	20.0	1.0	2.0	2.9	Ø > 20	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	SG200 F R12	20.0	1.2	2.4	2.9	Ø > 20	6	
	SG200 F R15	20.0	1.5	3.0	2.9	Ø > 20	6	
	SG200 F R20	20.0	2.0	4.0	2.9	Ø > 20	6	

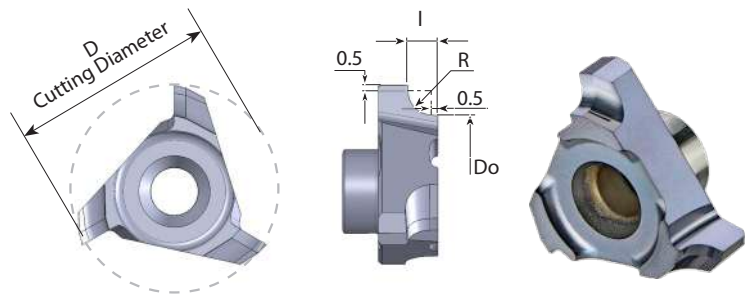
Face Milling and Finishing



Insert Type	Ordering Code	D	W ± 0.1	R	Holder Code*
C10	C10 F R0.1	10	3.0	0.1	H1, 1.1, 2, 15, 16, 17
C12	C12 F R0.1	12	3.0	0.1	H3, 3.1, 4, 5, 18, 19, 20
C18	C18 F R0.1	17.8	5.0	0.1	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
C25	C25 F R0.2	25.0	6.0	0.2	H10, 11, 24, 25

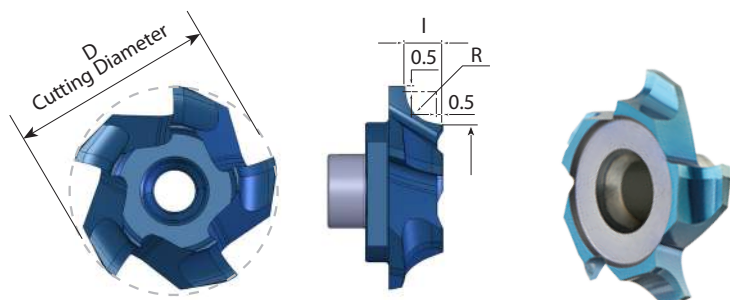
* For complete toolholder description see pages B07-22 and 23

Corner Rounding



Insert Type	Ordering Code	D	Do	R	I	Holder Code*
C10	C10 CR05	10.0	7.9	0.5	1.05	H1, 1.1, 2, 15, 16, 17
	C10 CR10	10.0	6.9	1.0	1.55	
C18	C18 CR13	17.8	14.2	1.25	1.80	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
	C18 CR15	17.8	13.7	1.5	2.05	
	C18 CR20	17.8	12.7	2.0	2.55	
C25	C25 CR30	25.0	17.7	3.0	3.60	H10, 11, 24, 25

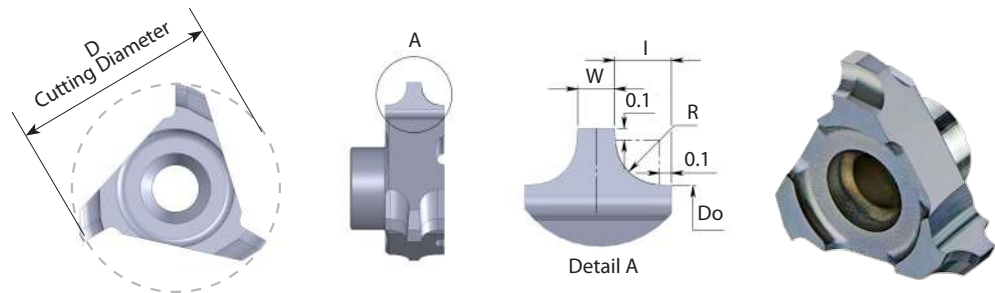
Corner Rounding Multi Flute



Insert Type	Ordering Code	D	Do	R	I	No. of Flutes	Holder Code*
S17	S170 E CR10	17.0	13.9	1.0	1.55	5	H3, 3.1, 4, 5, 18, 19, 20
	S170 E CR13	17.0	13.4	1.25	1.80	5	
	S170 E CR15	17.0	12.9	1.5	2.05	5	

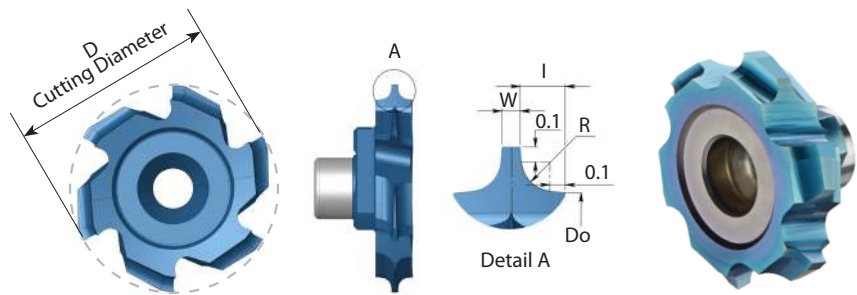
* For complete toolholder description see pages B07-22 and 23

Front and Back Corner Rounding



Insert Type	Ordering Code	D	Do	R	W	I	Holder Code*
C10	C10 CRD08	10.0	8.2	0.8	1.2	0.90	H1, 1.1, 2, 15, 16, 17
C18	C18 CRD15	17.8	14.6	1.5	1.8	1.60	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23
C25	C25 CRD20	25.0	20.7	2.0	2.0	2.10	H10, 11, 24, 25

Front and Back Corner Rounding Multi Flute

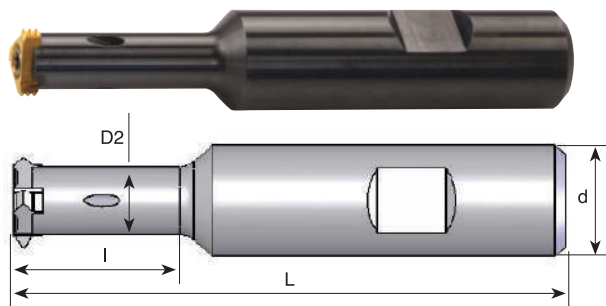


Insert Type	Ordering Code	D	Do	R	W	I	No. of Flutes	Holder Code*
S17	S170 F CRD08	17.0	15.2	0.8	1.2	0.90	6	H3, 3.3, 4, 5, 18, 19, 20
S20	S200 F CRD15	20.0	16.8	1.5	1.8	1.60	6	H5.1, 5.2, 6, 7, 8, 9, 21, 22, 23

* For complete toolholder description see pages B07-22 and 23

Steel Toolholders

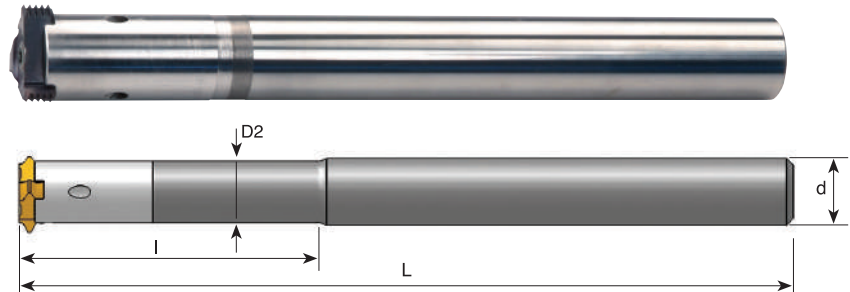
With internal coolant



Tool No.	Ordering Code	Insert Type	d	D2	I	L	Insert Screw	Torx Key
H1	SRC 1210 E	C10	12	7.3	19	70	S5	K5
H1.1	SRC 1210 F		12	8.0	25	80	S5	K5
H2	SRC 1610 G		16	7.3	19	90	S5	K5
H3	SRC 1212 E	C12, S17	12	9.0	25	70	S10	K10
H3.1	SRC 1212 G		12	10.0	40	90	S10	K10
H4	SRC 1612 G		16	9.0	25	90	S10	K10
H5	SRC 1612 H		16	9.0	35	100	S10	K10
H5.1	SRC 1618 F	C18, S20	16	12.0	25	80	S16	K16
H5.2	SRC 1618 G		16	12.0	40	90	S16	K16
H6	SRC 1618 H		16	13.8	48	100	S16	K16
H7	SRC 2018 H		20	13.8	32	100	S16	K16
H8	SRC 2018 J		20	13.8	48	110	S16	K16
H9	SRC 2018 L		20	13.8	74	140	S16	K16
H10	SRC 2525 J	C25	25	17.5	45	115	S27	K27
H11	SRC 2525 M		25	17.5	80	150	S27	K27
H12	SRC 2035 K	S35	20	22.0	44	130	S33	K33
H13	SRC 2535 H		25	22.0	40	100	S33	K33
H14	SRC 2535 K		25	22.0	60	130	S33	K33

Carbide Shank Toolholders

With internal coolant



Tool No.	Ordering Code	Insert Type	d	D2	I	L	Insert Screw	Torx Key
H15	CRC 0810 L35 K	C10	8	7.3	35	125	S5	K5
H16	CRC 0810 K		8	8.0	---	125	S5	K5
H17	CRC 1010 L45 M		10	7.3	45	150	S5	K5
H18	CRC 1012 L40 M	C12, S17	10	9.0	40	150	S10	K10
H19	CRC 1012 M		10	10.0	---	150	S10	K10
H20	CRC 1212 L57 P		12	9.0	57	165	S10	K10
H21	CRC 1218 P	C18, S20	12	12.0	---	170	S16	K16
H22	CRC 1618 L48 R		16	13.8	48	195	S16	K16
H23	CRC 1618 L74 R		16	13.8	74	195	S16	K16
H24	CRC 1625 R	C25	16	17.5	28	205	S27	K27
H25	CRC 2025 L85 S		20	17.5	85	250	S27	K27
H26	CRC 2035 S	S35	20	22.0	37	260	S33	K33

Toolholders without Weldon

CMT Multi Insert Milling Cutters

CMT indexable milling inserts and cutters for Grooving, Chamfering and Threading



Inserts

- Insert profiles are fully ground
- Spiral inserts for smooth cutting operation
- Three cutting edges on each insert
- For a wide range of materials and applications

Carbide grade: MT7

Milling cutters / Disc milling cutter

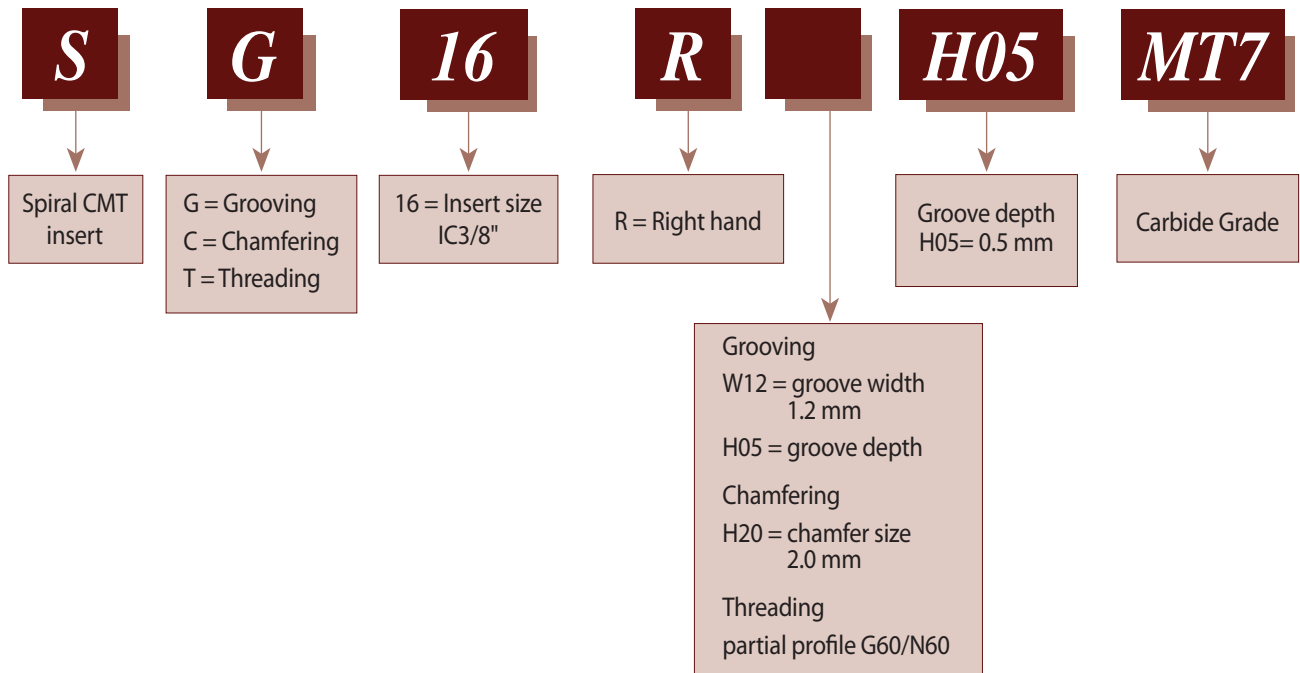
- 4 - 8 inserts per holder, for high productivity
- For use with CPT standard CMT S35 toolholders
- The milling cutters are coated with a special layer (silver color) for high anti-corrosive resistance and extra protection against cutting burrs



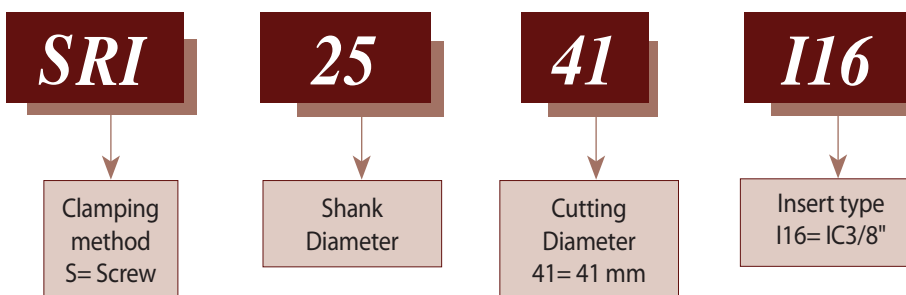
Demonstration

Product Identification - Ordering Codes

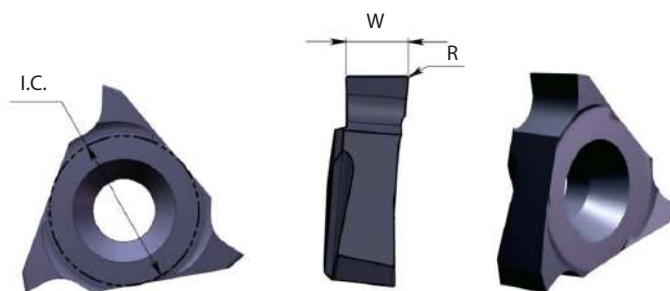
Inserts



Toolholders



Groove Milling



DIN 471 / 472

Insert Type	I.C.	Ordering Code	W	R	Holder Code*
SI16	3/8"	SG 16 R W14	1.40	0.10	H27, 28, 29
		SG 16 R W17	1.70	0.10	
		SG 16 R W19	1.95	0.15	
		SG 16 R W22	2.25	0.15	
		SG 16 R W27	2.75	0.20	
		SG 16 R W32	3.25	0.20	
		SG 16 R W42	4.25	0.20	H27, 29, 30
		SG 16 R W43	4.35	0.20	

Right hand cutting

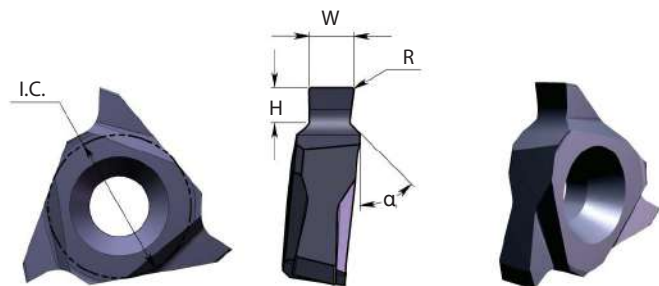
Insert Type	I.C.	Ordering Code	W	R	Holder Code*
SI16	3/8"	SG 16 L W43	4.35	0.20	H30

Left hand cutting

*Maximum groove depth (T max) according to the toolholder.

* For complete toolholder description see pages B07-29 and 30

Groove Milling with Chamfer

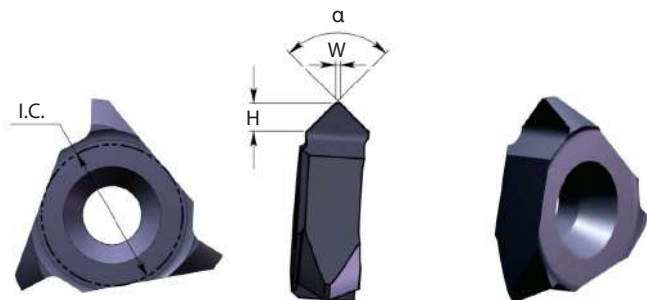


DIN 471 / 472

Insert Type	I.C.	Ordering Code	W	H max	R	α	Holder Code*
SI16	3/8"	SG 16 R W12 H05	1.20	0.50	0.10	45°	H27, 28, 29
		SG 16 R W14 H07	1.40	0.70			
		SG 16 R W14 H08	1.40	0.85			
		SG 16 R W17 H08	1.70	0.85			
		SG 16 R W17 H10	1.70	1.00			
		SG 16 R W19 H12	1.95	1.25	0.15		
		SG 16 R W22 H15	2.25	1.50			
		SG 16 R W27 H15	2.75	1.50			
		SG 16 R W27 H17	2.75	1.75			
		SG 16 R W32 H17	3.25	1.75			
		SG 16 R W42 H20	4.25	2.00			
		SG 16 R W42 H25	4.25	2.50			

Right hand cutting

Chamfering



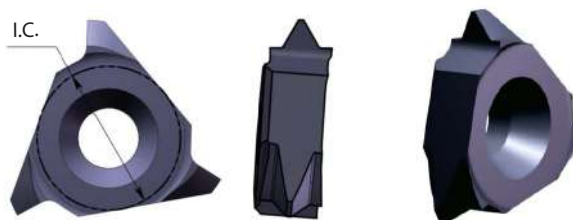
Insert Type	I.C.	Ordering Code	H max	W	α	Holder Code*
SI16	3/8"	SC 16 R H20	2.00	0.2	90°	H27, 28, 29
		SC 16 R H19	1.90	0.5		

Right hand cutting

* For complete toolholder description see pages B07-29 and 30

Partial Profile 60° - ISO, UN

Same insert for internal and external thread



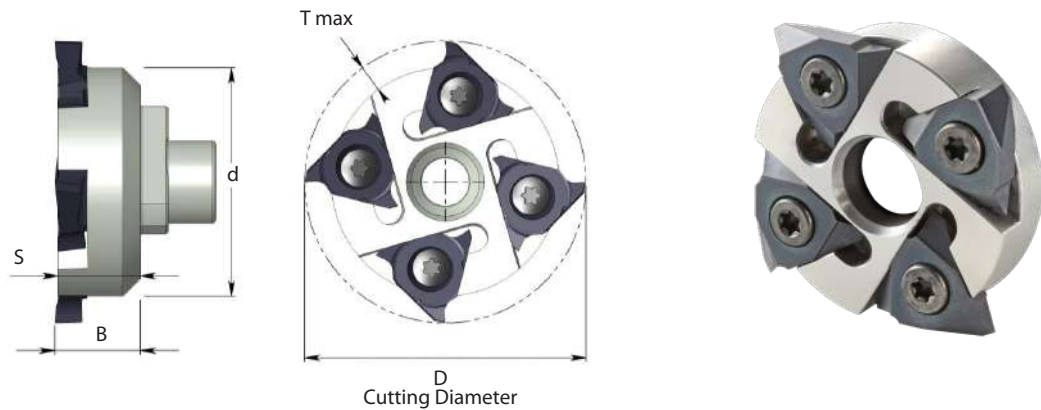
Insert Type	I.C.	Ordering Code	Pitch Range mm	Pitch Range TPI	Holder Code*
SI16	3/8"	ST 16 R G60	Int. 1.5-3.0	Int. 16-8	H27, 28, 29
			Ex. 1.25-3.0	Ex. 20-8	
		ST 16 R N60	Int. 3.5-5.0	Int. 7-5	
			Ex. 3.0-4.5	Ex. 8-6	

Right hand cutting

* For complete toolholder description see pages B07-29 and 30

Toolholders

Milling Cutter - Arbor

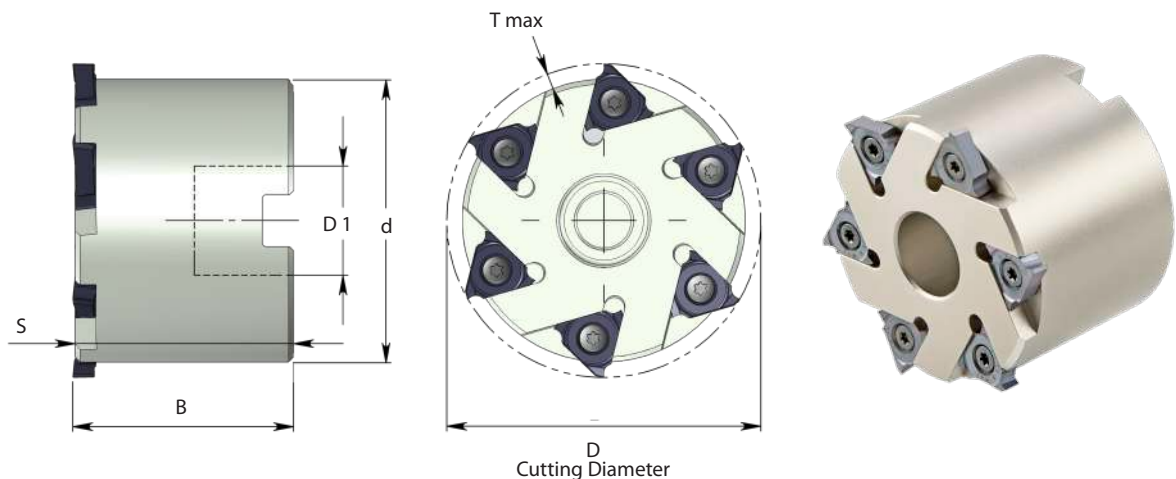


Tool No.	Ordering Code	Insert Type	D	d	T max	B	S	Insert Screw	Torx Key
H27	SRI 41- I16	SI16	41	33.2	3.6	12.5	12.0	S16S	K16

Right hand cutting

To connect to the standard CMT toolholders S35: SRC 2035 K, SRC 2535 H, SRC 2535 K, CRC 2035 S

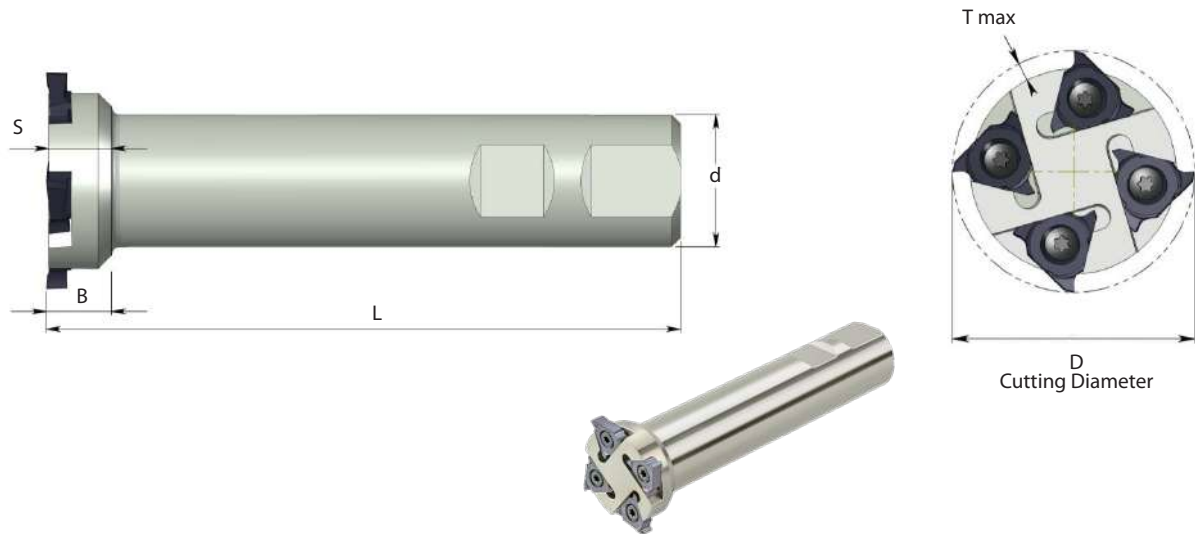
Milling Cutter - Shell Mill



Tool No.	Ordering Code	Insert Type	D	d	T max	B	S	D1	Insert Screw	Torx Key
H28	SRI 0063-I16	SI16	63	57	3.0	44.5	44.0	22	S16S	K16

Right hand cutting

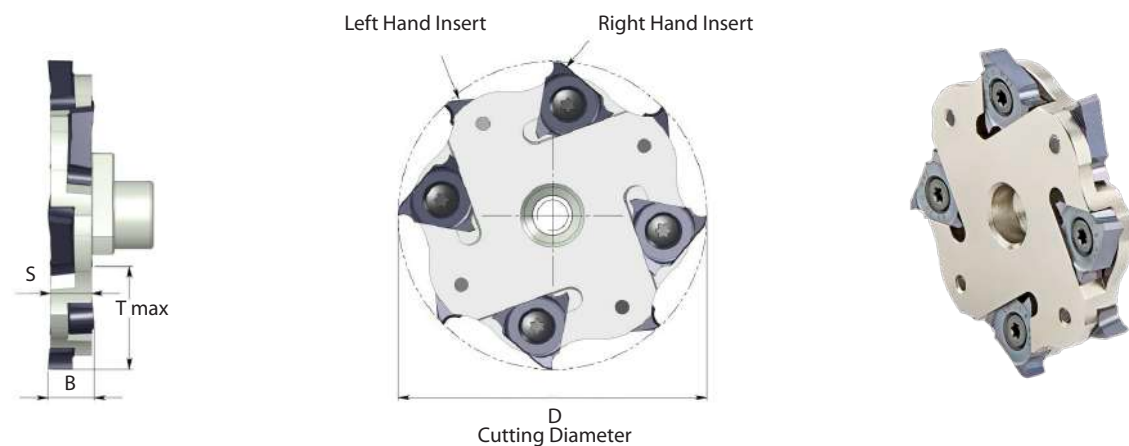
Milling Cutter - Weldon Shank



Tool No.	Ordering Code	Insert Type	D	d	T max	B	S	L	Insert Screw	Torx Key
H29	SRI 2541-I16	SI16	41	25	3.6	12.5	12.0	125	S16S	K16

Right hand cutting

Milling Cutter - Disc Milling



Tool No.	Ordering Code	Insert Type	D	T max	B	S	Insert Screw	Torx Key
H30	SRI 55-I16	SI16	55	15.5	8.2	7.2	S16M	K16

Right hand cutting

To use only with inserts SG 16 R W43, and SG 16 L W43

To connect to the standard CMT toolholders S35: SRC 2035 K, SRC 2535 H, SRC 2535 K, CRC 2035 S