

# CMT Vertical Milling



**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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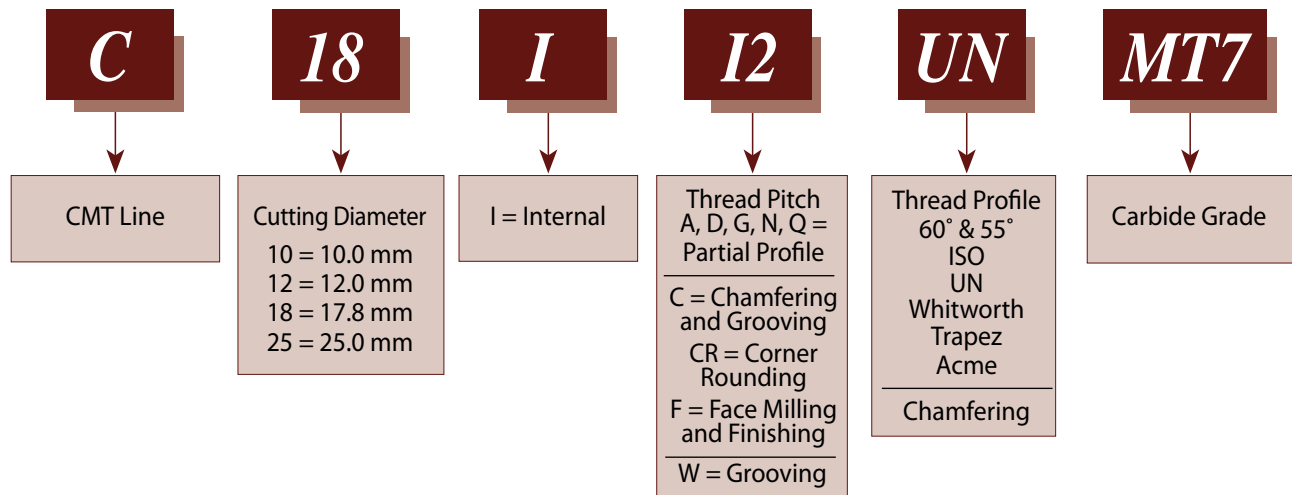
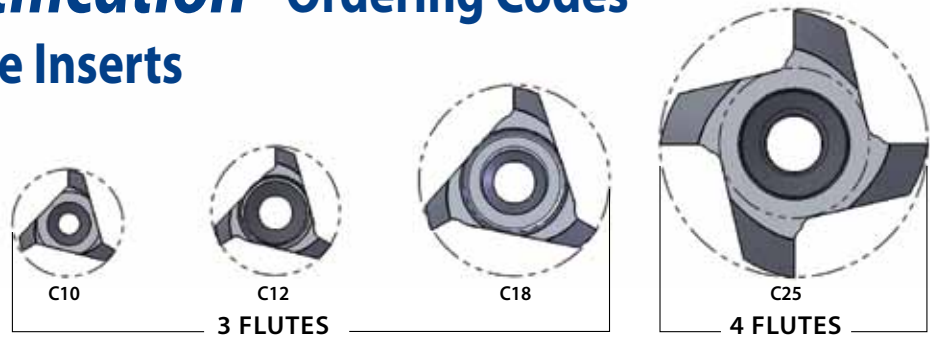
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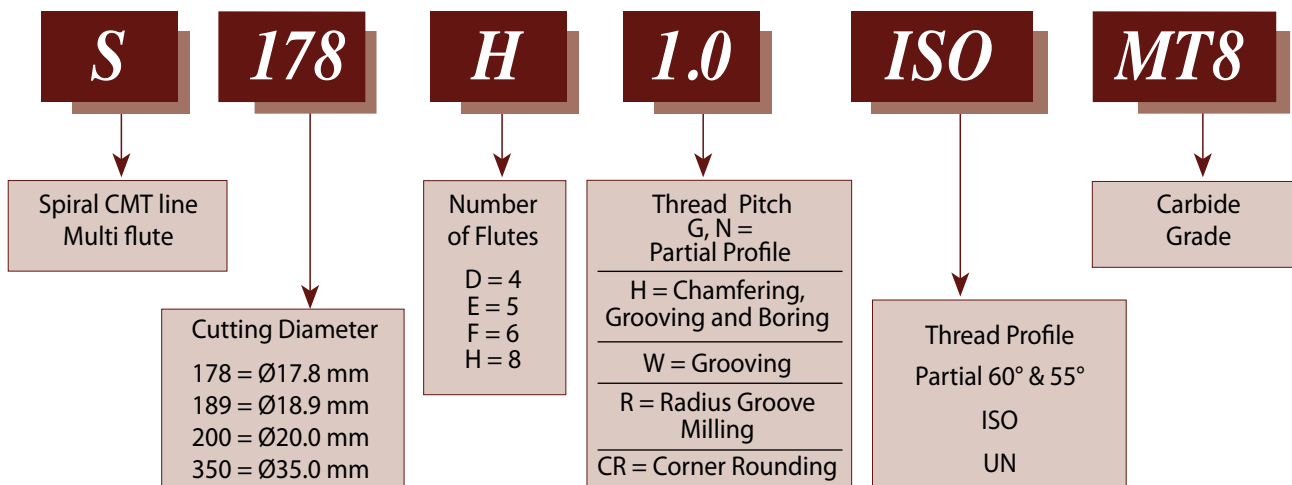
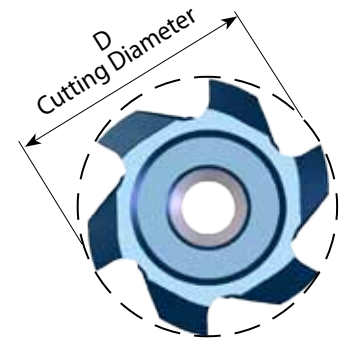
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## Product Identification - Ordering Codes

### CMT Straight Flute Inserts

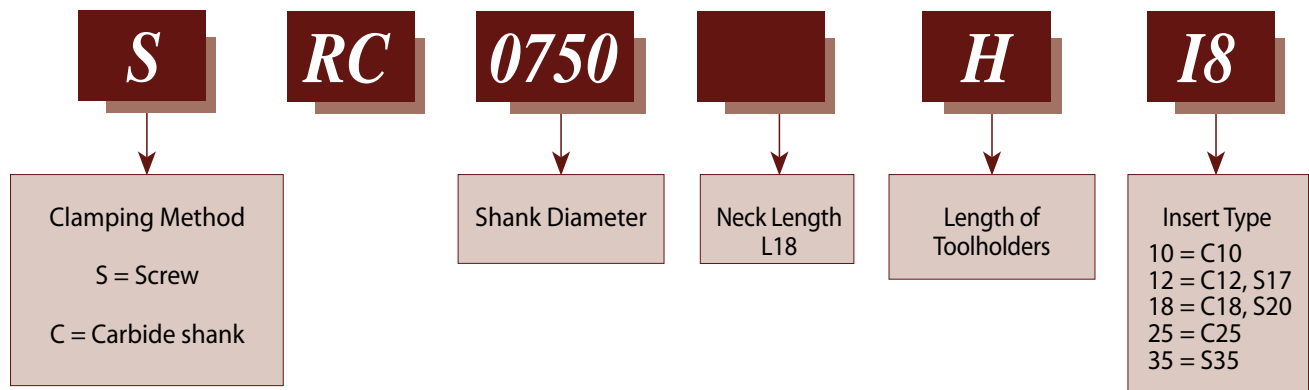


### CMT Spiral Multi Flute Inserts



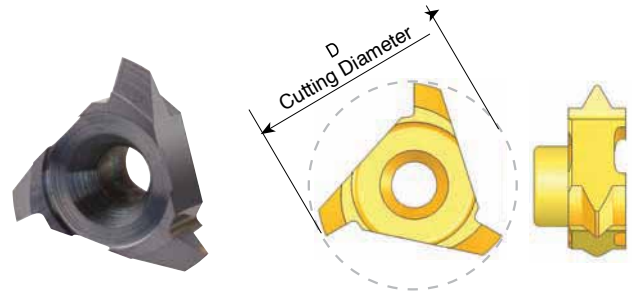
## Product Identification - Ordering Codes

### CMT Toolholders



## Partial Profile 60° - ISO, UN

Same insert for internal and external thread



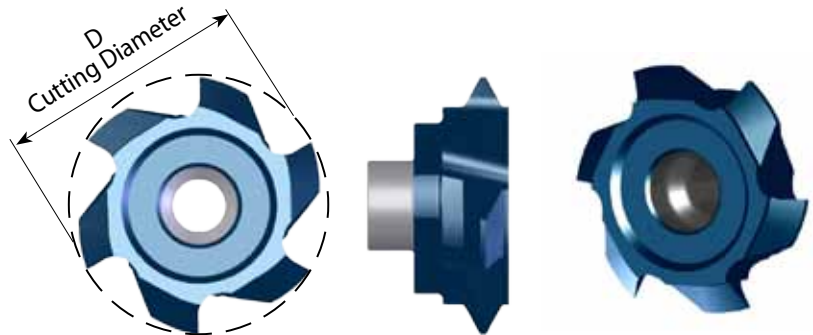
Insert Type	Pitch Range mm	Pitch Range TPI	Ordering Code	D	Thread Diameter (min)		Holder Code*
					Pitch Low Range	Pitch High Range	
C10	Int. 0.5 - 0.8	56 - 28	<b>C10 A60</b>	.39	$\phi \geq .43$	$\phi \geq .47$	H1, 2, 15, 16, 17
	Ex. 0.4 - 0.8	64 - 32		.39			
	Int. 1.0 - 2.0	28 - 13	<b>C10 G60</b>	.39	$\phi \geq .47$	$\phi \geq .55$	
	Ex. 0.8 - 1.75	32 - 15		.39			
C12	Int. 0.5 - 0.8	56 - 28	<b>C12 A60</b>	.47	$\phi \geq .51$	$\phi \geq .55$	H3, 4, 5, 18, 19, 20
	Ex. 0.4 - 0.8	64 - 32		.47			
	Int. 1.0 - 2.0	28 - 13	<b>C12 G60</b>	.49	$\phi \geq .55$	$\phi \geq .63$	
	Ex. 0.8 - 1.75	32 - 15		.49			
C18	Int. 0.5 - 0.8	56 - 28	<b>C18 A60</b>	.70	$\phi \geq .75$		H6, 7, 8, 9, 21, 22, 23
	Ex. 0.4 - 0.8	64 - 32		.70			
	Int. 1.0 - 1.75	28 - 14	<b>C18 G60</b>	.70	$\phi \geq .79$	$\phi \geq .83$	
	Ex. 0.8 - 1.5	32 - 16		.70			
	Int. 2.0 - 3.0	13 - 8	<b>C18 D60</b>	.70	$\phi \geq .83$	$\phi \geq .91$	
	Ex. 1.75 - 2.5	15 - 10		.70			
C25	Int. 1.5 - 2.5	16 - 10	<b>C25 G60</b>	.98	$\phi \geq 1.10$	$\phi \geq 1.18$	H10, 11, 24, 25
	Ex. 1.0 - 2.0	28 - 13		.98			
	Int. 3.0 - 5.0	8 - 5	<b>C25 N60</b>	.98	$\phi \geq 1.18$	$\phi \geq 1.34$	
	Ex. 2.5 - 4.5	10 - 6		.98			
	Int. 5.0 - 6.0	5 - 4	<b>C25 Q60</b>	.98	$\phi \geq 1.34$	$\phi \geq 1.38$	
	Ex. 4.5 - 5.0	6 - 5		.98			

\* For complete toolholder description see pages 225-226.

## Partial Profile 60° - ISO, UN

Same insert for internal and external thread

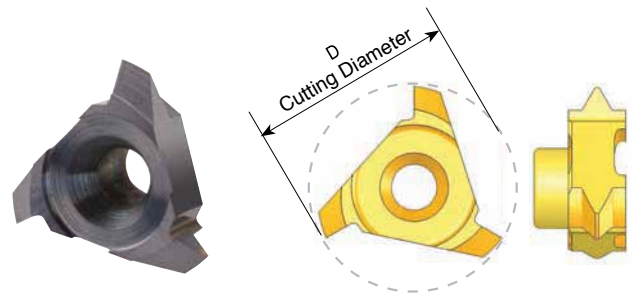
Multi Flute



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	
S20	<b>S200 F G60</b>	Int. 1.5-2.5	16-10	.79	6	$\text{Ø} \geq .91$	$\text{Ø} \geq .98$	H6, 7, 8, 9, 21, 22, 23
		Ex. 1.0-2.0	28-13	.79	6			
	<b>S200 D N60</b>	Int. 3.0-5.0	8-5	.79	4	$\text{Ø} \geq .98$	$\text{Ø} \geq 1.14$	
		Ex. 2.5-4.5	10-6	.79	4			

## Partial Profile 60° - NPT

Same insert for internal and external thread

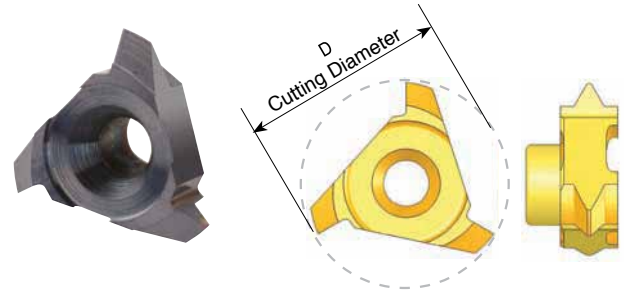


Insert Type	Pitch TPI	Standard	Ordering Code	D	Holder Code*
C10	18	1/4 - 3/8	<b>C10 18 NPT</b>	.39	H1, 2, 15, 17
C18	14	1/2 - 3/4	<b>C18 14 NPT</b>	.62	H21
C25	11.5	1-2	<b>C25 11.5NPT</b>	.98	H10, 11, 24, 25
	8	$\geq 2 \frac{1}{2}$	<b>C25 8 NPT</b>	.98	

\* For complete toolholder description see pages 225-226.

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

Same insert for internal and external thread

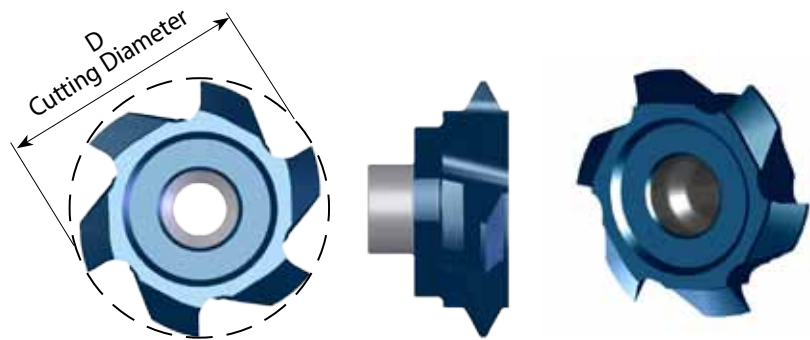


Insert Type	Pitch Range TPI	Ordering Code	D	Thread Dia. (min)	Holder Code*
C10	19-14	<b>C10 G55</b>	.39	$\phi \geq .51$	H1, 2, 15, 17
C12	28-19	<b>C12 G55</b>	.47	$\phi \geq .55$	H3, 4, 5, 18, 19, 20
	14- 11	<b>C12 N55</b>	.48	$\phi \geq .63$	H3, 4, 5, 18, 20
C18	14- 8	<b>C18 G55</b>	.71	$\phi \geq .91$	H6, 7, 8, 9, 21, 22, 23
C25	7- 5	<b>C25 N55</b>	.98	$\phi \geq 1.22$	H10, 11, 24, 25

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

Same insert for internal and external thread

Multi Flute

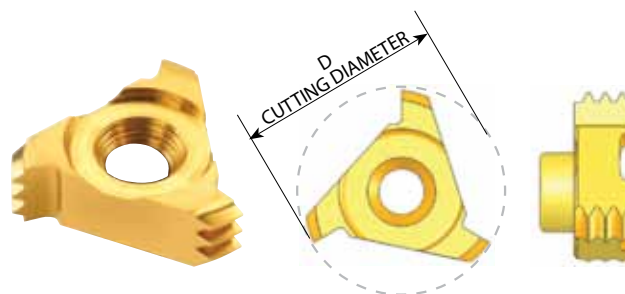


Insert Type	Ordering Code	Pitch Range TPI	D	No. of Flutes	Thread Dia (min)	Holder Code*
S17	<b>S170 F G55</b>	11-8	.67	6	$\phi \geq .73$	H3, 4, 5, 18, 19, 20
S20	<b>S195 F G55</b>	14	.77	6	$\phi \geq .91$	H6, 7, 8, 9, 21, 22, 23
	<b>S200 D N55</b>	8-6	.79	4	$\phi \geq .98$	H21

\* For complete toolholder description see pages 225-226.

## Full Profile - ISO

### Inserts for internal thread



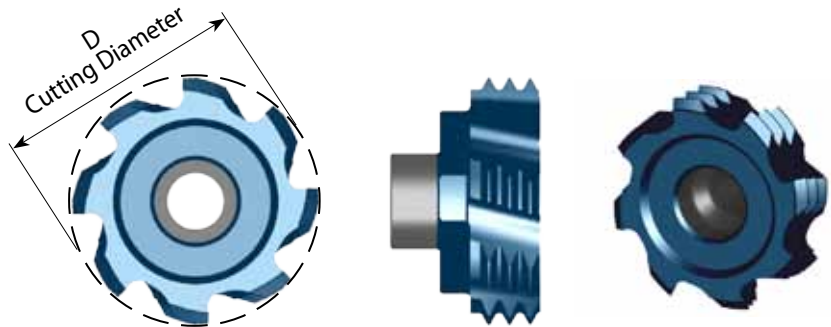
Insert Type	Pitch mm	M coarse	M fine	Ordering Code	Number of Teeth	D	Holder Code*
C10	0.5		M10, M12	<b>C10 I 0.5 ISO</b>	6	.35	H1,2,15,16, 17
	1.0		M12, M13	<b>C10 I 1.0 ISO</b>	3	.39	
	1.5		M13, M14	<b>C10 I 1.5 ISO</b>	2	.39	
	1.75	M12		<b>C10 I 1.75ISO</b>	1	.38	H1, 2, 15, 17
	2.0	M14	M18	<b>C10 I 2.0 ISO</b>	1	.39	
C12	0.5		M13-M18	<b>C12 I 0.5 ISO</b>	6	.47	H3,4,5,18,19,20
	0.75		M13-M18	<b>C12 I 0.75ISO</b>	4	.47	
	1.0		M14-M19	<b>C12 I 1.0 ISO</b>	3	.47	
	1.5		M15-M19	<b>C12 I 1.5 ISO</b>	2	.47	
	2.0	M16	M18, M20	<b>C12 I 2.0 ISO</b>	1	.49	H3, 4, 5, 18, 20
	2.5	M18, M20		<b>C12 I 2.5 ISO</b>	1	.47	
C18	0.5		M19-M60	<b>C18 I 0.5 ISO</b>	9	.70	H6, 7, 8, 9, 21, 22, 23
	0.75		M19-M60	<b>C18 I 0.75ISO</b>	6	.70	
	1.0		M20-M60	<b>C18 I 1.0 ISO</b>	5	.70	
	1.5		M20-M60	<b>C18 I 1.5 ISO</b>	3	.70	
	2.0		M21-M60	<b>C18 I 2.0 ISO</b>	2	.70	
	2.5	M22		<b>C18 I 2.5 ISO</b>	2	.70	
	3.0	M24, M27	M28-M60	<b>C18 I 3.0 ISO</b>	1	.70	
	3.5	M30, M33		<b>C18 I 3.5 ISO</b>	1	.70	
C25	3.0	M32, M33	M30-M80	<b>C25 I 3.0 ISO</b>	2	.98	H10, 11, 24, 25
	4.0	M36, M39	M40-M80	<b>C25 I 4.0 ISO</b>	1	.98	
	4.5	M45		<b>C25 I 4.5 ISO</b>	1	.98	
	5.0	M48, M52		<b>C25 I 5.0 ISO</b>	1	.98	
	5.5	M60		<b>C25 I 5.5 ISO</b>	1	.98	
	6.0	M64, M68	M70-M80	<b>C25 I 6.0 ISO</b>	1	.98	

\* For complete toolholder description see pages 225-226.

## Full Profile - ISO

Inserts for internal thread

Multi Flute



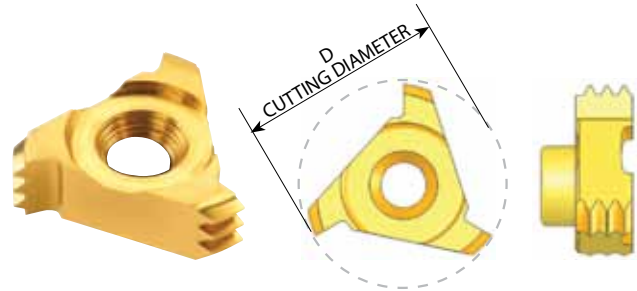
Insert Type	Ordering Code	Pitch mm	M coarse	M fine	Number of Teeth	D	No. of Flutes	Holder Code*
S17	<b>S160 F 2.5 ISO</b>	2.5	M20		1	.63	6	H3, 4, 5, 18, 19, 20
S20	<b>S163 H 1.0 ISO</b>	1.0		M18-M60	5	.64	8	H6, 7, 8, 9, 21, 22, 23
	<b>S175 H 1.5 ISO</b>	1.5		M20-M60	3	.69	8	
	<b>S186 F 2.0 ISO</b>	2.0		M22-M60	2	.73	6	
	<b>S178 F 2.5 ISO</b>	2.5	M22		2	.70	6	
	<b>S189 F 3.0 ISO</b>	3.0	M24, M27	M28-M60	1	.74	6	
	<b>S200 F 3.5 ISO</b>	3.5	M30, M33		1	.79	6	
	<b>S200 F 4.0 ISO</b>	4.0	M36, M39	M40-M60	1	.79	6	
	<b>S200 E 4.5 ISO</b>	4.5	M42, M45		1	.79	5	
	<b>S200 D 5.0 ISO</b>	5.0	M48, M52		1	.79	4	H21
S35	<b>S350 F 6.0 ISO</b>	6.0	M64, M68		1	1.38	6	H12, 13, 14, 26
	<b>S350 F 8.0 ISO</b>	8.0		M130-M200	1	1.38	6	

\* For complete toolholder description see pages 225-226.



## Full Profile - UN

### Inserts for internal thread



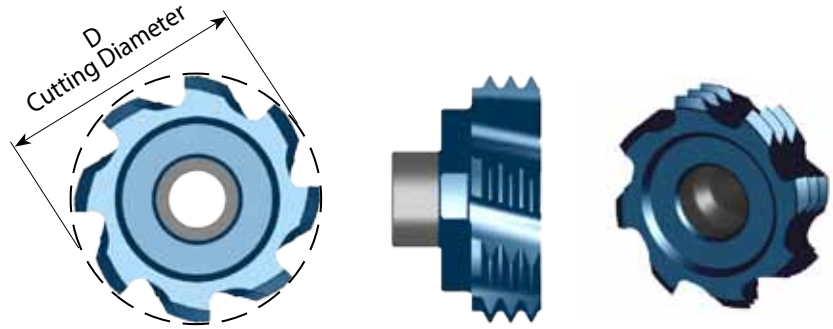
Insert Type	Pitch TPI	Nominal Size	UNC	UNF	UNEF	Ordering Code	Number of Teeth	D	Holder* Code
C10	20			1/2		<b>C10 I 20 UN</b>	2	.39	H1, 2, 15, 16, 17
	18			9/16		<b>C10 I 18 UN</b>	2	.39	
	13		1/2			<b>C10 I 13 UN</b>	1	.39	H1, 2, 15, 17
	12	5/8, 11/16, 3/4	9/16			<b>C10 I 12 UN</b>	1	.39	
C12	32	9/16, 5/8				<b>C12 I 32 UN</b>	3	.47	H3, 4, 5, 18, 19, 20
	28	9/16, 5/8, 11/16				<b>C12 I 28 UN</b>	3	.47	
	24				9/16, 5/8, 11/16	<b>C12 I 24 UN</b>	2	.47	
	20	9/16, 5/8, 11/16			3/4	<b>C12 I 20 UN</b>	2	.47	
	18			5/8		<b>C12 I 18 UN</b>	2	.47	
	16	5/8, 11/16		3/4		<b>C12 I 16 UN</b>	1	.47	
	11		5/8			<b>C12 I 11 UN</b>	1	.47	H3, 4, 5, 18, 20
	10		3/4			<b>C12 I 10 UN</b>	1	.47	
C18	32	3/4, 13/16, 7/8				<b>C18 I 32 UN</b>	6	.70	H6, 7, 8, 9, 21, 22, 23
	28	3/4, 13/16, 7/8				<b>C18 I 28 UN</b>	5	.70	
	24					<b>C18 I 24 UN</b>	4	.70	
	20	11/16, 11/8			13/16, 7/8, 15/16	<b>C18 I 20 UN</b>	3	.70	
	18					<b>C18 I 18 UN</b>	3	.70	
	16	7/8, 1				<b>C18 I 16 UN</b>	3	.70	
	14			7/8		<b>C18 I 14 UN</b>	2	.70	
	12	7/8		1, 1 1/8		<b>C18 I 12 UN</b>	2	.70	
	11					<b>C18 I 11 UN</b>	2	.70	
	9		7/8			<b>C18 I 9 UN</b>	1	.70	
	8		1			<b>C18 I 8 UN</b>	1	.70	
C25	8	13/16, 11/4, 15/16				<b>C25 I 8 UN</b>	2	.98	H10, 11, 24, 25
	7		1 1/4			<b>C25 I 7 UN</b>	1	.98	
	6	17/16, 19/16	1 3/8, 1 1/2			<b>C25 I 6 UN</b>	1	.98	
	5		1 3/4			<b>C25 I 5 UN</b>	1	.98	
	4		2 1/2, 2 3/4			<b>C25 I 4 UN</b>	1	.98	

\* For complete toolholder description see pages 225-226.

## Full Profile - UN

Inserts for internal thread

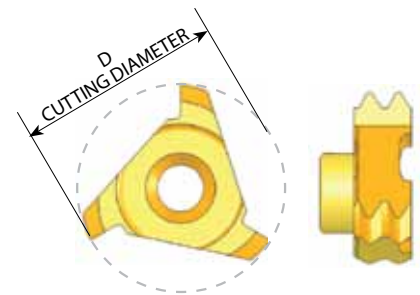
Multi Flute



Insert Type	Ordering Code	Pitch TPI	Nominal size	UNC	UNF	UNEF	Number of Teeth	D	No. of Flutes	Holder* Code
S20	<b>S160 H 24 UN</b>	24				11/16	4	.63	8	H6, 7, 8, 9, 21, 22, 23
	<b>S169 H 20 UN</b>	20				3/4, 13/16, 7/8, 15/16, 1	4	.67	8	
	<b>S164 F 16 UN</b>	16	7/8, 15/16, 1		3/4		3	.65	6	
	<b>S191 F 14 UN</b>	14			7/8		2	.75	6	
	<b>S186 F 12 UN</b>	12	7/8, 15/16		1		2	.73	6	
	<b>S178 F 9 UN</b>	9		7/8			1	.70	6	
	<b>S200 F 8 UN</b>	8	1 1/8	1			1	.79	6	
	<b>S200 F 7 UN</b>	7		1 1/8, 1 1/4			1	.79	6	
	<b>S200 E 6 UN</b>	6	1 7/16	1 3/8, 1 1/2			1	.79	5	
	<b>S200 D 5 UN</b>	5		1 3/4			1	.79	4	H21
S35	<b>S350 F 4 UN</b>	4		2 1/2, 2 3/4, 3			1	1.38	6	H12, 13, 14, 26

## G 55° BSW, BSF, BSP

Same Insert for internal and external thread

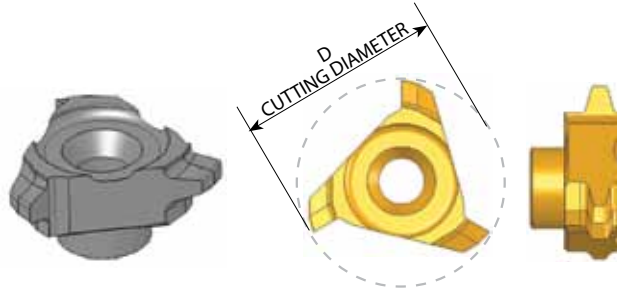


Insert Type	Pitch TPI	Standard	Ordering Code	Number of Teeth	D	Holder Code*
C10	19	G 1/4	<b>C10 19 W</b>	2	.39	H1, 2, 15, 16, 17
C12	19	G 3/8	<b>C12 19 W</b>	2	.47	H3, 4, 5, 18, 19, 20
C18	14	G 7/8	<b>C18 14 W</b>	2	.70	H6, 7, 8, 9, 21, 22, 23
	11	G ≥ 1	<b>C18 11 W</b>	2	.70	

\* For complete toolholder description see pages 225-226.

## Trapez - DIN 103

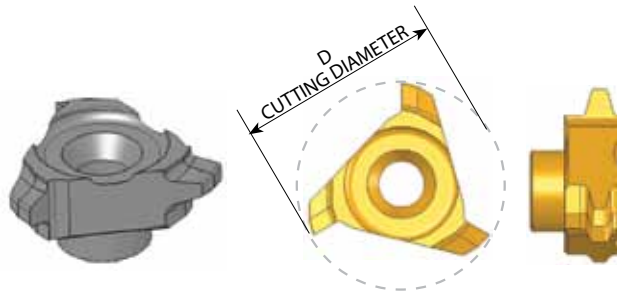
Inserts for internal thread



Insert Type	Pitch mm	Standard	Ordering Code	D	Holder Code*
C10	2.0	$\emptyset \geq .63$	<b>C10 I 2 TR</b>	.39	H1, 2, 15, 17
C18	3.0	$\emptyset \geq .94$	<b>C18 I 3 TR</b>	.70	H6, 7, 8, 9, 21, 22, 23
	4.0	$\emptyset \geq 1.02$	<b>C18 I 4 TR</b>	.70	H21
	5.0	$\emptyset \geq 1.10$	<b>C18 I 5 TR</b>	.70	
C25	6.0	$\emptyset \geq 1.42$	<b>C25 I 6 TR</b>	.98	H10, 11, 24, 25

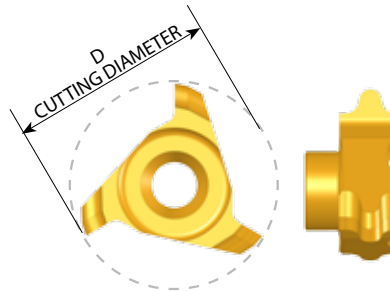
## Acme

Inserts for internal thread



Insert Type	Pitch TPI	Standard	Ordering Code	D	Holder Code*
C18	5	1 <sup>1</sup> / <sub>8</sub> , 1 <sup>1</sup> / <sub>4</sub>	<b>C18 I 5 ACME</b>	.71	Metric CRC 1218 P
C25	4	1 <sup>1</sup> / <sub>2</sub> , 1 <sup>3</sup> / <sub>4</sub> , 2	<b>C25 I 4 ACME</b>	.98	H10, 11, 24, 25

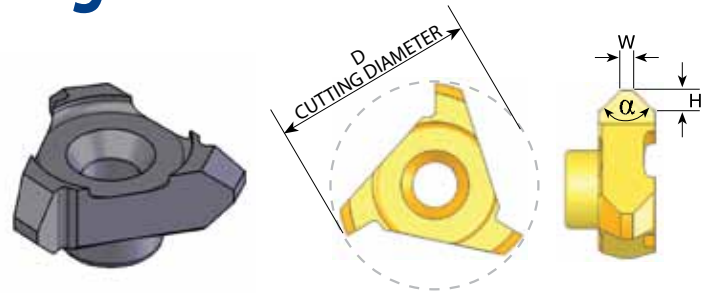
## Round - DIN 405



Insert Type	Pitch TPI	Standard	Ordering Code	D	Holder Code*
C18	8	1/8RD	<b>C18 1/8RD</b>	.70	H6, 7, 8, 9, 21, 22, 23
	6	1/6RD	<b>C18 1/6RD</b>	.70	H21
C25	4	1/4RD	<b>C25 1/4RD</b>	.98	H10, 11, 24, 25

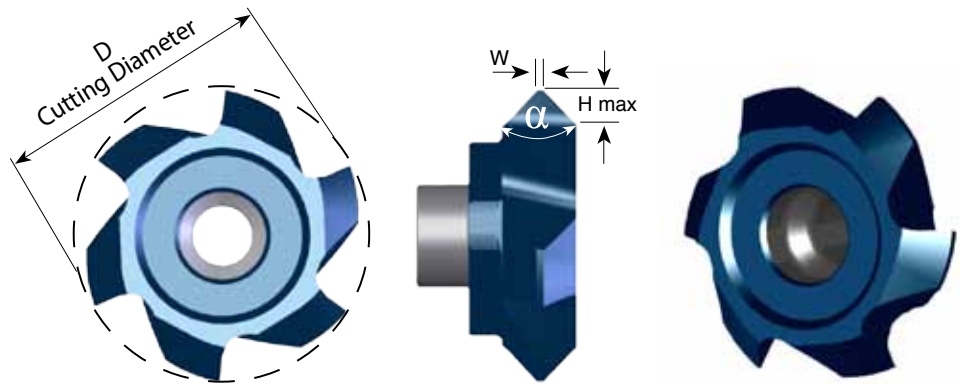
\* For complete toolholder description see pages 225-226.

## Chamfering and Grooving



Insert Type	Ordering Code	D	H	W	α	Holder Code*
C10	<b>C10 C90</b>	.39	.051	.016	90°	H1, 2, 15, 17
C12	<b>C12 C90</b>	.47	.053	.012	90°	H3, 4, 5, 18, 20
C18	<b>C18 C90</b>	.70	.077	.043	90°	H6, 7, 8, 9, 21, 22, 23
C25	<b>C25 C90</b>	.98	.098	.039	90°	H10, 11, 24, 25

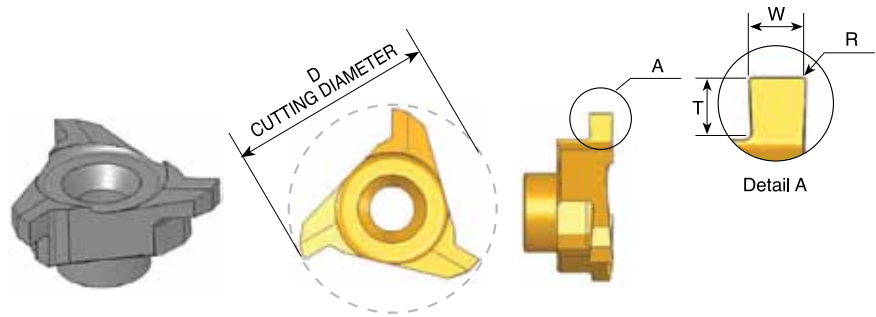
## Chamfering, Grooving and Boring Multi Flute



Insert Type	Ordering Code	D	H max	W	α	No. of Flutes	Holder Code
S17	<b>SC160 E H14</b>	.63	.053	.008	90°	5	H3, 4, 5, 18, 19, 20
S20	<b>SC170 E H14</b>	.67	.053	.008	90°	5	H6, 7, 8, 9, 21, 22, 23
	<b>SC200 F H14</b>	.79	.053	.008	90°	6	H6, 7, 8, 9, 21, 22, 23
	<b>SC200 F H24</b>	.79	.093	.008	90°	6	
S35	<b>SC350 F H42</b>	1.38	.165	.008	90°	6	H12, 13, 14, 26
S20	<b>SC200 F H20</b>	.79	.077	.039	90°	6	H6, 7, 8, 9, 21, 22, 23
	<b>SC200 F H17</b>	.79	.067	.059	90°	6	
	<b>SC200 F H15</b>	.79	.059	.079	90°	6	
	<b>SC200 F H12</b>	.79	.047	.079	90°	6	

\* For complete toolholder description see pages 225-226.

## Groove Milling

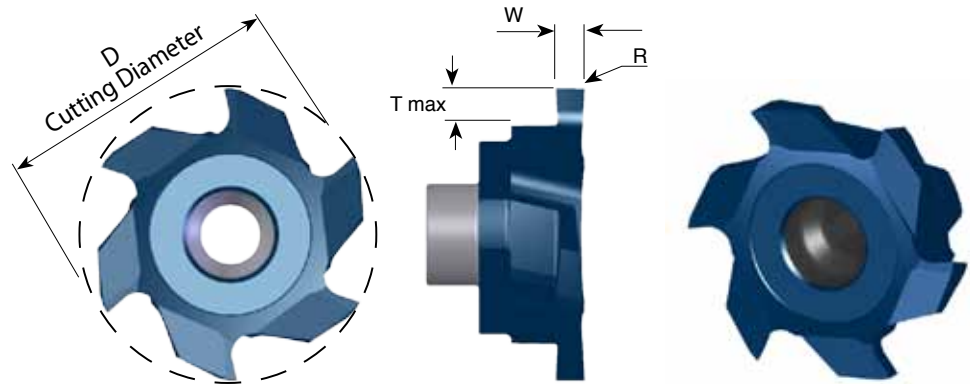


Insert Type	Ordering Code	D	W ±.001	T max.	R	Groove Dia. (min.)	Holder Code*
C10	<b>C10 W08</b>	.39	.031	.03	.004	$\phi > .39$	H1, 2, 15, 16, 17
	<b>C10 W09</b>	.39	.035	.04	.004	$\phi > .39$	
	<b>C10 W10</b>	.39	.039	.04	.004	$\phi > .39$	
	<b>C10 W15</b>	.39	.059	.05	.004	$\phi > .39$	
	<b>C10 W20</b>	.39	.079	.05	.004	$\phi > .39$	
C12	<b>C12 W08</b>	.47	.031	.03	.004	$\phi > .47$	H3, 4, 5,18,19,20
	<b>C12 W10</b>	.47	.039	.04	.004	$\phi > .47$	
	<b>C12 W15</b>	.49	.059	.06	.004	$\phi > .49$	
	<b>C12 W20</b>	.49	.079	.06	.004	$\phi > .49$	
	<b>C12 W25</b>	.49	.098	.06	.004	$\phi > .49$	
C18	<b>C18 W10</b>	.70	.039	.06	.004	$\phi > .70$	H6, 7, 8, 9, 21, 22, 23
	<b>C18 W12</b>	.70	.047	.06	.004	$\phi > .70$	
	<b>C18 W15</b>	.70	.059	.08	.004	$\phi > .70$	
	<b>C18 W20</b>	.70	.079	.11	.004	$\phi > .70$	H21
C25	<b>C25 W20</b>	.98	.079	.12	.008	$\phi > .98$	H10, 11, 24, 25
	<b>C25 W25</b>	.98	.098	.12	.008	$\phi > .98$	
	<b>C25 W30</b>	.98	.118	.12	.008	$\phi > .98$	
	<b>C25 W35</b>	.98	.138	.14	.008	$\phi > .98$	
	<b>C25 W40</b>	.98	.157	.14	.008	$\phi > .98$	
	<b>C25 W50</b>	.98	.197	.14	.008	$\phi > .98$	

\* For complete toolholder description see pages 225-226.

## Groove Milling

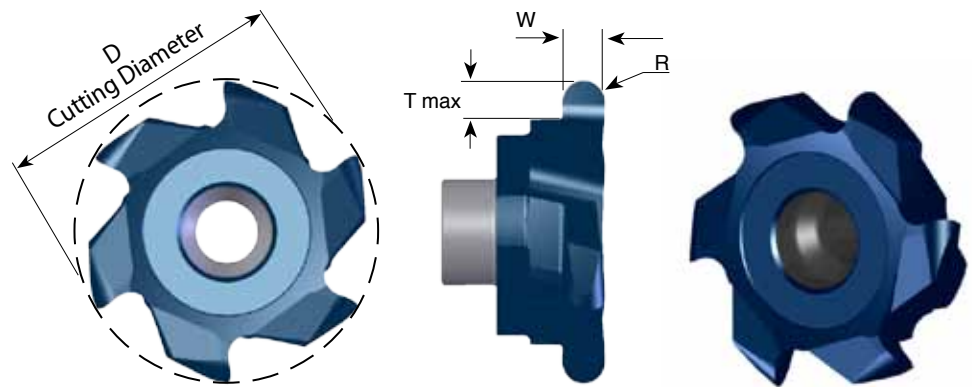
### Multi Flute



Insert Type	Ordering Code	D	W ±.001	T Max.	R	Groove Dia. (min)	No. of Flutes	Holder Code*
S17	<b>SG170 F W15</b>	.67	.059	.11	.008	Ø > .67	6	H3, 4, 5, 18, 19, 20
	<b>SG170 F W20</b>	.67	.079	.11	.008	Ø > .67	6	
	<b>SG170 F W25</b>	.67	.098	.11	.008	Ø > .67	6	
S20	<b>SG200 F W15</b>	.79	.059	.11	.008	Ø > .79	6	H6, 7, 8, 9, 21, 22, 23
	<b>SG200 F W20</b>	.79	.079	.11	.008	Ø > .79	6	
	<b>SG200 F W25</b>	.79	.098	.11	.008	Ø > .79	6	
	<b>SG200 F W30</b>	.79	.118	.11	.008	Ø > .79	6	
	<b>SG200 F W40</b>	.79	.157	.11	.008	Ø > .79	6	
	<b>SG200 F W49</b>	.79	.193	.11	.008	Ø > .79	6	
S20	<b>SG200 E W20T</b>	.79	.079	.15	.008	Ø > .79	5	H21
	<b>SG200 E W25T</b>	.79	.098	.15	.008	Ø > .79	5	
	<b>SG200 E W30T</b>	.79	.118	.15	.008	Ø > .79	5	
S35	<b>SG350 F W30T</b>	1.38	.118	.25	.008	Ø > 1.38	6	H12, 13, 14, 26
	<b>SG350 F W40T</b>	1.38	.157	.25	.008	Ø > 1.38	6	
	<b>SG350 F W50T</b>	1.38	.197	.25	.008	Ø > 1.38	6	
	<b>SG350 F W60T</b>	1.38	.236	.25	.008	Ø > 1.38	6	
	<b>SG350 F W80T</b>	1.38	.315	.25	.008	Ø > 1.38	6	

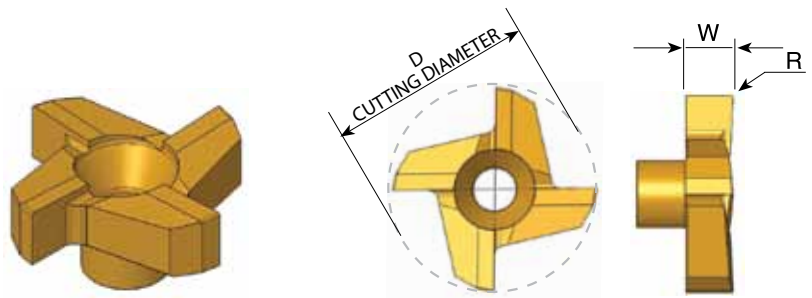
\* For complete toolholder description see pages 225-226.

## Full Radius Groove Milling Multi Flute



Insert Type	Ordering Code	D	R	W ±.001	T Max.	Groove Dia. (min)	No. of Flutes	Holder Code*
S20	<b>SG200 F R10</b>	.79	.039	.079	.11	Ø > .79	6	H6, 7, 8, 9, 21, 22, 23
	<b>SG200 F R12</b>	.79	.047	.094	.11	Ø > .79	6	
	<b>SG200 F R15</b>	.79	.059	.118	.11	Ø > .79	6	
	<b>SG200 F R20</b>	.79	.079	.157	.11	Ø > .79	6	

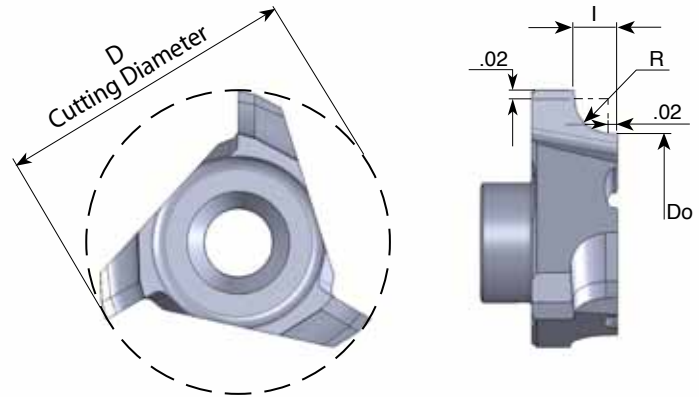
## Face Milling and Finishing



Insert Type	Ordering Code	D	W +.008	R	Holder Code*
C10	<b>C10 F R0.1</b>	.39	.12	.004	H1, 2, 15, 16, 17
C12	<b>C12 F R0.1</b>	.47	.12	.004	H3, 4, 5, 18, 19, 20
C18	<b>C18 F R0.1</b>	.70	.20	.004	H6, 7, 8, 9, 21, 22, 23
C25	<b>C25 F R0.2</b>	.98	.24	.008	H10, 11, 24, 25

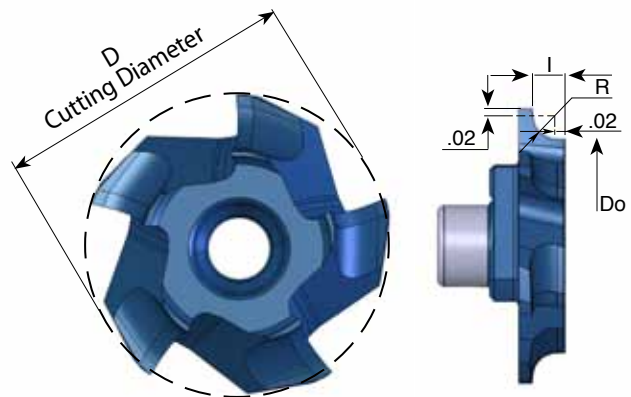
\* For complete toolholder description see pages 225-226.

## Corner Rounding



Insert Type	Ordering Code	D	Do	R	I	Holder Code*
C10	<b>C10 CR05</b>	.39	.31	.020	.04	H1, 2, 15, 16, 17
	<b>C10 CR10</b>	.39	.27	.039	.06	
C18	<b>C18 CR13</b>	.70	.56	.049	.07	H6, 7, 8, 9, 21, 22, 23
	<b>C18 CR15</b>	.70	.54	.059	.08	
	<b>C18 CR20</b>	.70	.50	.079	.10	

## Corner Rounding Multi Flute



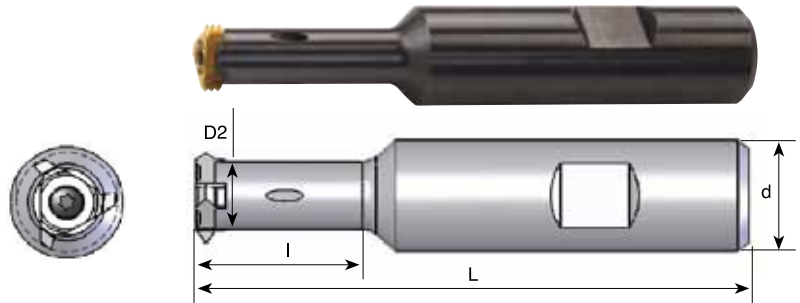
Insert Type	Ordering Code	D	Do	R	I	No. of Flutes	Holder Code*
S17	<b>S170 F CR10</b>	.67	.55	.039	.06	5	H3, 4, 5, 18, 19, 20
	<b>S170 F CR13</b>	.67	.53	.049	.07	5	
	<b>S170 F CR15</b>	.67	.51	.059	.08	5	

\* For complete toolholder description see pages 225-226.



## Steel Toolholders

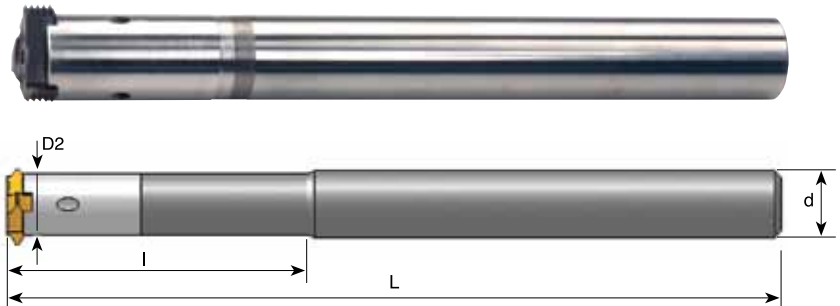
With internal coolant



Tool No.	Ordering Code	Insert Type	d	D2	l	L	Insert Screw	Torx Key
H1	<a href="#">SRC 0500 E10</a>	C10	.500	.29	.75	2.8	S5	K5
H2	<a href="#">SRC 0625 G10</a>		.625	.29	.75	3.5		
H3	<a href="#">SRC 0500 E12</a>	C12, S17	.500	.35	.98	2.8	S10	K10
H4	<a href="#">SRC 0625 G12</a>		.625	.35	.98	3.5		
H5	<a href="#">SRC 0625 H12</a>		.625	.35	1.38	4.0		
H6	<a href="#">SRC 0625 H18</a>	C18, S20	.625	.54	1.89	4.0	S16	K16
H7	<a href="#">SRC 0750 H18</a>		.750	.54	1.26	4.0		
H8	<a href="#">SRC 0750 J18</a>		.750	.54	1.89	4.5		
H9	<a href="#">SRC 0750 L18</a>		.750	.54	2.91	5.5		
H10	<a href="#">SRC 1000 J25</a>	C25	1.00	.69	1.77	4.5	S27	K27
H11	<a href="#">SRC 1000 M25</a>		1.00	.69	3.15	5.9		
H12	<a href="#">SRC 0750 P35</a>	S35	.750	.87	-	6.7	S33	K33
H13	<a href="#">SRC 1000 H35</a>		1.00	.87	1.57	3.9		
H14	<a href="#">SRC 1000 K35</a>		1.00	.87	2.36	5.1		

## Carbide Shank Toolholders

With internal coolant

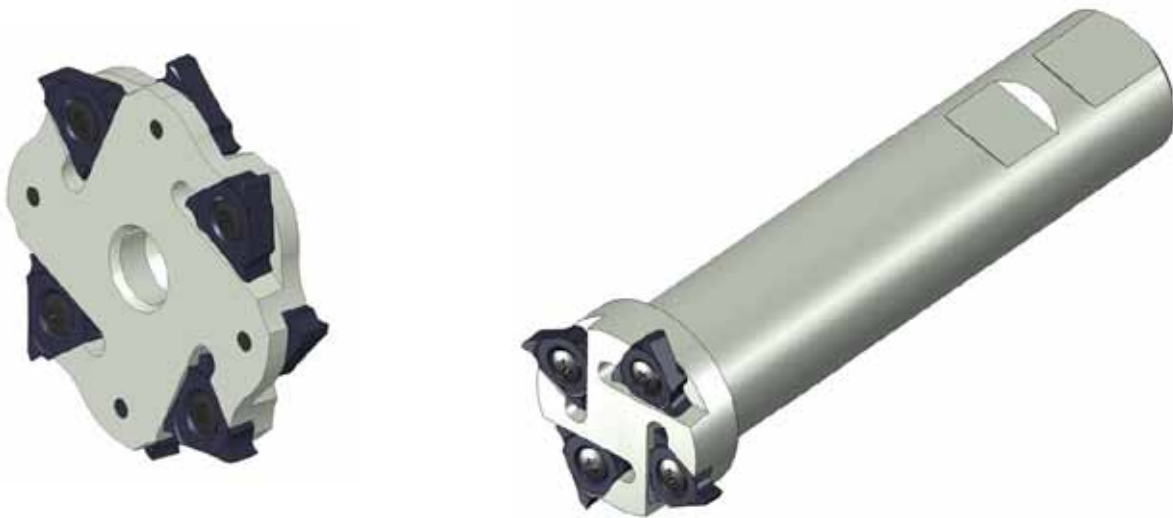


Tool No.	Ordering Code	Insert Type	d	D2	l	L	Insert Screw	Torx Key
H15	<a href="#">CRC 0312 L13 K10</a>	C10	.312	.29	1.38	5.0	S5	K5
H16	<a href="#">CRC 0312 K10</a>		.312	.312	-	5.0	S5	K5
H17	<a href="#">CRC 0312 L17 M10</a>		.312	.29	1.77	5.9	S5	K5
H18	<a href="#">CRC 0375 L15 M12</a>	C12, S17	.375	.35	1.58	6.0	S10	K10
H19	<a href="#">CRC 0375 M12</a>		.375	.375	-	6.0	S10	K10
H20	<a href="#">CRC 0500 L22 P10</a>		.500	.35	2.24	6.7	S10	K10
H21	<a href="#">CRC 0500 P18</a>	C18, S20	.500	.500	-	7.0	S16	K16
H22	<a href="#">CRC 0625 L18 R18</a>		.625	.54	1.89	7.8	S16	K16
H23	<a href="#">CRC 0625 L29 R18</a>		.625	.54	2.91	7.8	S16	K16
H24	<a href="#">CRC 0625 R25</a>	C25	.625	.69	-	8.2	S27	K27
H25	<a href="#">CRC 0750 L33 S25</a>		.750	.69	3.35	10.0	S27	K27
H26	<a href="#">CRC 0750 S35</a>	S35	.750	.87	-	10.2	S33	K33

Tools without Weldon

## CMT Multi Insert Milling Cutters

**Carmex presents a new generation of 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

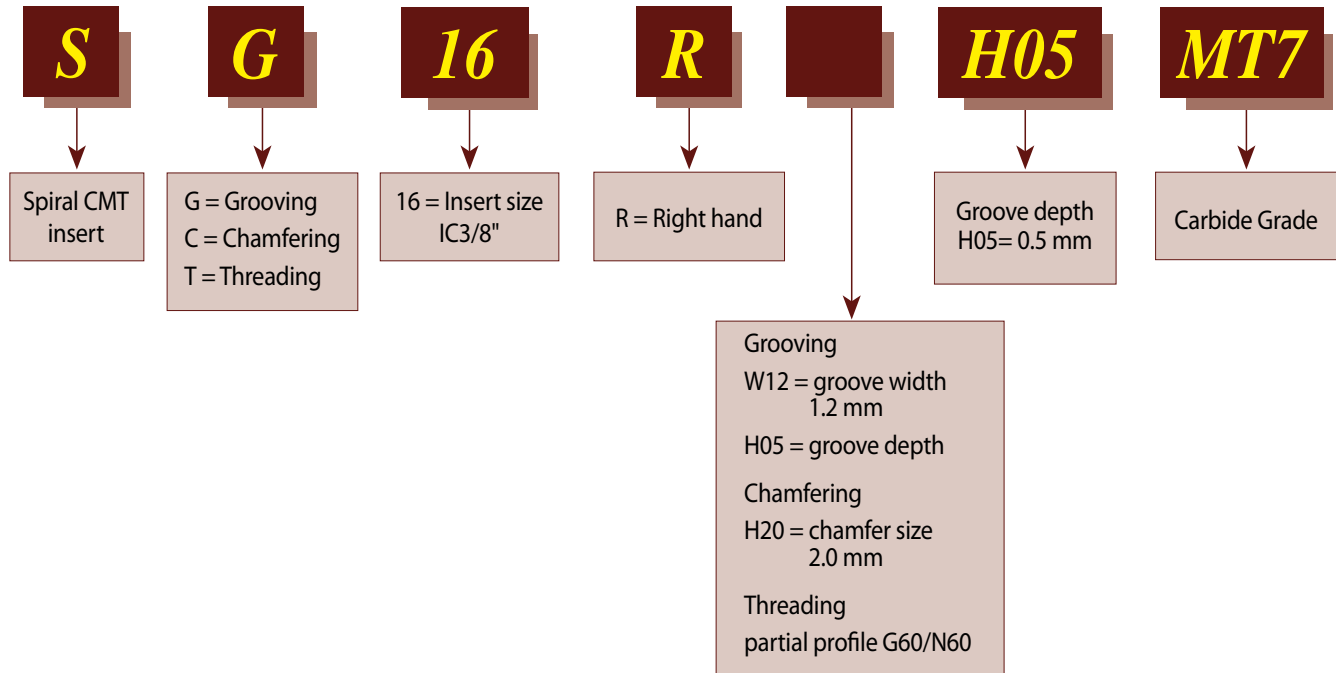


### Milling cutters / Disc milling cutter

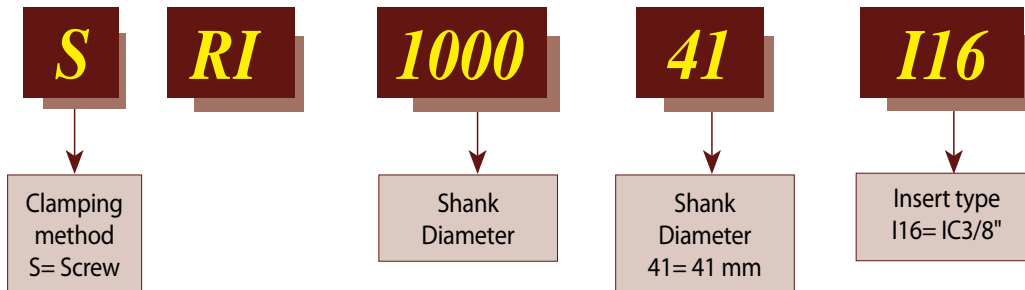
- 4 - 8 inserts per holder, for high productivity
- To use with Carmex standard CMT - S35 toolholders
- The milling cutters are coated with a special layer (silver color) for high Anti-corrosive resistance and extra protection against cutting burrs

## Product Identification - Ordering Codes

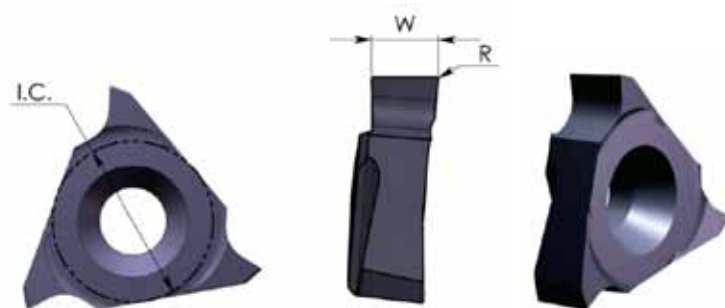
### Inserts



### Toolholders



## Groove Milling



### DIN 471 / 472

Insert Type	I.C.	Ordering Code	W	R	Holder Code
SI16	3/8"	<b>SG 16 R W14</b>	.055	.004	H27, H28
		<b>SG 16 R W17</b>	.067	.004	
		<b>SG 16 R W19</b>	.077	.006	
		<b>SG 16 R W22</b>	.089	.006	
		<b>SG 16 R W27</b>	.108	.008	
		<b>SG 16 R W32</b>	.128	.008	
		<b>SG 16 R W42</b>	.167	.008	
		<b>SG 16 R W43</b>	.171	.008	H27, H28, H29

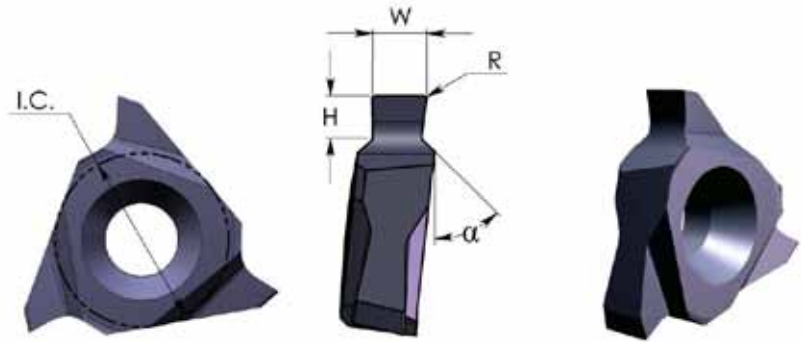
Right hand cutting

Insert Type	I.C.	Ordering Code	W	R	Holder Code
SI16	3/8"	<b>SG 16 L W43</b>	.171	.008	H29

Left hand cutting

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

## Groove Milling with Chamfer

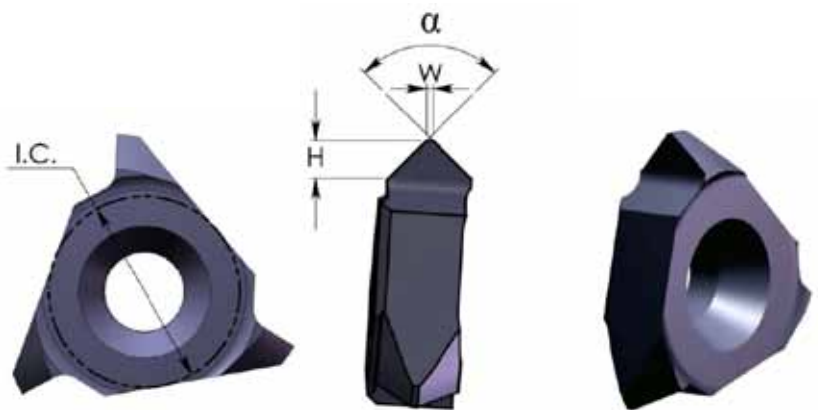


### DIN 471 / 472

Insert Type	I.C.	Ordering Code	W	H max	R	$\alpha$	Holder Code
SI16	3/8"	<b>SG 16 R W12 H05</b>	.047	.020	.004	45°	H27, H28
		<b>SG 16 R W14 H07</b>	.055	.028	.004		
		<b>SG 16 R W14 H08</b>	.055	.033	.004		
		<b>SG 16 R W17 H08</b>	.067	.033	.004		
		<b>SG 16 R W17 H10</b>	.067	.039	.004		
		<b>SG 16 R W19 H12</b>	.077	.049	.006		
		<b>SG 16 R W22 H15</b>	.089	.059	.006		
		<b>SG 16 R W27 H15</b>	.108	.059	.006		
		<b>SG 16 R W27 H17</b>	.108	.069	.006		
		<b>SG 16 R W32 H17</b>	.128	.069	.006		
		<b>SG 16 R W42 H20</b>	.167	.079	.006		
		<b>SG 16 R W42 H25</b>	.167	.098	.006		

Right hand cutting

## Chamfering

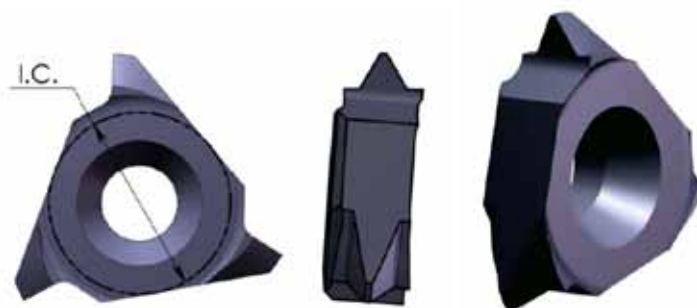


Insert Type	I.C.	Ordering Code	H max	W	$\alpha$	Holder Code
SI16	3/8"	<b>SC 16 R H20</b>	.079	.008	90°	H27, H28
		<b>SC 16 R H19</b>	.075	.020		

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

## Partial Profile 60° - ISO, UN

Same Insert for internal and external thread

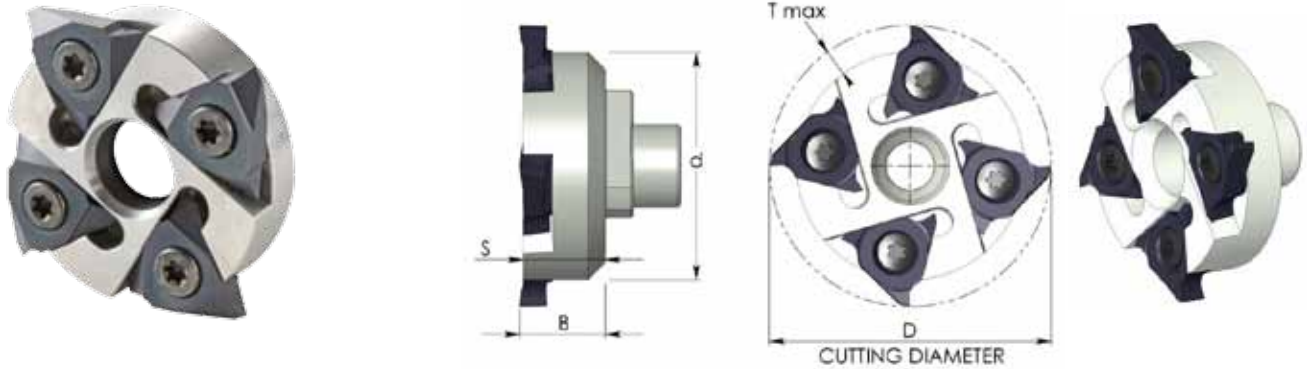


Insert Type	I.C.	Ordering Code	Pitch Range mm	Pitch Range TPI	Holder Code
SI16	3/8"	<b>ST 16 R G60</b>	1.5-3.0	16-8	H27, H28
		<b>ST 16 R N60</b>	3.5-5.0	7-5	

Right hand cutting

## Toolholders

### Milling Cutter- Arbor

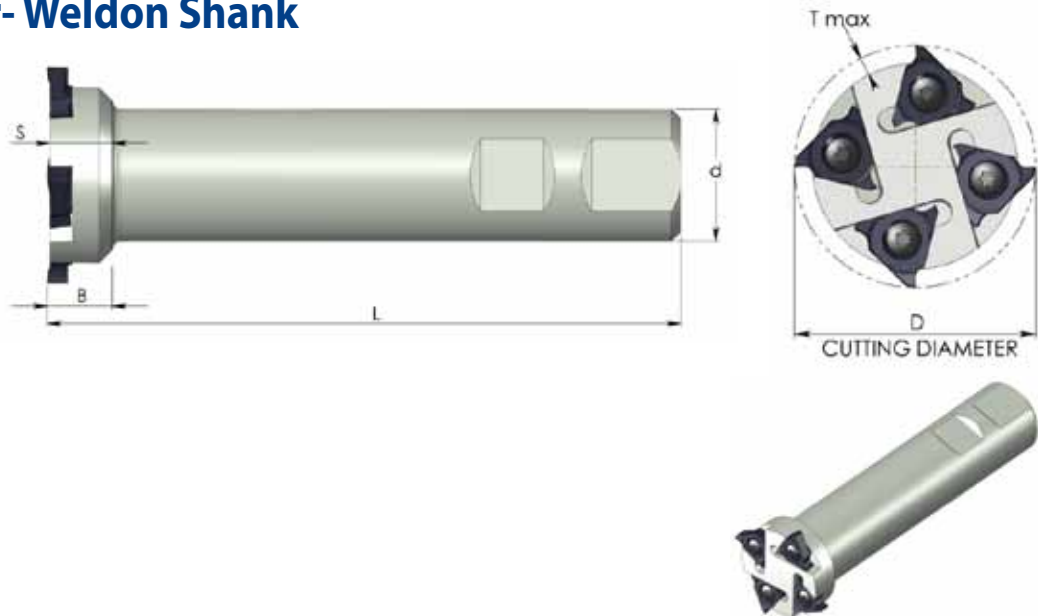


Tool No.	Ordering Code	Insert type	D	d	T max	B	S	Insert Screw	Torx Key
H27	<b>SRI 41- I16</b>	SI16	1.614	1.307	.142	.492	.472	S16S	K16

Right hand cutting

To connect to the standard CMT toolholders S35: SRC 0750 P35, SRC 1000 H35, SRC 1000 K35, CRC 0750 S35.

### Milling Cutter- Weldon Shank

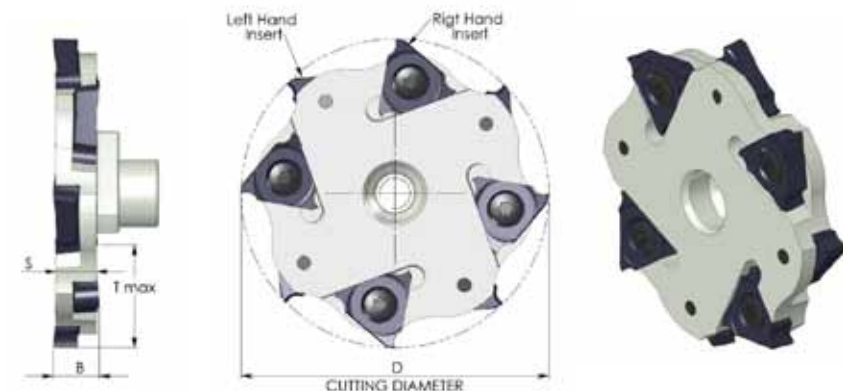


Tool No.	Ordering Code	Insert type	D	d	T max	B	S	L	Insert Screw	Torx Key
H28	<b>SRI 1000-I16</b>	SI16	1.614	1.000	.142	.492	.472	4.9	S16S	K16

Right hand cutting



## Mill Cutter - Disc Milling



Tool No.	Ordering Code	Insert type	D	T max	B	S	Insert Screw	Torx Key
H29	<b>SRI 55-I16</b>	SI16	2.165	.610	.323	.283	S16M	K16

Right hand cutting

To use only with inserts SG 16 RW43, and SG 16 L W43

To connect to the standard CMT toolholders S35: SRC 0750 P35, SRC 1000 H35, SRC 1000 K35, CRC 0750 S35.