



***Carmex***  
*Precision Tools Ltd.*  
*x-treme thread cutting™*

# **CMT**

## **Vertical Mill Thread**



**Metric 2014 - 2015**

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# CMT Vertical Mill Thread

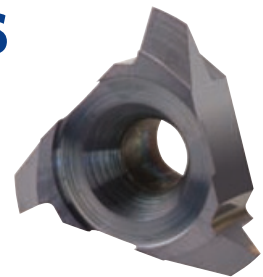
## Advantages

- 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

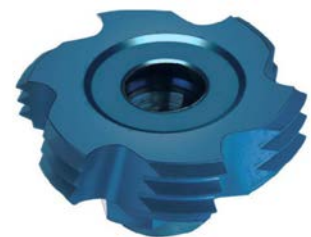
Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminium Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, covering a very wide range of materials.



## 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. Use with the same CMT tool holders, C18 type.



### Advantages

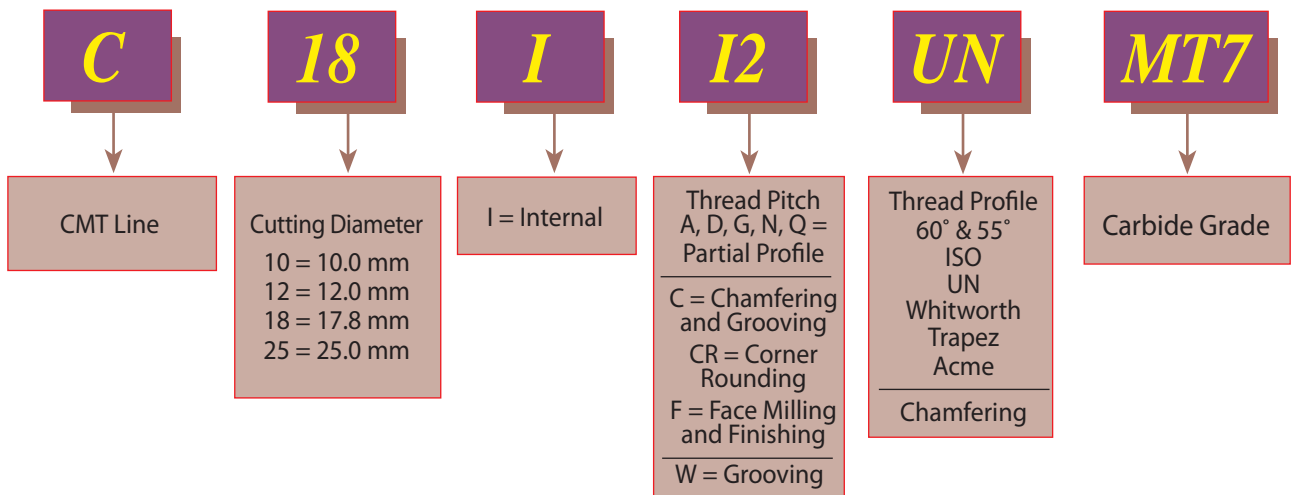
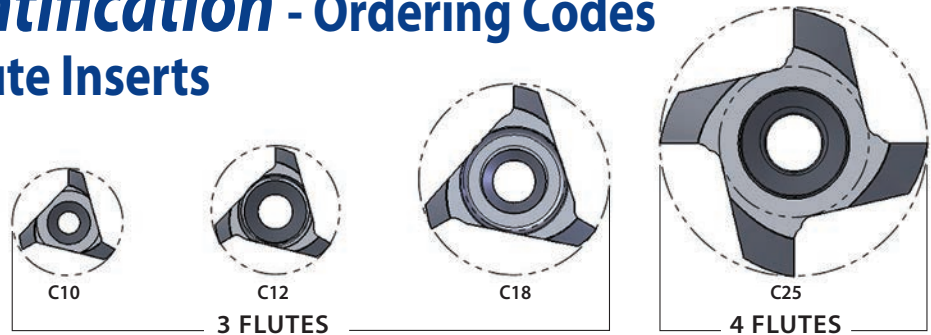
- Longer tool life
- High material removal and higher feeds results increased productivity
- Excellent surface finish
- Reduced cycle time
- Low cutting forces due to the spiral multi flutes

### Carbide Grade: MT8

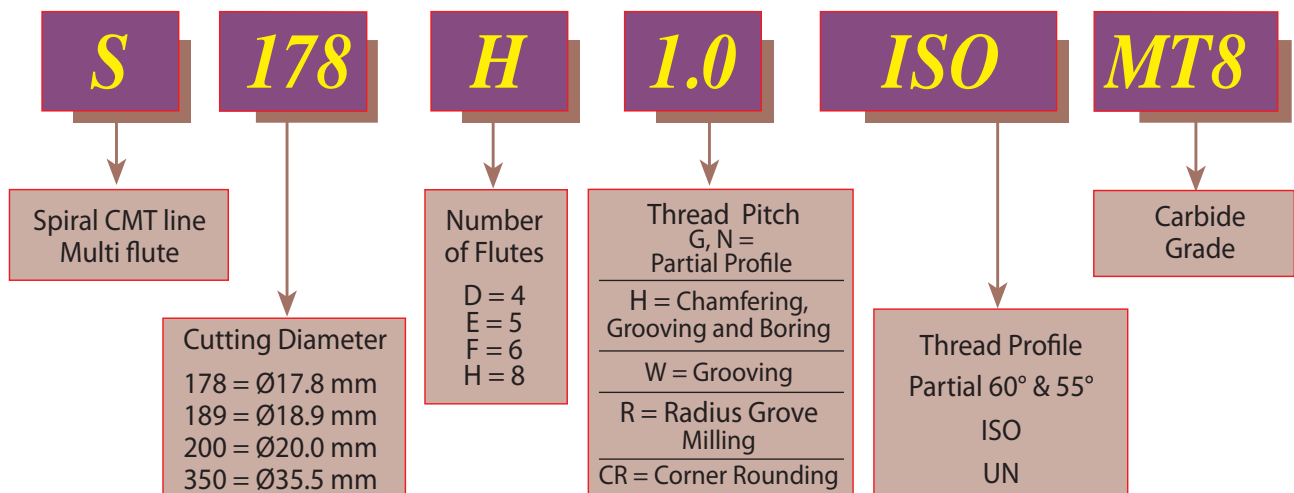
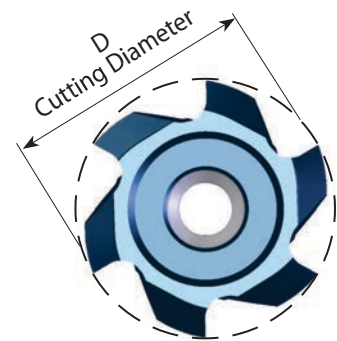
Sub Micron grade with advanced PVD triple coating (ISO K10-K20). Extremely high heat resistant and smooth cutting operation, high performance, for all machining conditions.

# Product Identification - Ordering Codes

## CMT Straight Flute Inserts

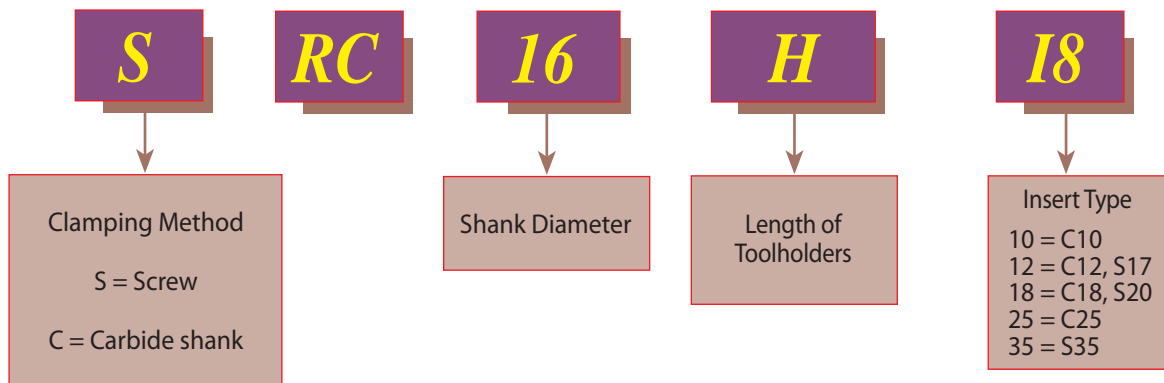


## CMT Spiral Multi Flute Inserts



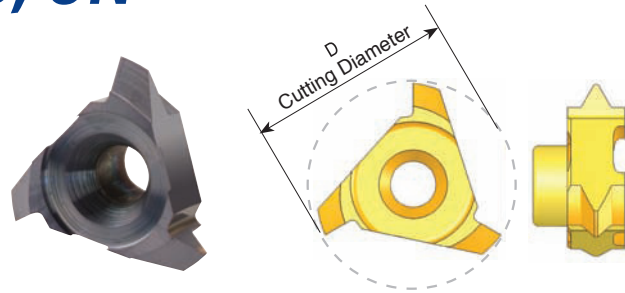
# Product Identification - Ordering Codes

## CMT Toolholders



# Partial Profile 60° - ISO, UN

Same insert for internal and external thread

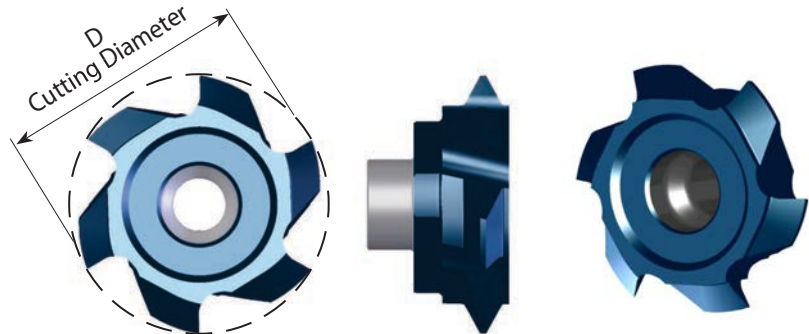


Insert Type	Pitch Range mm	Pitch Range TPI	Ordering Code	D	Thread Diameter (min)		Holder Code
					Pitch Low Range	Pitch High Range	
C10	Int. 0.5 - 0.8	56 - 28	<b>C10 A60</b>	10.0	$\varnothing \geq 11$	$\varnothing \geq 12$	H1, 2, 12, 13
	Ex. 0.4 - 0.8	64 - 32					
	Int. 1.0 - 2.0	28 - 13	<b>C10 G60</b>		$\varnothing \geq 12$	$\varnothing \geq 14$	
	Ex. 0.8 - 1.75	32 - 15					
C12	Int. 0.5 - 0.8	56 - 28	<b>C12 A60</b>	12.0	$\varnothing \geq 13$	$\varnothing \geq 14$	H3, 4, 5, 14, 15
	Ex. 0.4 - 0.8	64 - 32					
	Int. 1.0 - 2.0	28 - 13	<b>C12 G60</b>		$\varnothing \geq 14$	$\varnothing \geq 16$	
	Ex. 0.8 - 1.75	32 - 15					
C18	Int. 0.5 - 0.8	56 - 28	<b>C18 A60</b>	17.8	$\varnothing \geq 19$		H6, 7, 8, 9, 16
	Ex. 0.4 - 0.8	64 - 32					
	Int. 1.0 - 1.75	28 - 14	<b>C18 G60</b>		$\varnothing \geq 20$	$\varnothing \geq 21$	
	Ex. 0.8 - 1.5	32 - 16					
	Int. 2.0 - 3.0	13 - 8	<b>C18 D60</b>		$\varnothing \geq 21$	$\varnothing \geq 23$	
Ex. 1.75 - 2.5	15 - 10						
C25	Int. 1.5 - 2.5	16 - 10	<b>C25 G60</b>	25.0	$\varnothing \geq 28$	$\varnothing \geq 30$	H10, 11, 17, 18
	Ex. 1.0 - 2.0	28 - 13					
	Int. 3.0 - 5.0	8 - 5	<b>C25 N60</b>		$\varnothing \geq 30$	$\varnothing \geq 34$	
	Ex. 2.5 - 4.5	10 - 6					
	Int. 5.0 - 6.0	5 - 4	<b>C25 Q60</b>		$\varnothing \geq 34$	$\varnothing \geq 35$	
	Ex. 4.5 - 5.0	6 - 5					

## Partial Profile 60° - ISO, UN

Same insert for internal and external thread

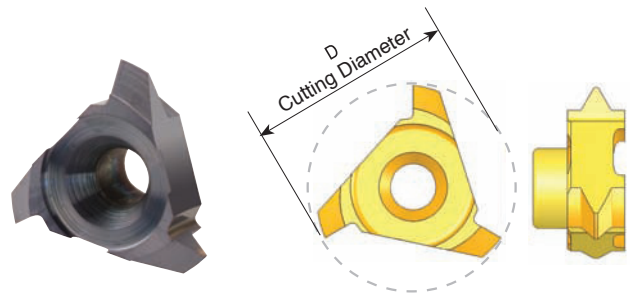
Multi Flute



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	20.0	6	Ø ≥ 23	Ø ≥ 25	H6, 7, 8, 9, 16
		Ex. 1.0-2.0	28-13					
	<b>S200 D N60</b>	Int. 3.0-5.0	8 - 5	20.0	4	Ø ≥ 25	Ø ≥ 29	
		Ex. 2.5-4.5	10 - 6					

## Partial Profile 60° - NPT

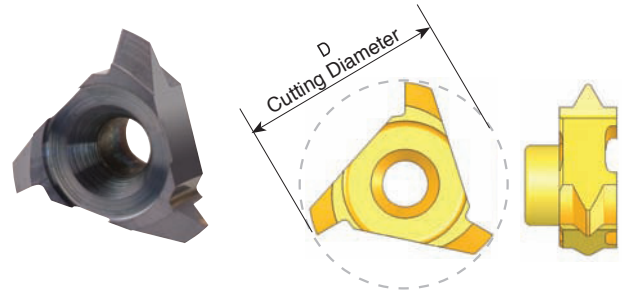
Same insert for internal and external thread



Insert Type	Pitch TPI	Standard	Ordering Code	D	Holder Code
C10	18	1/4 - 3/8	<b>C10 18 NPT</b>	10.0	H1, 2, 12
C18	14	1/2 - 3/4	<b>C18 14 NPT</b>	15.8	H16
C25	11.5	1-2	<b>C25 11.5NPT</b>	25.0	H10, 11, 17, 18
	8	≥ 2 1/2	<b>C25 8 NPT</b>		

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

Same insert for internal and external thread

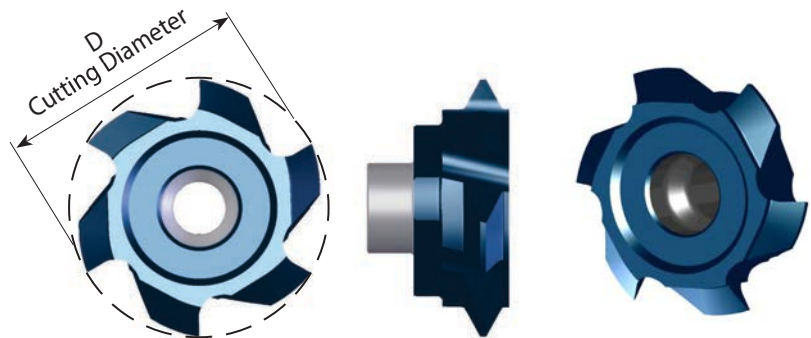


Insert Type	Pitch Range TPI	Ordering Code	D	Thread Dia. (min)	Holder Code
C10	19-14	<b>C10 G55</b>	10.0	$\text{Ø} \geq 13$	H1, 2, 12
C12	28-19	<b>C12 G55</b>	12.0	$\text{Ø} \geq 14$	H3, 4, 5, 14, 15
	14-11	<b>C12 N55</b>	12.2	$\text{Ø} \geq 16$	H3, 4, 5, 14
C18	14 - 8	<b>C18 G55</b>	18.0	$\text{Ø} \geq 23$	H6, 7, 8, 9, 16
C25	7 - 5	<b>C25 N55</b>	25.0	$\text{Ø} \geq 31$	H10, 11, 17, 18

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

Same insert for internal and external thread

Multi Flute

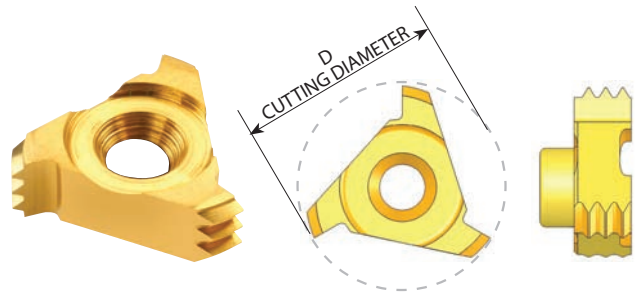


Insert Type	Ordering Code	Pitch Range TPI	D	No. of Flutes	Thread Dia (min)	Holder Code
S20	<b>S195 F G55</b>	14	19.5	6	$\text{Ø} \geq 23$	H6, 7, 8, 9, 16
	<b>S200 D N55</b>	8-6	20.0	4	$\text{Ø} \geq 25$	H16



# Full Profile - ISO

Inserts for internal thread

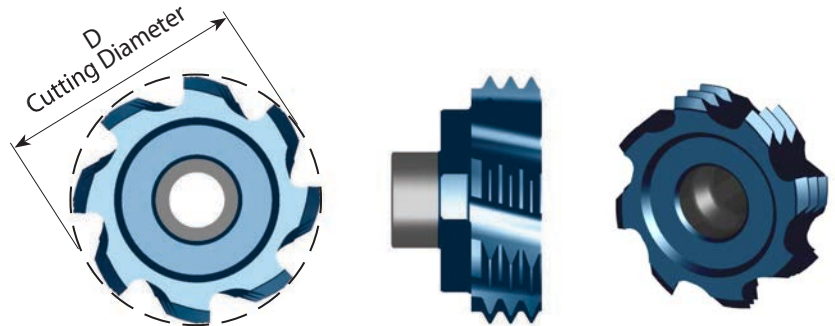


Insert Type	Pitch mm	M coarse	M fine	Ordering Code	Number of Teeth	D	Holder Code
C10	0.5		$\text{Ø} \geq 10$	<b>C10 I 0.5 ISO</b>	6	9.0	H1, 2, 12, 13
	1.0		$\text{Ø} \geq 12$	<b>C10 I 1.0 ISO</b>	3	10.0	
	1.5		$\text{Ø} \geq 13$	<b>C10 I 1.5 ISO</b>	2		
	1.75	M12	$\text{Ø} \geq 13$	<b>C10 I 1.75ISO</b>	1	9.6	H1, 2, 12
	2.0	M14	$\text{Ø} \geq 14$	<b>C10 I 2.0 ISO</b>	1	10.0	
C12	0.5		$\text{Ø} \geq 13$	<b>C12 I 0.5 ISO</b>	6	12.0	H3, 4, 5, 14, 15
	0.75		$\text{Ø} \geq 13$	<b>C12 I 0.75ISO</b>	4		
	1.0		$\text{Ø} \geq 14$	<b>C12 I 1.0 ISO</b>	3		
	1.5		$\text{Ø} \geq 15$	<b>C12 I 1.5 ISO</b>	2		
	2.0	M16	$\text{Ø} \geq 16$	<b>C12 I 2.0 ISO</b>	1	12.4	H3, 4, 5, 14
	2.5	M18, M20	$\text{Ø} \geq 17$	<b>C12 I 2.5 ISO</b>	1	12.0	
	3.0		$\text{Ø} \geq 17$	<b>C12 I 3.0 ISO</b>	1	12.4	
C18	0.5		$\text{Ø} \geq 19$	<b>C18 I 0.5 ISO</b>	9	17.8	H6, 7, 8, 9, 16
	0.75		$\text{Ø} \geq 19$	<b>C18 I 0.75ISO</b>	6		
	1.0		$\text{Ø} \geq 20$	<b>C18 I 1.0 ISO</b>	5		
	1.5		$\text{Ø} \geq 20$	<b>C18 I 1.5 ISO</b>	3		
	2.0		$\text{Ø} \geq 21$	<b>C18 I 2.0 ISO</b>	2		
	2.5	M22	$\text{Ø} \geq 22$	<b>C18 I 2.5 ISO</b>	2		
	3.0	M24, M27	$\text{Ø} \geq 23$	<b>C18 I 3.0 ISO</b>	1		
	3.5	M30, M33	$\text{Ø} \geq 24$	<b>C18 I 3.5 ISO</b>	1		
C25	3.0	M32, M33	$\text{Ø} \geq 30$	<b>C25 I 3.0 ISO</b>	2	25.0	H10, 11, 17, 18
	4.0	M36, M39	$\text{Ø} \geq 32$	<b>C25 I 4.0 ISO</b>	1		
	4.5	M45	$\text{Ø} \geq 33$	<b>C25 I 4.5 ISO</b>	1		
	5.0	M48, M52	$\text{Ø} \geq 34$	<b>C25 I 5.0 ISO</b>	1		
	5.5	M60	$\text{Ø} \geq 35$	<b>C25 I 5.5 ISO</b>	1		
	6.0	M64, M68	$\text{Ø} \geq 36$	<b>C25 I 6.0 ISO</b>	1		

# Full Profile - ISO

Inserts for internal thread

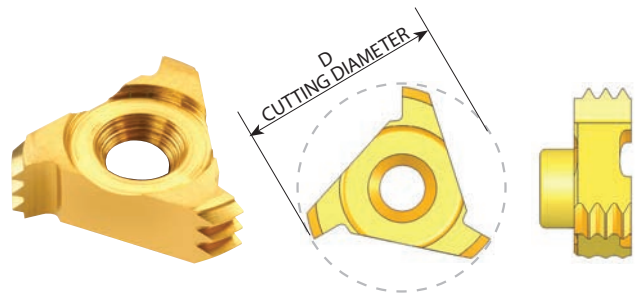
Multi Flute



Insert Type	Ordering Code	Pitch mm	M coarse	M fine	Number of Teeth	D	No. of Flutes	Holder Code
S20	<b>S163 H 1.0 ISO</b>	1.0		$\emptyset \geq 18$	5	16.3	8	H6, 7, 8, 9, 16
	<b>S175 H 1.5 ISO</b>	1.5		$\emptyset \geq 20$	3	17.5	8	
	<b>S186 F 2.0 ISO</b>	2.0		$\emptyset \geq 22$	2	18.6	6	
S17	<b>S160 F 2.5 ISO</b>	2.5	M20	$\emptyset \geq 20$	1	16.0	6	H3, 4, 5, 14, 17
S20	<b>S178 F 2.5 ISO</b>	2.5	M22	$\emptyset \geq 22$	2	17.8	6	H6, 7, 8, 9, 16
	<b>S189 F 3.0 ISO</b>	3.0	M24, M27	$\emptyset \geq 24$	1	18.9	6	
	<b>S200 F 3.5 ISO</b>	3.5	M30, M33	$\emptyset \geq 26$	1	20.0	6	
	<b>S200 F 4.0 ISO</b>	4.0	M36, M39	$\emptyset \geq 27$	1	20.0	6	
	<b>S200 E 4.5 ISO</b>	4.5	M42, M45	$\emptyset \geq 28$	1	20.0	5	
	<b>S200 D 5.0 ISO</b>	5.0	M48, M52	$\emptyset \geq 29$	1	20.0	4	H16
S35	<b>S350 F 6.0 ISO</b>	6.0	M64, M68	$\emptyset \geq 46$	1	35.0	6	H19, 20, 21
	<b>S350 F 8.0 ISO</b>	8.0		$\emptyset \geq 50$	1	35.0	6	

# Full Profile - UN

Inserts for internal thread

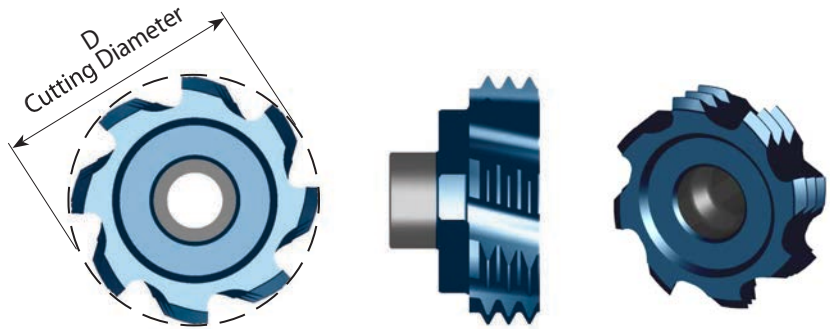


Insert Type	Pitch TPI	Nominal Size	UNC	UNF	UNEF	Ordering Code	Number of Teeth	D	Holder Code
C10	20			1/2		<b>C10 I 20 UN</b>	2	10.0	H1, 2, 12, 13
	18			9/16		<b>C10 I 18 UN</b>	2		
	13		1/2			<b>C10 I 13 UN</b>	1	10.0	H1, 2, 12
	12	5/8, 11/16, 3/4	9/16			<b>C10 I 12 UN</b>	1		
C12	32	9/16, 5/8				<b>C12 I 32 UN</b>	3	12.0	H3, 4, 5, 14, 15
	28	9/16, 5/8, 11/16				<b>C12 I 28 UN</b>	3		
	24				9/16, 5/8, 11/16	<b>C12 I 24 UN</b>	2		
	20	9/16, 5/8, 11/16			3/4	<b>C12 I 20 UN</b>	2		
	18			5/8		<b>C12 I 18 UN</b>	2		
	16	5/8, 11/16		3/4		<b>C12 I 16 UN</b>	1		
	11		5/8			<b>C12 I 11 UN</b>	1	12.0	H3, 4, 5, 14
10		3/4			<b>C12 I 10 UN</b>	1			
C18	32	3/4, 13/16, 7/8				<b>C18 I 32 UN</b>	6	17.8	H6, 7, 8, 9, 16
	28	3/4, 13/16, 7/8				<b>C18 I 28 UN</b>	5		
	24					<b>C18 I 24 UN</b>	4		
	20	11/16, 11/8			13/16, 7/8, 15/16	<b>C18 I 20 UN</b>	3		
	18					<b>C18 I 18 UN</b>	3		
	16	7/8, 1				<b>C18 I 16 UN</b>	3		
	14			7/8		<b>C18 I 14 UN</b>	2		
	12	7/8		1, 1 1/8		<b>C18 I 12 UN</b>	2		
	11					<b>C18 I 11 UN</b>	2		
	9		7/8			<b>C18 I 9 UN</b>	1		
8		1			<b>C18 I 8 UN</b>	1			
C25	8	13/16, 11/4, 15/16				<b>C25 I 8 UN</b>	2	25.0	H10, 11, 17, 18
	7		1 1/4			<b>C25 I 7 UN</b>	1		
	6	17/16, 19/16	13/8, 1 1/2			<b>C25 I 6 UN</b>	1		
	5		1 3/4			<b>C25 I 5 UN</b>	1		
	4		2 1/2, 2 3/4			<b>C25 I 4 UN</b>	1		

# Full Profile - UN

Inserts for internal thread

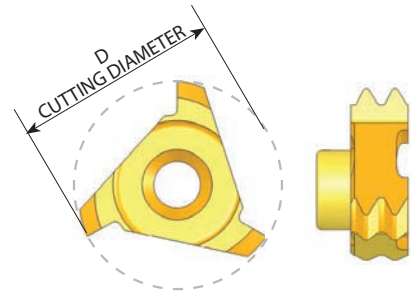
Multi Flute



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	16.0	8	H6, 7, 8, 9, 16
	<b>S169 H 20 UN</b>	20				3/4, 13/16, 7/8, 15/16, 1	4	16.9	8	
	<b>S164 F 16 UN</b>	16	7/8, 15/16, 1		3/4		3	16.4	6	
	<b>S191 F 14 UN</b>	14			7/8		2	19.1	6	
	<b>S186 F 12 UN</b>	12	7/8, 15/16		1		2	18.6	6	
	<b>S178 F 9 UN</b>	9		7/8			1	17.8	6	
	<b>S200 F 8 UN</b>	8	1 1/8	1			1	20.0	6	
	<b>S200 F 7 UN</b>	7		1 1/8, 1 1/4			1	20.0	6	
	<b>S200 E 6 UN</b>	6	1 7/16	1 3/8, 1 1/2			1	20.0	5	
	<b>S200 D 5 UN</b>	5		1 3/4			1	20.0	4	
S35	<b>S350 F 4 UN</b>	4		2 1/2, 2 3/4, 3			1	35.0	6	H19, 20, 21

## G 55° BSW, BSF, BSP

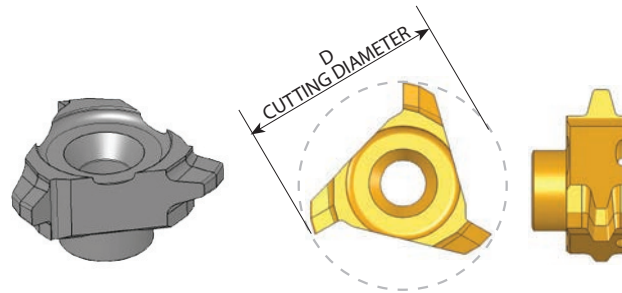
Same Insert for internal and external thread



Insert Type	Pitch TPI	Standard	Ordering Code	Number of Teeth	D	Holder Code
C10	19	G 1/4	<b>C10 19 W</b>	2	10.0	H1, 2, 12, 13
C12	19	G 3/8	<b>C12 19 W</b>	2	12.0	H3, 4, 5, 14, 15
C18	14	G 7/8	<b>C18 14 W</b>	2	17.8	H6, 7, 8, 9, 16
	11	G ≥ 1	<b>C18 11 W</b>	2		

## Trapez - DIN 103

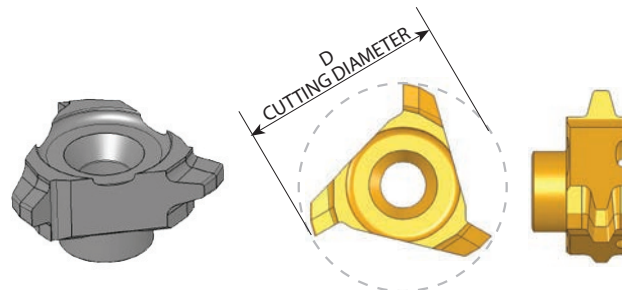
Inserts for internal thread



Insert Type	Pitch mm	Standard	Ordering Code	D	Holder Code
C10	2.0	$\varnothing \geq 16$	<b>C10 I 2 TR</b>	10.0	H1, 2, 12,
C18	3.0	$\varnothing \geq 24$	<b>C18 I 3 TR</b>	17.8	H6, 7, 8, 9, 16
	4.0	$\varnothing \geq 26$	<b>C18 I 4 TR</b>		H16
	5.0	$\varnothing \geq 28$	<b>C18 I 5 TR</b>		
C25	6.0	$\varnothing \geq 36$	<b>C25 I 6 TR</b>	25.0	H10, 11, 17, 18

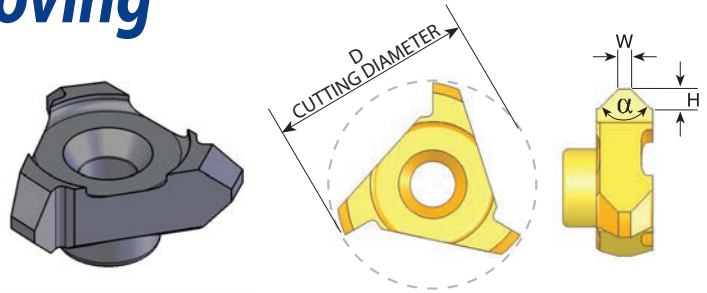
## Acme

Inserts for internal thread



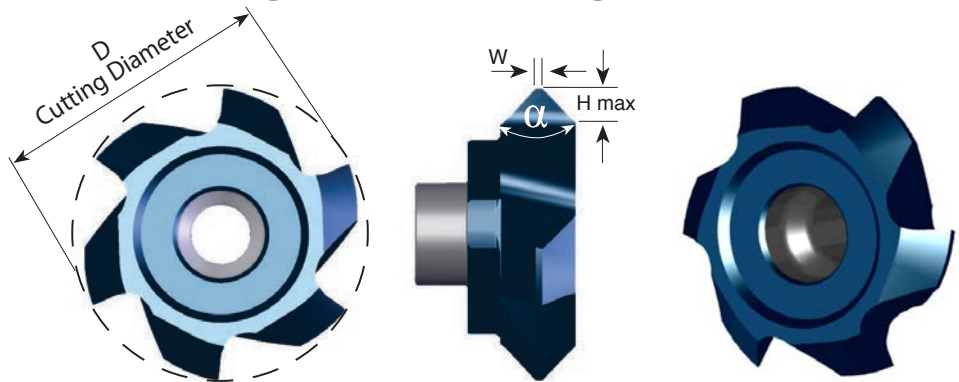
Insert Type	Pitch TPI	Standard	Ordering Code	D	Holder Code
C18	5	1 1/8, 1 1/4	<b>C18 I 5 ACME</b>	18.0	H16
C25	4	1 1/2, 1 3/4, 2	<b>C25 I 4 ACME</b>	25.0	H10, 11, 17, 18

# Chamfering and Grooving



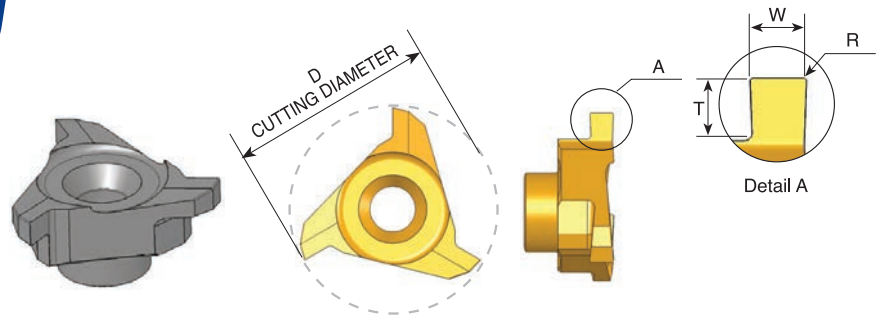
Insert Type	Ordering Code	D	H	W	α	Holder Code*
C10	<b>C10 C90</b>	10.0	1.30	0.4	90°	H1, 2, 12
C12	<b>C12 C90</b>	12.0	1.35	0.3		H3, 4, 5, 14
C18	<b>C18 C90</b>	17.8	1.95	1.1		H6, 7, 8, 9, 16
C25	<b>C25 C90</b>	25.0	2.50	1.0		H10, 11, 17, 18

# 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>	16.0	1.35	0.2	90°	5	H3, 4, 5, 14, 15
S20	<b>SC170 E H14</b>	17.0	1.35	0.2	90°	5	H6, 7, 8, 9, 16
	<b>SC200 F H14</b>	20.0	1.35	0.2	90°	6	H6, 7, 8, 9, 16
	<b>SC200 F H24</b>	20.0	2.35	0.2			
	S35	<b>SC350 F H42</b>	35.0	4.20	0.2	90°	6
S20	<b>SC200 F H20</b>	20.0	1.95	1.0	90°	6	H6, 7, 8, 9, 16
	<b>SC200 F H17</b>	20.0	1.70	1.5			
	<b>SC200 F H15</b>	20.0	1.50	2.0			
	<b>SC200 F H12</b>	20.0	1.20	2.5			

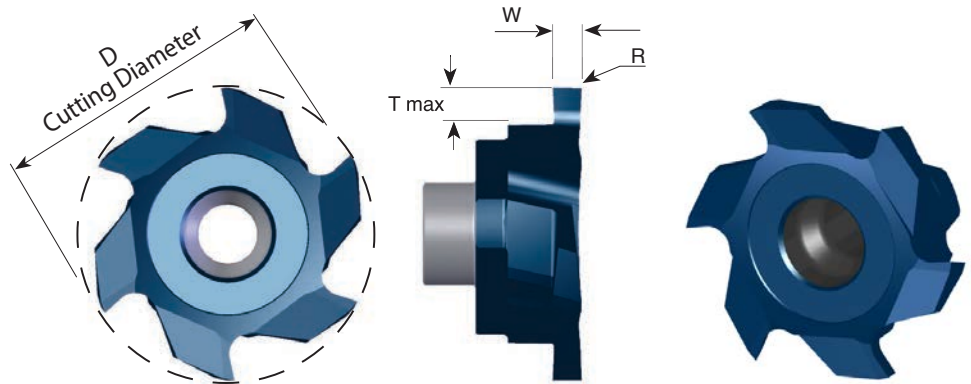
# Groove Milling



Insert Type	Ordering Code	D	W ±0.02	T max.	R	Groove Dia. (min.)	Holder Code
C10	<b>C10 W08</b>	10.0	0.80	0.80	0.1	Ø ≥ 10.0	H1, 2, 12, 13
	<b>C10 W09</b>		0.90	0.90			
	<b>C10 W10</b>		1.00	0.90			
C12	<b>C12 W08</b>	12.0	0.80	0.80	0.1	Ø ≥ 12.0	H3, 4, 5, 14, 15
	<b>C12 W10</b>		1.00	0.90			
C18	<b>C18 W10</b>	17.8	1.00	1.50	0.1	Ø ≥ 17.8	H6, 7, 8, 9, 16
	<b>C18 W12</b>		1.20	1.50			
	<b>C18 W15</b>		1.50	1.95			
	<b>C18 W20</b>		2.00	2.80			H16
C25	<b>C25 W20</b>	25.0	2.00	3.00	0.2	Ø ≥ 25	H10, 11, 17, 18
	<b>C25 W25</b>		2.50	3.00			
	<b>C25 W30</b>		3.00	3.00			
	<b>C25 W35</b>		3.50	3.50			
	<b>C25 W40</b>		4.00	3.50			
	<b>C25 W50</b>		5.00	3.50			

# Groove Milling

## Multi Flute

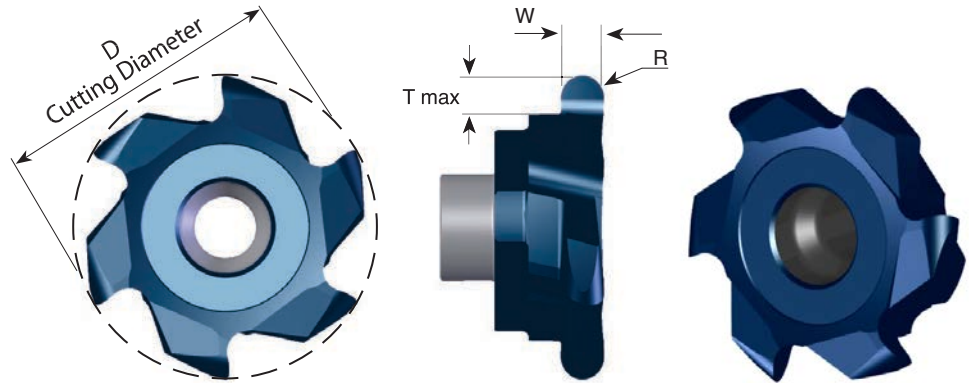


Insert Type	Ordering Code	D	W ±0.02	T Max.	R	Groove Dia. (min)	No. of Flutes	Holder Code
S17	<b>SG170 F W15</b>	17.0	1.5	2.8	0.2	Ø > 17	6	H3, 4, 5, 14, 15
	<b>SG170 F W20</b>	17.0	2.0					
	<b>SG170 F W25</b>	17.0	2.5					
S20	<b>SG200 F W15</b>	20.0	1.5	2.9	0.2	Ø > 20	6	H6, 7, 8, 9, 16
	<b>SG200 F W20</b>	20.0	2.0					
	<b>SG200 F W25</b>	20.0	2.5					
	<b>SG200 F W30</b>	20.0	3.0					
	<b>SG200 F W40</b>	20.0	4.0					
	<b>SG200 F W49</b>	20.0	4.9					
S20	<b>SG200 E W20T</b>	20.0	2.0	3.7	0.2	Ø > 20	5	H16
	<b>SG200 E W25T</b>	20.0	2.5					
	<b>SG200 E W30T</b>	20.0	3.0					
S35	<b>SG350 F W30T</b>	35.0	3.0	6.3	0.2	Ø > 35	6	H19, 20, 21
	<b>SG350 F W40T</b>	35.0	4.0					
	<b>SG350 F W50T</b>	35.0	5.0					
	<b>SG350 F W60T</b>	35.0	6.0					
	<b>SG350 F W80T</b>	35.0	8.0					



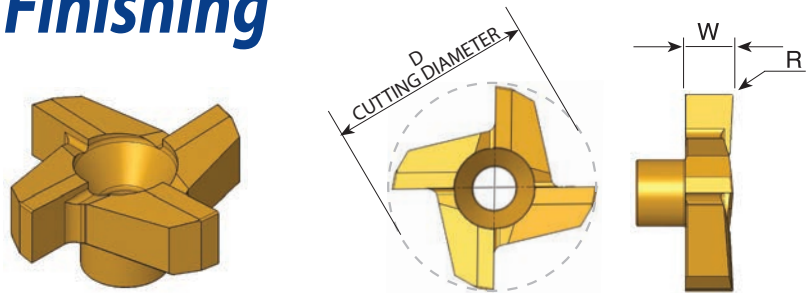
## Full Radius Groove Milling

### Multi Flute



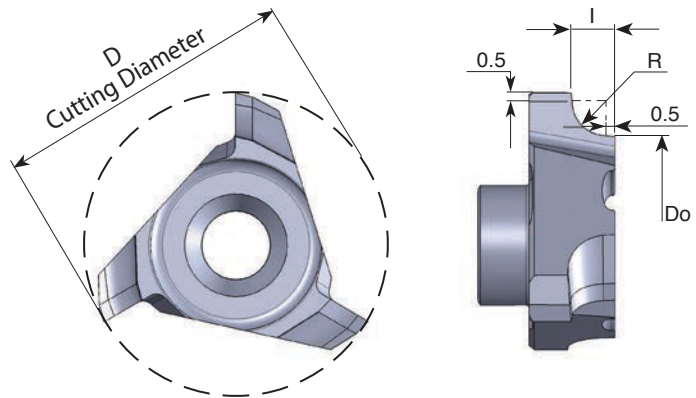
Insert Type	Ordering Code	D	R	W ±0.02	T Max.	Groove Dia. (min)	No. of Flutes	Holder Code
S20	<b>SG200 F R10</b>	20.0	1.0	2.0	2.9	Ø > 20	6	H6, 7, 8, 9, 16
	<b>SG200 F R12</b>	20.0	1.2	2.4				
	<b>SG200 F R15</b>	20.0	1.5	3.0				
	<b>SG200 F R20</b>	20.0	2.0	4.0				

## Face Milling and Finishing



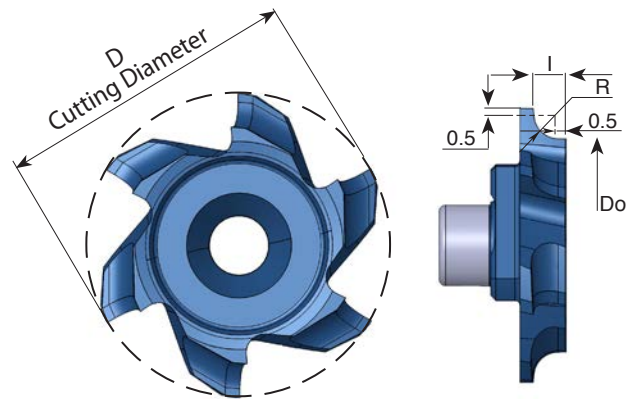
Insert Type	Ordering Code	D	W	R	Holder Code
C18	<b>C18 F R0.1</b>	17.8	5.0	0.1	H6, 7, 8, 9, 16
C25	<b>C25 F R0.2</b>	25.0	6.0	0.2	H10, 11, 17, 18

## Corner Rounding



Insert Type	Ordering Code	D	Do	R	I	Holder Code
C10	<b>C10 CR05</b>	10.0	7.9	0.5	1.05	H1, 2, 12, 13
	<b>C10 CR10</b>	10.0	6.9	1.0	1.55	
C18	<b>C18 CR13</b>	17.8	14.2	1.25	1.80	
	<b>C18 CR15</b>	17.8	13.7	1.5	2.05	H6, 7, 8, 9, 16
	<b>C18 CR20</b>	17.8	12.7	2.0	2.55	

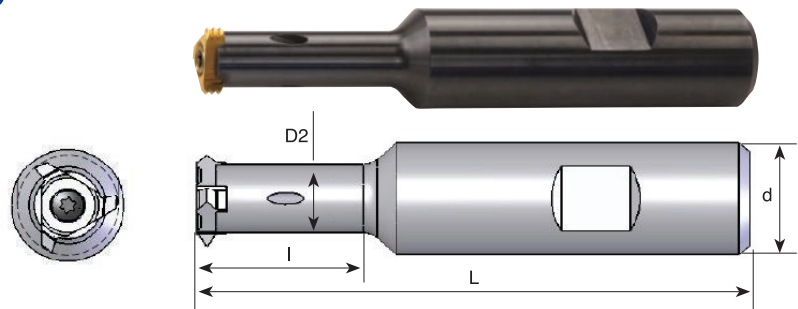
## Corner Rounding Multi Flute



Insert Type	Ordering Code	D	Do	R	I	No. of Flutes	Holder Code
S17	<b>S170 E CR10</b>	17.0	13.9	1.0	1.55	5	H3, 4, 5, 14, 15
	<b>S170 E CR13</b>	17.0	13.4	1.25	1.80	5	
	<b>S170 E CR15</b>	17.0	12.9	1.5	2.05	5	

# Steel Toolholders

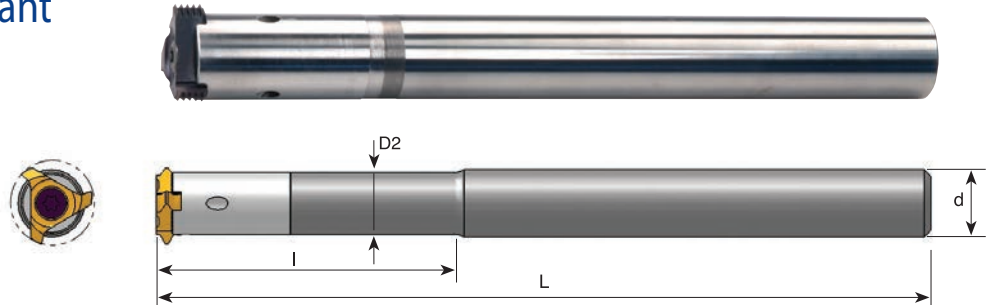
With internal coolant



Tool No.	Ordering Code	Insert Type	d	D2	l	L	Insert Screw	Torx Key
H1	<b>SRC 1210 E</b>	C10	12	7.3	19	70	S5	K5
H2	<b>SRC 1610 G</b>		16		19	90		
H3	<b>SRC 1212 E</b>	C12, S17	12	9.0	25	70	S10	K10
H4	<b>SRC 1612 G</b>		16		25	90		
H5	<b>SRC 1612 H</b>		16		35	100		
H6	<b>SRC 1618 H</b>	C18, S20	16	13.8	48	100	S16	K16
H7	<b>SRC 2018 H</b>		20		32	100		
H8	<b>SRC 2018 J</b>		20		48	110		
H9	<b>SRC 2018 L</b>		20		74	140		
H10	<b>SRC 2525 J</b>	C25	25	17.5	45	115	S27	K27
H11	<b>SRC 2525 M</b>		25		80	150		
H19	<b>SRC 2535 H</b>	S35	25	22	40	100	S33	K33
H20	<b>SRC 2535 K</b>		25		60	130		

# Carbide Shank Toolholders

With internal coolant

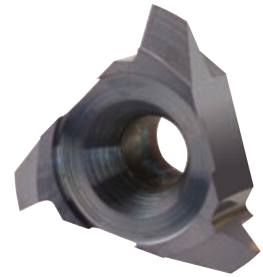


Tool No.	Ordering Code	Insert Type	d	D2	l	L	Insert Screw	Torx Key
H12	<b>CRC 0810 L35 K</b>	C10	8	7.3	35	125	S5	K5
H13	<b>CRC 0810 K</b>		8	8.0	—	125	S5	K5
H14	<b>CRC 1012 L40 M</b>	C12, S17	10	9.0	40	150	S10	K10
H15	<b>CRC 1012 M</b>		10	10.0	—	150	S10	K10
H16	<b>CRC 1218 P</b>	C18, S20	12	12.0	—	170	S16	K16
H17	<b>CRC 1625 R</b>	C25	16	16.0	—	205	S27	K27
H18	<b>CRC 2025 L85 S</b>		20	17.5	85	250	S27	K27
H21	<b>CRC 2035 S</b>	S35	20	22.0	—	260	S33	K33

Toolholders without Weldon

# Cutting Data

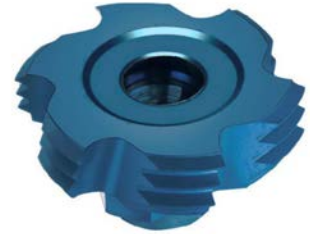
## CMT Straight Flute Inserts



ISO Standard	Material	Cutting Speed m/min	Feed mm/tooth Cutting Diameter=D			
			Ø10	Ø12	Ø18	Ø25
<b>P</b>	Low & Medium Carbon Steels <0.55%C	60-120	0.16	0.17	0.20	0.22
	High Carbon Steels ≥0.55%C	60-90	0.14	0.16	0.20	0.22
	Alloy Steels, Treated Steels	50-80	0.10	0.12	0.16	0.18
<b>M</b>	Stainless Steel – Free Cutting	70-100	0.10	0.11	0.15	0.17
	Stainless Steel – Austenitic	60-90	0.10	0.11	0.15	0.17
	Cast Steels	70-90	0.10	0.12	0.16	0.18
<b>K</b>	Cast Iron	40-80	0.16	0.17	0.20	0.22
<b>N</b>	Aluminium ≤12%Si, Copper	100-200	0.16	0.17	0.20	0.22
	Aluminium >12%Si	60-140	0.10	0.11	0.16	0.18
	Synthetics, Duroplastics, Thermoplastics	50-200	0.19	0.19	0.22	0.24
<b>S</b>	Nickel Alloys, Titanium Alloys.	20-40	0.07	0.07	0.10	0.12
<b>H</b>	Hardened Steel 45 – 50HRc	60-70	0.09	0.09	0.13	0.15
	Hardened Steel 50 – 55HRc	50-60	0.08	0.08	0.12	0.14

# Cutting Data

## CMT Spiral Multi Flute Inserts



ISO Standard	Material	Cutting Speed m/min	Feed mm/tooth Cutting Diameter = D
			Ø16 - Ø35
<b>P</b>	Low & Medium Carbon Steels <0.55%C	60-120	0.14-0.24
	High Carbon Steels ≥0.55%C	60-90	0.12-0.24
	Alloy Steels, Treated Steels	50-80	0.08-0.20
<b>M</b>	Stainless Steel - Free Cutting	70-100	0.08-0.19
	Stainless Steel - Austenitic	60-90	0.08-0.19
	Cast Steels	70-90	0.08-0.20
<b>K</b>	Cast Iron	40-80	0.14-0.24
<b>N</b>	Aluminum ≤12%Si, Copper	100-200	0.14-0.26
	Aluminum >12%Si	60-140	0.08-0.22
	Synthetics, Duroplastics, Thermoplastics	50-200	0.17-0.28
<b>S</b>	Nickel Alloys, Titanium Alloys.	20-40	0.05-0.14
<b>H</b>	Hardened Steel 45-50HRC	60-70	0.07-0.17
	Hardened Steel 51-62HRC	50-60	0.06-0.16

## ***Carmex Mill-Thread catalog and CNC programming software***

This software is provided by Carmex to assist the thread milling user, to select and apply the correct tool to machine threads on CNC machining centers. The program will find tools and inserts which are suitable for your application, calculate cutting data and generate a CNC program for a variety of controls.

The software is available at our web site online or offline (download) versions.





***Carmex***  
*Precision Tools Ltd.*  
***x-treme** thread cutting™*

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1st Hacharoshet St., Maalot Industrial Zone 2101302, ISRAEL  
Tel: (972) 4-9077400, Fax: (972) 4-9077440.  
E-mail: [info@carmex.com](mailto:info@carmex.com) Website: [www.carmex.com](http://www.carmex.com)  
Postal address: P.O. Box 404, Maalot 2101302, ISRAEL.