

CMT Vertical Mill-Thread



C.P.T. presents a new family of vertical thread milling indexable inserts and toolholders to perform a wide variety of threads.



Advantages of CMT - Vertical Mill-Thread

- 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 built-in weldon and coolant bore.
- Chamfer inserts are also available.

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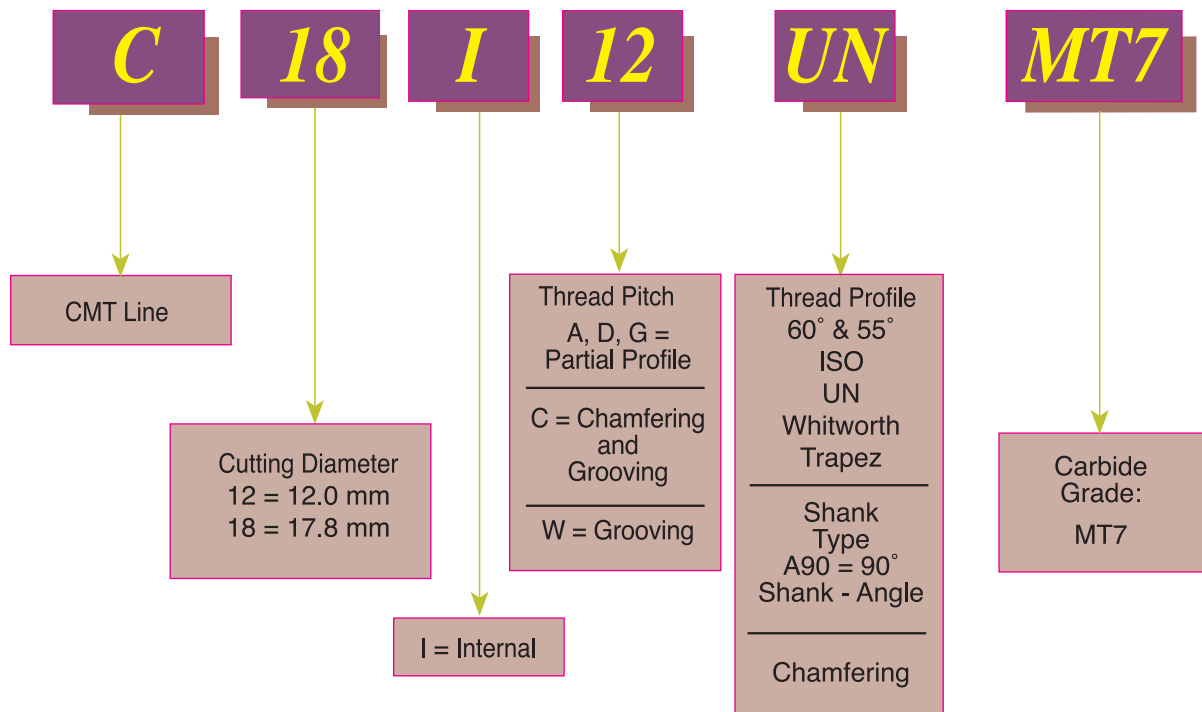
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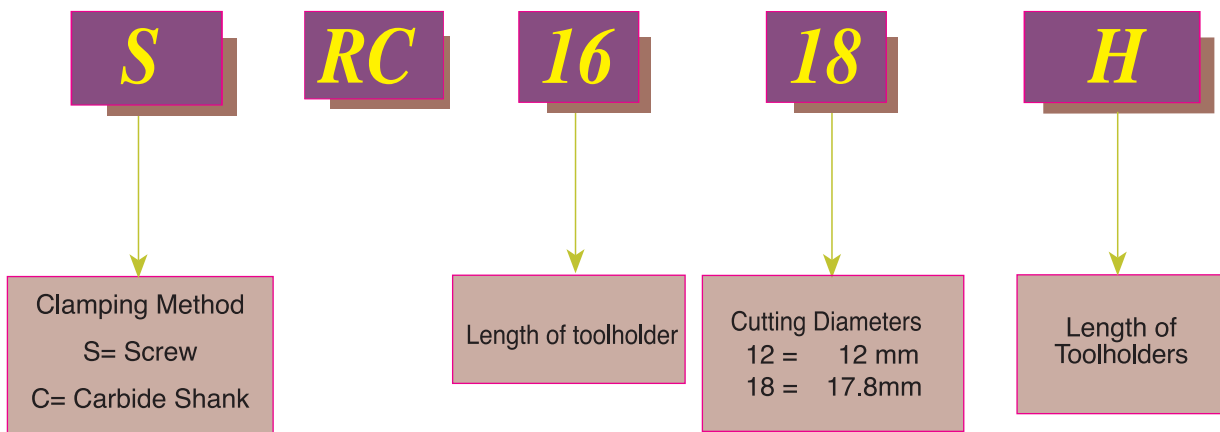
Product Identification

CMT Ordering Codes

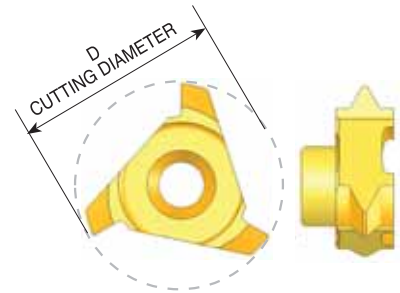
Inserts



Toolholders



CMT Vertical-Thread Turning



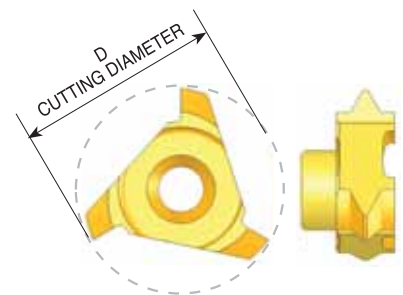
Partial Profile 60°

Same insert for internal and external thread

Insert Type	Pitch Range mm	Pitch Range TPI	Ordering Code	D	Thread Dia. (min)
C12	Int. 0.5 - 0.8	56 - 28	C12 A60	12.0	$\varnothing \geq 14$
C12	Ex. 0.4 - 0.8	64 - 32		12.0	$\varnothing \geq 14$
C12	Int. 1.0 - 2.0	28 - 13	C12 G60	12.0	$\varnothing \geq 16$
C12	Ex. 0.8 - 1.75	32 - 15		12.0	$\varnothing \geq 16$
C18	Int. 0.5 - 0.8	56 - 28	C18 A60	17.8	$\varnothing \geq 19$
C18	Ex. 0.4 - 0.8	64 - 32		17.8	$\varnothing \geq 19$
C18	Int. 1.0 - 1.75	28 - 14	C18 G60	17.8	$\varnothing \geq 21$
C18	Ex. 0.8 - 1.5	32 - 16		17.8	$\varnothing \geq 21$
C18	Int. 2.0 - 3.0	13 - 8	C18 D60	17.8	$\varnothing \geq 23$
C18	Ex. 1.75 - 2.5	15 - 10		17.8	$\varnothing \geq 23$

Partial Profile 55°

Same insert for internal and external thread

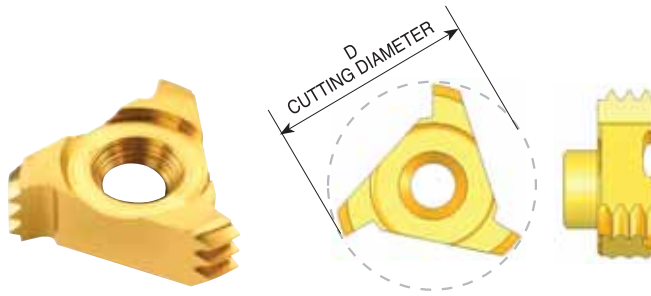


Insert Type	Pitch Range TPI	Ordering Code	D	Thread Dia. (min)
C12	28-19	C12 G55	12.0	$\varnothing \geq 14$
C18	14 - 8	C18 G55	18.0	$\varnothing \geq 23$

Full Profile

ISO

Inserts for internal thread



Insert Type	Pitch mm	Minimum Thread Dia.	Ordering Code	Number of Teeth	D
C12	0.5	$\varnothing \geq 13$	C12 I 0.5 ISO	6	12.0
C12	0.75	$\varnothing \geq 13$	C12 I 0.75 ISO	4	12.0
C12	1.0	$\varnothing \geq 14$	C12 I 1.0 ISO	3	12.0
C12	1.5	$\varnothing \geq 15$	C12 I 1.5 ISO	2	12.0
C12	2.0	$\varnothing \geq 16$	* C12 I 2.0 ISO	1	12.0
C18	0.5	$\varnothing \geq 19$	C18 I 0.5 ISO	9	17.8
C18	0.75	$\varnothing \geq 19$	C18 I 0.75 ISO	6	17.8
C18	1.0	$\varnothing \geq 20$	C18 I 1.0 ISO	5	17.8
C18	1.5	$\varnothing \geq 20$	C18 I 1.5 ISO	3	17.8
C18	2.0	$\varnothing \geq 21$	C18 I 2.0 ISO	2	17.8
C18	2.5	$\varnothing \geq 22$	C18 I 2.5 ISO	2	17.8
C18	3.0	$\varnothing \geq 23$	C18 I 3.0 ISO	1	17.8

* The insert cannot be used with toolholder CRC 1012 M

UN

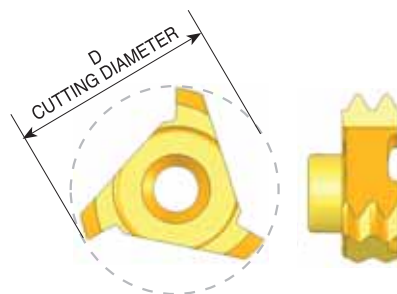
Inserts for internal thread

Insert Type	Pitch TPI	Minimum Thread Dia.	Ordering Code	Number of Teeth	D
C12	32	$\varnothing \geq 13$	C12 I 32 UN	3	12.0
C12	28	$\varnothing \geq 14$	C12 I 28 UN	3	12.0
C12	24	$\varnothing \geq 14$	C12 I 24 UN	2	12.0
C12	20	$\varnothing \geq 14$	C12 I 20 UN	2	12.0
C12	18	$\varnothing \geq 15$	C12 I 18 UN	2	12.0
C12	16	$\varnothing \geq 15$	C12 I 16 UN	1	12.0
C12	11	$\varnothing \geq 16$	* C12 I 11 UN	1	12.0
C18	32	$\varnothing \geq 19$	C18 I 32 UN	6	17.8
C18	28	$\varnothing \geq 19$	C18 I 28 UN	5	17.8
C18	24	$\varnothing \geq 20$	C18 I 24 UN	4	17.8
C18	20	$\varnothing \geq 20$	C18 I 20 UN	3	17.8
C18	18	$\varnothing \geq 20$	C18 I 18 UN	3	17.8
C18	16	$\varnothing \geq 21$	C18 I 16 UN	3	17.8
C18	14	$\varnothing \geq 21$	C18 I 14 UN	2	17.8
C18	12	$\varnothing \geq 22$	C18 I 12 UN	2	17.8
C18	11	$\varnothing \geq 22$	C18 I 11 UN	2	17.8

* The insert cannot be used with toolholder CRC 1012 M

G 55° BSW, BSF, BSP, BSB

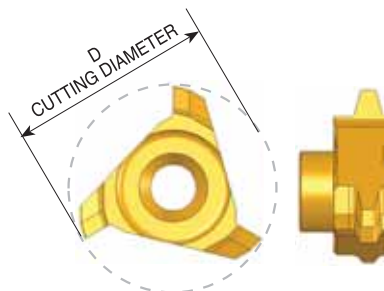
Same Insert for internal and external thread



Insert Type	Pitch TPI	Minimum Thread Dia.	Ordering Code	Number of Teeth	D
C12	19	$\varnothing \geq 14$	C12 19 W	2	12.0
C18	14	$\varnothing \geq 21$	C18 14 W	2	17.8
C18	11	$\varnothing \geq 22$	C18 11 W	2	17.8

Trapez - DIN 103

Inserts for internal thread

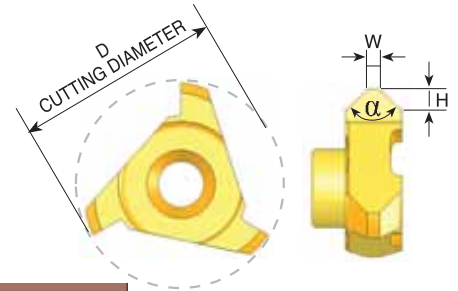


Insert Type	Pitch mm	Minimum Thread Dia.	Ordering Code	D
C18	3	$\varnothing \geq 24$	C 18 I 3TR	17.8
C18	4	$\varnothing \geq 26$	*C 18 I 4TR	17.8

* Can be used only with toolholder CRC 1218 P

Chamfering and Grooving

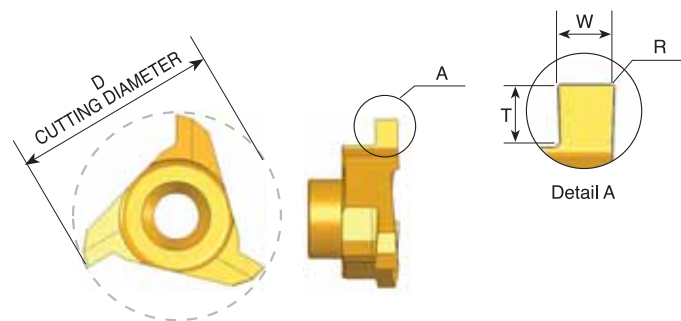
- Optimal for deburring, back chamfering and grooving
- Double side cutting
- General purpose for all materials



Insert Type	Ordering Code	D	H	W	α
C12	*C12 C90	12.0	1.35	0.3	90°
C18	C18 C90	17.8	1.95	1.1	90°

* The insert cannot be used with toolholder CRC 1012 M

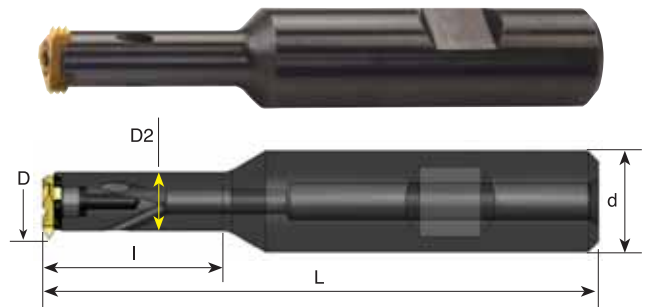
Groove Milling



Insert Type	Ordering Code	D	W ± 0.02	T max.	R	Groove Dia. (min)
C12	C12 W08	12.0	0.8	0.80	0.1	$\varnothing > 12.0$
C12	C12 W10	12.0	1.0	0.90	0.1	$\varnothing > 12.0$
C18	C18 W10	17.8	1.0	1.50	0.1	$\varnothing > 17.8$
C18	C18 W12	17.8	1.2	1.50	0.1	$\varnothing > 17.8$
C18	C18 W15	17.8	1.5	1.95	0.1	$\varnothing > 17.8$

Toolholders

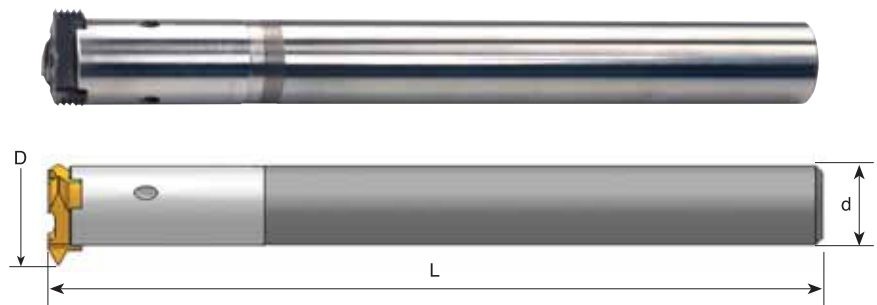
With internal coolant



Insert Type	Ordering Code	d	D	D2	I	L	Insert Screw	Torx Key
C12	SRC 1212 E	12	12.0	9.0	25	70	S10	K10
C12	SRC 1612 G	16	12.0	9.0	25	90	S10	K10
C12	SRC 1612 H	16	12.0	9.0	35	100	S10	K10
C18	SRC 1618 H	16	17.8	13.8	48	100	S16	K16
C18	SRC 2018 H	20	17.8	13.8	32	100	S16	K16
C18	SRC 2018 J	20	17.8	13.8	48	110	S16	K16
C18	SRC 2018 L	20	17.8	13.8	74	140	S16	K16

Carbide Shank Toolholders

With internal coolant



Insert Type	Ordering Code	d	D	L	Insert Screw	Torx Key
C12	*CRC 1012 M	10	12.0	150	S10	K10
C18	CRC 1218 P	12	17.8	170	S16	K16

Toolholders without Weldon

* Cannot be used with the following insert range

Ordering Code		Pitch	
		mm	TPI
C12 G60	INT	2.0	14-13
	EX.	1.5-1.75	16-15