C.P.T.

Groove Milling with Chamfer
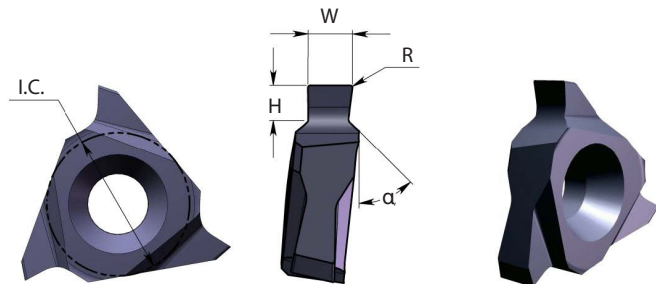
DIN 471 / 472

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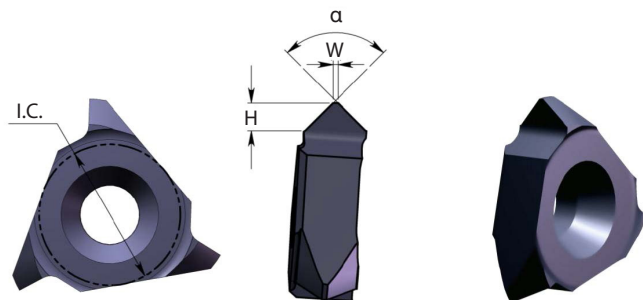
Insert Type	I.C.	Ordering Code	H max	W	α	Holder Code*
SI16	3/8"	**SC 16 R H20**	2.00	0.2	90°	H27, 28, 29
		SC 16 R H19	1.90	0.5		

Right hand cutting

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

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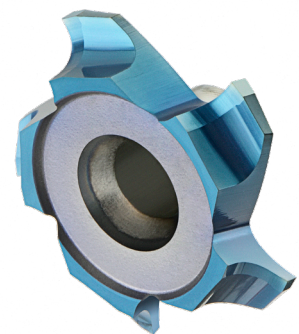
Carbide Grade: MT7
Inserts are available in MT7 Sub-Micron Grade with Titanium Aluminum Nitride multi-layer coating (ISO K10 - K20). This is a general purpose grade, covering a very wide range of materials.
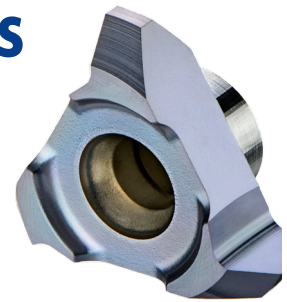
CMT Spiral Multi Flute Inserts

- 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.

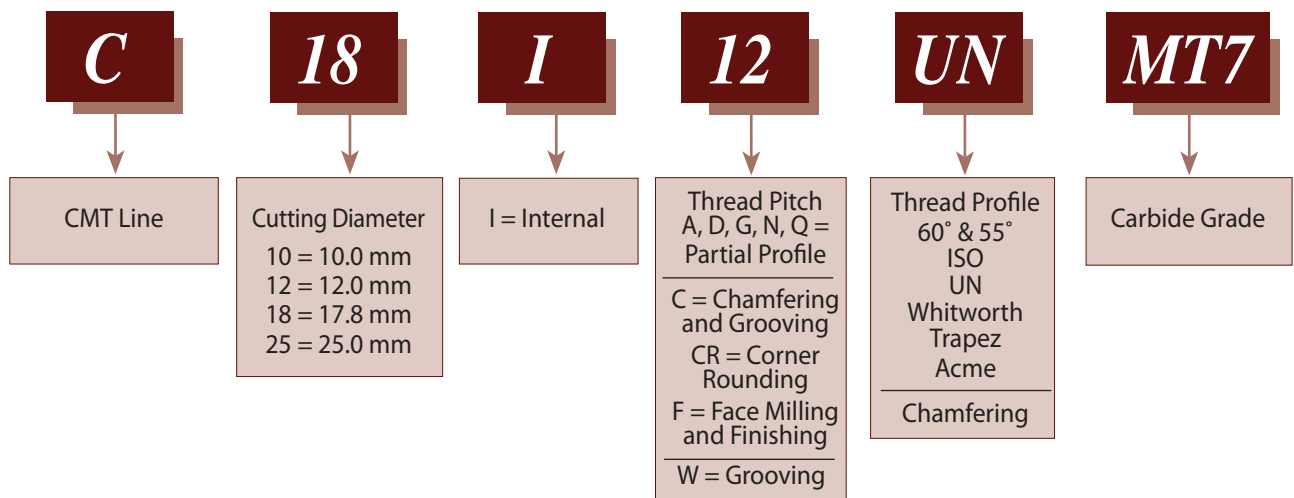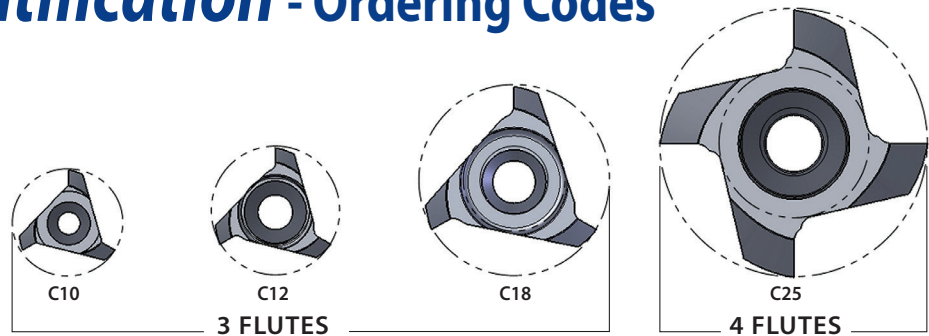### Advantages

- 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

| C10 | C12 | C18 | C25 |

3 FLUTES | **4 FLUTES**

C	**18**	**I**	**12**	**UN**	**MT7**

CMT Line	Cutting Diameter	I = Internal	Thread Pitch	Thread Profile	Carbide Grade
	10 = 10.0 mm		A, D, G, N, Q = Partial Profile	60° & 55°	
	12 = 12.0 mm			ISO	
	18 = 17.8 mm		C = Chamfering and Grooving	UN	
	25 = 25.0 mm			Whitworth	
			CR = Corner Rounding	Trapez	
				Acme	
			F = Face Milling and Finishing		
				Chamfering	
			W = Grooving		

CMT Spiral Multi Flute Inserts

D Cutting Diameter

S	**178**	**H**	**1.0**	**ISO**	**MT8**

Spiral CMT line Multi flute		Number of Flutes	Thread Pitch		Carbide Grade
	Cutting Diameter	D = 4	G, N = Partial Profile	Thread Profile	
	178 = Ø17.8 mm	E = 5	H = Chamfering, Grooving and Boring	Partial 60° & 55°	
	189 = Ø18.9 mm	F = 6	W = Grooving	ISO	
	200 = Ø20.0 mm	H = 8	R = Radius Groove Milling	UN	
	350 = Ø35.0 mm		CR = Corner Rounding		