



STERN

2025

JAN



Milling Tools Turning Tools

-  Quality
-  Raw material
-  Reduce Costs Improve Efficiency

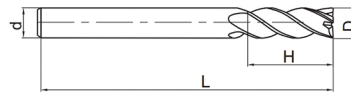
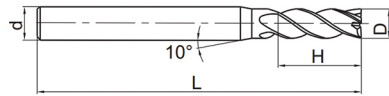


ENDMILL BALLNOSE TIPRADIUS ROUGH ALUMINIUM
55 HRC



High performance machining

- Factory standard
- Centre cutting



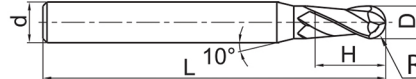
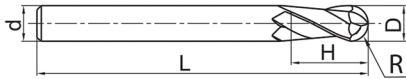
END-MILLING-4F-55HRC

Type	Dimensions(mm)				Type	Dimensions(mm)			
	D	H	L	d		D	H	L	d
0.3~0.9x3Dx50x4D	0.3-0.9	3D	50	4	8x20x60x8D	8	20	60	8
1x3x50x4D	1	3	50	4	8x30x75x8D	8	30	75	8
1x3x50x6D	1	3	50	6	8x35x100x8D	8	35	100	8
1.5x4.5x50x4D	1.5	4.5	50	4	8x40x120x8D	8	40	120	8
1.5x3x50x6D	1.5	3	50	6	8x40x150x8D	8	40	150	8
2x6x50x2D	2	6	50	2	8x45x200x8D	8	45	200	8
2x6x50x4D	2	6	50	4	9x25x75x10D	9	25	75	10
2x6x50x6D	2	6	50	6	10x25x75x10D	10	25	75	10
2.5x8x50x4D	2.5	8	50	4	10x40x100x10D	10	40	100	10
2.5x8x50x6D	2.5	8	50	6	10x55x120x10D	10	55	120	10
3x9x50x3D	3	9	50	3	10x55x150x10D	10	55	150	10
3x9x50x4D	3	9	50	4	10x60x200x10D	10	60	200	10
3x9x50x6D	3	9	50	6	11x30x75x12D	11	30	75	12
3x12x75x3D	3	12	75	3	12x30x75x12D	12	30	75	12
3x12x75x6D	3	12	75	6	12x45x100x12D	12	45	100	12
3x15x100x3D	3	15	100	3	12x60x120x12D	12	60	120	12
3.5x12x50x4D	3.5	12	50	4	12x60x150x12D	12	60	150	12
4x12x50x4D	4	12	50	4	12x65x200x12D	12	65	200	12
4x12x50x6D	4	12	50	6	13x45x100x14D	13	45	100	14
4x15x75x4D	4	15	75	4	14x45x100x14D	14	45	100	14
4x15x75x6D	4	15	75	6	14x50x150x14D	14	50	150	14
4x20x100x4D	4	20	100	4	14x70x200x14D	14	70	200	14
4.5x12x50x6D	4.5	12	50	6	15x45x100x15D	15	45	100	16
5x13x50x5D	5	13	50	5	16x45x100x16D	16	45	100	16
5x13x50x6D	5	13	50	6	16x70x150x16D	16	70	150	16
5x20x75x5D	5	20	75	5	16x75x200x16D	16	75	200	16
5x25x100x5D	5	25	100	5	18x45x100x18D	18	45	100	18
6x16x50x6D	6	16	50	6	18x50x150x18D	18	50	150	18
6x25x75x6D	6	25	75	6	20x45x100x20D	20	45	100	20
6x30x100x6D	6	30	100	6	20x70x150x20D	20	70	150	20
6x35x150x6D	6	35	150	6	20x75x200x20D	20	75	200	20
7x20x60x8D	7	20	60	8					

P	M	K	N	S	H
✓	✓	✓		✓	✓

High performance machining

- Factory standard
- Centre cutting

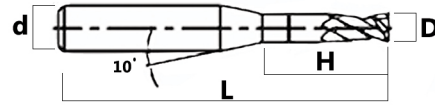


BALLNOSE-MILLING-2F-55HRC	Type	Dimensions(mm)				Type	Dimensions(mm)			
		D	H	L	d		D	H	L	d
	R0.15x0.6x50x4D	0.3	0.6	50	4	R2.5x10x50x5D	5	10	50	5
R0.20x0.6x50x4D	0.4	0.6	50	4	R2.5x10x75x5D	5	10	75	5	
R0.25x0.6x50x4D	0.5	0.6	50	4	R2.5x10x100x5D	5	10	100	5	
R3.0x0.6x50x4D	0.6	0.6	50	4	R3.0x12x50x6D	6	12	50	6	
R0.5x2x50x4D	1	2	50	4	R3.0x12x75x6D	6	12	75	6	
R0.5x2x50x6D	1	2	50	6	R3.0x12x100x6D	6	12	100	6	
R0.75x3x50x4D	1.5	3	50	4	R3.0x12x150x6D	6	12	150	6	
R1.0x2x50x2D	2	2	50	2	R3.5x14x60x8D	7	14	60	8	
R1.0x2x50x4D	2	2	50	4	R4.0x16x60x8D	8	16	60	8	
R1.0x6x75x2D	2	6	75	2	R4.0x16x75x8D	8	16	75	8	
R1.0x6x75x4D	2	6	75	4	R4.0x16x100x8D	8	16	100	8	
R1.0x6x100x2D	2	6	100	2	R4.0x16x150x8D	8	16	150	8	
R1.25x5x50x4D	2.5	5	50	4	R5.0x20x75x10D	10	20	75	10	
R1.25x5x50x6D	2.5	5	50	6	R5.0x20x100x10D	10	20	100	10	
R1.5x6x50x3D	3	6	50	3	R5.0x20x150x10D	10	20	150	10	
R1.5x6x50x4D	3	6	50	4	R5.0x20x200x10D	10	20	200	10	
R1.5x6x100x3D	3	6	100	3	R6.0x24x75x12D	12	24	75	12	
R2.0x8x50x4D	4	8	50	4	R6.0x24x100x12D	12	24	100	12	
R2.0x8x75x4D	4	8	75	4	R6.0x24x150x12D	12	24	150	12	
R2.0x8x100x4D	4	8	100	4	R6.0x24x200x12D	12	24	200	12	

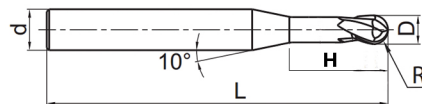
P	M	K	N	S	H
✓	✓	✓		✓	✓

High performance machining

- Factory standard
- Centre cutting



END-MILLING - TALL NECK-4F	Type	Dimensions(mm)				Type	Dimensions(mm)			
		D	H	L	d		D	H	L	d
	1x9x50x4D	1	9	50	4	2x9x50x4D	2	9	9	4
1x16x50x4D	1	16	50	4	2x16x50x4D	2	16	16	4	
1x16x50x6D	1	16	50	6	2x16x50x6D	2	16	16	6	
1x20x50x4D	1	20	50	4	2x20x50x6D	2	20	20	6	
1x25x75x4D	1	25	75	4	2x25x75x4D	2	25	25	4	
1.5x9x50x4D	1.5	9	9	4	2.5x16x50x4D	2.5	16	16	4	
1.5x16x50x4D	1.5	16	16	4	2.5x20x50x4D	2.5	20	20	4	
1.5x16x50x6D	1.5	16	16	6	2.5x25x50x4D	2.5	25	25	4	
1.5x20x50x4D	1.5	20	20	4						
1.5x25x75x4D	1.5	25	25	4						

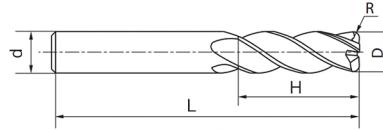


BALLNOSE-MILLING TALL NECK-2F	Type	Dimensions(mm)				Type	Dimensions(mm)			
		D	H	L	d		D	H	L	d
	R0.5x10x50x4D	1	10	50	4	R0.75x20x50x4D	1.5	20	50	4
R0.5x16x50x4D	1	16	50	4	R1.0x10x50x4D	2	10	50	4	
R0.5x20x50x4D	1	20	50	4	R1.0x16x50x4D	2	16	50	4	
R0.5x10x50x4D	1	10	50	4	R1.0x20x50x4d	2	20	50	4	
R0.75x16x50x4D	1.5	16	50	4						

P	M	K	N	S	H
✓	✓	✓		✓	✓

High performance machining

- Factory standard
- Centre cutting

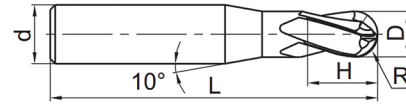
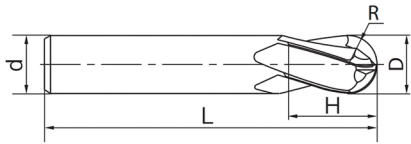


	Type	D	Tipradius(R)					Dimensions(mm)		
			R0.5	R1.0	R1.5	R2.0	R3.0	L1	H	d
TIPRADIUS-MILLING-4F	2x6x50x2D	2	★					6	50	2
	2x9x50x4D	2	★					9	50	4
	2x9x50x6D	2	★					9	50	6
	3x9x50x3D	3	★	★				9	50	3
	3x9x50x4D	3	★					9	50	4
	3x9x50x6D	3	★					9	50	6
	3x12x75x3D	3	★	★				12	75	3
	3x12x75x4D	3	★					12	75	4
	3x12x75x6D	3	★					12	75	6
	3x15x100x3D	3	★					15	100	3
	4x12x50x4D	4	★	★				12	50	4
	4x12x50x6D	4	★	★				12	50	6
	4x15x75x4D	4	★	★				15	75	4
	4x15x75x6D	4	★	★				15	75	6
	4x20x100x4D	4	★					20	100	4
	5x13x50x5D	5	★	★				13	50	5
	5x20x75x5D	5	★	★				20	75	5
	5x25x100x5D	5	★	★				25	100	5
	6x16x50x6D	6	★	★				16	50	6
	6x25x75x6D	6	★	★				25	75	6
	6x30x100x6D	6	★	★				30	100	6
	6x35x150x6D	6	★					35	100	6
	8x20x60x8D	8	★	★				20	60	8
	8x30x75x8D	8	★	★		★		30	75	8
	8x35x100x8D	8	★	★				35	100	8
	8x40x150x8D	8	★	★				40	150	8
	10x25x75x10D	10	★	★	★	★	★	25	75	10
	10x40x100x10D	10	★	★	★	★	★	40	100	10
	10x55x150x10D	10	★	★				55	150	10
	10x60x200x10D	10	★	★				60	200	10
12x30x75x12D	12	★	★	★	★	★	30	75	12	
12x45x100x12D	12	★	★	★	★	★	45	100	12	
12x60x150x12D	12	★	★				60	150	12	
14x45x100x14D	14		★		★	★	45	100	14	
16x45x100x16D	16		★		★	★	45	100	16	

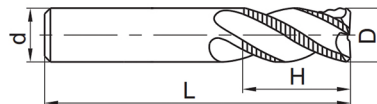
P	M	K	N	S	H
✓	✓	✓		✓	✓

High performance machining

- Factory standard
- Centre cutting



BALLNOSE-MILLING-4F	Type	Dimensions(mm)				Type	Dimensions(mm)			
		D	H	L	d		D	H	L	d
	R1.25x5x50x4D-4F	2.5	5	50	4	R4.0x16x100x8D-4F	8	16	100	8
R1.5x6x50x3D-4F	3	6	50	3	R5.0x20x75x10D-4F	10	20	75	10	
R1.5x6x100x3D-4F	3	6	100	3	R5.0x20x100x10D-4F	10	20	100	10	
R2.0x8x50x4D-4F	4	8	50	4	R6.0x24x75x12D-4F	12	24	75	12	
R2.0x8x100x4D-4F	4	8	100	4	R6.0x24x100x12D-4F	12	24	100	12	
R2.5x10x50x5D-4F	5	10	50	5	R7.0x28x100x14D-4F	14	28	100	14	
R2.5x10x100x5D-4F	5	10	100	5	R8.0x32x100x16D-4F	16	32	100	16	
R3.0x12x50x6D-4F	6	12	50	6	R8.0x32x150x16D-4F	16	32	150	16	
R3.0x12x100x6D-4F	6	12	100	6	R10.0x40x100x20D-4F	20	40	100	20	
R4.0x16x60x8D-4F	8	16	60	8	R10.0x40x150x20D-4F	20	40	150	20	

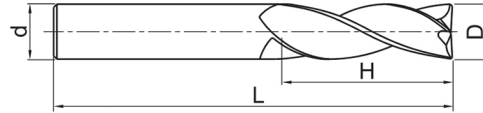


END-MILLING4F ROUGH	Type	Dimensions(mm)			
		D	H	L	d
	6x16x50x6D	6	16	50	6
	8x20x50x8D	8	20	60	8
	10x25x75x10D	10	25	75	10
	12x30x75x12D	12	30	75	12
	16x45x100x16D	16	45	100	16
	20x45x100x20D	20	45	100	20

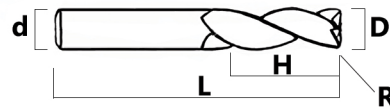
P	M	K	N	S	H
✓	✓	✓		✓	✓

High performance machining

- Factory standard
- Centre cutting



END-MILLING--3F-2F ALUMINIUM	Type	Dimensions(mm)				Type	Dimensions(mm)			
		D	H	L	d		D	H	L	d
	2x6x50x4D	2	6	50	4	8x20x60x8D	8	20	60	8
3x9x50x3D	3	9	50	3	8x30x75x8D	8	30	75	8	
3x12x75x3D	3	12	75	3	8x35x100x8D	8	35	100	8	
3x15x100x3D	3	15	100	3	10x25x75x10D	10	25	75	10	
4x12x50x4D	4	12	50	4	10x40x100x10D	10	40	100	10	
4x15x75x4D	4	15	75	4	12x30x75x12D	12	30	75	12	
4x20x100x4D	4	20	100	4	12x45x100x12D	12	45	100	12	
5x13x50x5D	5	13	50	5	14x45x100x14D	14	45	100	14	
5x25x100x5D	5	25	100	5	16x45x100x16D	16	45	100	16	
6x16x50x6D	6	16	50	6	16x50x150x16D	16	50	150	16	
6x30x100x6D	6	30	100	6	20x45x100x20D	20	45	100	20	

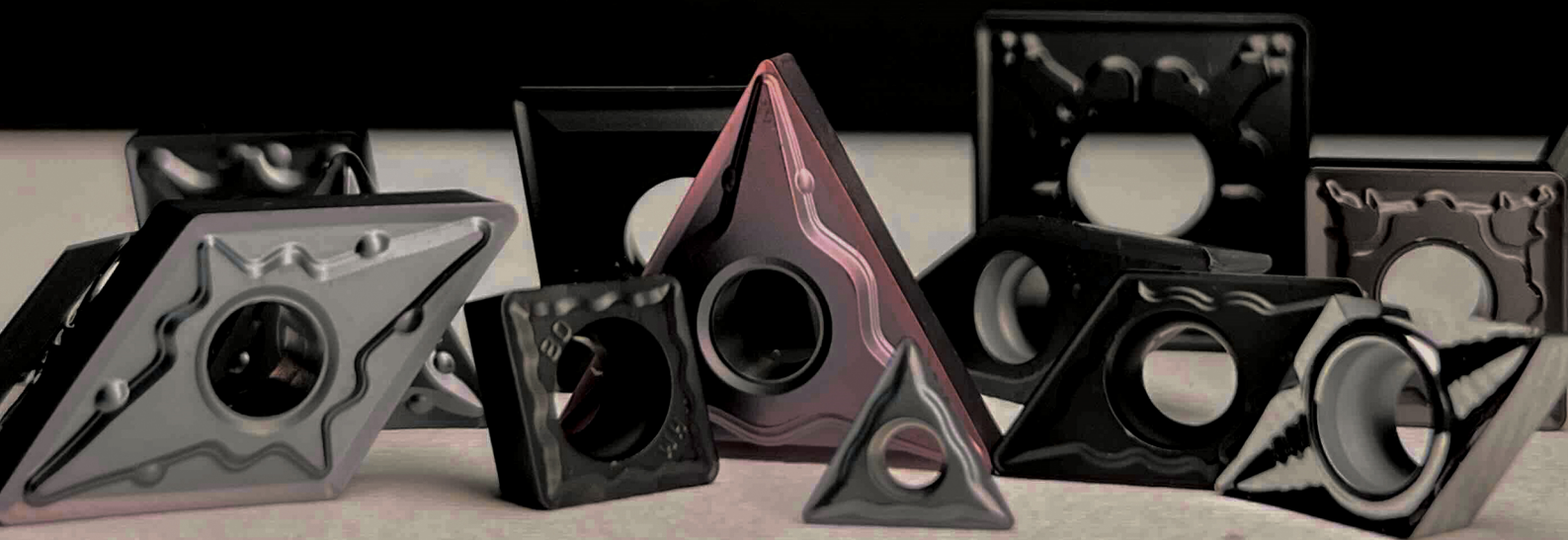


TIPRADIUS-MILLING-3F ALUMINIUM	Type	D	R	Dimensions(mm)		
				H	L	d
	3x9x50x3D	3	0.5	9	50	3
4x12x50x4D	4	0.5	12	50	4	
5x13x50x5D	5	0.5	13	50	5	
6x16x50x6D	6	0.5	16	50	6	

P	M	K	N	S	H
			✓		



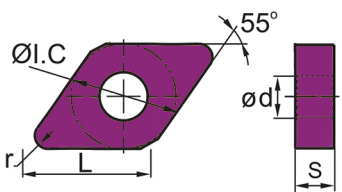



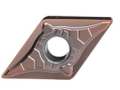
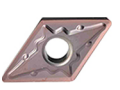

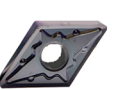
- DNMG
- TNMG
- CNMG
- DCMT
- CCMT
- WNMG
- TCMT
- DCGX
- CCGX
- VCGX



- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

DN**	L	I.C	S	d
15 06	15.5	12.7	6.35	5.16

TURNING INSERT

DN** Positive insert					CVD		PVD	
	P	Steel	⊗		⊗		⊗	
	K	Cast iron			⊗		⊗	
	M	Stainless steel					⊗	⊗
	N	Aluminium						
	S	Super alloy						⊗
	H	Hard metal				⊗		
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	DNMG150604-TM	0.4	0.1-0.5	0.5-4.0	★			
	DNMG150608-TM	0.8	0.5-3.0	0.1-0.5	★			
	DNMG150612-PT	12	1.0-5.5	0.15-0.6	★			
	DNMG150616-PT	16	1.0-5.5	0.2-0.6	★			
	DNMG150608-FC	0.8	0.5-4.0	0.15-0.4		★		
	DNMG150612-FC	12	1.0-6.0	0.2-0.6		★		
	DNMG150604-MSF	0.4	0.5-2.5	0.10-0.3			★	
	DNMG150608-MM	0.8	0.5-2.5	0.10-0.3			★	
	DNMG150604-MSF	0.4	0.5-3.0	0.05-0.2				★
	DNMG150608-MM	0.8	1.0-3.0	0.05-0.3				★

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

TN**	L	I.C	S	d
16 04	16.5	9.525	4.76	3.81
22 04	22	12.7	4.76	5.16

TURNING INSERT

TN**Positive insert					CVD		PVD	
	<p>60°</p> <p>ØI.C</p> <p>r</p> <p>L</p> <p>S</p> <p>ød</p>	P	Steel	⊗	○			
		K	Cast iron	⊗	○			
		M	Stainless steel		⊗	○		
		N	Aluminium					
		S	Super alloy		⊗	○		
		H	Hard metal	⊗				
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	TNMG220404-MM	0.4	0.5-3.0	0.05-0.3	★			
	TNMG220408-MM	0.8	0.5-4.0	0.1-0.5	★			
	TNMG220408-KM	0.8	0.5-3.0	0.05-0.25		★		
	TNMG220412-KM	12	1.0-6.0	0.20-0.6		★		
	TNMG220404-MM	0.4	0.5-2.5	0.05-0.2			★	
	TNMG220408-MM	0.8	0.5-2.5	0.1-0.3			★	
	TNMG220404-MM	0.4	0.5-2.5	0.05-0.2				★
	TNMG220404-MM	0.8	0.5-2.5	0.1-0.3				★
	TNMG160404-MA	0.4	0.5-3.0	0.1-0.3				★
	TNMG160408-MA	0.8	0.5-3.0	0.05-0.2				★

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

CN**	L	I.C	S	d
12 04	12.9	12.7	4.76	5.16
16 06	16.1	15.875	6.35	6.35
19 06	19.3	19.05	6.35	7.94

TURNING INSERT

CN** Positive insert					CVD		PVD	
					P Steel			
					K Cast iron			
					M Stainless steel			
					N Aluminium			
					S Super alloy			
					H Hard metal			
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	CNMG120404-TM	0.4	0.2-2.0	0.05-0.3	★			
	CNMG120408-TM	0.8	0.5-2.0	0.1-0.4	★			
	CNMG120412-PM	12	2.0-5.5	0.15-0.6	★			
	CNMG120408-KM	0.8	1.0-5.0	0.2-0.5		★		
	CNMG120412-KM	12	1.0-5.0	0.2-0.5		★		
	CNMA120416-KM	16	1.0-5.0	0.2-0.5		★		
	CNMA120416	16	0.2-7.0	0.15-0.65		★		
	CNMG120404-MM	0.4	0.5-3.0	0.05-0.3			★	
	CNMG120408-MM	0.8	0.10-7.5	0.10-0.3			★	
	CNMG120404-MM	0.4	0.5-2.5	0.05-0.2				★
	CNMG120408-MM	0.8	1.0-3.0	0.1-0.3				★
	CNMG160608-TC	0.8	2.0-6.0	0.25-0.6	★			
	CNMG190612-TC	12	1.0-7.0	0.15-0.6	★			

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

DC**	L	I.C	S	d
07 02	7.8	6.35	2.38	2.8
11 T3	11.6	9.525	3.97	4.4

DC** Positive insert					CVD		PVD	
	P	Steel	⊗					
	K	Cast iron	⊗					
	M	Stainless steel		⊗				
	N	Aluminium						
	S	Super alloy		⊗				
	H	Hard metal	⊗					
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	DCMT070208-MP	0.8	0.5-3.0	0.08-0.3				★
	DCMT11T304-MP	0.4	0.2-2.0	0.10-0.3				★
	DCMT11T308-MP	0.8	0.8-3.0	0.08-0.3				★
	DCMT11T308-HM	0.8	1.0-3.0	0.05-0.2		★		

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

CCMT	L	I.C	S	d
06 02	6.4	6.35	2.38	2.8
09 T3	9.7	9.525	3.97	4.4
12 04	12.9	12.7	4.76	5.56

CC** Positive insert					CVD		PVD	
	P	Steel	⊗					
	K	Cast iron	⊗					
	M	Stainless steel		⊗				
	N	Aluminium						
	S	Super alloy		⊗				
	H	Hard metal	⊗					
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	CCMT09T3404-MP	0.4	0.8-3.0	0.08-0.3				★
	CCMT09T308-MP	0.8	0.2-2.0	0.05-0.2				★
	CCMT09T308-HM	0.8	0.5-3.0	0.1-0.4		★		
	CCMT120408-TM	0.8	0.5-3.0	0.1-0.5	★			
	CCMT120408-TM	0.8	1.0-6.0	0.2-0.6		★		

○ Ideal&Normal machining conditions

⊗ Unfavourable machining conditions

WN**	L	I.C	S	d
08 04	8.7	12.7	4.76	5.16

TURNING INSERT

WN** Positive insert					CVD		PVD	
					P Steel ⊗		●	
					K Cast iron ⊗		●	
					M Stainless steel ⊗		●	
					N Aluminium ⊗		●	
					S Super alloy ⊗		●	
					H Hard metal ⊗			
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	WNMG080404-TM	0.4	0.5-3.0	0.1-0.5	★			
	WNMG080408-TM	0.8	1.0-5.0	0.1-0.5	★			
	WNMG080412-TC	12	2.0-6.0	0.25-0.6		★		
	WNMG080404-MM	0.4	0.5-3.0	0.05-0.3			★	
	WNMG080408-MM	0.8	1.0-3.0	0.1-0.3			★	
	WNMG080404-MM	0.4	0.5-2.5	0.05-0.2				★
	WNMG080408-MM	0.8	1.0-3.0	0.1-0.3				★

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

SN**	L	I.C	S	d
12 04	12.7	12.7	4.76	5.16
15 06	15.875	15.875	6.35	6.35
19 06	19.05	19.05	6.35	7.94

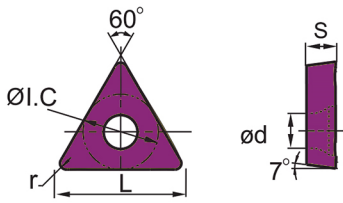



TURNING INSERT

SN** Positive insert					CVD		PVD	
					P Steel	⊗		●
					K Cast iron	⊗		●
					M Stainless steel		⊗	●
					N Aluminium			
					S Super alloy		⊗	●
					H Hard metal	⊗		
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530
	SNMG120408-TM	0.8	1.0-5.0	0.25-0.7	★			
	SNMG120412-TC	12	1.0-5.0	0.2-0.5	★			
	SNMG150612-PM	12	2.0-6.0	0.25-0.6	★			
	SNMG190612-PM	12	1.0-7.5	0.2-0.69	★			

- Ideal&Normal machining conditions
- ☒ Unfavourable machining conditions

TCMT	L	I.C	S	d
09 02	9.63	5.56	2.38	2.5
11 02	11	6.35	2.38	2.8
16 T3	16.5	9.525	3.97	4.4

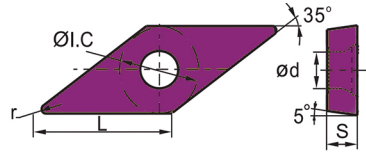

TURNING INSERT

TC** Positive insert					CVD		PVD		
	P	Steel	☒					●	
	K	Cast iron	☒					●	
	M	Stainless steel					☒	●	
	N	Aluminium							
	S	Super alloy						☒	●
	H	Hard metal	☒						
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530	
	TCMT090204-TM	0.4	0.1-2.0	0.05-0.2				★	
	TCMT110208-TM	0.8	1.0-5.0	0.1-0.5	★				
	TCMT16T308-TM	0.8	1.0-3.0	0.1-0.3				★	

- Ideal&Normal machining conditions
- ☒ Unfavourable machining conditions

VBMT	L	I.C	S	d
16 04	16.5	9.525	4.76	4.4

TURNING INSERT

VB** Positive insert					CVD		PVD		
	P	Steel	☒					●	
	K	Cast iron	☒					●	
	M	Stainless steel					☒	●	
	N	Aluminium							
	S	Super alloy						☒	●
	H	Hard metal	☒						
	ISO	r	ap	f	CW4125	CW3115D	CW1125	CW1530	
	VBMT160404-MT	0.4	0.2-2.0	0.05-0.2				★	
	VBMT160408-MT	0.8	0.8-3.0	0.08-0.3				★	

TURNING/MILLING INSERT

○ Ideal&Normal machining conditions

☼ Unfavourable machining conditions

CC** Positive					CVD
					P Steel
					K Cast iron
					M Stainless steel
					N Aluminium
					S Super alloy
					H Hard metal
ISO	r	ap	f	N Aluminium	
	CCGX09T302-AK	0.2	1.0-5.0	0.05-0.5	★
	CCGX09T304-AK	0.4	1.0-5.0	0.05-0.5	★
	CCGX09T308-AK	0.8	1.0-5.0	0.05-0.5	★

CGX	L	IC	S	d
09	9.7	9.525	3.97	4.4

DC** Positive					CVD
					P Steel
					K Cast iron
					M Stainless steel
					N Aluminium
					S Super alloy
					H Hard metal
ISO	r	ap	f	N Aluminium	
	DCGX11T302-AK	0.2	1.0-5.0	0.05-0.5	★
	DCGX11T304-AK	0.4	1.0-5.0	0.05-0.5	★
	DCGX11T308-AK	0.8	1.0-5.0	0.05-0.5	★

DCGX	L	IC	S	d
11	11.6	9.525	3.97	4.4

VC** Positive					CVD
					P Steel
					K Cast iron
					M Stainless steel
					N Aluminium
					S Super alloy
					H Hard metal
ISO	r	ap	f	N Aluminium	
	VCGX09T302-AK	0.2	1.0-5.0	0.05-0.5	★
	VCGX09T304-AK	0.4	1.0-5.0	0.05-0.5	★
	VCGX09T308-AK	0.8	1.0-5.0	0.05-0.5	★

VGX	L	IC	S	d
16	16.6	9.525	4.76	4.4



- MGMN200
- MGMN250
- MGMN300
- MGMN400
- MGMN500



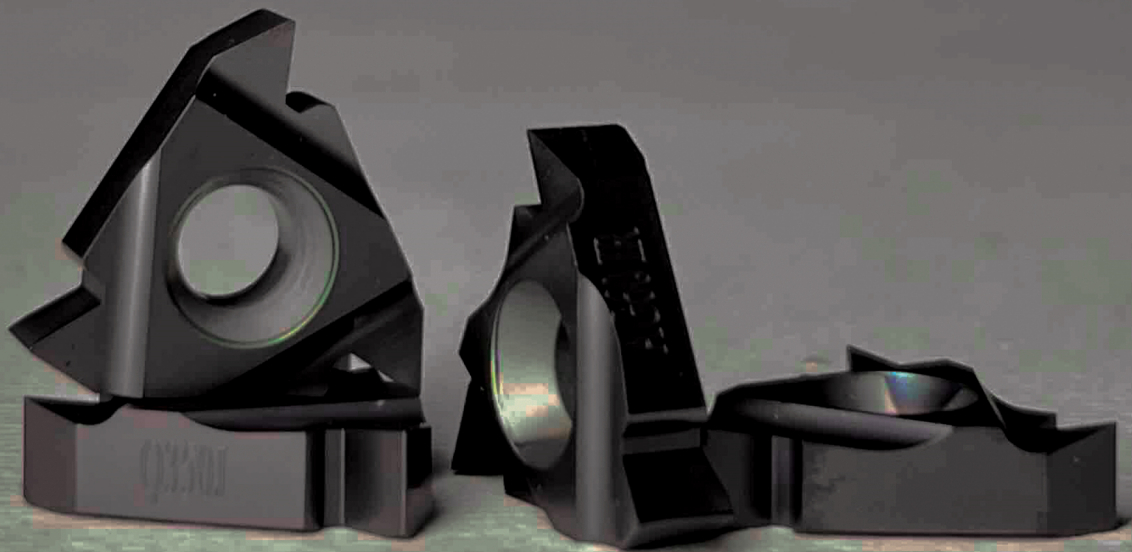
GROVING INSERT

- Ideal&Normal machining conditions
- ⊗ Unfavourable machining conditions

MG** Positive						CVD		PVD	
						P Steel	⊗	○	○
						K Cast iron	⊗	⊗	⊗
						M Stainless steel	○	⊗	○
						N Aluminium	○	○	○
						S Super alloy	○	⊗	⊗
						H Hard metal	⊗	○	○
	ISO	R _{±0.05}	La max	S _{±0.1}	f	CW4125	CW3115D	CW1125	CW1530
	MGMN2002-N	0.2	16	2	0.05-0.2				★
	MGMN2503-N	0.3	18.5	2.5	0.05-0.2				★
	MGMN3003-N	0.3	21	3	0.1-0.3				★
	MGMN4004	0.4	21	4	0.1-0.3				★
	MGMN5004-N	0.4	26	5	0.1-0.3		★		★



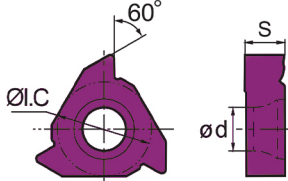

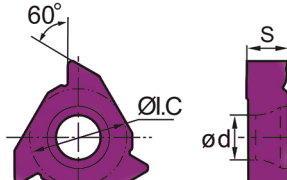

- 11ER-AG60
- 11IR-AG60
- 16ER-AG60
- 16IR-AG60
- 22ER-AG60
- 22IR-AG60



- Ideal & Normal machining conditions
- ⊗ Unfavourable machining conditions

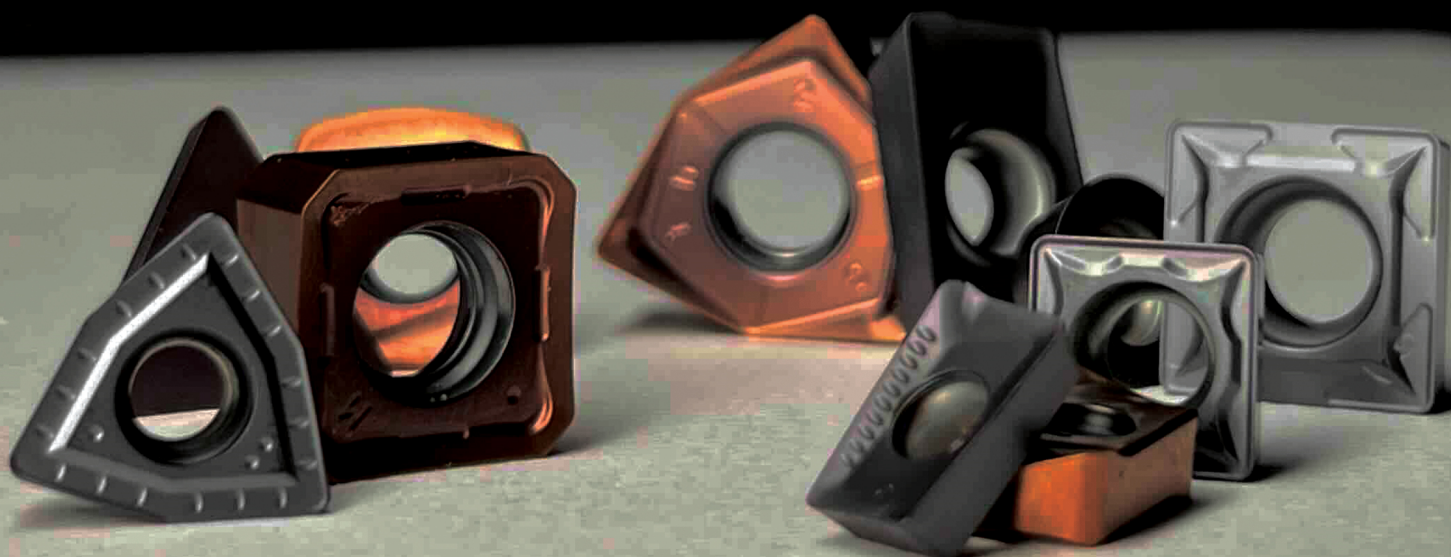
R/LT**N/W	I.C	S	d
11	6.35	3.18	2.8
16	9.525	3.97	4.4
22	12.7	5.56	5.5

Treading inserts

ISO metric coarse thread 60° full profile				CVD		PVD	
	P	Steel	⊗			○	
	K	Cast iron	⊗			○	
	M	Stainless steel		⊗		○	
	N	Aluminium				○	
	S	Super alloy		⊗		○	
	H	Hard metal	⊗				
	External	ISO	Pitch(mm)	CW4125	CW3115D	CW1125	CW1530
	11ER-AG60	11	0.5-2				★
	16ER-AG60	16	1-3				★
	22ER-AG60	22	3.5-6				★
ISO metric coarse thread 60° full profile				CVD		PVD	
	P	Steel	⊗			○	
	K	Cast iron	⊗			○	
	M	Stainless steel		⊗		○	
	N	Aluminium				○	
	S	Super alloy		⊗		○	
	H	Hard metal	⊗				
	External	ISO	Pitch(mm)	CW4125	CW3115D	CW1125	CW1530
	11IR-AG60	11	0.5-2				★
	16IR-AG60	16	1-3				★
	22IR-AG60	22	3.5-6				★



- RDMT10T3
- RDMT1204
- SCMT09T308
- SCMT120408
- SDMT120512
- SNMX1205ANN
- SPUN120308
- SPUN150408
- APKT1035PDSR
- APKT160408
- LNMU0303ZER
- WNMU080608
- TPUN160308
- TPUN220408
- WCMX030208
- WCMX040208
- WCMX050308
- WCMX06T308
- WCMX080408












MILLING INSERT

		PVD
P	Steel	
K	Cast iron	
M	Stainless steel	
N	Aluminium	
S	Super alloy	
H	Hard metal	

Milling Positive	ISO	r	L	IC	S	d	f	PVD	
								CW1125	CW1530
	RDMT10T3MO-MM	-	10.00	10.00	3.97	4.5	0.1-0.3		★
	RDMT1204MO-MM	-	12.00	12.00	4.76	5.5	0.1-0.4		★
	SCMT09T308-MP	0.8	9.525	9.525	3.97	4.4	0.05-0.2		★
	SCMT120408-MP	0.8	12.7	12.7	4.76	5.56	0.1-0.3		★
	SDMT120512-GM	12	12.7	12.7	5.56	4.6	0.1-0.3		★
	SNMX1205ANN-M	-	12.4	12.4	5.7	5.9	0.1-0.3		★
	SPUN120308-SKR	0.8	12.7	12.7	3.18	-	0.1-0.3		★
	SPUN150408-SKR	0.8	15.875	15.875	4.76	-	0.1-0.4		★
	APKT1035PDSR	0.4	10.6	10.6	3.24	2.6	0.1-0.4		★
	APKT160408-ZM	0.8		17.65	9.64	4.76	0.1-0.4		★

MILLING INSERT

		PVD	
P	Steel		●
K	Cast iron		●
M	Stainless steel		●
N	Aluminium		
S	Super alloy		●
H	Hard metal		

Milling Positive	ISO	r	L	IC	S	d	f	PVD	
								CW1125	CW1530
	 LNMU0303ZER-MJ	-	11.58	11.58	4.45	2.65	0.1-0.3		★
	 WNMU080608EN-M	0.8	12.00	12.00	6.35	4.6	0.1-0.4		★
	 TPUN160308-SKR	0.8	16.5	9.525	3.18	-	0.1-0.3		★
	 TPUN220408-SKR	0.8	22	12.7	4.76	-	0.1-0.4		★
	 WCMX030208-UK	0.8	3.8	5.56	2.8	2.8	0.1-0.4		★
	 WCMX040208-UK	0.8	4.3	6.35	3.1	3.1	0.1-0.4		★
	 WCMX050308-UK	0.8	5.4	7.94	3.2	3.2	0.1-0.4		★
	 WCMX06T308-UK	0.8	6.5	9.525	3.7	3.7	0.1-0.4		★
	 WCMX080408-UK	0.8	8.7	12.7	4.3	4.3	0.1-0.4		★

TURNING & MILLING

ISO		General Turning		General Milling	Threading	Grooving
Code	Coating		Coating	Coating	Coating	
	CVD	PVD	PVD	PVD	PVD	
P Steel	P01					
	P10		CW1530	CW1530	CW1530	CW1530
	P20	CW4125	CW1530	CW1530	CW1530	CW1530
	P30	CW4125				
	P40					
M StainlessSteel	M01					
	M10		CW1530	CW1530	CW1530	CW1530
	M20		CW1530 CW1125	CW1530 CW1125	CW1530 CW1125	CW1530 CW1125
	M30					
K Cast iron	K01					
	K10	CW3115D	CW3115D N20 CW1530	CW1530 CW3115D	CW1530	CW1530
	K20	CW3115D				
	K30					
N Non ferrous metal	N01					
	N10	N20		N20		N20
	N20	N20				
	N30					
S Heat resistant alloy & Ti alloy	S01					
	S10		CW1530 CW1125	CW1530 CW1125	CW1530 CW1125	CW1530 CW1125
	S20					
	S30					
H Super hard metal	H01					
	H10					
	H20					
	H30					

Coated Cemented Carbide

CVD

PVD

CW4125

Comprising of thick TiCN and Al₂O₃ coating, the grade has high capability against plastic deformation and good hardness of cutting edge. It is preferred grade for machining of steel from finishing to roughing. Under the same cutting conditions, the cutting speed can be increased by more than 25%, while the tool life can be 30% longer under the same cutting speed.

CW3115D

CVD coated grade, which is the combination of hard substrate and coating (medium thick Al₂O₃ + Thick TiCN), has good flaking resistance. It is suitable for turning of cast iron at high speed, and light intermittent cutting can be supported even at moderate. It is also suitable for milling of cast iron

- ◆ The combination of thick coating and substrate with good hardness and impact resistance gives the inserts excellent resistance and stability under high temperature, and improves wear resistance of inserts. Inserts also satisfy the requirements of high speed and high feed rate when machining cast iron.
- ◆ the appearance of shining full back is easily identified.,
- ◆ Working efficiency has been improved. Both the coating and the substrate are suitable for machining cast iron at high speed and high feed rate. Cutting speed can be increased by 30%.
- ◆ Cost is reduced as tool life is increased by 40%-50%
- ◆ High machining stability

CW1125





Suitable for relatively small workpieces which require high surface smoothness.

PVD coating grade of finishing of stainless steel

Superfine TiAlN nano coating added with wear-resistant and heat-resistant, providing effective protection for the cutting edge, Special coating technology ensures stronger combination of coating and substrate. It is suitable for extra finishing of stainless steel.

CW1530

PVD coated P10-P30/M10-M25 carbide substrate for finishing to medium application of stainless steel and steel (milling). Good wear resistance in a wide application field

	Range of machining	Grade	Vc (m/min)
 STEEL	For finishing	CW1530	180-360
	For semi-finishing	CW4125	280-440
	For roughing	CW4125	200-320
 Stainless steel	For finishing	CW1530	110-270
	For semi-finishing	CW1125	160-300
	For roughing	CW1125	140-260
 Cast iron	For finishing	CW1530	140-220
	For semi-finishing	CW3115D	160-300
	For roughing	CW3115D	160-300
 Heat resistant Alloy Ti alloy	For finishing	CW1530	110-270
	For semi-finishing	CW1125	160-300
	For roughing	CW1125	140-260

INDEX

MILLING	END-MILLING-4F	1
	BALNOSE-MILLING-2F	2
	END & BALLNOSE-MILLING-TALL NECK	3
	TIPRADIUS	4
	BALLNOSE-MILLING-4F & ROUGH MILLING	5
	ALUMINIUM-MILLING	6
GENERAL TURNING	DNMG15	8
	TNMG	9
	CNMG	10
	DCMT-CCMT	11
	WNMG	12
	SNMG	13
	TCMT-VBMT	14
	ALUMINIUM-INSERT	15
GROVING	GROVING	17
TREADING	TREADING	19
MILLING INSERT	MILLING INSERT	21
	MILLING INSERT	22
TABLE	GRADE TABLE DESCRIPTION	23
GRADE	GRADE DESCRIPTION	24




STERN
2025
JAN

Our company (**STERN**) is the basis of manufacturing and selling CNC cutting tools with a large scale, advanced production, advanced equipment and technology, and using quality raw materials.

-Starting from the very beginning of material selection, we strictly control each procedure and implement to guarantee the stable quality of products.

-We offer considerate and professional technology services regarding order of standard or non-standard tailor-made products.

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