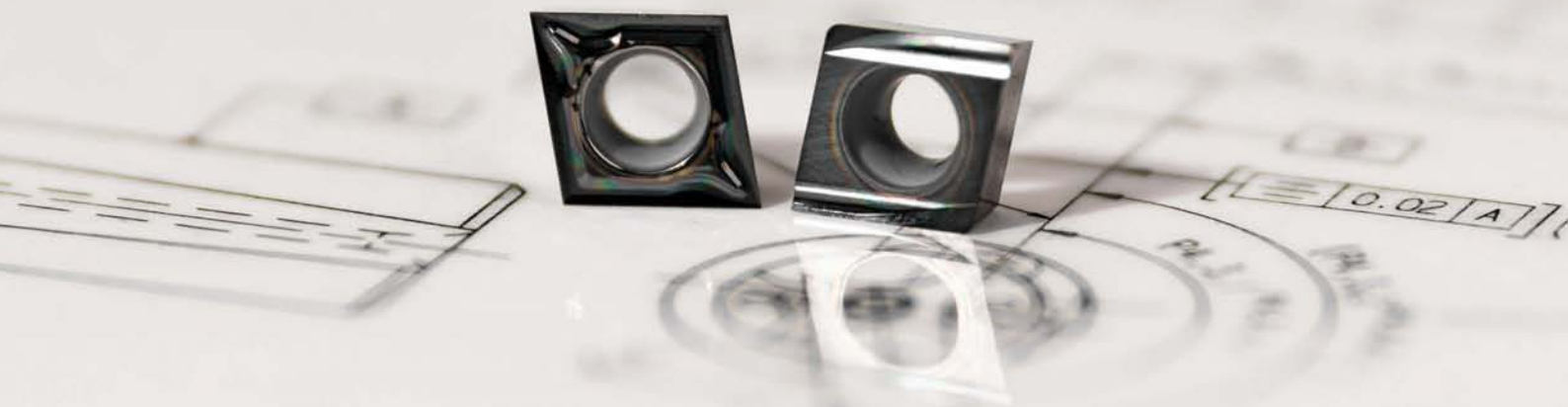




TopSwissTM INSERTS



**Next Level Turning for
Small Parts Machining**

Applications

Medium
Machining

Light
Machining

Fine
Finishing

Materials

P Steels

M Stainless Steels

S High-Temp Alloys

N Non-Ferrous

Industries

+ Medical

✈ Aerospace

⚙ General Engineering

🚗 Automotive

TopSwiss small parts machining inserts enhance Kennametal's turning portfolio with better solutions for aerospace, general engineering, medical and transportation customers facing challenges with achieving superior chip evacuation and surface finish in low feed, high depth-of-cut applications.

TopSwiss Inserts Feature:

4 new carbide grades, 1 new cermet grade and 7 new geometries

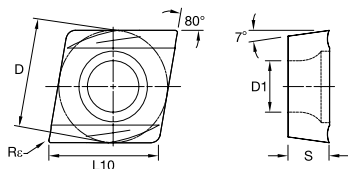
Straight and curved cutting edges for stable cuts and smooth chip flow in low feed, high DOC applications

Polished finishing geometries for increased welding resistance and improved surface finishing

Medium and finishing wiper geometries for increased feed rates and superior surface quality

Several geometries with high chip breaker walls and large pockets for better chip evacuation





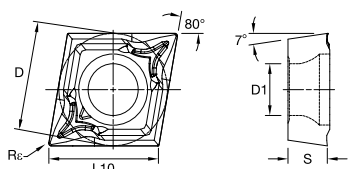
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCGT Insert • Positive • PPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCGT21502MRPPS	CCGT060201MRPPS	6.35	0.250	6.45	0.254	0.1	0.004	2.8	0.110	2.38	0.094	●	●	●	-	-
CCGT21505MRPPS	CCGT060202MRPPS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	●	●	●	-	-
CCGT32502MRPPS	CCGT09T301MRPPS	9.53	0.375	9.67	0.381	0.1	0.004	4.4	0.173	3.97	0.156	●	●	●	-	-
CCGT32505MRPPS	CCGT09T302MRPPS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	●	●	●	-	-
CCGT3251MRPPS	CCGT09T304MRPPS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	●	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")



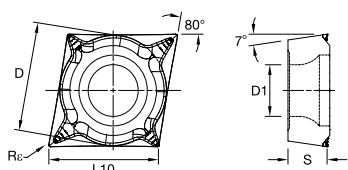
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCGT Insert • Positive • LFS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCGT21502MLFS	CCGT060201MLFS	6.35	0.250	6.45	0.254	0.1	0.004	2.8	0.110	2.38	0.094	●	●	●	-	-
CCGT21505MLFS	CCGT060202MLFS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	●	●	●	-	-
CCGT32502MLFS	CCGT09T301MLFS	9.53	0.375	9.67	0.381	0.1	0.004	4.4	0.173	3.97	0.156	●	●	●	-	-
CCGT32505MLFS	CCGT09T302MLFS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	●	●	●	-	-
CCGT3251MLFS	CCGT09T304MLFS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	●	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")



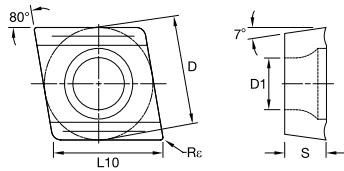
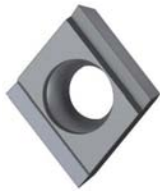
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCGT Insert • Positive • FFS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCGT21502MFFS	CCGT060201MFFS	6.35	0.250	6.45	0.254	0.1	0.004	2.8	0.110	2.38	0.094	-	●	●	-	-
CCGT21505MFFS	CCGT060202MFFS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	-	●	●	-	-
CCGT32502MFFS	CCGT09T301MFFS	9.53	0.375	9.67	0.381	0.1	0.004	4.4	0.173	3.97	0.156	-	●	●	-	-
CCGT32505MFFS	CCGT09T302MFFS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	-	●	●	-	-
CCGT3251MFFS	CCGT09T304MFFS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")

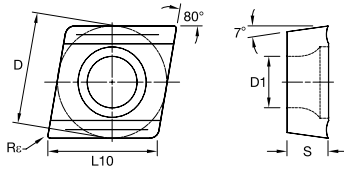


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCET Insert • Positive • PPS (Left Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCET2150LPPS	CCET060200LPPS	6.35	0.250	6.45	0.254	0.0	0.000	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET215X0LPPS	CCET0602X0LPPS	6.35	0.250	6.45	0.254	0.03	0.001	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET21502LPPS	CCET060201LPPS	6.35	0.250	6.45	0.254	0.1	0.004	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET21505LPPS	CCET060202LPPS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET2151LPPS	CCET060204LPPS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET3250LPPS	CCET09T300LPPS	9.53	0.375	9.67	0.381	0.0	0.000	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET325X0LPPS	CCET09T3X0LPPS	9.53	0.375	9.67	0.381	0.03	0.001	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET32502LPPS	CCET09T301LPPS	9.53	0.375	9.67	0.381	0.1	0.004	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET32505LPPS	CCET09T302LPPS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET3251LPPS	CCET09T304LPPS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	●	●

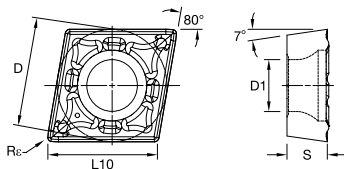


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCET Insert • Positive • PPS (Right Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCET2150RPPS	CCET060200RPPS	6.35	0.250	6.45	0.254	0.0	0.000	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET215X0RPPS	CCET0602X0RPPS	6.35	0.250	6.45	0.254	0.03	0.001	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET21502RPPS	CCET060201RPPS	6.35	0.250	6.45	0.254	0.1	0.004	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET21505RPPS	CCET060202RPPS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET2151RPPS	CCET060204RPPS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	●	●
CCET3250RPPS	CCET09T300RPPS	9.53	0.375	9.67	0.381	0.0	0.000	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET325X0RPPS	CCET09T3X0RPPS	9.53	0.375	9.67	0.381	0.03	0.001	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET32502RPPS	CCET09T301RPPS	9.53	0.375	9.67	0.381	0.1	0.004	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET32505RPPS	CCET09T302RPPS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	●	●
CCET3251RPPS	CCET09T304RPPS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	●	●



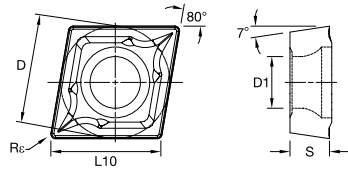
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCMT Insert • Positive • MWS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCMT2151MWS	CCMT060204MWS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT2152MWS	CCMT060208MWS	6.35	0.250	6.45	0.254	0.8	0.031	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT3251MWS	CCMT09T304MWS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
CCMT3252MWS	CCMT09T308MWS	9.53	0.375	9.67	0.381	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●

Note: Wiper Geometry

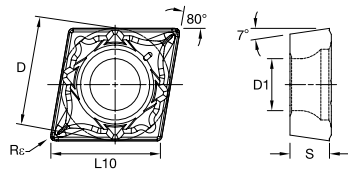


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCMT Insert • Positive • MPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCMT2151MPS	CCMT060204MPS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT2152MPS	CCMT060208MPS	6.35	0.250	6.45	0.254	0.8	0.031	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT3251MPS	CCMT09T304MPS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
CCMT3252MPS	CCMT09T308MPS	9.53	0.375	9.67	0.381	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●



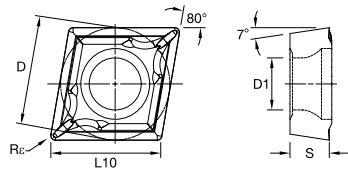
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCMT Insert • Positive • FWS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCMT21505FWS	CCMT060202FWS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT2151FWS	CCMT060204FWS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT32505FWS	CCMT09T302FWS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	-	●
CCMT3251FWS	CCMT09T304FWS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●

Note: Wiper Geometry

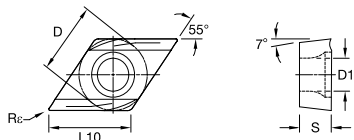


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CCMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CCMT21505FPS	CCMT060202FPS	6.35	0.250	6.45	0.254	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT2151FPS	CCMT060204FPS	6.35	0.250	6.45	0.254	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
CCMT32505FPS	CCMT09T302FPS	9.53	0.375	9.67	0.381	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	-	●
CCMT3251FPS	CCMT09T304FPS	9.53	0.375	9.67	0.381	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
CCMT3252FPS	CCMT09T308FPS	9.53	0.375	9.67	0.381	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●



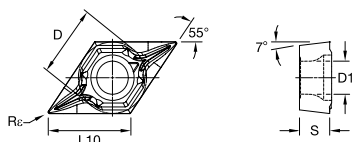
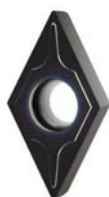
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DCGT Insert • Positive • PPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCGT21502MRPPS	DCGT070201MRPPS	6.35	0.250	7.75	0.305	0.1	0.004	2.8	0.110	2.38	0.094	●	●	●	-	-
DCGT21505MRPPS	DCGT070202MRPPS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	●	●	●	-	-
DCGT32502MRPPS	DCGT11T301MRPPS	9.53	0.375	11.63	0.458	0.1	0.004	4.4	0.173	3.97	0.156	●	●	●	-	-
DCGT32505MRPPS	DCGT11T302MRPPS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	●	●	●	-	-
DCGT3251MRPPS	DCGT11T304MRPPS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	●	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")



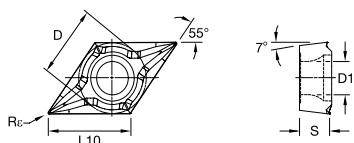
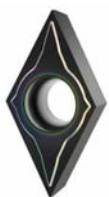
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DCGT Insert • Positive • LFS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCGT21502MLFS	DCGT070201MLFS	6.35	0.250	7.75	0.305	0.1	0.004	2.8	0.110	2.38	0.094	●	●	●	-	-
DCGT21505MLFS	DCGT070202MLFS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	●	●	●	-	-
DCGT2151MLFS	DCGT070204MLFS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	●	●	●	-	-
DCGT32502MLFS	DCGT11T301MLFS	9.53	0.375	11.63	0.458	0.1	0.004	4.4	0.173	3.97	0.156	●	●	●	-	-
DCGT32505MLFS	DCGT11T302MLFS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	●	●	●	-	-
DCGT3251MLFS	DCGT11T304MLFS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	●	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")



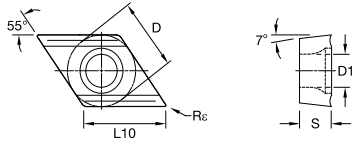
- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DCGT Insert • Positive • FFS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCGT21502MFFS	DCGT070201MFFS	6.35	0.250	7.75	0.305	0.1	0.004	2.8	0.110	2.38	0.094	-	●	●	-	-
DCGT21505MFFS	DCGT070202MFFS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	-	●	●	-	-
DCGT2151MFFS	DCGT070204MFFS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	-	●	●	-	-
DCGT32502MFFS	DCGT11T301MFFS	9.53	0.375	11.63	0.458	0.1	0.004	4.4	0.173	3.97	0.156	-	●	●	-	-
DCGT32505MFFS	DCGT11T302MFFS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	-	●	●	-	-
DCGT3251MFFS	DCGT11T304MFFS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	-	●	●	-	-

Note: Rε has a minus tolerance -0,05mm (0.002")

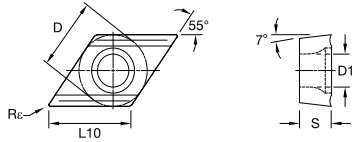


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DCET Insert • Positive • PPS (Left Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCET2150LPPS	DCET070200LPPS	6.35	0.250	7.75	0.305	0.0	0.000	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET215X0LPPS	DCET0702X0LPPS	6.35	0.250	7.75	0.305	0.03	0.001	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET21502LPPS	DCET070201LPPS	6.35	0.250	7.75	0.305	0.1	0.004	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET21505LPPS	DCET070202LPPS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET2151LPPS	DCET070204LPPS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET3250LPPS	DCET11T300LPPS	9.53	0.375	11.63	0.458	0.0	0.000	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET325X0LPPS	DCET11T3X0LPPS	9.53	0.375	11.63	0.458	0.03	0.001	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET32502LPPS	DCET11T301LPPS	9.53	0.375	11.63	0.458	0.1	0.004	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET32505LPPS	DCET11T302LPPS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET3251LPPS	DCET11T304LPPS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	●	●

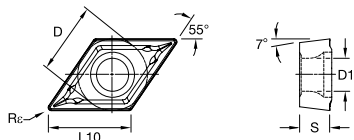


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DCET Insert • Positive • PPS (Right Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCET2150RPPS	DCET070200RPPS	6.35	0.250	7.75	0.305	0.0	0.000	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET215X0RPPS	DCET0702X0RPPS	6.35	0.250	7.75	0.305	0.03	0.001	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET21502RPPS	DCET070201RPPS	6.35	0.250	7.75	0.305	0.1	0.004	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET21505RPPS	DCET070202RPPS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET2151RPPS	DCET070204RPPS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	●	●
DCET3250RPPS	DCET11T300RPPS	9.53	0.375	11.63	0.458	0.0	0.000	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET325X0RPPS	DCET11T3X0RPPS	9.53	0.375	11.63	0.458	0.03	0.001	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET32502RPPS	DCET11T301RPPS	9.53	0.375	11.63	0.458	0.1	0.004	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET32505RPPS	DCET11T302RPPS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	●	●
DCET3251RPPS	DCET11T304RPPS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	●	●

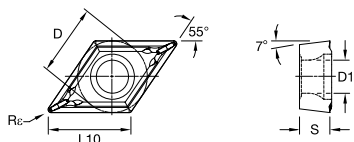


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

DCMT Insert • Positive • MPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCMT2151MPS	DCMT070204MPS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
DCMT2152MPS	DCMT070208MPS	6.35	0.250	7.75	0.305	0.8	0.031	2.8	0.110	2.38	0.094	-	-	-	-	●
DCMT3251MPS	DCMT11T304MPS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
DCMT3252MPS	DCMT11T308MPS	9.53	0.375	11.63	0.458	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●
DCMT431MPS	DCMT150404MPS	12.70	0.500	15.50	0.610	0.4	0.016	5.5	0.217	4.76	0.188	-	-	-	-	●
DCMT432MPS	DCMT150408MPS	12.70	0.500	15.50	0.610	0.8	0.031	5.5	0.217	4.76	0.188	-	-	-	-	●

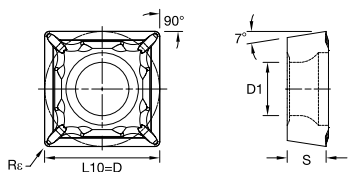


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

DCMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DCMT21505FPS	DCMT070202FPS	6.35	0.250	7.75	0.305	0.2	0.008	2.8	0.110	2.38	0.094	-	-	-	-	●
DCMT2151FPS	DCMT070204FPS	6.35	0.250	7.75	0.305	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
DCMT32505FPS	DCMT11T302FPS	9.53	0.375	11.63	0.458	0.2	0.008	4.4	0.173	3.97	0.156	-	-	-	-	●
DCMT3251FPS	DCMT11T304FPS	9.53	0.375	11.63	0.458	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
DCMT3252FPS	DCMT11T308FPS	9.53	0.375	11.63	0.458	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●

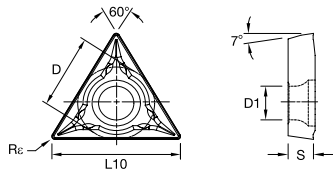


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

SCMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
SCMT3251FPS	SCMT09T304FPS	9.53	0.375	9.53	0.375	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
SCMT3252FPS	SCMT09T308FPS	9.53	0.375	9.53	0.375	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●

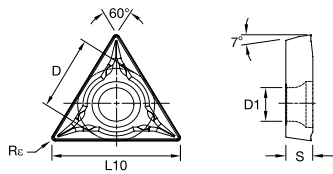


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

TCMT Insert • Positive • MPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
TCMT2151MPS	TCMT110204MPS	6.35	0.250	11.00	0.433	0.4	0.016	2.8	0.110	2.38	0.094	-	-	-	-	●
TCMT2152MPS	TCMT110208MPS	6.35	0.250	11.00	0.433	0.8	0.031	2.8	0.110	2.38	0.094	-	-	-	-	●
TCMT3251MPS	TCMT16T304MPS	9.53	0.375	16.50	0.650	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●
TCMT3252MPS	TCMT16T308MPS	9.53	0.375	16.50	0.650	0.8	0.031	4.4	0.173	3.97	0.156	-	-	-	-	●
TCMT3253MPS	TCMT16T312MPS	9.53	0.375	16.50	0.650	1.2	0.047	4.4	0.173	3.97	0.156	-	-	-	-	●

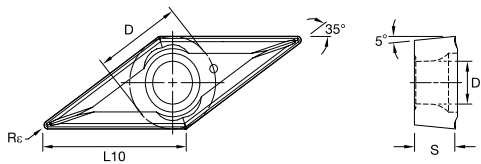


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

TCMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
TCMT21505FPS	TCMT110202FPS	6.35	0.25	11.00	0.433	0.2	0.004	2.8	0.110	2.38	0.094	-	-	-	-	●
TCMT2151FPS	TCMT110204FPS	6.35	0.25	11.00	0.433	0.4	0.008	2.8	0.110	2.38	0.094	-	-	-	-	●
TCMT3251FPS	TCMT16T304FPS	9.53	0.375	16.50	0.650	0.4	0.016	4.4	0.173	3.97	0.156	-	-	-	-	●

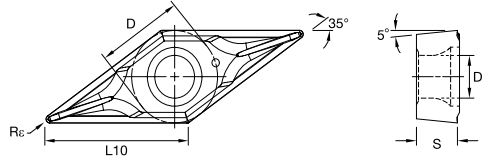


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VBMT Insert • Positive • MPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VBMT331MPS	VBMT160404MPS	9.53	0.375	16.61	0.654	0.4	0.016	4.4	0.173	4.76	0.188	-	-	-	-	●
VBMT332MPS	VBMT160408MPS	9.53	0.375	16.61	0.654	0.8	0.031	4.4	0.173	4.76	0.188	-	-	-	-	●

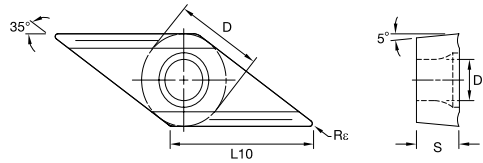


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VBMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VBMT2205FPS	VBMT110302FPS	6.35	0.250	11.07	0.436	0.2	0.008	2.8	0.110	3.18	0.125	-	-	-	-	●
VBMT221FPS	VBMT110304FPS	6.35	0.250	11.07	0.436	0.4	0.016	2.8	0.110	3.18	0.125	-	-	-	-	●
VBMT222FPS	VBMT110308FPS	6.35	0.250	11.07	0.436	0.8	0.031	2.8	0.110	3.18	0.125	-	-	-	-	●
VBMT331FPS	VBMT160404FPS	9.53	0.375	16.61	0.654	0.4	0.016	4.4	0.173	4.76	0.188	-	-	-	-	●
VBMT332FPS	VBMT160408FPS	9.53	0.375	16.61	0.654	0.8	0.031	4.4	0.173	4.76	0.188	-	-	-	-	●

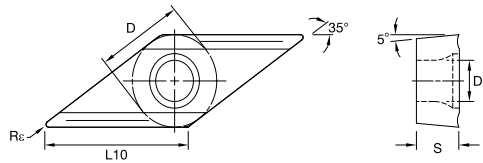


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VBET Insert • Positive • PPS (Left Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VBET220LPPS	VBET110300LPPS	6.35	0.250	11.07	0.436	0.0	0.000	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET22X0LPPS	VBET1103X0LPPS	6.35	0.250	11.07	0.436	0.03	0.001	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET2202LPPS	VBET110301LPPS	6.35	0.250	11.07	0.436	0.1	0.004	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET2205LPPS	VBET110302LPPS	6.35	0.250	11.07	0.436	0.2	0.008	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET221LPPS	VBET110304LPPS	6.35	0.250	11.07	0.436	0.4	0.016	2.8	0.110	3.18	0.125	-	-	-	●	●

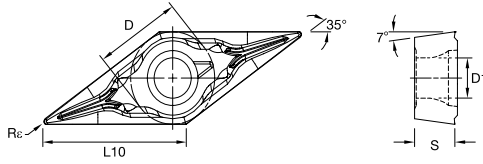
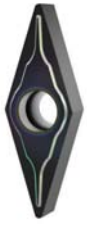


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VBET Insert • Positive • PPS (Right Hand)

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VBET220RPPS	VBET110300RPPS	6.35	0.250	11.07	0.436	0.0	0.000	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET22X0RPPS	VBET1103X0RPPS	6.35	0.250	11.07	0.436	0.03	0.001	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET2202RPPS	VBET110301RPPS	6.35	0.250	11.07	0.436	0.1	0.004	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET2205RPPS	VBET110302RPPS	6.35	0.250	11.07	0.436	0.2	0.008	2.8	0.110	3.18	0.125	-	-	-	●	●
VBET221RPPS	VBET110304RPPS	6.35	0.250	11.07	0.436	0.4	0.016	2.8	0.110	3.18	0.125	-	-	-	●	●

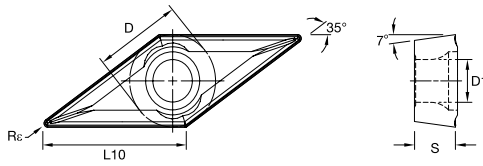


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VCGT Insert • Positive • LFS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VCGT2202MLFS	VCGT110301MLFS	6.35	0.250	11.07	0.436	0.1	0.004	2.8	0.110	3.18	0.125	-	●	-	-	-
VCGT2205MLFS	VCGT110302MLFS	6.35	0.250	11.07	0.436	0.2	0.008	2.8	0.110	3.18	0.125	-	●	-	-	-
VCGT221MLFS	VCGT110304MLFS	6.35	0.250	11.07	0.436	0.4	0.016	2.8	0.110	3.18	0.125	-	●	-	-	-

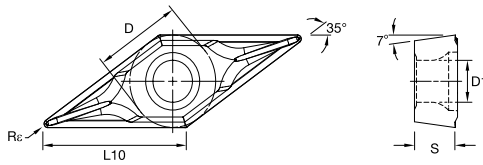


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VCMT Insert • Positive • MPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VCMT331MPS	VCMT160404MPS	9.53	0.375	16.61	0.654	0.4	0.016	4.4	0.173	4.76	0.188	-	-	-	-	●
VCMT332MPS	VCMT160408MPS	9.53	0.375	16.61	0.654	0.8	0.031	4.4	0.173	4.76	0.188	-	-	-	-	●

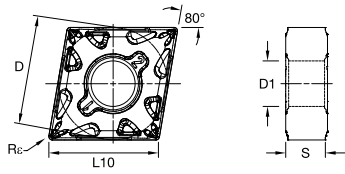


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

VCMT Insert • Positive • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VCMT2205FPS	VCMT110302FPS	6.35	0.250	11.07	0.436	0.2	0.008	2.9	0.110	3.18	0.126	-	-	-	-	●
VCMT221FPS	VCMT110304FPS	6.35	0.250	11.07	0.436	0.4	0.016	2.8	0.110	3.18	0.126	-	-	-	-	●
VCMT331FPS	VCMT160404FPS	9.53	0.375	16.61	0.654	0.4	0.016	4.4	0.173	4.76	0.188	-	-	-	-	●
VCMT332FPS	VCMT160408FPS	9.53	0.375	16.61	0.654	0.8	0.031	4.4	0.173	4.76	0.188	-	-	-	-	●

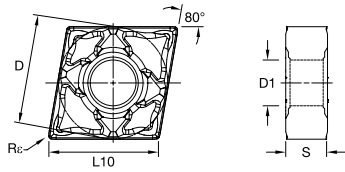


- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CNMG Insert • Negative • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CNMG4305FPS	CNMG120402FPS	12.70	0.500	12.90	0.508	0.2	0.008	5.16	0.203	4.76	0.188	-	-	-	-	●
CNMG431FPS	CNMG120404FPS	12.70	0.500	12.90	0.508	0.4	0.016	5.16	0.203	4.76	0.188	-	-	-	-	●
CNMG432FPS	CNMG120408FPS	12.70	0.500	12.90	0.508	0.8	0.031	5.16	0.203	4.76	0.188	-	-	-	-	●



- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

CNMG Insert • Negative • FWS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
CNMG431FWS	CNMG120404FWS	12.70	0.500	12.90	0.508	0.4	0.016	5.16	0.203	4.76	0.188	-	-	-	-	●
CNMG432FWS	CNMG120408FWS	12.70	0.500	12.90	0.508	0.8	0.031	5.16	0.203	4.76	0.188	-	-	-	-	●

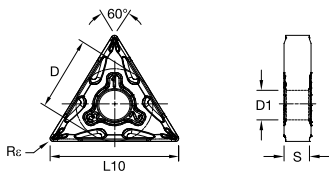
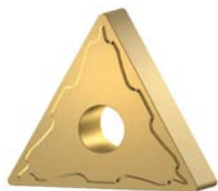
Note: Wiper Geometry

- Primary
- Secondary

P		●			●
M		○	●	○	○
K				○	
N				●	
S		○	●		
H					

DNMG Insert • Negative • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
DNMG431FPS	DNMG150404FPS	12.70	0.500	15.50	0.610	0.4	0.016	5.16	0.203	4.76	0.188	-	-	-	-	●
DNMG432FPS	DNMG150408FPS	12.70	0.500	15.50	0.610	0.8	0.031	5.16	0.203	4.76	0.188	-	-	-	-	●
DNMG433FPS	DNMG150412FPS	12.70	0.500	15.50	0.610	1.2	0.047	5.16	0.203	4.76	0.188	-	-	-	-	●
DNMG441FPS	DNMG150604FPS	12.70	0.500	15.50	0.610	0.4	0.016	5.16	0.203	6.35	0.250	-	-	-	-	●

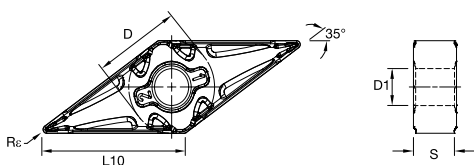


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

TNMG Insert • Negative • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
TNMG331FPS	TNMG160404FPS	9.53	0.375	16.50	0.650	0.4	0.016	3.81	0.150	4.76	0.188	-	-	-	-	●
TNMG332FPS	TNMG160408FPS	9.53	0.375	16.50	0.650	0.8	0.031	3.81	0.150	4.76	0.188	-	-	-	-	●

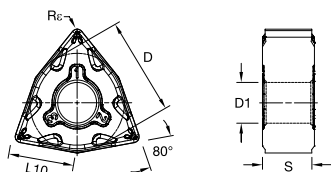
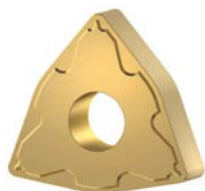


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

VNMG Insert • Negative • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
VNMG331FPS	VNMG160404FPS	9.53	0.375	16.61	0.654	0.4	0.016	3.81	0.150	4.76	0.188	-	-	-	-	●
VNMG332FPS	VNMG160408FPS	9.53	0.375	16.61	0.654	0.8	0.031	3.81	0.150	4.76	0.188	-	-	-	-	●

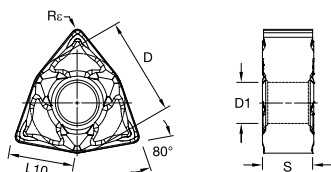
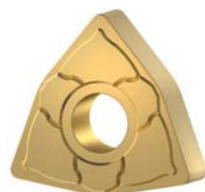


- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

WNMG Insert • Negative • FPS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
WNMG432FPS	WNMG080408FPS	12.70	0.500	8.69	0.342	0.8	0.031	5.16	0.203	4.76	0.188	-	-	-	-	●



- Primary
- Secondary

P		●				●
M		○	●	○		○
K					○	
N					●	
S			○	●		
H						

WNMG Insert • Negative • FWS

ANSI	ISO	D		L10		Rε		D1		S		KCP20S	KCM25S	KCS25S	KN10S	KTP25S
Catalog Number	Catalog Number	mm	in	mm	in	mm	in	mm	in	mm	in					
WNMG432FWS	WNMG080408FWS	12.70	0.500	8.69	0.342	0.8	0.031	5.16	0.203	4.76	0.188	-	-	-	-	●

Note: Wiper Geometry

TOOL SELECTION GUIDE - STEELS

Step 1 - Select the insert geometry

Cutting Parameters

Metric				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FPS	0.04	0.05	0.25	1
-MPS	0.11	0.16	0.5	3.6

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.02	0.13	0.12	1.26
-LFS	0.02	0.19	0.15	2.7
-PPS	0.01	0.06	0.1	4.5
-FPS	0.04	0.05	0.25	1
-MPS	0.11	0.16	0.5	3.6

Inch				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FPS	0.0016	0.002	0.0098	0.039
-MPS	0.0043	0.006	0.0197	0.142

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.0008	0.005	0.0047	0.050
-LFS	0.0008	0.007	0.0059	0.106
-PPS	0.0004	0.002	0.0039	0.177
-FPS	0.0016	0.002	0.0098	0.039
-MPS	0.0043	0.006	0.0197	0.142

Step 2 - Select the grade

Negative Insert Geometry		
Cutting Condition	-FPS	-MPS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Positive Insert Geometry					
Cutting Condition	-FFS	-LFS	-PPS	-FPS	-MPS
heavily interrupted cut	-	-	-	KTP25S	KTP25S
lightly interrupted cut	-	KCP20S KCM25S	-	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	-	KCP20S KCM25S	KCP20S KCM25S KCS25S KTP25S	KTP25S	KTP25S
smooth cut, pre-turned surface	KCM25S KCS25S	KCP20S KCM25S KCS25S	KCP20S KCM25S KCS25S KTP25S	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KCM25S KCS25S	KCP20S KCM25S KCS25S	KCP20S KCM25S KCS25S KTP25S	KTP25S	KTP25S

NOTE: Bold is first choice when showing multiple grades.

Step 3 - Select the cutting speed

Low-Carbon (<0,3% C) and Free-Machining Steel

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P0/P1	KCP20S	50	165	274	165	540	900
	KTP25S	122	216	351	400	710	1150

Medium- and High-Carbon Steels (>0,3% C)

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P2	KCP20S	50	149	250	165	490	820
	KTP25S	122	204	312	400	670	1025

Alloy Steels and Tool Steels; <330 HB; <35 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P3	KCP20S	50	110	165	165	360	540
	KTP25S	122	189	274	400	620	900

Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P4	KCP20S	50	101	149	165	330	490
	KTP25S	107	152	189	350	500	620

Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P5	KCS25S	53	75	107	175	245	350
	KCM25S	43	64	85	140	210	280
	KTP25S	122	155	204	400	510	670

Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P6	KCS25S	50	70	101	165	230	330
	KCM25S	40	59	79	130	195	260
	KTP25S	116	146	183	380	480	600

WIPER TECHNOLOGY

Step 1 - Select the insert geometry

Cutting Parameters

Metric				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.05	0.14	0.5	2.5
-MWS	0.14	0.49	0.56	3.2

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.05	0.14	0.5	2.5
-MWS	0.14	0.49	0.56	3.2

Inch				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.002	0.006	0.020	0.098
-MWS	0.006	0.019	0.022	0.126

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.002	0.006	0.020	0.098
-MWS	0.006	0.019	0.022	0.126

Step 2 - Select the grade

Negative Insert Geometry		
Cutting Condition	-FWS	-MWS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Positive Insert Geometry		
Cutting Condition	-FWS	-MWS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Step 3 - Select the cutting speed

Low-Carbon (<0,3% C) and Free-Machining Steel

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P0/P1	KTP25S	122	216	351	400	710	1150

Medium- and High-Carbon Steels (>0,3% C)

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P2	KTP25S	122	204	312	400	670	1025

Alloy Steels and Tool Steels; <330 HB; <35 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P3	KTP25S	122	189	274	400	620	900

Alloy Steels and Tool Steels; 350–450 HB; 35–48 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P4	KTP25S	107	152	189	350	500	620

Ferritic, Martensitic, and PH Stainless Steels; <330 HB; <35 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P5	KTP25S	122	155	204	400	510	670

Ferritic, Martensitic, and PH Stainless Steels; 350–450 HB; 35–48 HRC

material group	grade	m/min			SFM		
		MIN	START	MAX	MIN	START	MAX
P6	KTP25S	116	146	183	380	480	600

TOOL SELECTION GUIDE - STAINLESS STEELS

Step 1 - Select the insert geometry

Metric				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FPS	0.04	0.05	0.25	1
-MPS	0.11	0.16	0.5	3.6

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.02	0.13	0.12	1.26
-LFS	0.02	0.19	0.15	2.7
-PPS	0.01	0.06	0.1	4.5
-FPS	0.04	0.05	0.25	1
-MPS	0.11	0.16	0.5	3.6

Inch				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FPS	0.0016	0.002	0.0098	0.039
-MPS	0.0043	0.006	0.0197	0.142

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.0008	0.005	0.0047	0.050
-LFS	0.0008	0.007	0.0059	0.106
-PPS	0.0004	0.002	0.0039	0.177
-FPS	0.0016	0.002	0.0098	0.039
-MPS	0.0043	0.006	0.0197	0.142

Step 2 - Select the grade

Negative Insert Geometry		
Cutting Condition	-FPS	-MPS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Negative Insert Geometry					
Cutting Condition	-FFS	-LFS	-PPS	-FPS	-MPS
heavily interrupted cut	-	-	-	KTP25S	KTP25S
lightly interrupted cut	-	KCM25S KCS25S	-	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	-	KCM25S KCS25S	KCM25S/KCS25S KTP25S	KTP25S	KTP25S
smooth cut, pre-turned surface	KCM25S KCS25S	KCM25S KCS25S	KCM25S/KCS25S KTP25S	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KCM25S KCS25S	KCM25S KCS25S	KCM25S/KCS25S KTP25S	KTP25S	KTP25S

NOTE: Bold is first choice when showing multiple grades.

Step 3 - Select the cutting speed

Austenitic Stainless Steel		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M1	KCM25S	40	59	101	130	195	330
	KCS25S	59	101	149	195	330	490
	KTP25S	94	130	186	310	425	610

High Strength Austenitic Stainless and Cast Stainless Steels		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M2	KCM25S	40	59	101	130	195	330
	KCS25S	59	101	149	195	330	490
	KTP25S	91	125	180	300	410	590

Duplex Stainless Steel (Ferritic and Austenitic Mixture)		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M3	KCM25S	40	79	160	130	260	525
	KCS25S	50	101	180	165	330	590
	KTP25S	91	122	180	300	400	590

WIPER TECHNOLOGY

Step 1 - Select the insert geometry

Cutting Parameters

Metric				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.05	0.14	0.5	2.5
-MWS	0.14	0.49	0.56	3.2

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.05	0.14	0.5	2.5
-MWS	0.14	0.49	0.56	3.2

Inch				
Negative Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.002	0.006	0.020	0.098
-MWS	0.006	0.019	0.022	0.126

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FWS	0.002	0.006	0.020	0.098
-MWS	0.006	0.019	0.022	0.126

Step 2 - Select the grade

Negative Insert Geometry		
Cutting Condition	-FWS	-MWS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Positive Insert Geometry		
Cutting Condition	-FWS	-MWS
heavily interrupted cut	KTP25S	KTP25S
lightly interrupted cut	KTP25S	KTP25S
varying depth of cut, casting, or forging skin	KTP25S	KTP25S
smooth cut, pre-turned surface	KTP25S	KTP25S
smooth cut, high precision / tight tolerance	KTP25S	KTP25S

Step 3 - Select the cutting speed

Austenitic Stainless Steel		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M1	KTP25S	94	130	186	310	425	610

High Strength Austenitic Stainless and Cast Stainless Steels		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M2	KTP25S	91	125	180	300	410	590

Duplex Stainless Steel (Ferritic and Austenitic Mixture)		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
M3	KTP25S	91	122	180	300	400	590

TOOL SELECTION GUIDE - NON-FERROUS

Step 1 - Select the insert geometry

Cutting Parameters

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-PPS	0.01	0.06	0.1	4.5

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-PPS	0.0004	0.002	0.0039	0.177

Step 2 - Select the grade

Positive Insert Geometry	
Cutting Condition	-PPS
heavily interrupted cut	-
lightly interrupted cut	KN10S
varying depth of cut, casting, or forging skin	KN10S
smooth cut, pre-turned surface	KN10S
smooth cut, high precision / tight tolerance	KN10S

NOTE: Bold is first choice when showing multiple grades.

Step 3 - Select the cutting speed

Wrought Aluminum Alloys		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
N1	KN10S	198	488	616	650	1600	2020

Low-Silicon Aluminum Alloys and Magnesium Alloys; Si12.2%		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
N2	KN10S	101	451	600	330	1480	1970

Copper, Brass, Zinc-Based on a Machinability Index Range of 70-100		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
N4	KN10S	107	259	366	350	850	1200

Nylon, Plastics, Rubbers, Phenolics, Resins, Fiberglass		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
N5	KN10S	101	149	351	330	490	1150

TOOL SELECTION GUIDE - HEAT RESISTANT ALLOYS & TITANIUM ALLOYS

Step 1 - Select the insert geometry

Cutting Parameters

Metric				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.02	0.13	0.12	1.26
-LFS	0.02	0.19	0.15	2.7
-PPS	0.01	0.06	0.1	4.5

Inch				
Positive Insert Geometry				
	min feed	min DOC	max feed	max DOC
-FFS	0.0008	0.005	0.0047	0.050
-LFS	0.0008	0.007	0.0059	0.106
-PPS	0.0004	0.002	0.0039	0.177

Step 2 - Select the grade

Positive Insert Geometry			
Cutting Condition	-FFS	-LFS	-PPS
heavily interrupted cut	-	-	-
lightly interrupted cut	-	KCS25S/KCM25S	-
varying depth of cut, casting, or forging skin	-	KCS25S/KCM25S	KCS25S/KCM25S
smooth cut, pre-turned surface	KCS25S/KCM25S	KCS25S/KCM25S	KCS25S/KCM25S/KN10S
smooth cut, high precision / tight tolerance	KCS25S/KCM25S	KCS25S/KCM25S	KCS25S/KCM25S/KN10S

NOTE: Bold is first choice when showing multiple grades.

Step 3 - Select the cutting speed

Iron-Based, Heat-Resistant Alloys; 160-260 HB; 25-48 HRC;
500-1200 Mpa Tensile Strength

		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
S1	KN10S	9	30	76	30	100	250
	KCS25S	40	79	140	130	260	460
	KCM25S	9	40	61	30	130	200

Cobalt-Based, Heat-Resistant Alloys; 250-450 HB;
25-48 HRC; 1000-1450 Tensile Strength

		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
S2	KN10S	9	34	76	30	110	250
	KCS25S	40	79	140	130	260	460
	KCM25S	9	30	61	30	100	200

Nickel-Based, Heat-Resistant Alloys 160-450HB;
<48 HRC; 600-1700 Tensile Strength

		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
S3	KN10S	9	40	76	30	130	250
	KCS25S	40	79	140	130	260	460
	KCM25S	9	40	61	30	130	200

Titanium and Titanium Alloys 300-400 HB;
33-48 HRC; 900-1600 Tensile Strength

		m/min			SFM		
material group	grade	MIN	START	MAX	MIN	START	MAX
S4	KN10S	9	46	76	30	150	250
	KCS25S	40	79	140	130	260	460



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It starts in 1938 with our founder, metallurgist Philip M. McKenna, who after years of research created a tungsten-titanium carbide alloy specifically for cutting tools. That single development not only led to a new class of machining tools that cut faster, lasted longer and drove productivity in everything from the automobile to the airplane, but also led to the opening of McKenna Metals Company in Latrobe, Pennsylvania, United States. Today, that company is Kennametal Inc.—a recognized leader in metalworking serving customers across continents and industries including transportation, construction, aerospace, machining and cutting, energy and general engineering. We have a reputation for building innovative solutions for our customers' most challenging applications. The name Kennametal is synonymous for high-quality, high-performance tools that can withstand the most strenuous conditions and bring ease to a wide range of machining operations. We help our customers' operations run longer, faster and with greater precision. We don't cut corners. We cut metal. Your toughest materials don't stand a chance.

EXPLORE TopSwiss



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TO THE **NEXT LEVEL**

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