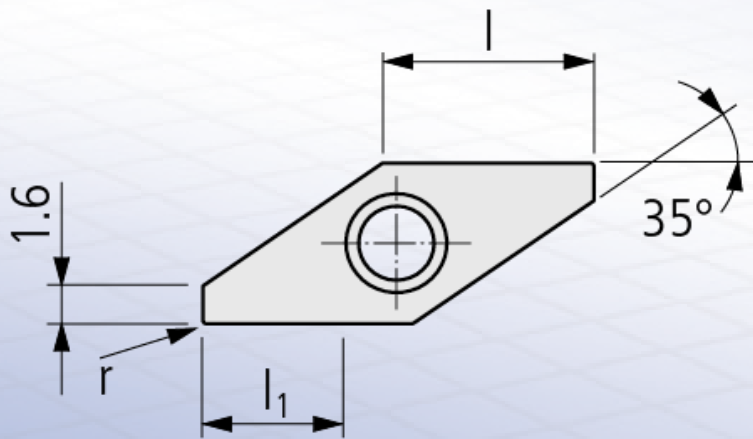


Speeds And Feeds Multidec TOP



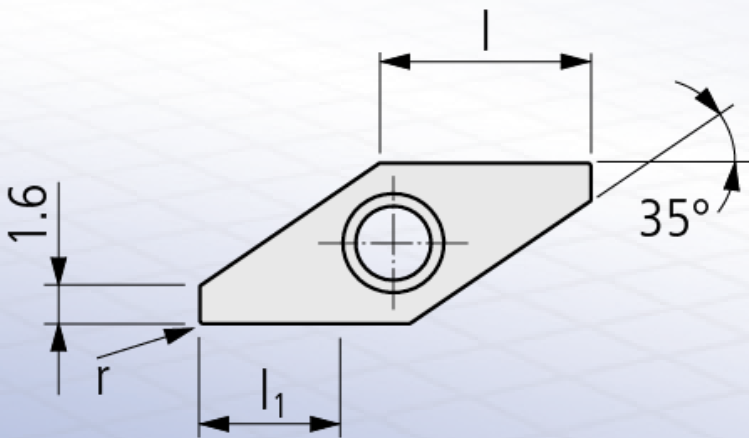
TOP	Steel Unalloyed			Steel Low Alloyed			Steel High Alloyed		
Hardness (HB)-(HRC)	125-300 HB			180-250 HB			200-350 HB		
Category	I			II			III		
Machining Method	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing
Cutting speeds	vc(ft/min)								
Carbide grade									
UHM 10	130-360	200-390	200-460	200-330	200-390	200-430	40-300	200-360	200-390
UHM 10 HX	200-590	200-720	200-850	200-560	200-660	200-790	160-520	200-590	200-720
UHM 10 TX+	-	-	-	260-490	330-590	520-720	230-330	300-490	390-590
UHM 10 MZ	590-980	720-1310	820-1640	490-920	660-1050	820-1310	390-920	590-1050	590-1050
UHM 20 HPX	490-660	590-720	660-850	260-490	330-590	520-720	230-330	300-490	390-590
UHM 20 TX +	-	-	-	260-430	330-490	520-620	230-300	300-430	390-490
UHM 20 MZ	430-590	520-720	590-850	330-520	360-590	430-720	230-490	160-520	430-620
UHM 30	100-230	160-260	160-330	100-200	130-260	130-300	100-160	100-230	100-260
UHM 30 HX	160-460	160-590	160-720	160-430	160-520	160-660	130-390	160-460	160-590
UHM 30 TX+	160-390	160-460	160-490	160-330	160-390	160-460	130-260	160-330	160-360
UHM 30 MZ	390-520	490-660	560-790	300-460	330-520	390-660	200-430	300-460	360-520
UHM 30 SX	160-390	160-590	50-660	160-330	160-460	160-590	130-300	160-390	160-520



Speeds And Feeds Multidec TOP



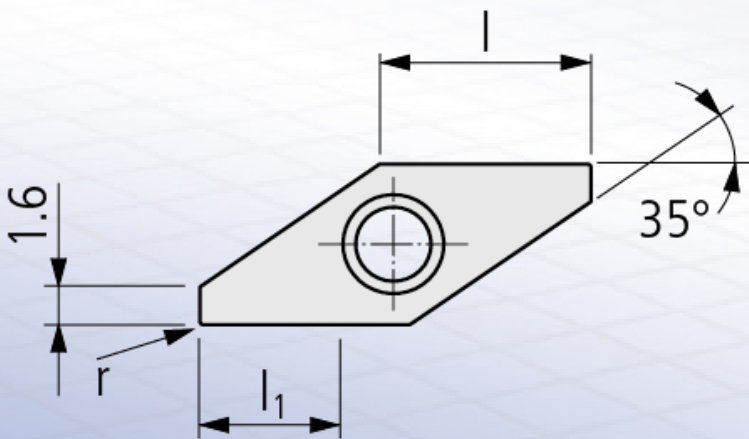
TOP	Stainless Steel			Stainless Steel			Titanium		
Hardness (HB)-(HRC)	180-220 HB			220-330 HB			-		
Category	V			VI			IV		
Machining Method	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing
Cutting Speeds	vc(ft/min)								
Carbide Grade									
UHM 10	130-330	130-360	130-390	100-230	100-260	100-260	130-200	160-230	200-260
UHM 10 HX	160-460	160-590	160-720	130-330	160-360	160-430	130-390	160-430	160-490
UHM 10 TX+	300-490	130-590	520-660	230-300	300-390	360-490	160-330	200-390	200-460
UHM 10 MZ	330-590	590-820	720-980	-	-	-	-	-	-
UHM 20 HPX	300-490	360-590	520-660	230-300	300-390	360-490	160-330	200-390	200-460
UHM 20 TX +	300-430	360-520	520-590	230-300	300-390	360-490	160-330	200-390	200-460
UHM 20 MZ	300-490	360-520	430-590	160-260	100-160	130-230	-	-	-
UHM 30	100-200	100-230	100-260	70-100	70-130	70-130	130-160	80-200	100-230
UHM 30 HX	130-330	130-460	130-590	100-200	130-230	130-300	100-300	130-330	130-390
UHM 30 TX+	-	-	-	-	-	-	-	-	-
UHM 30 MZ	260-430	330-460	360-520	130-260	160-300	300-360	-	-	-
UHM 30 SX	100-300	130-390	130-520	70-160	100-200	100-260	-	-	-



Speeds And Feeds Multidec TOP

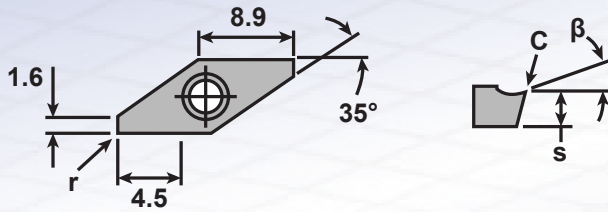


TOP	Aluminum			Brass			Hard Materials		
Hardness (HB)-(HRC)	60-130 HB			-			45-70 HRC		
Category	VII			VIII			X		
Machining Method	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing	▼ Roughing	▼▼ Medium Cut	▼▼▼ Micro Finishing
Cutting Speeds	vc(ft/min)								
Carbide Grade									
UHM 10	330-4920	390-6560	520-8200	260-980	330-1310	390-1640	-	-	-
UHM 10 HX	460-8200	520-9840	660-9840	330-1480	330-1970	330-2460	-	-	-
UHM 10 TX+	-	-	-	-	-	-	50-100	50-130	50-260
UHM 10 MZ	-	-	-	-	-	-	-	-	-
UHM 20 HPX	-	-	-	-	-	-	-	-	-
UHM 20 TX +	-	-	-	-	-	-	-	-	-
UHM 20 MZ	-	-	-	-	-	-	-	-	-
UHM 30	160-3280	200-3940	260-4920	130-330	160-460	160-50	-	-	-
UHM 30 HX	230-4920	260-6560	330-9840	160-490	160-660	160-820	-	-	-
UHM 30 TX+	-	-	-	-	-	-	-	-	-
UHM 30 MZ	-	-	-	-	-	-	-	-	-
UHM 30 SX	200-3940	260-6560	330-9840	160-390	160-590	160-660	-	-	-

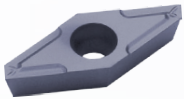


Carbide										Cermet	Diamond	Materials		
-	-	■	■	■	□	□	■	□	■	■	-	-	-	Steel
-	■	-	■	□	□	■	■	□	■	-	-	-	Stainless Steel	
□	■	-	□	-	□	■	-	-	-	-	-	-	Titanium & Ti-Alloys	
■	□	-	-	-	□	□	-	□	-	-	-	■	Non Ferrous Metals	
UHM 10	UHM 10 HX	UHM 10 MZ	UHM 20 HPX	UHM 20 MZ	UHM 30	UHM 30 HX	UHM 30 MZ	UHM 30 SX	UCM 10	UCM 10 HX	UCVD 08	UPCD 15	UPCD 20	

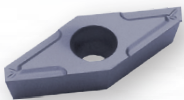
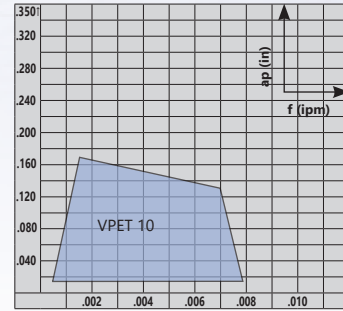
Material Class								
I	II	III	IV	V	VI	VII	VIII	IX
Steel Non-Alloyed	Steel Low-Alloyed	Steel High-Alloyed	Titanium	Stainless Steel (HB<220)	Stainless Steel (HB≥220)	Aluminum	Brass	Synthetics / Composites



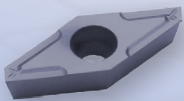
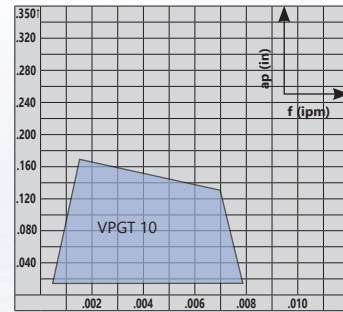
β : 12°
 C: <0.002
 s: ±0.025 (VPET)
 ±0.13 (VPGT)
 ±0.1 (VPXT)



VPET Carbide TOP Wiper (S: ±0.025)
 Cut: Standard
 Chip Breaker: TOP Wiper, Polished Rake, Sharp Cutting Edge



VPGT Carbide TOP Wiper (S: ±0.13)
 Cut: Standard
 Chip Breaker: TOP Wiper, Polished Rake, Sharp Cutting Edge



VPXT Carbide TOP Wiper (S: ±0.1)
 Cut: Standard
 Chip Breaker: TOP Wiper, Honed Cutting Edge

