



# CERMET PV70<sup>05/10/25</sup> TN60<sup>10/20</sup>

## Steady and precise machining

- PV70<sup>05</sup> for Cast Iron and PV70<sup>10/25</sup> for Steel Machining with MEGACOAT.

- Economic TN60<sup>10/20</sup> (uncoated) for Steel Machining with the latest substrate technology.



### Konstant präzise Bearbeitung

- PV7005 für Guß und PV70<sup>10/25</sup> für die Stahlbearbeitung mit MEGACOAT.
- Wirtschaftliche TN60<sup>10/20</sup> (unbeschichtet) für Stahlbearbeitung mit neuester Substratechnologie.

### Usinage stable et précis

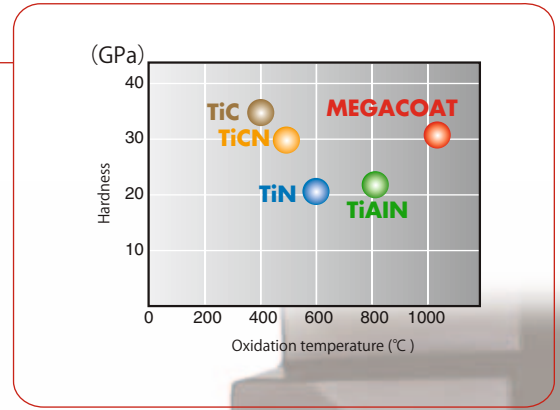
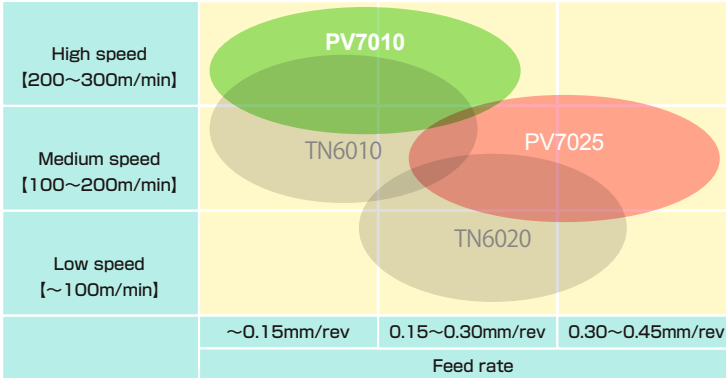
- Usinage de la fonte en PV70<sup>05</sup> et de l'acier en PV70<sup>10/25</sup> avec MEGACOAT.
- Usinage de l'acier avec la nuance TN60<sup>10/20</sup> (non revêtue) élaborée à partir de la dernière technologie de substrat.

### Lavorazione di tornitura stabile e precisa

- I gradi PV 70<sup>05</sup> per Ghisa e PV70<sup>10/25</sup> per Acciaio consentono alte performance grazie al MEGACOAT.
- L'economico TN60<sup>10/20</sup> (non rivestito) per acciaio è stato prodotto con l'ultima tecnologia dei substrati.

## MEGACOAT

- Excellent wear resistance and heat resistance.  
Hervorragende Verschleißfestigkeit und Hitzebeständigkeit.  
Excellente résistance à l'abrasion et à la chaleur.  
Eccellente resistenza ad usura ed al calore.

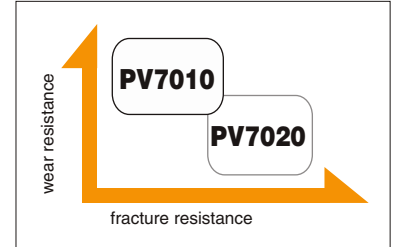
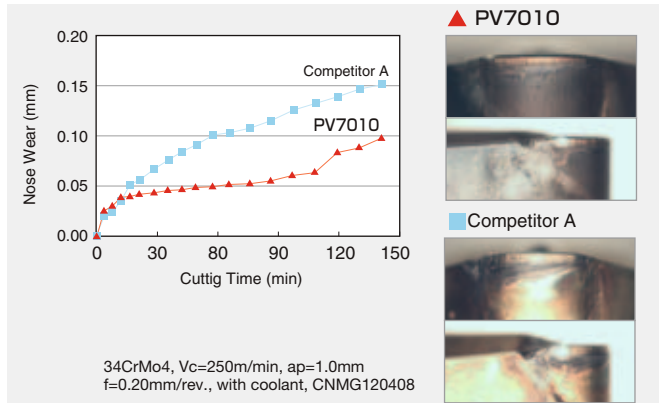


## PV7010 MEGACOAT CERMET

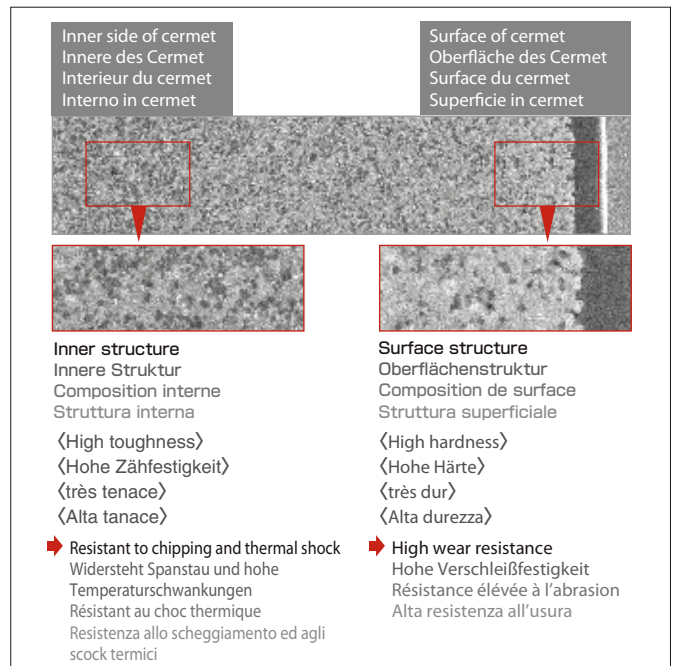
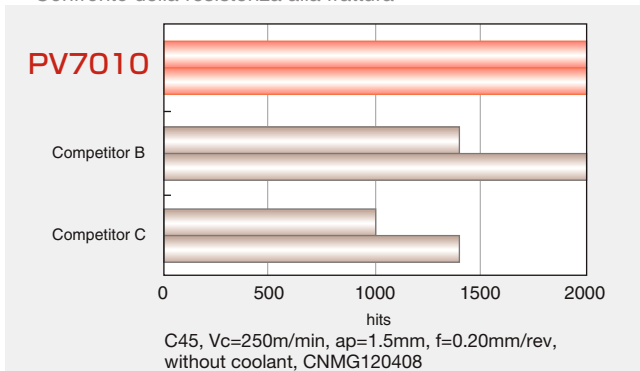
for steel machining | für die Stahlbearbeitung | Pour l'usinage des aciers | Per lavorazioni di Acciaio

- Achieves long tool life and stable machining with two new technologies, MEGACOAT plus special surface reforming Cermet.
- Lange Standzeit bei stabiler Bearbeitung, durch den Einsatz von MEGACOAT und des oberflächenrestrukturierten Cermet.
- Longue durée de vie de l'outil et stabilité de l'usinage grâce à 2 nouvelles technologies, le MEGACOAT et un cermet spécial amélioré en surface.
- Lunga vita utensile e lavorazioni stabili ottenute per mezzo delle due nuove tecnologie MEGACOAT più Cermet.

### Comparison of wear resistance Vergleich Verschleißfestigkeit Comparaison de résistance à l'abrasion Confronto della resistenza ad usura



### Comparison of fracture resistance Vergleich Bruchfestigkeit Comparaison de résistance à la rupture Confronto della resistenza alla frattura

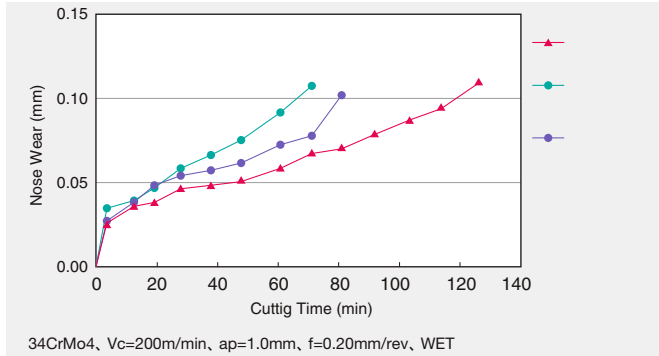


## PV7025 MEGACOAT CERMET

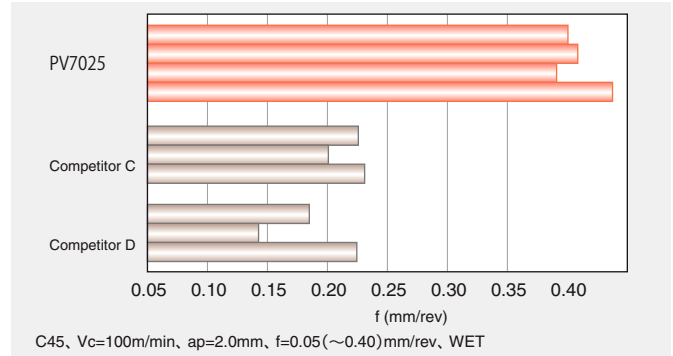
for steel machining | für die Stahlbearbeitung | Pour l'usinage des aciers | Per lavorazioni di Acciaio

- High strength by super micro-grain cermet and long tool life by MEGACOAT.  
Hohe Festigkeit durch Feinstkorn Cermet und lange Standzeiten dank MEGACOAT.  
Haute robustesse avec le cermet super micro grain et longue durée de vie grâce au revêtement MEGACOAT.  
Ad alta resistenza da super micro-grana cermet e lunghe durate da MEGACOAT

■ Comparison of wear resistance  
Vergleich Verschleißfestigkeit  
Comparaison de résistance à l'abrasion  
Confronto della resistenza ad usura



■ Comparison of fracture resistance  
Vergleich Bruchfestigkeit  
Comparaison de résistance à la rupture  
Confronto della resistenza alla frattura

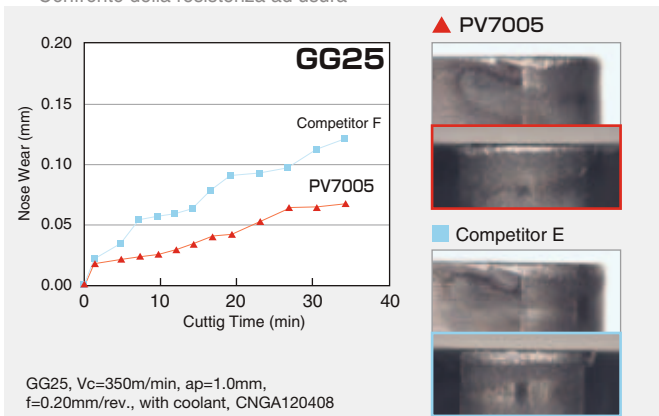


## PV7005 MEGACOAT CERMET

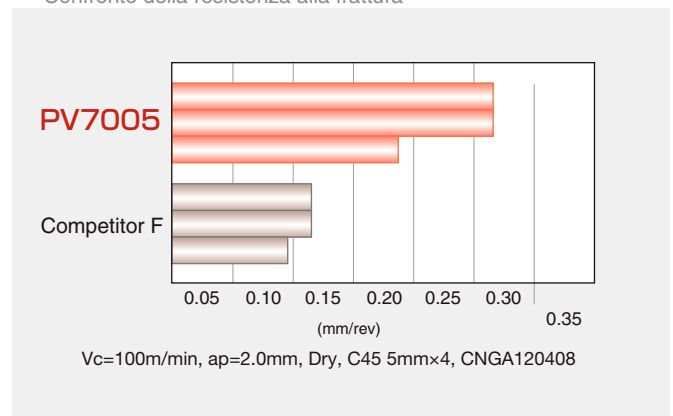
for cast iron machining | Graugußbearbeitung | Pour l'usinage des fontes | Per lavorazione di Ghisa

- Improved wear resistance for cast iron machining through the use of MEGACOAT.
- Controls deterioration of the cutting edge due to progressive crater wear, enabling stable machining.
- Verbesserte Verschleißfestigkeit bei der Gussbearbeitung, dank MEGACOAT Beschichtung.
- Konstante Bearbeitung selbst bei fortschreitendem Kolkverschleiss.
- Meilleure résistance à l'usure pour l'usinage de la fonte grâce au revêtement MEGACOAT.
- Permet de contrôler l'altération de l'arête de coupe grâce à l'usure en cratère progressive.
- Migliorata la resistenza all'usura per la lavorazione della Ghisa con l'uso di MEGACOAT.
- Il controllo del deterioramento del tagliente dovuto alla craterizzazione consente lavorazioni stabili.

■ Comparison of wear resistance  
Vergleich Verschleißfestigkeit  
Comparaison de résistance à l'abrasion  
Confronto della resistenza ad usura



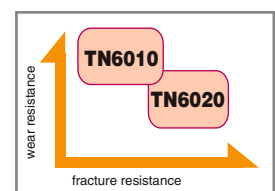
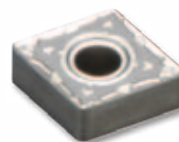
■ Comparison of fracture resistance  
Vergleich Bruchfestigkeit  
Comparaison de résistance à la rupture  
Confronto della resistenza alla frattura



## TN6010/TN6020 CERMET

for steel machining | für die Stahlbearbeitung | Pour l'usinage des aciers | Per lavorazioni di Acciaio  
(uncoated | unbeschichtet | non revêtue | non rivestito)

- Economical uncoated Cermet.
- Wirtschaftliches unbeschichtetes Cermet.
- Économiques Cermet non revêtue.
- Economico Cermet non rivestito.



■ Negative Type Inserts

Shape Handed insert shows Right-Hand	Description	Dimension (mm)					Grades			
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet		Cermet	
							PV7005	PV7010	PV7025	TN6010
	CNMG 120404WP 120408WP	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404WQ 120408WQ 120412WQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120402GP 120404GP 120408GP	12.70	4.76	5.16	0.2	-	•	•	•	•
					0.4	-	•	•	•	•
	CNMG 120404HQ 120408HQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404CQ 120408CQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404PS 120408PS 120412PS	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404HS 120408HS 120412HS	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404 120408 120412	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404XP 120408XP	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120404XQ 120408XQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNMG 120408XS	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	CNGA 120404 120408	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	CNGG 120404 <sup>*/L</sup> 120408 <sup>*/L</sup>	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150402GP 150404GP 150408GP	12.70	4.76	5.16	0.2	-	•	•	•	•
					0.4	-	•	•	•	•
	DNMG 150602GP 150604GP 150608GP	12.70	6.35	5.16	0.2	-	•	•	•	•
					0.4	-	•	•	•	•
	DNMG 150404HQ 150408HQ 150412HQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150604HQ 150608HQ 150612HQ	12.70	6.35	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150404CQ 150408CQ 150412CQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150604CQ	12.70	6.35	5.16	0.4	-	•	•	•	•
					0.4	-	•	•	•	•

Shape Handed insert shows Right-Hand	Description	Dimension (mm)					Grades			
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet		Cermet	
							PV7005	PV7010	PV7025	TN6010
	DNMG 150404PS 150408PS 150412PS	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150604PS 150608PS 150612PS	12.70	6.35	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150404HS 150408HS 150412HS	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150404 150408	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150404XP 150408XP	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150404XQ 150408XQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	DNMG 150408XS	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	DNGG 150404 <sup>*/L</sup> 150408 <sup>*/L</sup>	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	RNMG 090300 RNMG 120400	9.525	3.18	3.81	-	-	•	•	•	•
		12.70	4.76	5.16	-	-	•	•	•	•
	SNMG 120404HQ 120408HQ 120412HQ	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	SNMG 120408PS 120412PS	12.70	4.76	5.16	0.8	-	•	•	•	•
					1.2	-	•	•	•	•
	SNMG 120408HS 120412HS 120416HS	12.70	4.76	5.16	0.8	-	•	•	•	•
					1.2	-	•	•	•	•
	SNMG 120404 120408 120412 120416	12.70	4.76	5.16	0.4	-	•	•	•	•
					0.8	-	•	•	•	•
	SNMG 120408XP	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	SNMG 120408XQ	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	SNMG 120408XS	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	SNGA 120408	12.70	4.76	5.16	0.8	-	•	•	•	•
					0.8	-	•	•	•	•
	SNGG 090304 <sup>*/L</sup> -B SNGG 120404 <sup>*/L</sup> -C 120408 <sup>*/L</sup> -C	9.525	3.18	3.81	0.4	-	•	•	•	•
		12.70	4.76	5.16	0.4	-	•	•	•	•

● : Standard Item R: R-hand Only

■ Negative Type Inserts

Shape Handed insert shows Right-Hand	Description	Dimension (mm)					Grades				
		I.C.	Thickness	Hole	Corner-R (r <sub>e</sub> )	Relief Angle	MEGACOAT Cermet			TN6010	TN6020
							PV7005	PV7010	PV7025		
Finishing	TNMG 16040DP 160408DP	9.525	4.76	3.81	0.4 0.8	-				●	●
Finishing	TNMG 160402GP 160404GP 160408GP	9.525	4.76	3.81	0.2 0.4 0.8	-		●	●	●	●
Finishing-Medium	TNMG 160404HQ 160408HQ 160412HQ	9.525	4.76	3.81	0.4 0.8 1.2	-		●	●	●	●
Finishing-Medium / Up facing	TNMG 160404CQ 160408CQ 160412CQ	9.525	4.76	3.81	0.4 0.8 1.2	-		●	●	●	●
Medium-Roughing	TNMG 160404PS 160408PS	9.525	4.76	3.81	0.4 0.8	-		●	●	●	
Medium-Roughing	TNMG 160404HS 160408HS 160412HS	9.525	4.76	3.81	0.4 0.8 1.2	-					●
Roughing	TNMG 160404 160408 160412	9.525	4.76	3.81	0.4 0.8 1.2	-	●	●	●	●	●
Low Carbon Steel Finishing	TNMG 160404XP 160408XP	9.525	4.76	3.81	0.4 0.8	-		●	●	●	●
Low Carbon Steel Medium Finishing	TNMG 160404XQ 160408XQ	9.525	4.76	3.81	0.4 0.8	-		●	●	●	●
Low Carbon Steel Roughing	TNMG 160408XS	9.525	4.76	3.81	0.8	-			●	●	●
Without Chipbreaker	TNGA 160404 160408	9.525	4.76	3.81	0.4 0.8	-	●	●			
Finishing / Surface Roughness Oriented	TNGG 160401%L-S 160402%L-S 160404%L-S 160408%L-S	9.525	4.76	3.81	0.1 0.2 0.4 0.8	-		●	●	●	●
Finishing	TNEG 160402%L-SSF 160404%L-SSF	9.525	4.76	3.81	0.2 0.4	-					●
-B: Finishing-Medium -C: Medium-Roughing	TNGG 160402%L-B 160404%L-B	9.525	4.76	3.81	0.2 0.4	-	●	●	●	●	●
	TNGG 160402%L-C 160404%L-C 160408%L-C 160412%L-C 160416%L-C	9.525	4.76	3.81	0.2 0.4 0.8 1.2 1.6	-	●	●	●	●	●
	TNGG 220404%L-C 220408%L-C	12.70	4.76	5.16	0.4 0.8	-	●	●	●	●	●
	TNMG 160404%L-C 160408%L-C	9.525	4.76	3.81	0.4 0.8	-		●	●	●	●
Medium-Roughing Low Cutting Force	TNGG 160404%L-25R 160408%L-25R	9.525	4.76	3.81	0.4 0.8	-					●

Shape Handed insert shows Right-Hand	Description	Dimension (mm)					Grades				
		I.C.	Thickness	Hole	Corner-R (r <sub>e</sub> )	Relief Angle	MEGACOAT Cermet			TN6010	TN6020
							PV7005	PV7010	PV7025		
Finishing	VNMG 160402GP 160404GP 160408GP	9.525	4.76	3.81	0.2 0.4 0.8	-				●	●
Finishing-Medium	VNMG 160404VF 160408VF 160412VF	9.525	4.76	3.81	0.4 0.8 1.2	-		●	●	●	●
Finishing-Medium	VNMG 160404HQ 160408HQ 160412HQ	9.525	4.76	3.81	0.4 0.8 1.2	-		●	●	●	●
Roughing	VNMG 160404 160408	9.525	4.76	3.81	0.4 0.8	-	●	●	●	●	●
Medium cutting	VNGG 160402%L 160404%L 160408%L	9.525	4.76	3.81	0.2 0.4 0.8	-				●	●
Without Chipbreaker	VNGA 160404 160408	9.525	4.76	3.81	0.4 0.8	-	●	●			
Finishing With Wiper Edge	WNMG 080404WP 080408WP	12.70	4.76	5.16	0.4 0.8	-		●	●	●	●
Finishing-Medium With Wiper Edge	WNMG 080404WQ 080408WQ 080412WQ	12.70	4.76	5.16	0.4 0.8 1.2	-		●	●	●	●
Finishing	WNMG 080404GP 080408GP	12.70	4.76	5.16	0.4 0.8	-		●	●	●	●
Finishing-Medium	WNMG 080404HQ 080408HQ 080412HQ	12.70	4.76	5.16	0.4 0.8 1.2	-		●	●	●	●
Finishing-Medium / Up facing	WNMG 080404CQ 080408CQ 080412CQ	12.70	4.76	5.16	0.4 0.8 1.2	-		●	●	●	●
Medium-Roughing	WNMG 080404PS 080408PS	12.70	4.76	5.16	0.4 0.8	-		●	●	●	●
Medium-Roughing	WNMG 080404HS 080408HS 080412HS	12.70	4.76	5.16	0.4 0.8 1.2	-					●
Roughing	WNMG 080408	12.70	4.76	5.16	0.8	-	●	●	●	●	●
Low Carbon Steel Finishing	WNMG 080404XP 080408XP	12.70	4.76	5.16	0.4 0.8	-		●	●	●	●
Low Carbon Steel Medium Finishing	WNMG 080404XQ 080408XQ	12.70	4.76	5.16	0.4 0.8	-		●	●	●	●
Low Carbon Steel Roughing	WNMG 080408XS	12.70	4.76	5.16	0.8	-			●	●	●

● : Standard Item R: R-hand Only

Positive Type Inserts

Shape Handed insert shows Left-Hand	Description	Dimension (mm)					Grades			
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet		Cermet	
							PV7005	PV7010	PV7025	TN6010
	CCMT 060202GK 060204GK	6.35	2.38	2.8	0.2 0.4	7°	•	•	•	•
	CCMT 09T302GK 09T304GK	9.525	3.97	4.4	0.2 0.4	7°	•	•	•	•
	CCMT 120404GK 120408GK 120412GK	12.70	4.76	5.5	0.4 0.8 1.2	7°	•	•	•	•
Finishing-Medium										
	CCMT 060202HQ 060204HQ	6.35	2.38	2.8	0.2 0.4	7°	•	•	•	•
	CCMT 09T302HQ 09T304HQ 09T308HQ	9.525	3.97	4.4	0.2 0.4 0.8	7°	•	•	•	•
Finishing-Medium										
	CCGT 060201 060202 060204	6.35	2.38	2.8	0.1 0.2 0.4	7°		•	•	•
	CCGT 09T301 09T302 09T304	9.525	3.97	4.4	0.1 0.2 0.4	7°		•	•	•
	CCMT 09T308	9.525	3.97	4.4	0.8	7°		•	•	•
Medium cutting										
	CCGT 030101%-F 030102%-F 030104%-F	3.5	1.4	1.9	0.1 0.2 0.4	7°	L	•	L	L
	CCGT 040101%-F 040102%-F 040104%-F	4.3	1.8	2.3	0.1 0.2 0.4	7°	L	•	L	L
	CCGT 060201F%-U 060202F%-U	6.35	2.38	2.8	0.1 0.2	7°		L		•
Low Feed/Sharp Edge										
	CCGT 09T301F%-U 09T302F%-U	9.525	3.97	4.4	0.1 0.2	7°				R R
	CCGT 060202E%-U 060204E%-U	6.35	2.38	2.8	0.2 0.4	7°		L		•
Low Feed/With Honing										
	CCGT 09T302E%-U 09T304E%-U	9.525	3.97	4.4	0.2 0.4	7°				R R
	CPMT 080204GP	7.94	2.38	3.3	0.4	11°	•	•	•	•
Finishing										
	CPMT 090304GP 090308GP	9.525	3.18	4.4	0.4 0.8	11°	•	•	•	•
	CPMH 080204HQ 080208HQ	7.94	2.38	3.5	0.4 0.8	11°	•	•	•	•
Finishing-Medium										
	CPMH 090304HQ 090308HQ	9.525	3.18	4.5	0.4 0.8	11°	•	•	•	•
	CPMH 080204 080208	7.94	2.38	3.5	0.4 0.8	11°	•	•	•	•
Medium cutting										
	CPMH 090304 090308	9.525	3.18	4.5	0.4 0.8	11°	•	•	•	•
	CPMT 080204XP	7.94	2.38	3.3	0.4	11°	•	•	•	•
Low Carbon Steel Finishing										
	CPMT 090304XP 090308XP	9.525	3.18	4.4	0.4 0.8	11°	•	•	•	•
	CPMT 090304XQ 090308XQ	9.525	3.18	4.4	0.4 0.8	11°	•	•	•	•
Low Carbon Steel Medium Finishing										
	CPMH 080204%-Y	7.94	2.38	3.5	0.4	11°				L
	CPMH 090304%-Y	9.525	3.18	4.5	0.4	11°				L
Finishing-Medium										
	DCMT 070202GP 070204GP	6.35	2.38	2.8	0.2 0.4	7°	•	•	•	•
	DCMT 11T304GP 11T308GP	9.525	3.97	4.4	0.4 0.8	7°	•	•	•	•
Finishing										
	DCMT 070202GK 070204GK 070208GK	6.35	2.38	2.8	0.2 0.4 0.8	7°	•	•	•	•
	DCMT 11T302GK 11T304GK 11T308GK	9.525	3.97	4.4	0.2 0.4 0.8	7°	•	•	•	•
Finishing-Medium										

Shape Handed insert shows Left-Hand	Description	Dimension (mm)					Grades			
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet		Cermet	
							PV7005	PV7010	PV7025	TN6010
	DCMT 070202HQ 070204HQ 070208HQ	6.35	2.38	2.8	0.2 0.4 0.8	7°	•	•	•	•
	DCMT 11T302HQ 11T304HQ 11T308HQ	9.525	3.97	4.4	0.2 0.4 0.8	7°	•	•	•	•
	DCMT 11T302HQ 11T304HQ 11T308HQ	9.525	3.97	4.4	0.2 0.4 0.8	7°	•	•	•	•
Finishing-Medium										
	DCGT 070201 070202 070204	6.35	2.38	2.8	0.1 0.2 0.4	7°				•
	DCGT 11T302 11T304	9.525	3.97	4.4	0.2 0.4	7°				•
	DCMT 11T308	9.525	3.97	4.4	0.8	7°				•
Medium cutting										
	DCMT 070204XP	6.35	2.38	2.8	0.4	7°		•	•	•
	DCMT 11T302XP 11T304XP 11T308XP	9.525	3.97	4.4	0.4 0.4 0.8	7°		•	•	•
Low Carbon Steel Finishing										
	DCMT 11T304XQ 11T308XQ	9.525	3.97	4.4	0.4 0.8	7°		•	•	•
	DCMT 11T304XQ 11T308XQ	9.525	3.97	4.4	0.4 0.8	7°		•	•	•
Low Carbon Steel Medium Finishing										
	DCGT 070201F%-U 070202F%-U	6.35	2.38	2.8	0.1 0.2	7°				•
	DCGT 11T302F%-U	9.525	3.97	4.4	0.2	7°				•
Low Feed/Sharp Edge										
	DCGT 070202E%-U 070204E%-U	6.35	2.38	2.8	0.2 0.4	7°				•
	DCGT 11T302E%-U 11T304E%-U	9.525	3.97	4.4	0.2 0.4	7°				•
Low Feed/With Honing										
	DCGT 11T304E%-J	9.525	3.97	4.4	0.4	7°				•
	RCMX 1003M0	10.0	3.18	3.6	-	7°				•
Medium cutting										
	RCMX 1204M0	12.0	4.76	4.2	-	7°				•
	SCMT 09T304HQ 09T308HQ	9.525	3.97	4.4	0.4 0.8	7°		•	•	•
Finishing-Medium										
	SPGR 090304%-L	9.525	3.18	-	0.4	11°	•			
	SPGR 120308%-L	12.70	3.18	-	0.8	11°	•			
Finishing										
	SPGN 090304 090308	9.525	3.18	-	0.4 0.8	11°	•			
	SPGN 120304 120308	12.70	3.18	-	0.4 0.8	11°	•			
Without Chipbreaker										
	TBMT 060102DP 060104DP	3.97	1.59	2.3	0.2 0.4	5°		•	•	•
	TBMT 060102DP 060104DP	3.97	1.59	2.3	0.2 0.4	5°		•	•	•
Finishing										
	TBGT 060102%-L 060104%-L	3.97	1.59	2.3	0.2 0.4	5°		L	L	L
	TBGT 060102%-L 060104%-L	3.97	1.59	2.3	0.2 0.4	5°		L	L	L
Finishing										
	TCMT 090202HQ 090204HQ	5.56	2.38	2.5	0.2 0.4	7°		•	•	•
	TCMT 110202HQ 110204HQ 110208HQ	6.35	2.38	2.8	0.2 0.4 0.8	7°		•	•	•
	TCMT 16T304HQ 16T308HQ	9.525	3.97	4.4	0.4 0.8	7°			•	•
Finishing-Medium										
	TCGT 080202F%-U	4.76	2.38	2.3	0.2	7°				R
	TCGT 110302F%-U	6.35	3.18	2.8	0.2	7°				R
Low Feed/Sharp Edge										
	TCGT 110301E%-U 110302E%-U 110304E%-U	6.35	3.18	2.8	0.1 0.2 0.4	7°				•
	TCGT 110301E%-U 110302E%-U 110304E%-U	6.35	3.18	2.8	0.1 0.2 0.4	7°				•
Low Feed/With Honing										

● : Standard Item R: R-hand Only L: L-hand Only

Positive Type Inserts

Shape Handed insert shows Left-Hand	Description	Dimension (mm)					Grades				
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet			Cermets	
							PV7005	PV7010	PV7025	TN6010	TN6020
	TPMT 090202GP 090204GP	5.56	2.38	2.8	0.2 0.4	11°	●	●	●	●	●
	TPMT 110304GP 110308GP	6.35	3.18	3.3	0.4 0.8	11°	●	●	●	●	
	TPMT 160304GP	9.525	3.18	4.4	0.4	11°	●	●	●	●	
	TPMT 090202HQ 090204HQ	5.56	2.38	2.8	0.2 0.4	11°	●	●	●	●	
	TPMT 110302HQ 110304HQ 110308HQ	6.36	3.18	3.3	0.2 0.4 0.8	11°	●	●	●	●	
	TPMT 160304HQ 160308HQ	9.525	3.18	4.4	0.4 0.8	11°	●	●	●	●	
	TPMT 090204XP	5.56	2.38	2.8	0.4	11°	●	●	●	●	
	TPMT 110304XP 110308XP	6.35	3.18	3.3	0.4 0.8	11°	●	●	●	●	
	TPMT 160304XP 160308XP	9.525	3.18	4.4	0.4 0.8	11°	●	●	●	●	
	TPMT 110304XQ 110308XQ	6.35	3.18	3.3	0.4 0.8	11°	●	●	●	●	
	TPMT 160304XQ 160308XQ	9.525	3.18	4.4	0.4 0.8	11°	●	●	●	●	
	TPGH 080202%L 080204%L	4.76	2.38	2.3	0.2 0.4	11°	●	L	●	L	●
	TPGH 090202%L 090204%L	5.56	2.38	3.0	0.2 0.4	11°	●	L	●	L	●
	TPGH 110202%L 110204%L	6.35	2.38	3.5	0.2 0.4	11°	●			L	●
	TPGH 110302%L 110304%L 110308%L	6.35	3.18	3.3	0.2 0.4 0.8	11°	●	L	●	L	●
	TPGH 160302%L 160304%L 160308%L	9.525	3.18	4.5	0.2 0.4 0.8	11°	●	L	L	L	●
	TPGH 110302%L-H 110304%L-H 110308%L-H	6.35	3.18	3.3	0.2 0.4 0.8	11°				L	L
	TPGH 160304%L-H	9.525	3.18	4.5	0.4	11°			L	L	L
	TPGB 080202 080204	4.76	2.38	2.3	0.2 0.4	11°			●	●	●
	TPGB 090204	5.56	2.38	3.0	0.4	11°	●		●	●	●
	TPGB 110302 110304 110308	6.35	3.18	3.3	0.2 0.4 0.8	11°	●		●	●	●
	TPGB 160304	9.525	3.18	4.5	0.4	11°	●				
	TPMR 110304GP	6.35	3.18	-	0.4	11°					●
	TPMR 160304GP	9.525	3.18	-	0.4	11°					●
	TPMR 160304HQ 160308HQ	9.525	3.18	-	0.4 0.8	11°	●		●	●	
	TPMR 160304 160308	9.525	3.18	-	0.4 0.8	11°	●	●		●	

Shape Handed insert shows Left-Hand	Description	Dimension (mm)					Grades				
		I.C.	Thickness	Hole	Corner-R (rε)	Relief Angle	MEGACOAT Cermet			Cermets	
							PV7005	PV7010	PV7025	TN6010	TN6020
	TPGR 110302%L-A 110304%L-A	6.35	3.18	-	0.2 0.4	11°	L				L
	TPGR 110304%L-B	6.35	3.18	-	0.4	11°					L
	TPGR 160302%L-B 160304%L-B 160308%L-B	9.525	3.18	-	0.2 0.4 0.8	11°	L	L		L	L
	TPGR 160304%L-C 160308%L-C	9.525	3.18	-	0.4 0.8	11°		L	L	L	L
	TPGN 110304 110308	6.35	3.18	-	0.4 0.8	11°	●				
	TPGN 160304 160308	9.525	3.18	-	0.4 0.8	11°	●				
	VBMT 110304GP	6.35	3.18	2.8	0.4	5°		●	●	●	●
	VBMT 160404GP 160408GP	9.525	4.76	4.4	0.4 0.8	5°		●	●	●	●
	VBMT 110302VF 110304VF 110308VF	6.35	3.18	2.8	0.2 0.4 0.8	5°		●	●	●	●
	VBMT 160402VF 160404VF 160408VF 160412VF	9.525	4.76	4.4	0.2 0.4 0.8 1.2	5°		●	●	●	●
	VBMT 110304HQ 110308HQ	6.35	3.18	2.8	0.4 0.8	5°		●	●	●	●
	VBMT 160404HQ 160408HQ 160412HQ	9.525	4.76	4.4	0.4 0.8 1.2	5°		●	●	●	●
	VBGT 110302%L-F	6.35	3.18	2.8	0.2	5°				●	●
	VBGT 110302%L-Y 110304%L-Y	6.35	3.18	2.8	0.2 0.4	5°				●	●
	VBGT 160402%L-Y 160404%L-Y	9.525	4.76	4.4	0.2 0.4	5°				●	●
	VCMT 080202VF 080204VF	4.76	2.38	2.3	0.2 0.4	7°		●	●	●	●
	VCMT 080202HQ 080204HQ	4.76	2.38	2.3	0.2 0.4	7°		●	●	●	●
	WBMT 060102%L-DP 060104%L-DP	3.97	1.59	2.3	0.2 0.4	5°		L	L	L	L
	WBMT 080202%L-DP 080204%L-DP	4.76	2.38	2.3	0.2 0.4	5°		L	L	L	L
	WBGT 060102%L-F 060104%L-F	3.97	1.59	2.3	0.2 0.4	5°			L	L	L
	WBGT 080202%L-F 080204%L-F	4.76	2.38	2.3	0.2 0.4	5°			L	L	L
	WPMT 110204HQ	6.35	2.38	2.8	0.4	11°	●	●	●	●	
	WPMT 160304HQ 160308HQ	9.525	3.18	4.4	0.4 0.8	11°	●	●	●	●	
	WPGT 110204%L-Y	6.35	2.38	2.8	0.4	11°					L
	WPGT 160304%L-Y	9.525	3.18	4.4	0.4	11°					L

● : Standard Item R: R-hand Only L: L-hand Only

34CrMo4	
Sleeve VC= 150m/min → 180m/min ap=0.7mm (external) ap=0.5mm (facing) f=0.15mm/rev (external) f=0.2mm/rev (facing) Wet (internal coolant) VNMG160404VF (PV7010)	
PV7010	70 pcs/edge
Competitor K(Cermet)	50 pcs/edge
PV7010 processed 1.4 times more workpieces compared to competitor K.	

S43C	
Input Shaft VC= 200m/min → 220m/min ap=0.25 ~ 1mm f=0.05 ~ 0.3mm/rev Wet (oil base) VNMG160408VF (PV7025)	
PV7025	450 pcs/edge
Competitor L(Cermet)	Unstable 50~300 pcs/edge
PV7025 processed 1.5 ~ 9 times more workpieces compared to competitor L.	

Recommended Cutting Conditions | Empfohlene Schnittdaten | Conditions de coupe recommandées | Parametri di taglio consigliati

Workpiece material	Insert Grade (Vc:m/min)
	PV7010
(250HB) Carbon Steel	220-270-320
(300HB) Alloy Steel	200-250-300

Workpiece material	Insert Grade (Vc:m/min)
	PV7025
(250HB) Carbon Steel	180-250-320
(300HB) Alloy Steel	160-230-300

Workpiece material	Insert Grade (Vc:m/min)
	TN6010
(250HB) Carbon Steel	180-220-270
(300HB) Alloy Steel	160-200-250

Workpiece material	Insert Grade (Vc:m/min)
	TN6020
(250HB) Carbon Steel	150-200-250
(300HB) Alloy Steel	130-180-230

Workpiece material	Insert Grade (Vc:m/min)
	PV7005
Gray Cast Iron	300-350-400
Nodular Cast Iron	150-250-300



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