

THE NEW VALUE FRONTIER

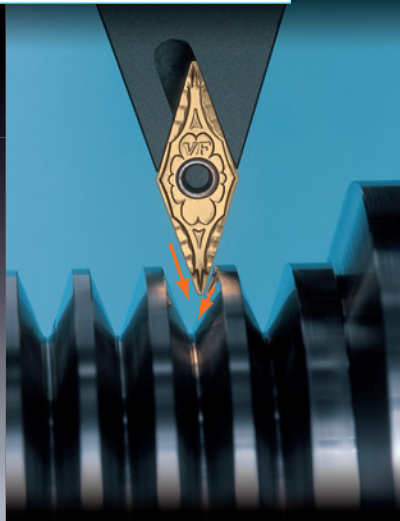


**CERATIP**<sup>®</sup>  
KYOCERA Cutting Tools

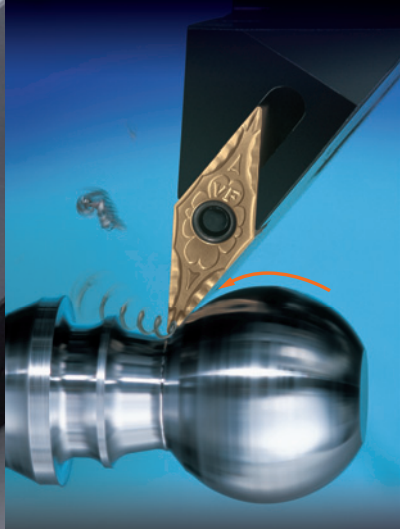
# VF

**35° Diamond Chipbreaker**

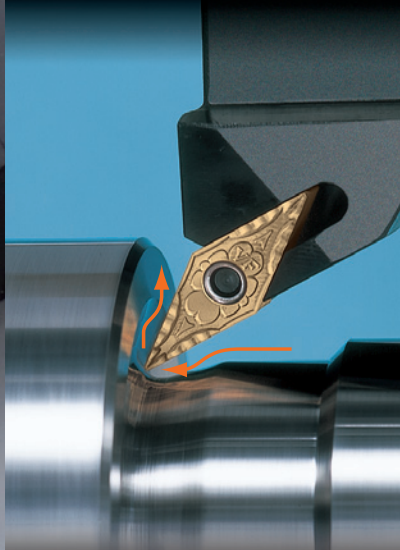
**Good chip control for variable D.O.C.  
(Undercutting and Profiling)**



Poly-V






Ball Stud



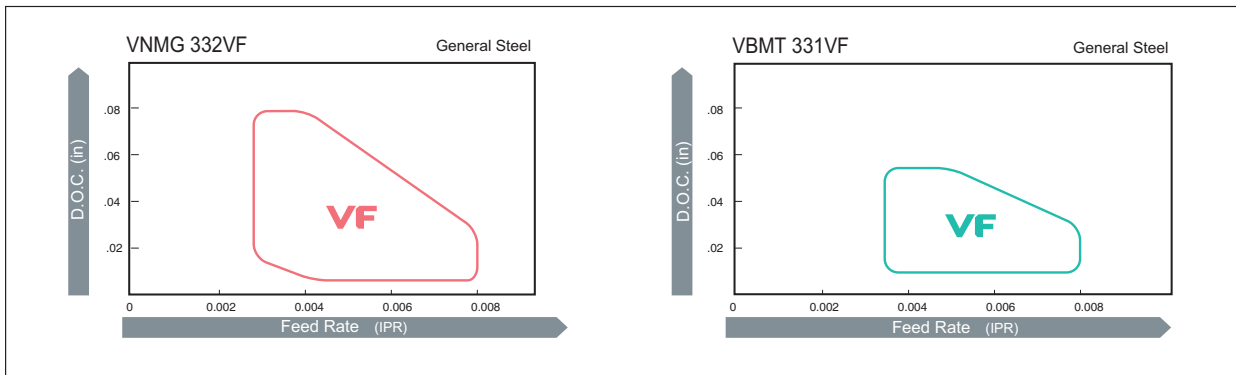
Undercutting

**New Positive Geometries Available**

Shape	Description	Dimensions					Insert Grade								
		I.C.	Thick-ness	Hole	Corner R	Relief Angle	Cer-meret	PVD Coated Cermet		CVD Coated Carbide				PVD Coated Carbide	
								TN6020	PV7020	PV90	CA5505	CA5515	CA5525		CA5535
	<b>VNMG 331VF</b>	.375	.187	.150	0.016	-	●	●			●	●		●	
	<b>332VF</b>				0.031		●	●		●	●		●		
	<b>333VF</b>				0.047		●	●		●	●		●		
	<b>VBMT 220.5VF</b>	.250	.125	.110	0.008	5°	○	○	○	○	○	○			○
	<b>221VF</b>				0.016		○	○	○	○	●	●	○		●
	<b>222VF</b>				0.031		○	○	○	○	●	●	○		●
	<b>VBMT 330.5VF</b>	.375	.187	.173	0.008	5°	○	○	○	○	○	○			○
	<b>331VF</b>				0.016		○	○	○	○	●	●	○		●
	<b>332VF</b>				0.031		○	○	○	○	●	●	○		●
<b>333VF</b>	0.047				○		○	○	○	○	○	○		○	
	<b>VCMT 1.51.50.5VF</b>	.187	.094	.091	0.008	7°	○	○	○	○	○	○			○
	<b>1.51.51VF</b>				0.016		○	○	○	○	○	○	○		○

Chip Control Range

● : Std. Stock ○ : World Express



Case Studies

**Carbon Steel**

- Poly-V
- V=2300 sfm
- d=0.008 in
- f=0.008 ipr
- Wet
- VNMG331 VF PV7020

**VF** 180pcs/edge

Competitor A 90pcs/edge

The VF chipbreaker insert showed stabler machining and better chip control than competitor A while doubling its tool life

Field Data

**Chromium Steel**

- Housing
- V=720 sfm
- d=0.008 in
- f=0.006 ipr
- Wet
- VNMG331 VF CA5025

**VF** 600pcs/edge

Competitor B 400pcs/edge

The VF chipbreaker insert improved the surface finish by improving chip control compared with Comp. B. It also improved the tool life by 50%.

Field Data

