

# **VR WESSON**

High Velocity Cutters



**VROOM, VROOM, VROOM!**

**VRM5 STYLE INDEXABLE  
MILLING CUTTERS THAT ACCEPT  
ROUND, SQUARE, OCTAGON INSERTS**



**HIGH SHEAR CUTTERS  
PRECISION GROUND INSERTS**

**100% AMERICAN MADE**



Toll Free 800-243-4385 - Fax 239-573-5137

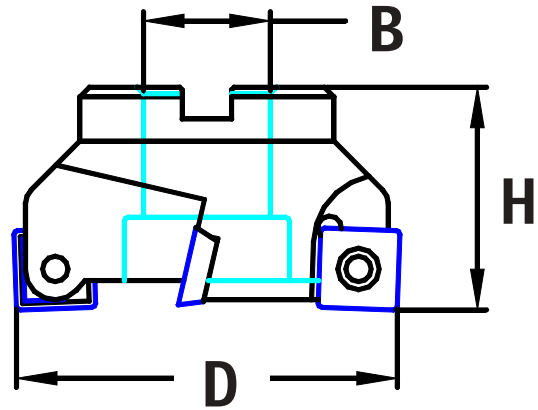
[www.vrwesson.com](http://www.vrwesson.com)

# VR WESSON

Nickel Plated

High Velocity Cutters

*Accepts all inserts listed below!*



## VRM5 STYLE CUTTERS

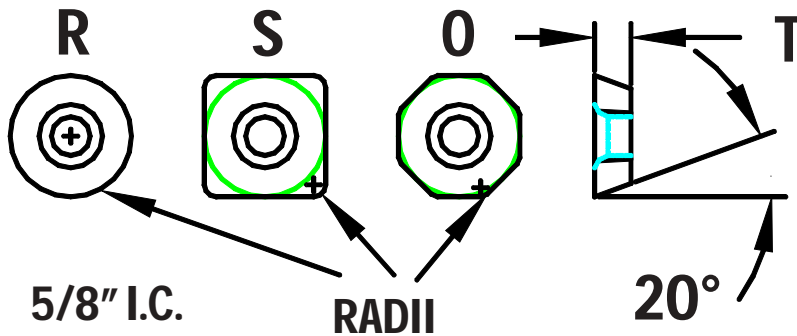
w/ square insert

CUTTER NUMBER	EDP	D*	H	B	N	INSERT STYLE
VRM5-2-3-750	35020	2"	1.725	.750	3	VRM5
VRM5-3-5-100	35030	3"	1.875	1.000	5	
VRM5-4-6-150	35040	4"	1.875	1.500	6	

\* D for octagons subtract 3/8"; D for rounds subtract 5/8"

VRS-1032 SCREW PACK (10 PC) USE EDP-35001

**Other cutter sizes available for this system by special order**



Edge Styles



## VRM5 STYLE INSERTS

INSERT NUMBER	RADII	RAMET2 EDP	VR777 EDP	RAMET EDP	FACE GRIND - SHAPE
VRM5-HS-O	.062	35100	35101	35102	HI SHEAR - OCTAGON
VRM5-NP-O	.062	35104	35105	35106	NEG/POS - OCTAGON
VRM5-HS-R	.312	35108	35109	35110	HI SHEAR - ROUND
VRM5-NP-R	.312	35112	35113	35114	NEG/POS - ROUND
VRM5-HS-S-032	.032	35116	35117		HI SHEAR - SQUARE
VRM5-HS-S-062	.062	35120	35121		HI SHEAR - SQUARE
VRM5-HS-S-125	.125	35124	35125		HI SHEAR - SQUARE
VRM5-NP-S-062	.062		35129		NEG/POS - SQUARE
VRM5-NP-S-125	.125		35133		NEG/POS - SQUARE

**Other insert styles available for this system by special order**

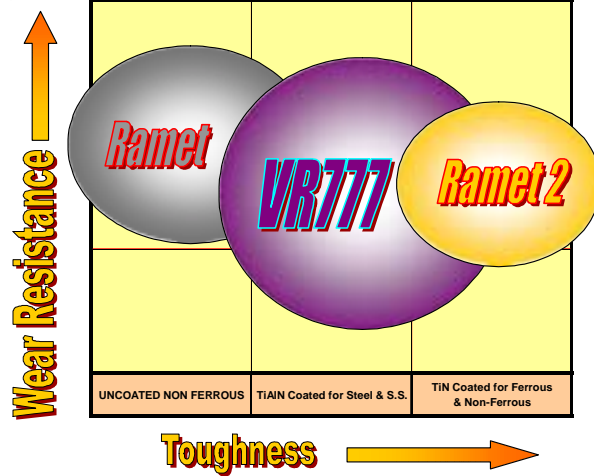
**AGI-VR Wesson Inc., 2673 NE 9th Ave., Cape Coral, FL 33909**



# VR WESSON

## Carbide Grades

RAMET2	K20-K30 TIN COATING ENHANCES NEXT GENERATION FERROUS AND NON-FERROUS MACHINING
VR777	P25-P30 ULTRA DENSE MULTI-LAYER TiAlN FOR MACHINING STAINLESS & OTHER STEELS
RAMET	UNCOATED 10% COBALT SUBMICRON WC FOR A VARIETY OF MATERIALS



## Application Information

1st Choice	2nd Choice	MATERIAL CLASSIFICATION	SFPM	FEED PER TOOTH	
				HI-POS	NEG/POS
VR777	RAMET2	STAINLESS STEEL	600-1800	.002" - .007"	.004" - .012"
RAMET2	VR777	CAST IRON	350-1200	.003" - .007"	.004" - .016"
VR777		LOW CARBON STEELS	500-1800	.003" - .008"	.004" - .012"
VR777		MEDIUM TO HIGH CARBON STEELS	450-1200	.002" - .007"	.004" - .012"
RAMET2		HIGH NICKEL - HIGH TEMPERATURE	200-600	.001" - .004"	.002" - .009"
RAMET2	RAMET	NON-FERROUS, ALUMINUM	2500-12000	.004" - .022"	N/R
RAMET		TITANIUM	125-500	.001" - .004"	N/R

Cutter diameter is based on using a square insert. Octagon styles produce a slightly smaller effective diameter but provide a 45° lead angle and 8 edges making it and the round style inserts the most popular. Using .032 radius square inserts are not intended for roughing steels and other hard and tough materials, but work well in aluminum and plastics.

### Feeds and Speeds Calculations:

To calculate RPM: SFPM (from chart) x 3.82 divided by the cutter diameter equals RPM.

To calculate the feed rate: Feed per tooth (FPT) x number of teeth(inserts) in cutter x RPM equals feed in inches per minute.

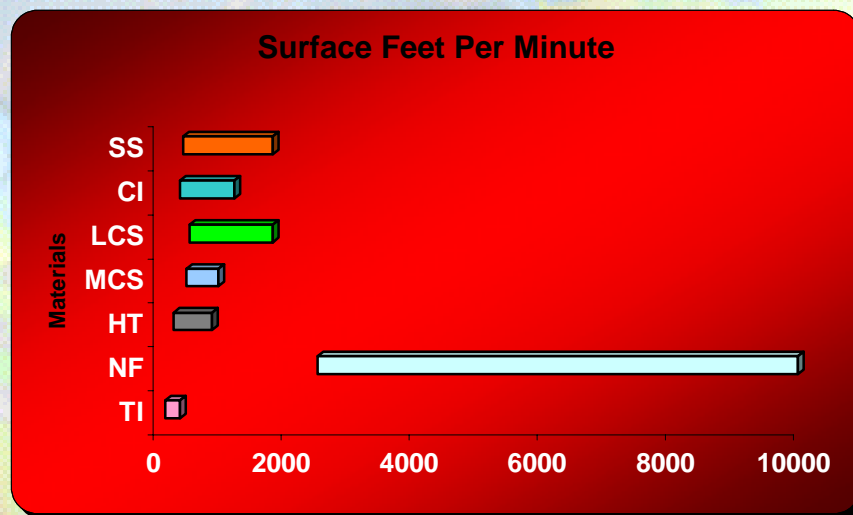
Start in the middle of figures provided. Feeds and speeds assume an octagon insert (reduce feed by 20% for square insert to start), also assumes a rigid setup, part properly held, basic knowledge and experience of cutting, etc. Depth of cut will be appropriate to the horsepower available. Always start with a light depth of cut (.015-.025) if the horsepower is low or unknown, increasing as power is available. Always use proper safety gear and procedures.

### General Application Tips:

1. Climb mill whenever possible.
2. Width of cut (WOC) should be 60%-70% diameter of cutter when soft milling; WOC for hard milling should be about 30%.
3. Always use the shortest reach toolholders possible for the application.
4. Use light depth of cut and higher feeds and speeds when finishing.

# VR WESSON

- ✓ Machine a Wide Variety of Materials
- ✓ Interchangeable Insert Styles
- ✓ Change from High Shear to Neg/Pos
- ✓ **Round, Octagon, Squares** in the Same Pocket
- ✓ High Metal Removal Rates
- ✓ Inserts Fit Other Cutter Systems



**High shear cutting for high metal removal rates in low to high horsepower applications**

Manufactured by:  
VR Wesson  
2673 NE 9TH AVE.  
CAPE CORAL, FL 33909  
800-243-4385 TOLL FREE  
239-573-5137 FAX

**800-243-4385**

**[www.vrwesson.com](http://www.vrwesson.com)**

\$1.00

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