

INDUSTRIAL PARTNER

JANUARY, 2006



INSIDE THIS ISSUE:

VP1505 DATA 2

AVAILABLE IN
SEVERAL
CHIPBREAKER
GEOMETRIES
AND INSERT
STYLES 3

VALENITE

IRONORCA™

TWO-TONE TOUGH FOR KILLER TURNING

An excellent choice
for roughing to
finishing applications
of
**Gray and Ductile Cast
Iron**

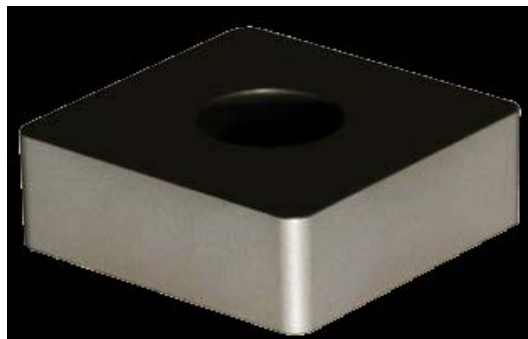
50% productivity
improvement
compared to other
K05-K10 products

VP1505
**FOR HIGH
SPEED TURNING**

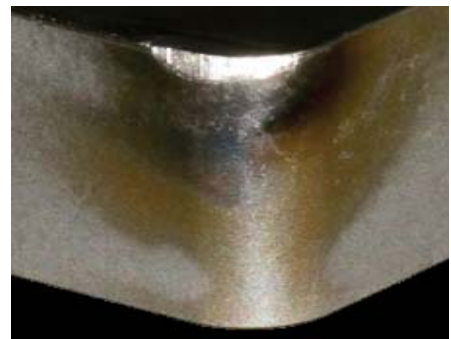


TWO-TONE COATING

FOR
WEAR
RECOGNITION
&
INDEXABILITY



VP1505 Flat-Top insert [before use](#)



VP1505 Flat-Top insert [after use](#)

VP1505

FEATURES

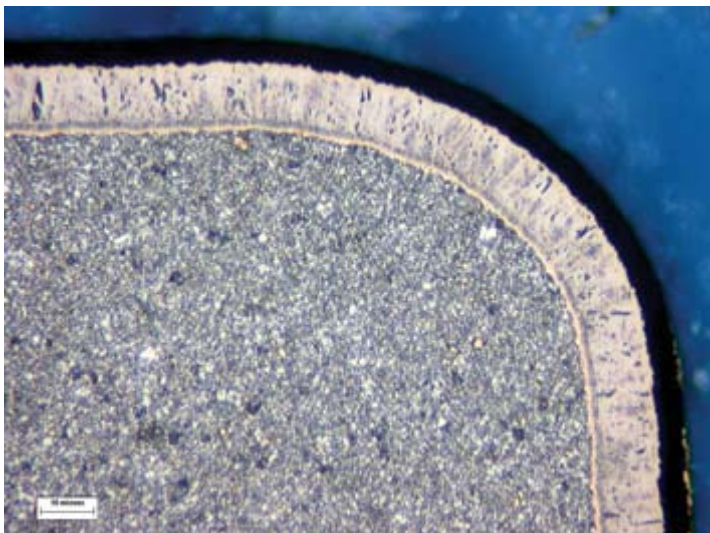
- Thick 18 micron MT-CVD TiCN/ Al₂O₃/TiC coating
- Unique gray/black coating used only by Valenite
- Predictable tool life and edge line strength
- Smooth surface coating, polished on the rake surface
- Micrograin substrate
- Compliments VP1510 on continuous high-speed K05 finishing applications

BENEFITS

- Allows for high speeds, feeds and enhanced flaking resistance
- Easy identification of used insert edges
- Reliable performance
- Reduces build-up of ferritic nodular iron
- Provides excellent wear and heat resistance at high speeds
- Provides a comprehensive tool line-up for cast iron roughing to finishing of all automotive components

People will accept your ideas much more readily if you tell them Benjamin Franklin said it first.

David H. Comins











1	Wear resistant aluminum oxide coating. Polished on rake to reduce build-up.
2	Thick TiCN layer for abrasive wear resistance.
3	Hard, wear resistant substrate with excellent heat resistance at high speeds.
4	Gray TiC layer on flank for identifying used edges.

**VP1505
FOR HIGH SPEED TURNING**

The VP1505 grade is available in several chipbreaker geometries and insert styles. The VP1505 consists of 110 items that include various diamond, square, triangle in ISO Positive for finishing and medium machining, as well as negative inserts for medium machining and roughing.

TREAT YOUR FRIENDS AS YOU DO
YOUR PICTURES, AND PLACE THEM IN
THEIR BEST LIGHT.

MOTHER JENNIE CHURCHILL OF
WINSTON CHURCHILL

<u>COMPONENTS</u>	<u>OPERATION</u>	<u>MATERIAL</u>	<u>INSERT STYLE</u>	<u>CUTTING CONDITIONS</u>	<u>IMPROVEMENT OVER COMPETITION</u>
<u>CONTROL ARM</u> 	Boring	Ductile Iron 217 BHN	SPMW 32.51	1067 sfm 0.006 ipr 0.015" doc	- Machined 600 parts - 100% increase in tool life - Enhanced indexability
<u>HYDRAULIC PISTON</u> 	Facing & Turning	Gray Iron 229 BHN	CNMA 432	1467 sfm 0.007 ipr 0.050" doc	- Machined 56 parts - 200% increase in tool life - Improved surface finish.
<u>HYDRAULIC PISTON</u> 	Facing & Turning	4140 Steel 285 BHN	CNMG 432 M5	629 sfm 0.008 ipr 0.125" doc	- Machined 5 parts - 400% increase in tool life - Improved surface finish
<u>DIFFERENTIAL CASE</u> 	Boring	Ductile Iron 225 BHN	WNMG 432	950 sfm 0.004 ipr 0.040" doc	- Machined 200 parts - 100% increase in tool life - Enhanced indexability
<u>DIFFERENTIAL CASE</u> 	Facing & Turning	Ductile Iron 225 BHN	CNMG 432 M5	800 sfm 0.006 ipr 0.060" doc	- Machined 200 parts - 300% increase in tool life - Improved surface finish
<u>DRIVE LINE FLANGE</u> 	Facing & Turning	Ductile Iron 220 BHN	CNMG 432 M5	750 sfm 0.013 ipr 0.030" doc	- Machined 100 parts - 140% increase in tool life - Enhanced reliability
<u>KNUCKLE</u> 	Boring	Ductile Iron	SNMA 432	877 sfm 0.013 ipr 0.070" doc	- Machined 211 parts - 6% increase in tool life - Enhanced indexability
<u>TRANSMISSION NUT</u> 	Boring, Facing & Turning	Ductile Iron	CNMA 433	900 sfm 0.014 ipr 0.060" doc	- Machined 150 pieces - 88 % increase in tool life - Improved burr resistance

Please contact your METRO TOOL & ABRASIVES sales representative for additional application information and test tools.

METRO TOOL & ABRASIVES

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