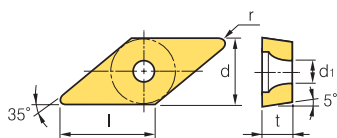


# B Turning Insert (Positive)

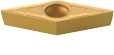
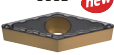
## VB



| Dimensions (mm) |       |      |                |
|-----------------|-------|------|----------------|
| Size            | d     | t    | d <sub>1</sub> |
| 11              | 6.35  | 3.18 | 2.8            |
| 16              | 9.525 | 4.76 | 4.4            |

Rhombic **35° Positive**  
Relief Angle: 5°

| Workpiece | Steel |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Inserts             |                                                                                                   | Designation |            | Cermet |        | Coated |        | Coated |        |        |        |        |        |        |        |        |        |        |        | Uncoated |        | Cutting Condition |        |        |           |           |                |            |
|---------------------|---------------------------------------------------------------------------------------------------|-------------|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|-------------------|--------|--------|-----------|-----------|----------------|------------|
|                     |                                                                                                   |             |            | CN1500 | CN2500 | CC1500 | CC2500 | NC3215 | NC3225 | NC3120 | NC3030 | NC3235 | NC5330 | NC6310 | NC6315 | NC9115 | NC9125 | NC9135 | PC5300 | PC5400   | PC8105 | PC8110            | PC8115 | PC9030 | H01       | H05       | fn<br>(mm/rev) | ap<br>(mm) |
| Finishing           | <br>[Mild steel] | VBMT        | 110302-FP  |        |        |        |        | ●      |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.01~0.10 | 0.05~0.08      |            |
|                     |                                                                                                   |             | 110304-FP  |        | ●      |        |        | ●      |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.01~0.10      | 0.10~0.90  |
|                     |                                                                                                   |             | 110308-FP  |        | ●      |        |        | ●      |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.01~0.10      | 0.10~1.00  |
|                     |                                                                                                   |             | 160404-FP  | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        | ●      |        |        |        |          |        | ●                 |        |        |           |           | 0.01~0.10      | 0.10~1.00  |
|                     |                                                                                                   |             | 160408-FP  | ●      | ●      | ●      | ●      | ●      | ●      |        |        |        |        |        |        | ●      |        |        |        |          |        | ●                 |        |        |           |           | 0.04~0.12      | 0.10~1.00  |
| Finishing           |                  | VBMT        | 110302-VB  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.05~0.15 | 0.20~1.20      |            |
|                     |                                                                                                   |             | 110304-VB  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.06~0.18 | 0.20~1.20      |            |
|                     |                                                                                                   |             | 110308-VB  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.08~0.20 | 0.60~1.20      |            |
|                     |                                                                                                   |             | 160402-VB  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.06~0.20 | 0.05~1.00      |            |
|                     |                                                                                                   |             | 160404-VB  | ●      | ●      |        |        |        | ●      |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.08~0.20      | 0.20~1.50  |
|                     |                                                                                                   |             | 160408-VB  | ●      | ●      |        |        |        | ●      |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.10~0.23      | 0.50~1.50  |
|                     |                                                                                                   |             | 160412-VB  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.12~0.25      | 0.80~1.50  |
| Finishing           |                | VBMT        | 160404-VF  | ●      | ●      |        |        |        | ●      |        |        | ●      |        |        |        |        | ●      |        |        | ●        |        |                   |        |        | 0.05~0.20 | 0.30~1.00 |                |            |
|                     |                                                                                                   |             | 160408-VF  | ●      | ●      |        |        |        |        |        |        |        |        |        |        |        |        |        | ●      |          |        |                   |        |        |           | 0.10~0.25 | 0.30~1.00      |            |
| Finishing           |                | VBMT        | 110302-VL  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.03~0.20 | 0.20~1.20      |            |
|                     |                                                                                                   |             | 110304-VL  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.04~0.20 | 0.20~1.20      |            |
|                     |                                                                                                   |             | 110308-VL  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.08~0.20 | 0.20~1.20      |            |
|                     |                                                                                                   |             | 160402-VL  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.03~0.20 | 0.30~1.50      |            |
|                     |                                                                                                   |             | 160404-VL  | ●      | ●      | ●      | ●      | ●      | ●      |        |        | ●      |        |        | ●      | ●      | ●      | ●      | ●      | ●        | ●      | ●                 | ●      |        |           |           | 0.05~0.20      | 0.30~1.50  |
|                     |                                                                                                   |             | 160408-VL  | ●      | ●      | ●      | ●      | ●      | ●      |        |        | ●      |        |        | ●      | ●      | ●      | ●      | ●      | ●        | ●      | ●                 | ●      | ●      |           |           | 0.10~0.20      | 0.30~1.50  |
| Medium to finishing |                | VBMT        | 110304-HMP |        |        |        |        |        | ●      |        |        |        |        |        |        |        |        |        |        |          |        | ●                 |        |        |           | 0.03~0.20 | 0.15~2.70      |            |
|                     |                                                                                                   |             | 110308-HMP |        |        |        |        |        | ●      |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.05~0.25 | 0.40~2.70      |            |
|                     |                                                                                                   |             | 160404-HMP |        |        |        |        |        |        | ●      | ●      |        | ●      |        | ●      |        |        |        | ●      |          |        | ●                 |        | ●      |           |           | 0.07~0.20      | 0.20~2.70  |
|                     |                                                                                                   |             | 160408-HMP |        |        |        |        |        | ●      | ●      | ●      |        | ●      |        |        |        |        |        | ●      |          |        | ●                 |        | ●      |           |           | 0.09~0.27      | 0.50~2.70  |
|                     |                                                                                                   |             | 160412-HMP |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.11~0.32      | 0.50~2.70  |
| Medium to finishing |                | VBMT        | 110302-MP  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.04~0.14 | 0.20~1.50      |            |
|                     |                                                                                                   |             | 110304-MP  |        |        |        |        | ●      | ●      |        |        |        |        |        |        | ●      | ●      |        |        |          |        |                   |        |        |           | 0.05~0.15 | 0.20~1.50      |            |
|                     |                                                                                                   |             | 110308-MP  |        |        |        |        | ●      | ●      |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           |           | 0.10~0.28      | 0.30~2.00  |
|                     |                                                                                                   |             | 160402-MP  |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |          |        |                   |        |        |           | 0.06~0.16 | 0.25~2.00      |            |
|                     |                                                                                                   |             | 160404-MP  | ●      | ●      | ●      | ●      | ●      | ●      |        |        | ●      | ●      |        | ●      | ●      | ●      | ●      | ●      | ●        | ●      | ●                 | ●      | ●      |           |           | 0.08~0.20      | 0.30~2.00  |
|                     |                                                                                                   |             | 160408-MP  | ●      | ●      | ●      | ●      | ●      | ●      |        |        | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●      | ●        | ●      | ●                 | ●      | ●      |           |           | 0.10~0.25      | 0.50~2.30  |
|                     |                                                                                                   |             | 160412-MP  | ●      | ●      |        |        | ●      | ●      |        |        | ●      |        |        | ●      | ●      | ●      | ●      |        |          | ●      | ●                 | ●      |        |           |           | 0.10~0.35      | 0.50~2.30  |

Cutting edge geometry A52~A61
 Recommended chip breaker B04~B14
 Code system B34~B35
 ● : Stock item

| Available tool holders |           |             |      |
|------------------------|-----------|-------------|------|
| Designation            | Page      | Designation | Page |
| SVABR/L                | B195      | SVVBN       | B196 |
| SVHBR/L                | B195      | SVQBR/L     | B222 |
| SVJBR/L                | B125, 195 | SVUBR/L     | B223 |

