

Expanded  
Inserts

New Cermet Grade for Turning

# NX3035

**Tough cermet grade can operate reliably in severe conditions and maintain excellent component surface finishes.**

- Outstanding performance provides high resistance to fracture, thermal shock and wear.
- Special alloy substrate binder allows a secure wet cutting performance.



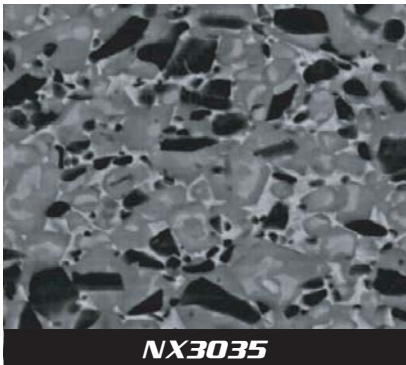
# New Cermet Grade for Turning

# NX3035

## Features

The most advanced, all round cermet grade.  
High thermal shock resistance, stable cutting and longer tool life

### Cermet with a special alloy binder



#### ● Highly stable cutting edge performance even during wet cutting

The special alloy binder with increased thermal conductivity has dramatically improved the thermal shock resistance properties. This gives a highly stable cutting edge performance even when wet cutting where conventional cermet grades usually exhibit an unstable and unpredictable performance.

#### ● Increased stability and improved surface finishes

The special alloy binder has improved the binding of the hard substrate particles. Abnormal damage such as thermal cracks and micro-chipping are prevented and the superior surface finishes specific to cermet grades can be maintained.

## Application range and recommended cutting conditions

### Application Range

| ISO | Application Range |
|-----|-------------------|
| P01 |                   |
| P10 |                   |
| P20 |                   |
| P30 |                   |

Please use NX2525 grade for dry cutting only or with non-water soluble coolant.

### Recommended Cutting Conditions

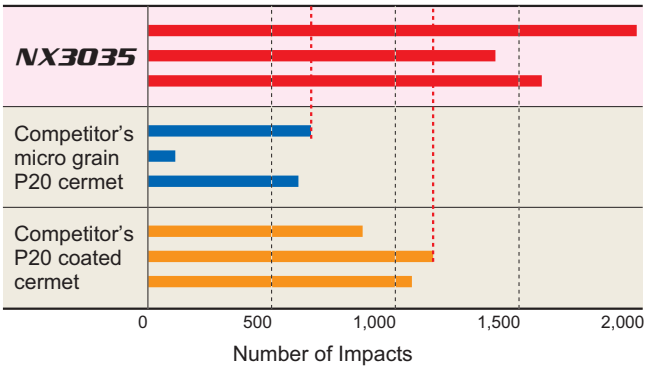
|   | Work Material               | Hardness | Cutting Mode    | Cutting Speed (m/min) |
|---|-----------------------------|----------|-----------------|-----------------------|
| P | Mild Steel                  | ≤180HB   | General Cutting | 300<br>(240—340)      |
|   | Carbon Steel<br>Alloy Steel | ≥180HB   | General Cutting | 230<br>(190—260)      |

# Cutting Performance

## Fracture and Thermal Shock Resistance

Wet interrupted cutting of alloy steel (JIS SCM440)

**NX3035** is less likely to fracture, allowing stable cutting.



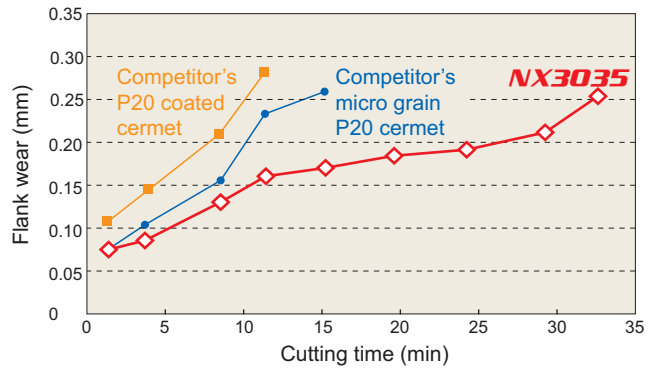
<Cutting conditions>

Insert : CNMG120408- Coolant: W.S.O.  
 Tool : PCLNR2525M12 Interrupted Cutting  
 Cutting speed : 200m/min  
 Feed : 0.2mm/rev  
 Depth of cut : 1.5mm

## Wear Resistance

Continuous cutting of carbon steel (JIS S45C)

**NX3035** displays exceptional wear resistance.



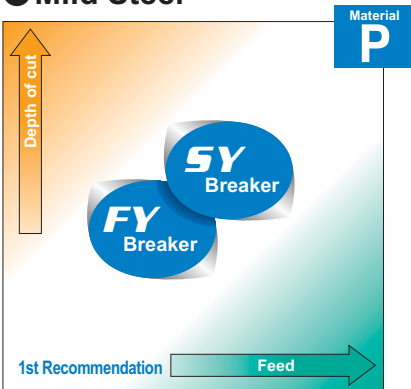
<Cutting conditions>

Insert : CNMG120408- Coolant: W.S.O.  
 Tool : PCLNR2525M12 External continuous cutting  
 Cutting speed : 250m/min  
 Feed : 0.15mm/rev  
 Depth of cut : 1.0mm

# Chipbreaker Applications

## Negative Inserts For Steel

### ● Mild Steel



|                                | Breaker       | Features   | Cross Section Geometry          |
|--------------------------------|---------------|--|---------------------------------|
| 1st Recommendation Chipbreaker | <b>FY</b><br> | <b>First recommendation for finishing mild steel</b><br>Double sided chipbreaker.<br>Effectively controls adhesive chips.<br>Suitable for mild steel finishing.                        | 15° Flank<br>0.2<br>Nose        |
|                                | <b>SY</b><br> | <b>First recommendation for light cutting of mild steel</b><br>Double sided chipbreaker.<br>Effectively controls adhesive chips.<br>Suitable for mild steel light cutting.             | 10° Flank<br>0.2<br>Nose        |
| Alternative Chipbreaker        | <b>MS</b><br> | <b>Alternative chipbreaker for medium cutting of mild steel</b><br>Double sided chipbreaker.<br>The sharp edge gives best performance.<br>Standard style, general purpose chipbreaker. | 25° Flank<br>15°<br>0.5<br>Nose |

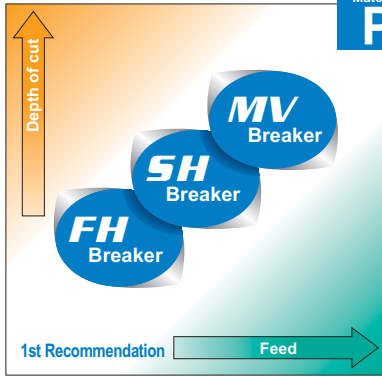
# NX3035

## Chipbreaker Applications

### Negative Inserts For Steel

● Carbon Steel / Alloy Steel

Material  
**P**

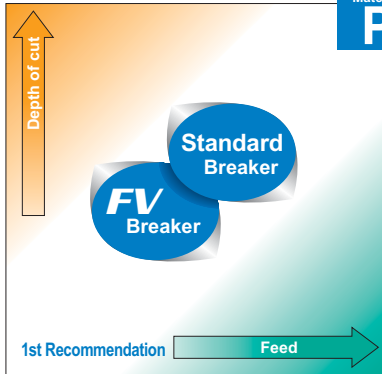



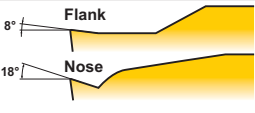

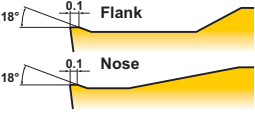

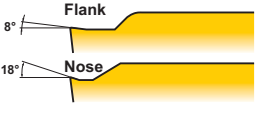

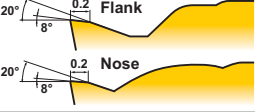
|                                | Breaker             | Features   | Cross Section Geometry |
|--------------------------------|---------------------|--|------------------------|
| 1st Recommendation Chipbreaker | <b>FH</b><br>       | <b>First recommendation for finishing general steel and alloy steel</b><br>Double sided chipbreaker.<br>Stable chip control even at small depths of cut.   |                        |
|                                | <b>SH</b><br>       | <b>First recommendation for light cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Can be used at low depths of cut at high feed rates.<br>The curved edge allows smooth chip discharge.<br>Recommended for workpieces in the 160–250HB range. |                        |
|                                | <b>MV</b><br>       | <b>First recommendation for medium cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Suitable for medium to light cutting.<br>Breaker geometry appropriate for copying and back turning.<br>Positive land provides sharp cutting action.        |                        |
| Alternative Chipbreaker        | <b>R/L-1M</b><br>   | <b>Alternative chipbreaker for light cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Parallel chipbreaker controls chip flow.<br>Suitable for finish-light cutting.   |                        |
|                                | <b>C</b><br>        | <b>Alternative chipbreaker for light cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Suitable for light cutting.<br>The curved edge allows smooth chip discharge.   |                        |
|                                | <b>SA</b><br>       | <b>Alternative chipbreaker for light cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Superior chip control at small depths of cut.<br>Covers copying and back turning with wavy edge.<br>Recommended for workpieces in the 200–300HB range.   |                        |
|                                | <b>SW</b><br>       | <b>Wiper insert for light cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>The wiper allows up to two times higher feed.<br>Wiper design for increased productivity and improved surface finish.   |                        |
|                                | <b>MA</b><br>       | <b>Alternative chipbreaker for medium cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Suitable for a wide range of application areas.<br>Positive land provides sharp cutting action.   |                        |
|                                | <b>Standard</b><br> | <b>Alternative chipbreaker for medium cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Flat land offers high edge strength.<br>Standard style, general purpose chipbreaker.  |                        |
|                                | <b>R/L-2M</b><br>   | <b>Alternative chipbreaker for medium cutting of general steel and alloy steel</b><br>Double sided chipbreaker.<br>Parallel chipbreaker controls chip flow.<br>Suitable for light to medium cutting.   |                        |

## 7° Positive Inserts For Steel

### Carbon Steel / Alloy Steel

Material  
**P**

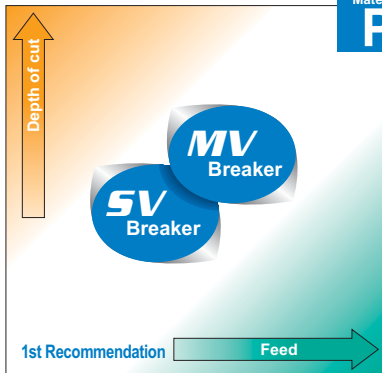



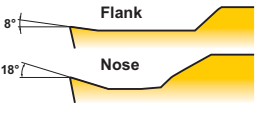

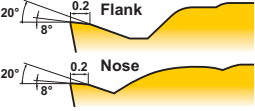
|                                | Breaker  | Features   | Cross Section Geometry  |
|--------------------------------|--|--|---|
| 1st Recommendation Chipbreaker | <b>FV</b><br>       | <b>First recommendation for finishing general steel and alloy steel</b><br>Suitable for low depths of cut and low feed rates. Sharp cutting edge and low resistance design achieves excellent cutting performance.   |  |
|                                | <b>Standard</b><br> | <b>First recommendation for medium cutting of general steel and alloy steel</b><br>Balance of edge strength and sharpness due to a combination of a flat land and large rake angle.  |  |
| Alternative Chipbreaker        | <b>SV</b><br>       | <b>Alternative chipbreaker for light cutting of general steel, alloy steel and mild steel</b><br>Large rake angle provides sharp cutting action. A peninsular dot ensures chip control at depths of cut under 1mm.   |  |
|                                | <b>MV</b><br>       | <b>Alternative chipbreaker for light cutting of general steel, alloy steel and mild steel</b><br>A positive insert and the large rake angle achieve sharp cutting edge performance. The double breakers and round shape in the rake face achieve a wide range of chip discharge. |  |

## 11° Positive Inserts For Steel

### Carbon Steel / Alloy Steel

Material  
**P**

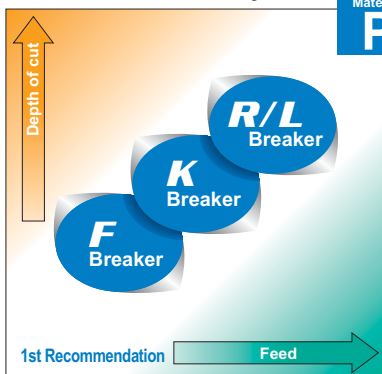



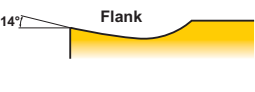

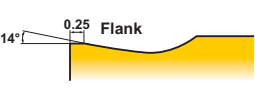


|                                | Breaker  | Features  | Cross Section Geometry  |
|--------------------------------|--|---|---|
| 1st Recommendation Chipbreaker | <b>SV</b><br> | <b>First recommendation for light cutting of general steel, alloy steel and mild steel</b><br>Large rake angle provides sharp cutting action. A peninsular dot ensures chip control at depths of cut under 1mm.   |  |
|                                | <b>MV</b><br> | <b>First recommendation for medium cutting of general steel, alloy steel and mild steel</b><br>A positive insert and large rake angle achieves sharp cutting edge performance. Double breakers in the rake face achieve a wide range of chip discharge. |  |

## Angular And Parallel Chip Breakers (Negative Inserts)

### Carbon Steel / Alloy Steel

Material  
**P**


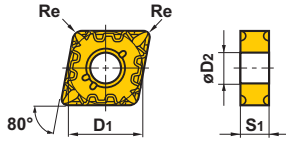

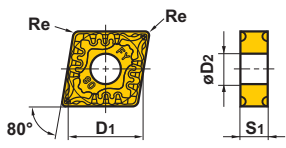

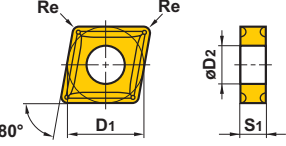

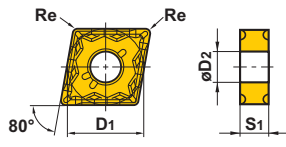

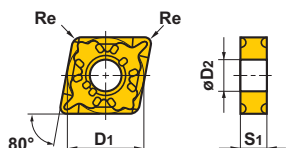

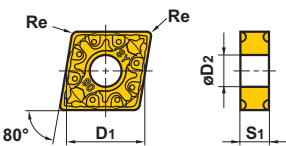

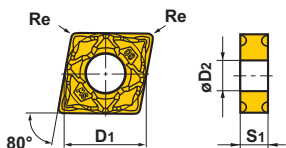

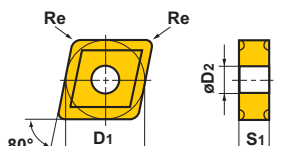



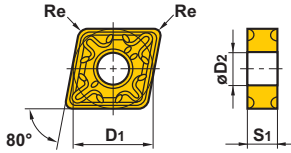

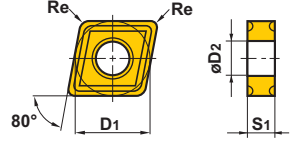

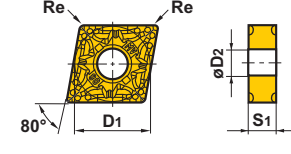

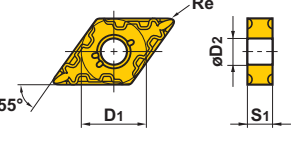

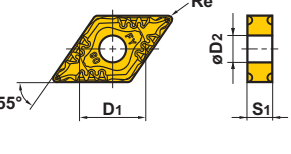

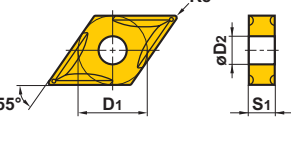

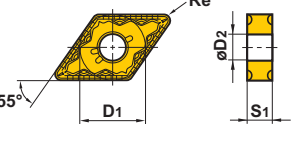

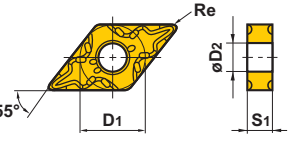
|                                | Breaker   | Features   | Cross Section Geometry  |
|--------------------------------|---|--|---|
| 1st Recommendation Chipbreaker | <b>R/L-F</b><br> | <b>First recommendation for finishing</b><br>Double sided chipbreaker. Lead chipbreaker controls chip flow. The sharp edge produces a good surface finish. |  |
|                                | <b>R/L-K</b><br> | <b>First recommendation for light cutting</b><br>Double sided chipbreaker. Parallel chipbreaker. Excellent chip control at low to medium feed rates.       |  |
|                                | <b>R/L</b><br>   | <b>First recommendation for medium cutting</b><br>Double sided chipbreaker. Parallel chipbreaker. Good chip control at medium feed rates.                  |  |

# NX3035

## Inserts

### ● Negative Inserts (With hole)


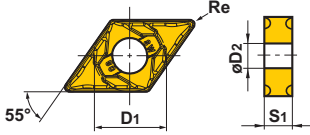

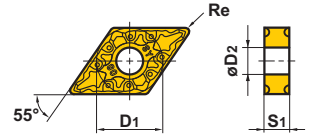

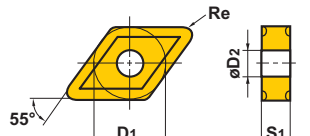

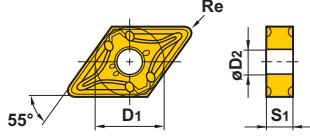

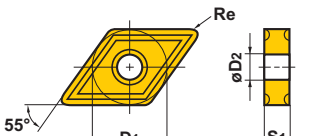

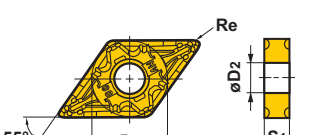

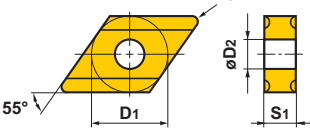
| Shape  | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|--|----------------------|-------|---------------|-----------------|------|-----|------|---|
|  |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>FH</b><br>Breaker<br><br>Finish Cutting          | <b>CNMG120404-FH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>120408-FH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>FY</b><br>Breaker<br><br>Finish Cutting          | <b>CNMG120404-FY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>120408-FY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>C</b><br>Breaker<br><br>Light Cutting            | <b>CNMG120404-C</b>  | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>120408-C</b>      | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>SA</b><br>Breaker<br><br>Light Cutting         | <b>CNMG120404-SA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>120408-SA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>120412-SA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SH</b><br>Breaker<br><br>Light Cutting         | <b>CNMG120404-SH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>120408-SH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>120412-SH</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SY</b><br>Breaker<br><br>Light Cutting         | <b>CNMG120404-SY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>120408-SY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>SW</b><br>Breaker<br><br>Light Cutting (Wiper) | <b>CNMG120404-SW</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>120408-SW</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>120412-SW</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting  | <b>CNMG120404</b>    | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>120408</b>        | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>120412</b>        | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |

| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|------|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>MA</b><br>Breaker<br><br>Medium Cutting   | <b>CNMG120404-MA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>120408-MA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-MA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>MS</b><br>Breaker<br><br>Medium Cutting   | <b>CNMG120404-MS</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>120408-MS</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-MS</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>MV</b><br>Breaker<br><br>Medium Cutting   | <b>CNMG120404-MV</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|   | <b>120408-MV</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-MV</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>FH</b><br>Breaker<br><br>Finish Cutting | <b>DNMG150404-FH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-FH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150604-FH</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-FH</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
| <b>FY</b><br>Breaker<br><br>Finish Cutting | <b>DNMG150404-FY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-FY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150604-FY</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-FY</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
| <b>C</b><br>Breaker<br><br>Light Cutting   | <b>DNMG150404-C</b>  | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-C</b>      | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150604-C</b>      | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-C</b>      | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
| <b>SA</b><br>Breaker<br><br>Light Cutting  | <b>DNMG150404-SA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-SA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-SA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-SA</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-SA</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-SA</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>SH</b><br>Breaker<br><br>Light Cutting  | <b>DNMG150404-SH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-SH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-SH</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-SH</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-SH</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-SH</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |

# NX3035


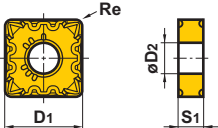

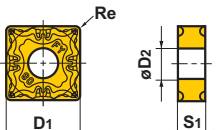

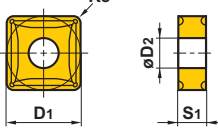

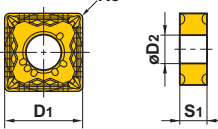

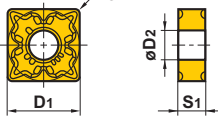

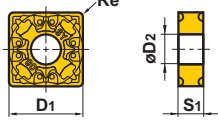

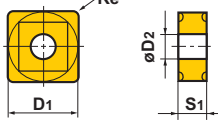

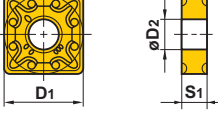
## Inserts

### ● Negative Inserts (With hole)

| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|------|---|
|   |                      |       | <b>NX3035</b> | D1              | S1   | Re  | D2   |   |
| <b>SW</b><br>Breaker<br><br><br>Light Cutting<br>(Wiper)     | <b>DNMX150404-SW</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>150408-SW</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-SW</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-SW</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-SW</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-SW</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>SY</b><br>Breaker<br><br><br>Light Cutting                | <b>DNMG150404-SY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>150408-SY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150604-SY</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-SY</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
| <b>Standard</b><br>Breaker<br><br><br>Medium Cutting         | <b>DNMG150404</b>    | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>150408</b>        | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412</b>        | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604</b>        | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608</b>        | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612</b>        | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>MA</b><br>Breaker<br><br><br>Medium Cutting             | <b>DNMG150404-MA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-MA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-MA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-MA</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-MA</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-MA</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>MS</b><br>Breaker<br><br><br>Medium Cutting             | <b>DNMG150404-MS</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-MS</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-MS</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-MS</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-MS</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-MS</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>MV</b><br>Breaker<br><br><br>Medium Cutting             | <b>DNMG150404-MV</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150408-MV</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150412-MV</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>150604-MV</b>     | M     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608-MV</b>     | M     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150612-MV</b>     | M     | ●             | 12.7            | 6.35 | 1.2 | 5.16 |   |
| <b>NEW</b> <b>R/L</b><br>Breaker<br><br><br>Medium Cutting | <b>DNGG150404R</b>   | G     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>150404L</b>       | G     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|   | <b>150408R</b>       | G     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150408L</b>       | G     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>150604R</b>       | G     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150604L</b>       | G     | ●             | 12.7            | 6.35 | 0.4 | 5.16 |   |
|   | <b>150608R</b>       | G     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |
|   | <b>150608L</b>       | G     | ●             | 12.7            | 6.35 | 0.8 | 5.16 |   |

Right hand insert shown.


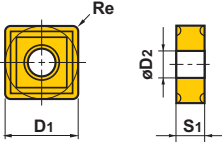

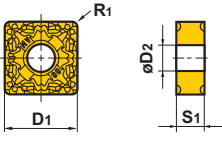

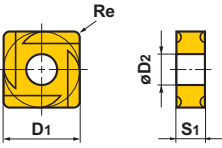

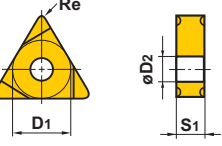

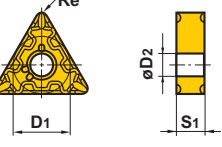

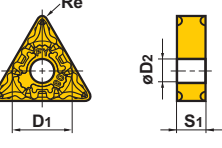

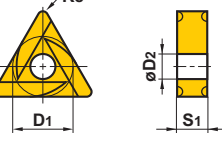



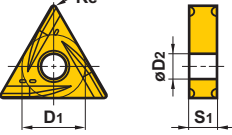

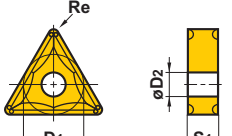

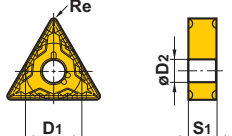

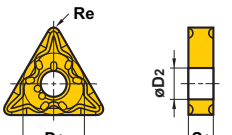

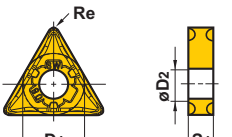

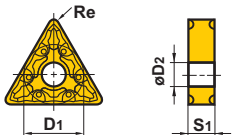

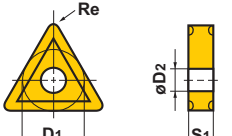

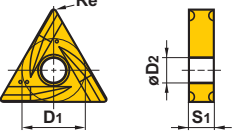
| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|------|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>FH</b><br>Breaker<br><br>Finish Cutting         | <b>SNMG120404-FH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|   | <b>120408-FH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>FY</b><br>Breaker<br><br>Finish Cutting         | <b>SNMG120408-FY</b> | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |    |
|   |                      |       |               |                 |      |     |      |   |
| <b>C</b><br>Breaker<br><br>Light Cutting           | <b>SNMG120408-C</b>  | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |    |
|   |                      |       |               |                 |      |     |      |   |
| <b>SA</b><br>Breaker<br><br>Light Cutting        | <b>SNMG120404-SA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>120408-SA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-SA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SH</b><br>Breaker<br><br>Light Cutting        | <b>SNMG120404-SH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>120408-SH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-SH</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SY</b><br>Breaker<br><br>Light Cutting        | <b>SNMG120408-SY</b> | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |  |
|   |                      |       |               |                 |      |     |      |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting | <b>SNMG090304</b>    | M     | ●             | 9.525           | 3.18 | 0.4 | 3.81 |  |
|   | <b>090308</b>        | M     | ●             | 9.525           | 3.18 | 0.8 | 3.81 |   |
|   | <b>120404</b>        | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|   | <b>120408</b>        | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412</b>        | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
|   | <b>120416</b>        | M     | ●             | 12.7            | 4.76 | 1.6 | 5.16 |   |
| <b>MA</b><br>Breaker<br><br>Medium Cutting       | <b>SNMG120404-MA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>120408-MA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|   | <b>120412-MA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |

# NX3035

## Inserts

### ● Negative Inserts (With hole)


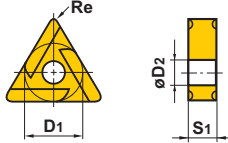

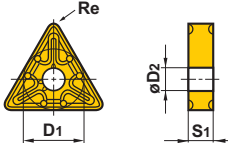

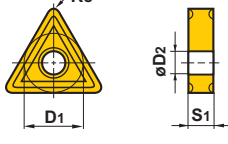

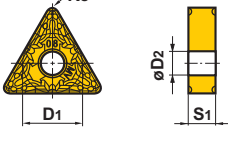
| Shape  | Order Number         | Class | Stock         | Dimensions (mm) |      |      |      | Geometry   |
|--|----------------------|-------|---------------|-----------------|------|------|------|--|
|  |                      |       | <b>NX3035</b> | D1              | S1   | Re   | D2   |  |
| <b>MS</b><br>Breaker<br><br>Medium Cutting  | <b>SNMG120404-MS</b> | M     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |   |
|  | <b>120408-MS</b>     | M     | ●             | 12.7            | 4.76 | 0.8  | 5.16 |  |
|  | <b>120412-MS</b>     | M     | ●             | 12.7            | 4.76 | 1.2  | 5.16 |  |
| <b>MV</b><br>Breaker<br><br>Medium Cutting  | <b>SNMG120404-MV</b> | M     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |   |
|  | <b>120408-MV</b>     | M     | ●             | 12.7            | 4.76 | 0.8  | 5.16 |  |
|  | <b>120412-MV</b>     | M     | ●             | 12.7            | 4.76 | 1.2  | 5.16 |  |
| <span style="color: red; font-weight: bold;">NEW</span><br><b>R/L</b><br>Breaker<br><br>Medium Cutting | <b>SNGG090304R</b>   | G     | ●             | 9.525           | 3.18 | 0.4  | 3.81 |  <p style="text-align: right;">Right hand insert shown.</p>  |
|  | <b>090304L</b>       | G     | ●             | 9.525           | 3.18 | 0.4  | 3.81 |  |
|  | <b>090308R</b>       | G     | ●             | 9.525           | 3.18 | 0.8  | 3.81 |  |
|  | <b>090308L</b>       | G     | ●             | 9.525           | 3.18 | 0.8  | 3.81 |  |
|  | <b>120404R</b>       | G     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |  |
|  | <b>120404L</b>       | G     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |  |
|  | <b>120408R</b>       | G     | ●             | 12.7            | 4.76 | 0.8  | 5.16 |  |
|  | <b>120408L</b>       | G     | ●             | 12.7            | 4.76 | 0.8  | 5.16 |  |
| <b>R/L-F</b><br>Breaker<br><br>Finish Cutting   | <b>TNGG160402R-F</b> | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |  <p style="text-align: right;">Right hand insert shown.</p> |
|  | <b>160402L-F</b>     | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |  |
|  | <b>160404R-F</b>     | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |  |
|  | <b>160404L-F</b>     | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |  |
|  | <b>160408R-F</b>     | G     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |  |
| <b>FH</b><br>Breaker<br><br>Finish Cutting  | <b>TNMG160404-FH</b> | M     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |   |
|  | <b>160408-FH</b>     | M     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |  |
| <b>FY</b><br>Breaker<br><br>Finish Cutting  | <b>TNMG160404-FY</b> | M     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |   |
|  | <b>160408-FY</b>     | M     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |  |
| <b>R/L-K</b><br>Breaker<br><br>Light Cutting  | <b>TNGG160402R-K</b> | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |  <p style="text-align: right;">Right hand insert shown.</p> |
|  | <b>160402L-K</b>     | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |  |
|  | <b>160404R-K</b>     | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |  |
|  | <b>160404L-K</b>     | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |  |
|  | <b>160408R-K</b>     | G     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |  |
| <b>160408L-K</b>   | G                    | ●     | 9.525         | 4.76            | 0.8  | 3.81 |      |  |


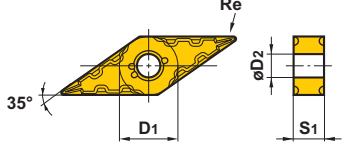

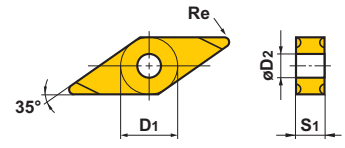

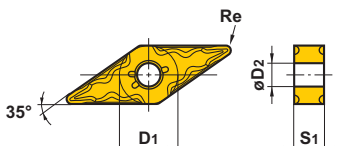

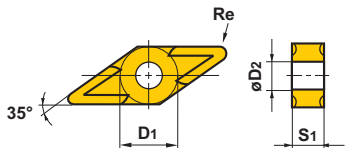

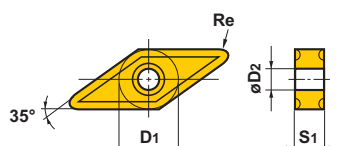

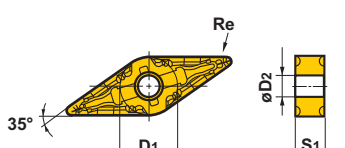

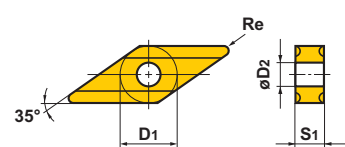
| Shape  | Order Number          | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|--|-----------------------|-------|---------------|-----------------|------|-----|------|---|
|  |                       |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>R/L-1M</b><br>Breaker<br><br>Light Cutting       | <b>TNMG160404R-1M</b> | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>Right hand insert shown.   |
|  | <b>160404L-1M</b>     | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |   |
|  | <b>160408R-1M</b>     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>160408L-1M</b>     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>C</b><br>Breaker<br><br>Light Cutting            | <b>TNMG160404-C</b>   | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                           |
|  | <b>160408-C</b>       | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>220404-C</b>       | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|  | <b>220408-C</b>       | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>SA</b><br>Breaker<br><br>Light Cutting           | <b>TNMG160404-SA</b>  | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                           |
|  | <b>160408-SA</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>160412-SA</b>      | M     | ●             | 9.525           | 4.76 | 1.2 | 3.81 |   |
| <b>SH</b><br>Breaker<br><br>Light Cutting         | <b>TNMG160404-SH</b>  | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                         |
|  | <b>160408-SH</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>160412-SH</b>      | M     | ●             | 9.525           | 4.76 | 1.2 | 3.81 |   |
| <b>SW</b><br>Breaker<br><br>Light Cutting (Wiper) | <b>TNMX160404-SW</b>  | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                         |
|  | <b>160408-SW</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>SY</b><br>Breaker<br><br>Light Cutting         | <b>TNMG160404-SY</b>  | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                         |
|  | <b>160408-SY</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting  | <b>TNMG160404</b>     | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>                         |
|  | <b>160408</b>         | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>160412</b>         | M     | ●             | 9.525           | 4.76 | 1.2 | 3.81 |   |
|  | <b>160416</b>         | M     | ●             | 9.525           | 4.76 | 1.6 | 3.81 |   |
|  | <b>220404</b>         | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|  | <b>220408</b>         | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>R/L-2M</b><br>Breaker<br><br>Medium Cutting    | <b>TNMG160404R-2M</b> | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>Right hand insert shown. |
|  | <b>160404L-2M</b>     | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |   |
|  | <b>160408R-2M</b>     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|  | <b>160408L-2M</b>     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |

# NX3035

## Inserts


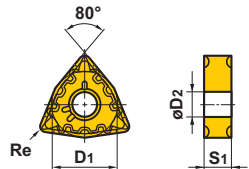

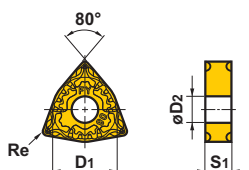

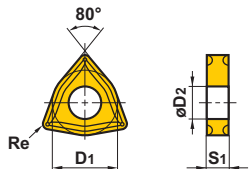

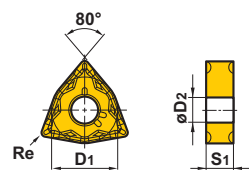

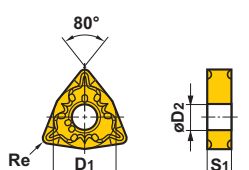

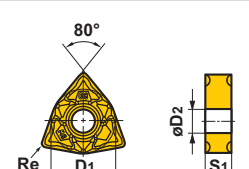

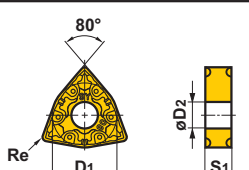

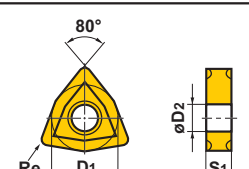
### ● Negative Inserts (With hole)

| Shape   | Order Number  | Class | Stock         | Dimensions (mm) |      |      |      | Geometry  |
|---|---------------|-------|---------------|-----------------|------|------|------|---|
|   |               |       | <i>NX3035</i> | D1              | S1   | Re   | D2   |   |
| <br>R/L Breaker  | TNGG110302R   | G     | ●             | 6.35            | 3.18 | 0.2  | 2.26 | <br>Right hand insert shown. |
|   | 110302L       | G     | ●             | 6.35            | 3.18 | 0.2  | 2.26 |   |
|   | 110304R       | G     | ●             | 6.35            | 3.18 | 0.4  | 2.26 |   |
|   | 110304L       | G     | ●             | 6.35            | 3.18 | 0.4  | 2.26 |   |
|   | 110308R       | G     | ●             | 6.35            | 3.18 | 0.8  | 2.26 |   |
|   | 110308L       | G     | ●             | 6.35            | 3.18 | 0.8  | 2.26 |   |
|   | 160304R       | G     | ●             | 9.525           | 3.18 | 0.4  | 3.81 |   |
|   | 160304L       | G     | ●             | 9.525           | 3.18 | 0.4  | 3.81 |   |
|   | 160308R       | G     | ●             | 9.525           | 3.18 | 0.8  | 3.81 |   |
|   | 160308L       | G     | ●             | 9.525           | 3.18 | 0.8  | 3.81 |   |
|   | 160402R       | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |   |
|   | 160402L       | G     | ●             | 9.525           | 4.76 | 0.2  | 3.81 |   |
|   | 160404R       | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |   |
|   | 160404L       | G     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |   |
|   | 160408R       | G     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |   |
|   | 160408L       | G     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |   |
|   | 160412R       | G     | ●             | 9.525           | 4.76 | 1.2  | 3.81 |   |
|   | 160412L       | G     | ●             | 9.525           | 4.76 | 1.2  | 3.81 |   |
|   | 220404R       | G     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |   |
|   | 220404L       | G     | ●             | 12.7            | 4.76 | 0.4  | 5.16 |   |
| 220408R   | G             | ●     | 12.7          | 4.76            | 0.8  | 5.16 |      |   |
| 220408L   | G             | ●     | 12.7          | 4.76            | 0.8  | 5.16 |      |   |
| Medium Cutting  |               |       |               |                 |      |      |      |   |
| <br>MA Breaker | TNMG160404-MA | M     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |                            |
|   | 160408-MA     | M     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |   |
|   | 160412-MA     | M     | ●             | 9.525           | 4.76 | 1.2  | 3.81 |   |
| Medium Cutting  |               |       |               |                 |      |      |      |   |
| <br>MS Breaker | TNMG160404-MS | M     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |                            |
|   | 160408-MS     | M     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |   |
|   | 160412-MS     | M     | ●             | 9.525           | 4.76 | 1.2  | 3.81 |   |
| Medium Cutting  |               |       |               |                 |      |      |      |   |
| <br>MV Breaker | TNMG160404-MV | M     | ●             | 9.525           | 4.76 | 0.4  | 3.81 |                            |
|   | 160408-MV     | M     | ●             | 9.525           | 4.76 | 0.8  | 3.81 |   |
|   | 160412-MV     | M     | ●             | 9.525           | 4.76 | 1.2  | 3.81 |   |
| Medium Cutting  |               |       |               |                 |      |      |      |   |


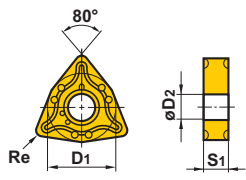

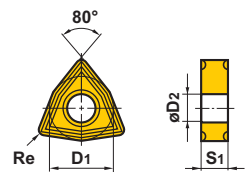

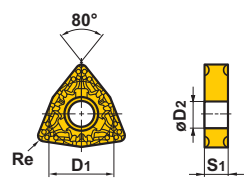
| Shape   | Order Number  | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|---|---------------|-------|---------------|-----------------|------|-----|------|---|
|   |               |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>FH</b><br>Breaker<br><br><br>Finish Cutting               | VNMG160404-FH | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |                                |
|   | 160408-FH     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>R/L-F</b><br>Breaker<br><br><br>Finish Cutting            | VNGG160402R-F | G     | ●             | 9.525           | 4.76 | 0.2 | 3.81 | <br>Right hand insert shown.   |
|   | 160402L-F     | G     | ●             | 9.525           | 4.76 | 0.2 | 3.81 |   |
|   | 160404R-F     | G     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |   |
|   | 160404L-F     | G     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |   |
| <b>SH</b><br>Breaker<br><br><br>Light Cutting                | VNMG160404-SH | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |                                |
|   | 160408-SH     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>Standard</b><br>Breaker<br><br><br>Medium Cutting       | VNMG160404    | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |                              |
|   | 160408        | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
|   | 160412        | M     | ●             | 9.525           | 4.76 | 1.2 | 3.81 |   |
| <b>MS</b><br>Breaker<br><br><br>Medium Cutting             | VNMG160404-MS | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |                              |
|   | 160408-MS     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>MV</b><br>Breaker<br><br><br>Medium Cutting             | VNMG160404-MV | M     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |                              |
|   | 160408-MV     | M     | ●             | 9.525           | 4.76 | 0.8 | 3.81 |   |
| <b>NEW</b> <b>R/L</b><br>Breaker<br><br><br>Medium Cutting | VNGG160404R   | G     | ●             | 9.525           | 4.76 | 0.4 | 3.81 | <br>Right hand insert shown. |
|   | 160404L       | G     | ●             | 9.525           | 4.76 | 0.4 | 3.81 |   |

## Inserts


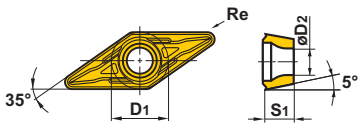

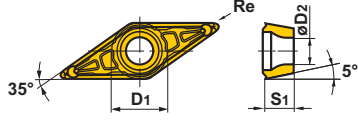

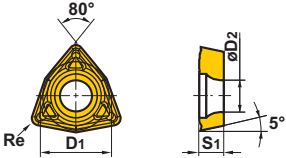
### ● Negative Inserts (With hole)

| Shape  | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|--|----------------------|-------|---------------|-----------------|------|-----|------|---|
|  |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>FH</b><br>Breaker<br><br>Finish Cutting          | <b>WNMG080404-FH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>080408-FH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>FY</b><br>Breaker<br><br>Finish Cutting          | <b>WNMG080404-FY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>080408-FY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>C</b><br>Breaker<br><br>Light Cutting            | <b>WNMG080404-C</b>  | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |    |
|  | <b>080408-C</b>      | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>SA</b><br>Breaker<br><br>Light Cutting         | <b>WNMG080404-SA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>080408-SA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>080412-SA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SH</b><br>Breaker<br><br>Light Cutting         | <b>WNMG080404-SH</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>080408-SH</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>080412-SH</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SW</b><br>Breaker<br><br>Light Cutting (Wiper) | <b>WNMG080404-SW</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>080408-SW</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>080412-SW</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |
| <b>SY</b><br>Breaker<br><br>Light Cutting         | <b>WNMG080404-SY</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>080408-SY</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting  | <b>WNMG080404</b>    | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|  | <b>080408</b>        | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |   |
|  | <b>080412</b>        | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |   |

### ● Negative Inserts (With hole)

| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |      | Geometry   |
|---|----------------------|-------|---------------|-----------------|------|-----|------|--|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |  |
| <b>MA</b><br>Breaker<br><br>Medium Cutting | <b>WNMG080404-MA</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|   | <b>080408-MA</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |  |
|   | <b>080412-MA</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |  |
| <b>MS</b><br>Breaker<br><br>Medium Cutting | <b>WNMG080404-MS</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |   |
|   | <b>080408-MS</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |  |
|   | <b>080412-MS</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |  |
| <b>MV</b><br>Breaker<br><br>Medium Cutting | <b>WNMG080404-MV</b> | M     | ●             | 12.7            | 4.76 | 0.4 | 5.16 |  |
|   | <b>080408-MV</b>     | M     | ●             | 12.7            | 4.76 | 0.8 | 5.16 |  |
|   | <b>080412-MV</b>     | M     | ●             | 12.7            | 4.76 | 1.2 | 5.16 |  |

### ● 5° Positive Inserts (With hole)


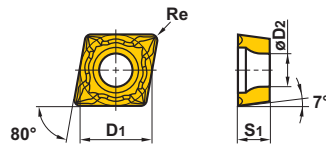

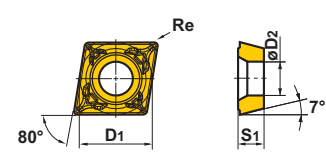

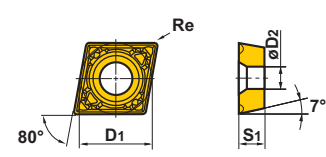

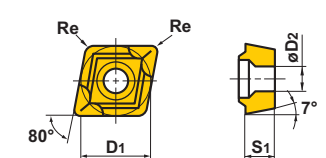

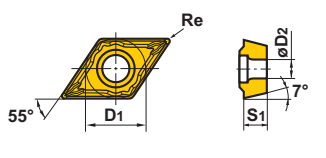

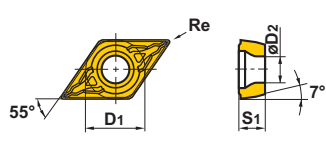

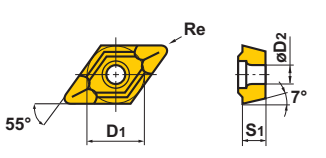
| Shape   | Order Number          | Class | Stock         | Dimensions (mm) |      |     |      | Geometry  |
|---|-----------------------|-------|---------------|-----------------|------|-----|------|---|
|   |                       |       | <i>NX3035</i> | D1              | S1   | Re  | D2   |   |
| <b>SV</b><br>Breaker<br><br>Light Cutting      | <b>VBMT110304-SV</b>  | M     | ●             | 6.35            | 3.18 | 0.4 | 2.85 |  |
|   | <b>110308-SV</b>      | M     | ●             | 6.35            | 3.18 | 0.8 | 2.85 |   |
|   | <b>160404-SV</b>      | M     | ●             | 9.525           | 4.76 | 0.4 | 4.43 |   |
|   | <b>160408-SV</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 4.43 |   |
| <b>MV</b><br>Breaker<br><br>Medium Cutting     | <b>VBMT110304-MV</b>  | M     | ●             | 6.35            | 3.18 | 0.4 | 2.85 |  |
|   | <b>110308-MV</b>      | M     | ●             | 6.35            | 3.18 | 0.8 | 2.85 |   |
|   | <b>160404-MV</b>      | M     | ●             | 9.525           | 4.76 | 0.4 | 4.43 |   |
|   | <b>160408-MV</b>      | M     | ●             | 9.525           | 4.76 | 0.8 | 4.43 |   |
| <b>R/L-MV</b><br>Breaker<br><br>Medium Cutting | <b>WBMTL30202R-MV</b> | M     | ●             | 4.76            | 2.38 | 0.2 | 2.3  |  |
|   | <b>L30202L-MV</b>     | M     | ●             | 4.76            | 2.38 | 0.2 | 2.3  |   |
|   | <b>L30204R-MV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.3  |   |
|   | <b>L30204L-MV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.3  |   |

Right hand insert shown.


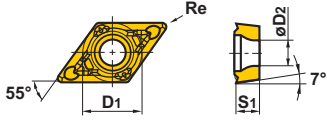

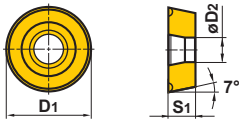



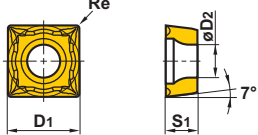

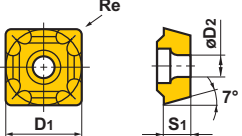

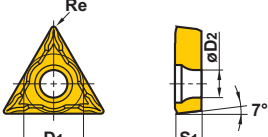

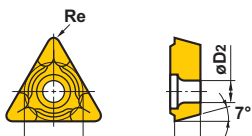
# NX3035

## Inserts

### ● 7° Positive Inserts (With hole)

| Shape   | Order Number  | Class | Stock  | Dimensions (mm) |      |     |     | Geometry  |
|---|---------------|-------|--------|-----------------|------|-----|-----|---|
|   |               |       | NX3035 | D1              | S1   | Re  | D2  |   |
| <b>FV</b><br>Breaker<br>         | CCMT060202-FV | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |    |
|   | 060204-FV     | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | 09T302-FV     | M     | ●      | 9.525           | 3.97 | 0.2 | 4.4 |   |
|   | 09T304-FV     | M     | ●      | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | 09T308-FV     | M     | ●      | 9.525           | 3.97 | 0.8 | 4.4 |   |
| Finish Cutting  |               |       |        |                 |      |     |     |   |
| <b>SV</b><br>Breaker<br>         | CCMH060202-SV | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |    |
|   | 060204-SV     | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
| Light Cutting   |               |       |        |                 |      |     |     |   |
| <b>MV</b><br>Breaker<br>         | CCMH060202-MV | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |    |
|   | 060204-MV     | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
| Medium Cutting  |               |       |        |                 |      |     |     |   |
| <b>Standard</b><br>Breaker<br> | CCMT060202    | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |  |
|   | 060204        | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | 080304        | M     | ●      | 7.94            | 3.18 | 0.4 | 3.4 |   |
|   | 09T302        | M     | ●      | 9.525           | 3.97 | 0.2 | 4.4 |   |
|   | 09T304        | M     | ●      | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | 09T308        | M     | ●      | 9.525           | 3.97 | 0.8 | 4.4 |   |
|   | 120404        | M     | ●      | 12.7            | 4.76 | 0.4 | 5.5 |   |
|   | 120408        | M     | ●      | 12.7            | 4.76 | 0.8 | 5.5 |   |
| 120412  | M             | ●     | 12.7   | 4.76            | 1.2  | 5.5 |     |   |
| Medium Cutting  |               |       |        |                 |      |     |     |   |
| <b>FV</b><br>Breaker<br>       | DCMT070202-FV | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |  |
|   | 070204-FV     | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | 11T304-FV     | M     | ●      | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | 11T308-FV     | M     | ●      | 9.525           | 3.97 | 0.8 | 4.4 |   |
| Finish Cutting  |               |       |        |                 |      |     |     |   |
| <b>SV</b><br>Breaker<br>       | DCMT070202-SV | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |  |
|   | 070204-SV     | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | 070208-SV     | M     | ●      | 6.35            | 2.38 | 0.8 | 2.8 |   |
|   | 11T302-SV     | M     | ●      | 9.525           | 3.97 | 0.2 | 4.4 |   |
|   | 11T304-SV     | M     | ●      | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | 11T308-SV     | M     | ●      | 9.525           | 3.97 | 0.8 | 4.4 |   |
| Light Cutting   |               |       |        |                 |      |     |     |   |
| <b>Standard</b><br>Breaker<br> | DCMT070202    | M     | ●      | 6.35            | 2.38 | 0.2 | 2.8 |  |
|   | 070204        | M     | ●      | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | 070208        | M     | ●      | 6.35            | 2.38 | 0.8 | 2.8 |   |
|   | 11T302        | M     | ●      | 9.525           | 3.97 | 0.2 | 4.4 |   |
|   | 11T304        | M     | ●      | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | 11T308        | M     | ●      | 9.525           | 3.97 | 0.8 | 4.4 |   |
|   | 150404        | M     | ●      | 12.7            | 4.76 | 0.4 | 5.5 |   |
| 150408  | M             | ●     | 12.7   | 4.76            | 0.8  | 5.5 |     |   |
| Medium Cutting  |               |       |        |                 |      |     |     |   |


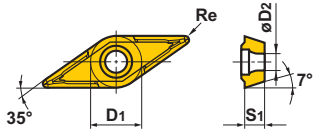

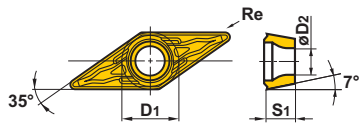

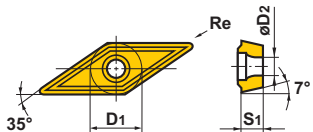

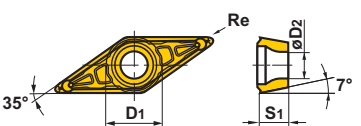

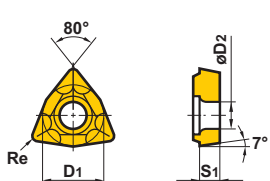


| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |     | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|-----|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2  |   |
| <b>MV</b><br>Breaker<br><br>Medium Cutting         | <b>DCMT070202-MV</b> | M     | ●             | 6.35            | 2.38 | 0.2 | 2.8 |    |
|   | <b>070204-MV</b>     | M     | ●             | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | <b>070208-MV</b>     | M     | ●             | 6.35            | 2.38 | 0.8 | 2.8 |   |
|   | <b>11T302-MV</b>     | M     | ●             | 9.525           | 3.97 | 0.2 | 4.4 |   |
|   | <b>11T304-MV</b>     | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | <b>11T308-MV</b>     | M     | ●             | 9.525           | 3.97 | 0.8 | 4.4 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting   | <b>RCMT0602M0</b>    | M     | ●             | 6               | 2.38 | —   | 2.8 |    |
|   | <b>0803M0</b>        | M     | ●             | 8               | 3.18 | —   | 3.4 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting   | <b>RCMX1003M0</b>    | M     | ●             | 10              | 3.18 | —   | 3.6 |    |
|   | <b>1204M0</b>        | M     | ●             | 12              | 4.76 | —   | 4.2 |   |
| <b>FV</b><br>Breaker<br><br>Finish Cutting       | <b>SCMT09T304-FV</b> | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |  |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting | <b>SCMT09T304</b>    | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |  |
|   | <b>09T308</b>        | M     | ●             | 9.525           | 3.97 | 0.8 | 4.4 |   |
|   | <b>120404</b>        | M     | ●             | 12.7            | 4.76 | 0.4 | 5.5 |   |
|   | <b>120408</b>        | M     | ●             | 12.7            | 4.76 | 0.8 | 5.5 |   |
| <b>FV</b><br>Breaker<br><br>Finish Cutting       | <b>TCMT110204-FV</b> | M     | ●             | 6.35            | 2.38 | 0.4 | 2.8 |  |
|   | <b>16T304-FV</b>     | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting | <b>TCMT080204</b>    | M     | ●             | 4.76            | 2.38 | 0.4 | 2.3 |  |
|   | <b>090204</b>        | M     | ●             | 5.56            | 2.38 | 0.4 | 2.5 |   |
|   | <b>110202</b>        | M     | ●             | 6.35            | 2.38 | 0.2 | 2.8 |   |
|   | <b>110204</b>        | M     | ●             | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | <b>130302</b>        | M     | ●             | 7.94            | 3.18 | 0.2 | 3.4 |   |
|   | <b>130304</b>        | M     | ●             | 7.94            | 3.18 | 0.4 | 3.4 |   |
|   | <b>16T304</b>        | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |   |
| <b>16T308</b>   | M                    | ●     | 9.525         | 3.97            | 0.8  | 4.4 |     |   |


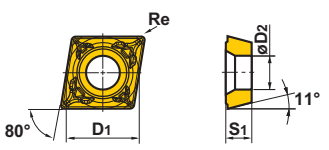

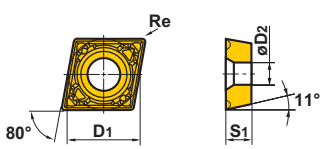
# NX3035

## Inserts


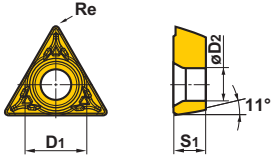

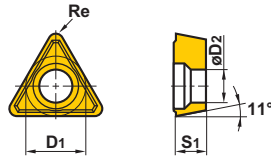

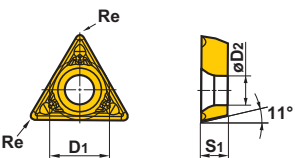

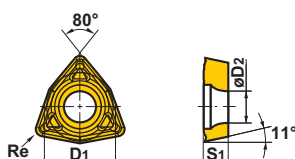
### ● 7° Positive Inserts (With hole)

| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |     | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|-----|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2  |   |
| <b>FV</b><br>Breaker<br><br>Finish Cutting         | <b>VCMT160404-FV</b> | M     | ●             | 9.525           | 4.76 | 0.4 | 4.4 |    |
|   | <b>160408-FV</b>     | M     | ●             | 9.525           | 4.76 | 0.8 | 4.4 |   |
| <b>SV</b><br>Breaker<br><br>Light Cutting          | <b>VCMT080202-SV</b> | M     | ●             | 4.76            | 2.38 | 0.2 | 2.9 |    |
|   | <b>080204-SV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.9 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting   | <b>VCMT110304</b>    | M     | ●             | 6.35            | 3.18 | 0.4 | 2.8 |    |
|   | <b>160404</b>        | M     | ●             | 9.525           | 4.76 | 0.4 | 4.4 |   |
|   | <b>160408</b>        | M     | ●             | 9.525           | 4.76 | 0.8 | 4.4 |   |
|   | <b>160412</b>        | M     | ●             | 9.525           | 4.76 | 1.2 | 4.4 |   |
| <b>MV</b><br>Breaker<br><br>Medium Cutting       | <b>VCMT080202-MV</b> | M     | ●             | 4.76            | 2.38 | 0.2 | 2.9 |  |
|   | <b>080204-MV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.9 |   |
| <b>Standard</b><br>Breaker<br><br>Medium Cutting | <b>WCMT020102</b>    | M     | ●             | 3.97            | 1.59 | 0.2 | 2.3 |  |
|   | <b>020104</b>        | M     | ●             | 3.97            | 1.59 | 0.4 | 2.3 |   |
|   | <b>L30202</b>        | M     | ●             | 4.76            | 2.38 | 0.2 | 2.3 |   |
|   | <b>L30204</b>        | M     | ●             | 4.76            | 2.38 | 0.4 | 2.3 |   |
|   | <b>040202</b>        | M     | ●             | 6.35            | 2.38 | 0.2 | 2.8 |   |
|   | <b>040204</b>        | M     | ●             | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | <b>06T304</b>        | M     | ●             | 9.525           | 3.97 | 0.4 | 4.4 |   |
|   | <b>06T308</b>        | M     | ●             | 9.525           | 3.97 | 0.8 | 4.4 |   |


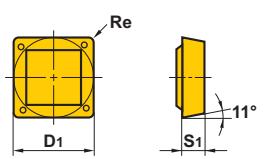

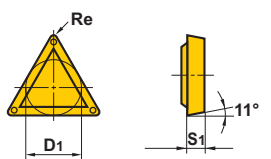
### ● 11° Positive Inserts (With hole)

| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |     | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|-----|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2  |   |
| <b>SV</b><br>Breaker<br><br>Light Cutting  | <b>CPMH080202-SV</b> | M     | ●             | 7.94            | 2.38 | 0.2 | 3.5 |  |
|   | <b>080204-SV</b>     | M     | ●             | 7.94            | 2.38 | 0.4 | 3.5 |   |
|   | <b>090302-SV</b>     | M     | ●             | 9.525           | 3.18 | 0.2 | 4.5 |   |
|   | <b>090304-SV</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | 4.5 |   |
|   | <b>090308-SV</b>     | M     | ●             | 9.525           | 3.18 | 0.8 | 4.5 |   |
| <b>MV</b><br>Breaker<br><br>Medium Cutting | <b>CPMH080204-MV</b> | M     | ●             | 7.94            | 2.38 | 0.4 | 3.5 |  |
|   | <b>080208-MV</b>     | M     | ●             | 7.94            | 2.38 | 0.8 | 3.5 |   |
|   | <b>090304-MV</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | 4.5 |   |
|   | <b>090308-MV</b>     | M     | ●             | 9.525           | 3.18 | 0.8 | 4.5 |   |

## ● 11° Positive Inserts (With hole)

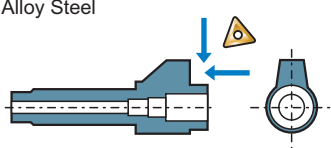
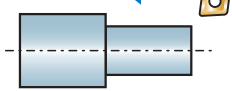
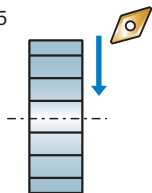
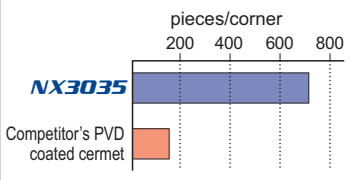
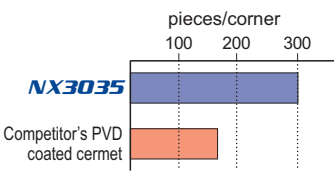
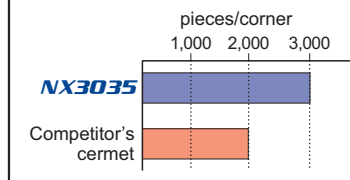
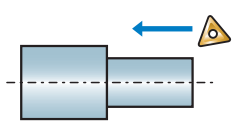
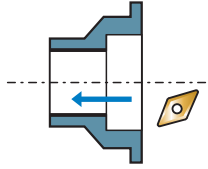
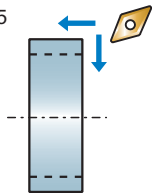
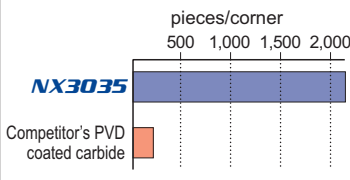
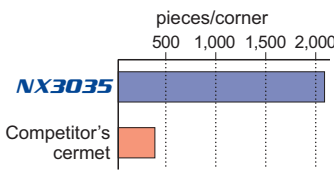
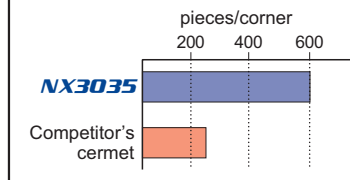
| Shape   | Order Number         | Class | Stock         | Dimensions (mm) |      |     |     | Geometry  |
|---|----------------------|-------|---------------|-----------------|------|-----|-----|---|
|   |                      |       | <i>NX3035</i> | D1              | S1   | Re  | D2  |   |
| <b>SV</b><br>Breaker<br><br><br><br>Light Cutting        | <b>TPMH080202-SV</b> | M     | ●             | 4.76            | 2.38 | 0.2 | 2.4 |    |
|   | <b>080204-SV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.4 |   |
|   | <b>090202-SV</b>     | M     | ●             | 5.56            | 2.38 | 0.2 | 2.9 |   |
|   | <b>090204-SV</b>     | M     | ●             | 5.56            | 2.38 | 0.4 | 2.9 |   |
|   | <b>110302-SV</b>     | M     | ●             | 6.35            | 3.18 | 0.2 | 3.4 |   |
|   | <b>110304-SV</b>     | M     | ●             | 6.35            | 3.18 | 0.4 | 3.4 |   |
|   | <b>110308-SV</b>     | M     | ●             | 6.35            | 3.18 | 0.8 | 3.4 |   |
|   | <b>160302-SV</b>     | M     | ●             | 9.525           | 3.18 | 0.2 | 4.4 |   |
|   | <b>160304-SV</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | 4.4 |   |
| <b>160308-SV</b>  | M                    | ●     | 9.525         | 3.18            | 0.8  | 4.4 |     |   |
| <b>Standard</b><br>Breaker<br><br><br><br>Medium Cutting | <b>TPMX110304</b>    | M     | ●             | 6.35            | 3.18 | 0.4 | 3.5 |    |
|   | <b>110308</b>        | M     | ●             | 6.35            | 3.18 | 0.8 | 3.5 |   |
| <b>MV</b><br>Breaker<br><br><br><br>Medium Cutting     | <b>TPMH080202-MV</b> | M     | ●             | 4.76            | 2.38 | 0.2 | 2.4 |  |
|   | <b>080204-MV</b>     | M     | ●             | 4.76            | 2.38 | 0.4 | 2.4 |   |
|   | <b>090202-MV</b>     | M     | ●             | 5.56            | 2.38 | 0.2 | 2.9 |   |
|   | <b>090204-MV</b>     | M     | ●             | 5.56            | 2.38 | 0.4 | 2.9 |   |
|   | <b>090208-MV</b>     | M     | ●             | 5.56            | 2.38 | 0.8 | 2.9 |   |
|   | <b>110302-MV</b>     | M     | ●             | 6.35            | 3.18 | 0.2 | 3.4 |   |
|   | <b>110304-MV</b>     | M     | ●             | 6.35            | 3.18 | 0.4 | 3.4 |   |
|   | <b>110308-MV</b>     | M     | ●             | 6.35            | 3.18 | 0.8 | 3.4 |   |
|   | <b>160304-MV</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | 4.4 |   |
| <b>160308-MV</b>  | M                    | ●     | 9.525         | 3.18            | 0.8  | 4.4 |     |   |
| <b>MV</b><br>Breaker<br><br><br><br>Medium Cutting     | <b>WPMT040202-MV</b> | M     | ●             | 6.35            | 2.38 | 0.2 | 2.8 |  |
|   | <b>040204-MV</b>     | M     | ●             | 6.35            | 2.38 | 0.4 | 2.8 |   |
|   | <b>060304-MV</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | 4.4 |   |
|   | <b>060308-MV</b>     | M     | ●             | 9.525           | 3.18 | 0.8 | 4.4 |   |

## ● 11° Positive Inserts (Without hole)

| Shape   | Order Number      | Class | Stock         | Dimensions (mm) |      |     |    | Geometry  |
|---|-------------------|-------|---------------|-----------------|------|-----|----|---|
|   |                   |       | <i>NX3035</i> | D1              | S1   | Re  | D2 |   |
| <b>Standard</b><br>Breaker<br><br><br><br>Light to<br>Medium Cutting | <b>SPMR090304</b> | M     | ●             | 9.525           | 3.18 | 0.4 | —  |  |
|   | <b>090308</b>     | M     | ●             | 9.525           | 3.18 | 0.8 | —  |   |
|   | <b>120304</b>     | M     | ●             | 12.7            | 3.18 | 0.4 | —  |   |
|   | <b>120308</b>     | M     | ●             | 12.7            | 3.18 | 0.8 | —  |   |
| <b>Standard</b><br>Breaker<br><br><br><br>Light to<br>Medium Cutting | <b>TPMR090202</b> | M     | ●             | 5.56            | 2.38 | 0.2 | —  |  |
|   | <b>090204</b>     | M     | ●             | 5.56            | 2.38 | 0.4 | —  |   |
|   | <b>090208</b>     | M     | ●             | 5.56            | 2.38 | 0.8 | —  |   |
|   | <b>110302</b>     | M     | ●             | 6.35            | 3.18 | 0.2 | —  |   |
|   | <b>110304</b>     | M     | ●             | 6.35            | 3.18 | 0.4 | —  |   |
|   | <b>110308</b>     | M     | ●             | 6.35            | 3.18 | 0.8 | —  |   |
|   | <b>160304</b>     | M     | ●             | 9.525           | 3.18 | 0.4 | —  |   |
|   | <b>160308</b>     | M     | ●             | 9.525           | 3.18 | 0.8 | —  |   |
| <b>160312</b>   | M                 | ●     | 9.525         | 3.18            | 1.2  | —   |    |   |

# NX3035

## Application Examples

| Insert             |                       | TNMG160404-FH   | CNMG120408-MV   | VNMG160404   |
|--------------------|-----------------------|---|---|--|
| Workpiece          |                       | Alloy Steel<br>  | JIS SS400<br>   | JIS SCM415<br>  |
| Cutting Conditions | Cutting Speed (m/min) | 150   | 120   | 250  |
|                    | Feed (mm/rev)         | 0.15  | 0.15  | 0.2  |
|                    | Depth of Cut (mm)     | 0.15  | 2.5   | 0.2  |
| Coolant            |                       | Wet cutting   | Wet cutting   | Wet cutting  |
| Results            |                       |  <p>NX3035 achieved 4 times longer tool life without any abnormal wear.</p>    |  <p>NX3035 achieved 1.7 times longer tool life without any abnormal wear.</p> |  <p>NX3035 achieved 1.5 times longer tool life without any abnormal wear.</p> |
| Insert             |                       | TNMG160404-SY   | DNMG150404-FH   | DNMG150404-SH  |
| Workpiece          |                       | Carbon Steel<br>   | JIS S48C<br>  | JIS SCM415<br>   |
| Cutting Conditions | Cutting Speed (m/min) | 100   | 150   | 200  |
|                    | Feed (mm/rev)         | 0.2   | 0.2   | 0.25   |
|                    | Depth of Cut (mm)     | 0.3   | 0.2   | 0.3  |
| Coolant            |                       | Wet cutting   | Wet cutting   | Wet cutting  |
| Results            |                       |  <p>NX3035 achieved 15 times longer tool life without any abnormal wear.</p> |  <p>NX3035 achieved 5 times longer tool life without any abnormal wear.</p> |  <p>NX3035 achieved 2 times longer tool life without any abnormal wear.</p> |

### For Your Safety

- Don't handle inserts and chips without gloves.
- Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage.
- Please use safety covers and wear safety glasses.
- When using compounded cutting oils, please take fire precautions.
- When attaching inserts or spare parts, please use only the correct wrench or spanner.

## MITSUBISHI MATERIALS CORPORATION



The Scope of the Registration:  
Design, Development, and  
Production of Cemented  
Carbide Tools and Carbide  
Blanks



The Scope of the Registration:  
Design, Development, and  
Production of Cutting Tools,  
Wear-resistant Tools, Rock  
Drilling Tools, Cemented  
Carbide Blanks and Coated  
Products



JAB  
EMC Accreditation  
REC3

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Mitsubishi Carbide Home page : <http://www.mitsubishicarbide.com>  
(Tools specifications subject to change without notice.)