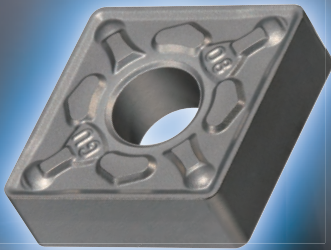


# AC8015P/AC8025P/AC8035P

AC8015P / AC8025P / AC8035P



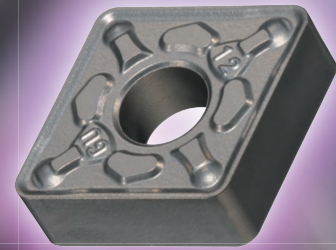
AC8015P

HIGH SPEED



AC8025P

GENERAL PURPOSE



AC8035P

INTERRUPTED

## 絶対的な安定加工を実現する 鋼旋削の新材種シリーズ

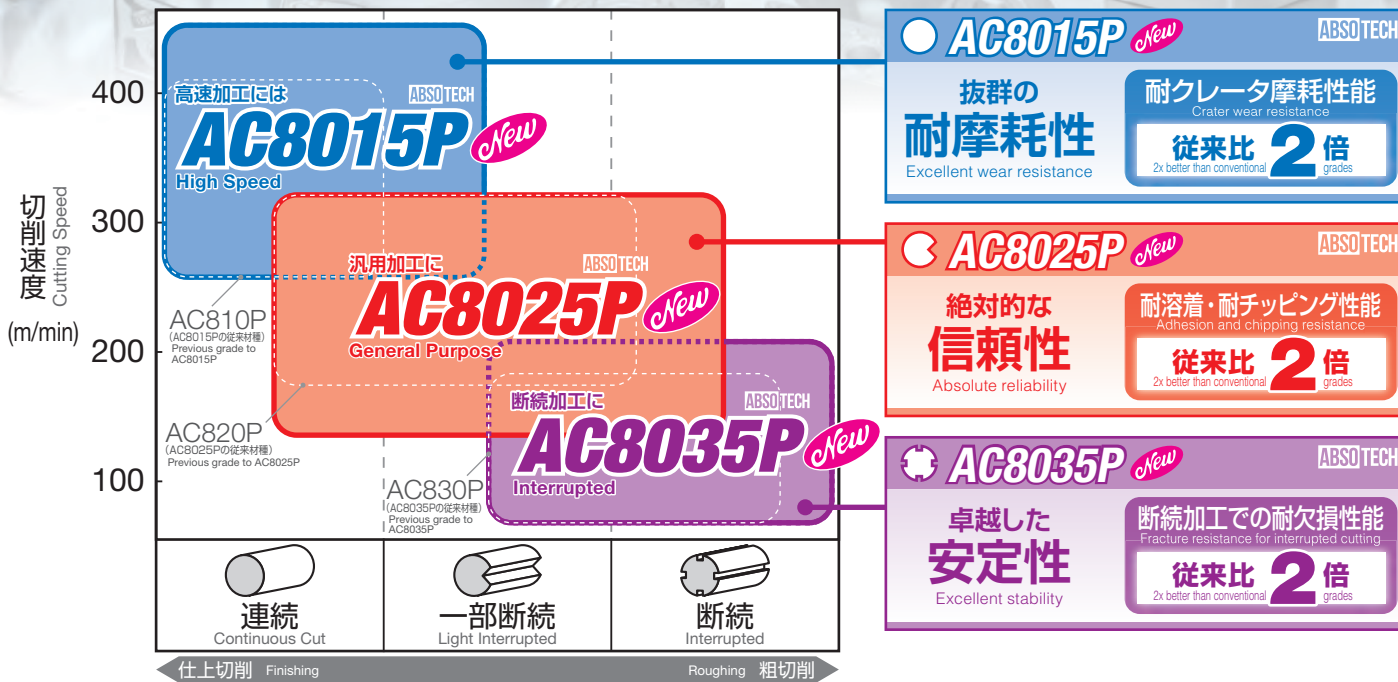
New grade for steel turning, creating "ABSOLUTELY STABLE CUTTING"





# AC8015P/A8025P/AC8035P

## 適用領域 Application Range



**AC8015P New** ABSOTECH

抜群の **耐摩耗性**  
Excellent wear resistance

耐クレータ摩耗性能  
Crater wear resistance  
従来比 **2倍**  
2x better than conventional grades

**AC8025P New** ABSOTECH

絶対的な **信頼性**  
Absolute reliability

耐溶着・耐チッピング性能  
Adhesion and chipping resistance  
従来比 **2倍**  
2x better than conventional grades

**AC8035P New** ABSOTECH

卓越した **安定性**  
Excellent stability

断続加工での耐欠損性能  
Fracture resistance for interrupted cutting  
従来比 **2倍**  
2x better than conventional grades

## 切削性能 Cutting Performance

高速加工 High Speed **AC8015P**

**ABSOTECH** Absotech Platinum

結晶制御アルミナ層  
Crystal-controlled alumina layer

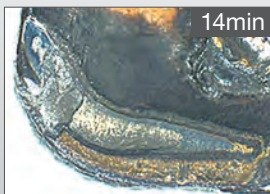
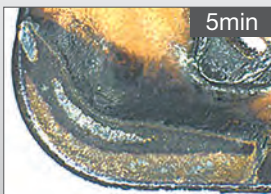
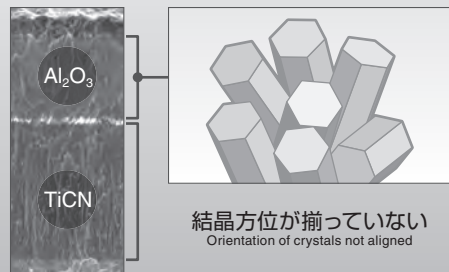
抜群の耐摩耗性  
Excellent wear resistance



アルミナ層の結晶配向性の制御により  
切りくず擦過によるクレータ損傷を抑制

Reduced crater damage due to chip abrasion through optimized crystal orientation in the alumina layer

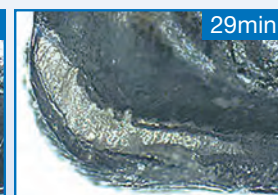
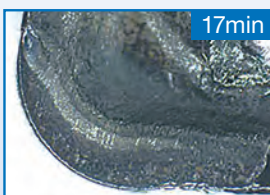
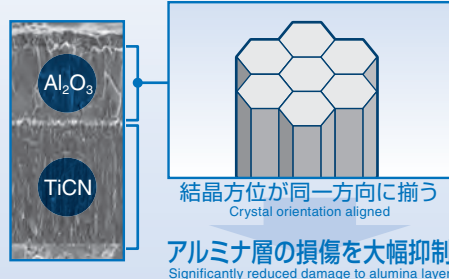
### 従来品 Conventional



アルミナ層剥離でクレータ損傷進行  
Progressive crater damage due to peeling of alumina layer

被削材 Work Material : SUJ2 (外径連続 External Continuous) チップ Insert : CNMG120408N-GU  
 切削条件 Cutting Conditions :  $v_c=300\text{m/min}$   $f=0.3\text{mm/rev}$   $a_p=1.5\text{mm}$  Wet

### AC8015P



切りくず擦過によるクレータ損傷を抑制  
Reduced crater damage due to chip abrasion

耐クレータ摩耗性能 **2倍**  
2x better crater wear resistance

## 汎用加工 AC8025P

General Purpose

**ABSOTECH** Absotech Platinum

表面平滑処理  
Surface-smoothing treatment

絶対的な信頼性  
Absolute reliability



### 平滑表面処理により溶着・チッピングを大幅に抑制

Improved tool surface smoothness and significantly reduced adhesions through special surface treatment

**従来品 Conventional**

SEM Image  
Ra0.4µm

2min

溶着発生  
Adhesions

70min

欠損  
Breakage

×

継続使用不可  
Unable to continue

被削材 Work Material : SCM415 (端面 Face) チップ Insert : CNMG120408N-GU  
 切削条件 Cutting Conditions :  $v_c=100-300\text{m/min}$   $f=0.3\text{mm/rev}$   $a_p=1.5\text{mm}$  Wet

**AC8025P**

SEM Image  
Ra0.04µm

2min

正常摩耗  
Normal wear

70min

損傷軽微、継続使用可能  
Controlled even wear No end of tool life

120min

極めて平滑な表面で溶着を抑制  
Extremely smooth surface for less adhesions

耐溶着欠損性能 2倍以上  
Double the adhesion and breakage resistance!

## 断続加工 AC8035P

Interrupted

**ABSOTECH** Absotech Platinum

膜中応力制御  
Coating stress control

卓越した安定性  
Excellent stability



### 特殊表面処理によりコーティング膜中の引張残留応力を低減し、欠損を大幅に抑制

Drastically reduced tensile residual stress in coating through special surface treatment

**従来品 Conventional**

膜中引張残留応力 (GPa)  
Tensile residual stress in TiCN (GPa)

| 送り量 f (mm) | 衝撃回数 (回) |
|------------|----------|
| 0.20       | 500      |
| 0.25       | 300      |
| 0.30       | 100      |

継続使用不可  
Unable to continue

被削材 Work Material : SCM435 (外径断続 External Interrupted) チップ Insert : CNMG120408N-GU  
 切削条件 Cutting Conditions :  $v_c=160\text{m/min}$   $f=0.2-0.3\text{mm/rev}$   $a_p=2.0\text{mm}$  Dry

**AC8035P**

引張応力 90%低減  
90% less tensile stress

膜中引張残留応力 (GPa)  
Tensile residual stress in TiCN (GPa)

| 送り量 f (mm) | 衝撃回数 (回) |
|------------|----------|
| 0.20       | 500      |
| 0.25       | 500      |
| 0.30       | 500      |

全コーナー継続可能  
Able to continue for all corners

引張残留応力低減で亀裂進展・欠損を抑制  
Reduced crack growth and breakage through reduced tensile residual stress

耐欠損性能 2倍以上  
Double the fracture resistance!

# 材種・チップブレイカ選択ガイド Grades & Chipbreaker Selection Guide

## ■ シリーズの使い分け Usage of Series

**汎用**  
General Purpose 第一推奨  
1st Recommendation

汎用加工  
General Purpose **AC8025P**

**GU型ブレイカ** GU Type Chipbreaker

第一推奨  
1st Recommendation

|   | 耐摩耗性重視<br>Better Wear Resistance |           | 汎用<br>General Purpose                           | 靱性重視<br>Better Toughness |  |
|---|----------------------------------|-----------|---|--------------------------|--|
| 仕上～低切込み<br>Finish to Small Depth        | <b>FE</b>                        | <b>SE</b> | <b>SU</b>                                       | <b>SX</b>                |  |
| 汎用<br>General Purpose                   | <b>GE</b>                        |           | <b>GU</b> <span style="color: red;">第一推奨</span> | <b>UX</b>                |  |
| 粗～大切込み<br>Rough to Larger Cutting Depth | <b>ME</b>                        |           | <b>MU</b>                                       | <b>MX</b>                |  |



**耐摩耗性重視**  
Better Wear Resistance

高速加工  
High Speed **AC8015P**

|   |           |
|---|-----------|
| 寿命延長したい<br>Longer Tool Life Required    | <b>GU</b> |
| 高能率加工がしたい<br>Better Efficiency Required | <b>GE</b> |

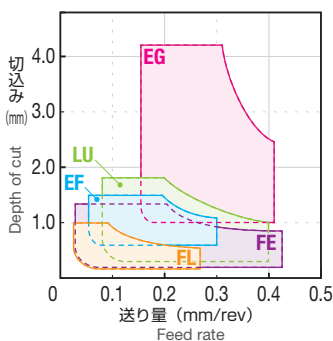
**靱性重視**  
Better Toughness

断続加工  
Interrupted **AC8035P**

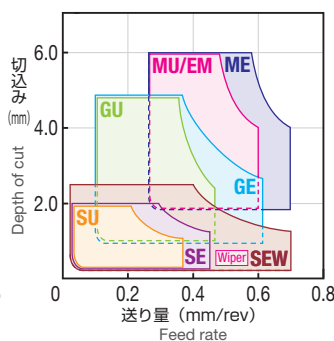
|  |           |
|--|-----------|
| 寿命延長したい<br>Longer Tool Life Required       | <b>GU</b> |
| 安定加工がしたい<br>Machining Consistency Required | <b>UX</b> |

## ■ チップブレイカ適用領域 Chipbreaker Application Range

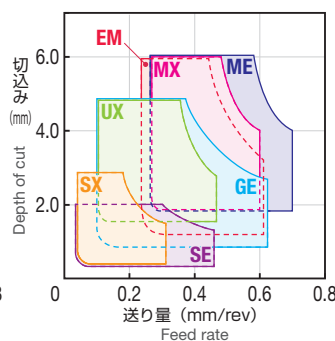
● 切りくず処理重視  
Good chip control



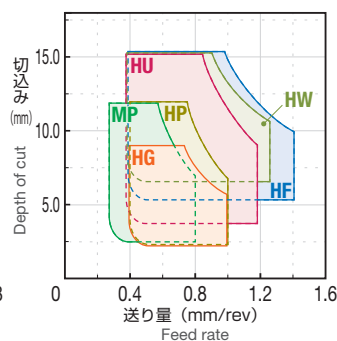
● 連続～弱断続切削  
Continuous ~ Light Interrupted cut



● 弱断続～強断続切削  
Light Interrupted ~ Heavy Interrupted cut



● 粗～重切削  
Rough ~ Heavy cut






# 推奨切削条件

# Recommended Cutting Conditions


## AC8015P

下限値 - 推奨値 - 上限値  
Min. Optimum Max.

| チップ形状・切刃長<br>Insert specification               | ブレーカ<br>Chipbreaker | 軟鋼(SS400など) 低炭素鋼(S10Cなど)<br>低合金鋼(SCM415など) 180HB以下<br><small>Soft steel (e.g., SS400), low carbon steel (e.g., S10C), and low alloy steel (e.g., SCM415) up to 180HB</small> |  |                                     | 高炭素鋼(S45Cなど) 高合金鋼(SCM435など) 180HB以上<br><small>High-carbon steel (e.g., S45C) and high-alloy steel (e.g., SCM435) in excess of 180HB</small> |                               |                                     |
|---|---------------------|--|--|-------------------------------------|---|-------------------------------|-------------------------------------|
|   |                     | 切込み $a_p$ (mm)<br>Depth of Cut   | 送り量 $f$ (mm/rev)<br>Feed Rate  | 切削速度 $v_c$ (m/min)<br>Cutting Speed | 切込み $a_p$ (mm)<br>Depth of Cut  | 送り量 $f$ (mm/rev)<br>Feed Rate | 切削速度 $v_c$ (m/min)<br>Cutting Speed |
|   |                     | CNM□12 TNM□16<br>DNM□15 TNM□22<br>SNM□12 WNM□08  | FE  | 0.1-0.4-1.2                         | 0.10-0.20-0.40  | 290-410-500                   | 0.1-0.4-1.2                         |
| LU・SU・SE  | 0.5-1.5-2.0         |  | 0.10-0.20-0.40   | 170-310-470                         | 0.5-1.5-2.0   | 0.10-0.20-0.40                | 130-260-420                         |
| SEW   | 0.5-1.5-2.5         |  | 0.10-0.40-0.60   | 170-310-470                         | 0.5-1.5-2.5   | 0.10-0.40-0.60                | 130-260-420                         |
| GU・GE・UX  | 0.8-2.2-5.0         |  | 0.10-0.30-0.45   | 170-310-470                         | 0.8-2.2-5.0   | 0.10-0.30-0.45                | 130-260-420                         |
| MU  | 1.8-3.0-6.0         |  | 0.20-0.35-0.60   | 140-280-400                         | 1.8-3.0-6.0   | 0.20-0.35-0.60                | 110-240-350                         |
| ME  | 1.0-3.0-6.0         |  | 0.20-0.45-0.70   | 140-280-400                         | 1.0-3.0-6.0   | 0.20-0.45-0.70                | 110-240-350                         |
| CNM□16 SNM□15                                   | HG                  | 3.0-4.5-8.0  | 0.35-0.50-0.80   | 140-280-400                         | 3.0-4.5-8.0   | 0.35-0.50-0.80                | 110-240-350                         |
|   | GU・GE・UX            | 0.8-3.5-5.0  | 0.15-0.30-0.45   | 140-280-400                         | 0.8-3.5-5.0   | 0.15-0.30-0.45                | 110-240-350                         |
|   | MU                  | 1.8-4.5-6.0  | 0.20-0.40-0.60   | 140-240-330                         | 1.8-4.5-6.0   | 0.20-0.40-0.60                | 110-200-280                         |
|   | ME                  | 1.5-4.5-7.0  | 0.20-0.50-0.70   | 140-240-330                         | 1.5-4.5-7.0   | 0.20-0.50-0.70                | 110-200-280                         |
| CNM□19 SNM□19<br>CNM□25 SNM□25<br>DNM□19 TNM□27 | HG                  | 3.0-5.0-8.0  | 0.35-0.60-0.80   | 120-210-300                         | 3.0-5.0-8.0   | 0.35-0.60-0.80                | 90-170-250                          |
|   | MU                  | 1.8-5.0-6.0  | 0.20-0.40-0.60   | 140-240-330                         | 1.8-5.0-6.0   | 0.20-0.40-0.60                | 110-200-280                         |
|   | ME                  | 2.0-5.0-8.0  | 0.20-0.50-0.70   | 140-240-330                         | 2.0-5.0-8.0   | 0.20-0.50-0.70                | 110-200-280                         |
|   | HG                  | 3.0-6.5-9.0  | 0.35-0.60-0.80   | 120-210-300                         | 3.0-6.5-9.0   | 0.35-0.60-0.80                | 90-170-250                          |


## AC8025P

下限値 - 推奨値 - 上限値  
Min. Optimum Max.

| チップ形状・切刃長<br>Insert specification               | ブレーカ<br>Chipbreaker | 軟鋼(SS400など) 低炭素鋼(S10Cなど)<br>低合金鋼(SCM415など) 180HB以下<br><small>Soft steel (e.g., SS400), low carbon steel (e.g., S10C), and low alloy steel (e.g., SCM415) up to 180HB</small> |   |                                     | 高炭素鋼(S45Cなど) 高合金鋼(SCM435など) 180HB以上<br><small>High-carbon steel (e.g., S45C) and high-alloy steel (e.g., SCM435) in excess of 180HB</small> |                               |                                     |
|---|---------------------|--|---|-------------------------------------|---|-------------------------------|-------------------------------------|
|   |                     | 切込み $a_p$ (mm)<br>Depth of Cut   | 送り量 $f$ (mm/rev)<br>Feed Rate   | 切削速度 $v_c$ (m/min)<br>Cutting Speed | 切込み $a_p$ (mm)<br>Depth of Cut  | 送り量 $f$ (mm/rev)<br>Feed Rate | 切削速度 $v_c$ (m/min)<br>Cutting Speed |
|   |                     | CNM□12 TNM□16<br>DNM□15 TNM□22<br>SNM□12 WNM□08  | FE  | 0.1-0.4-1.2                         | 0.10-0.25-0.45  | 150-250-350                   | 0.1-0.4-1.2                         |
| LU・SU・SE  | 0.5-1.5-2.0         |  | 0.10-0.20-0.40  | 150-250-350                         | 0.5-1.5-2.0   | 0.10-0.20-0.40                | 120-210-300                         |
| SEW   | 0.5-1.5-2.5         |  | 0.10-0.40-0.60  | 150-250-350                         | 0.5-1.5-2.5   | 0.10-0.40-0.60                | 120-210-300                         |
| GU・GE・UX  | 0.8-2.2-5.0         |  | 0.10-0.30-0.45  | 150-230-300                         | 0.8-2.2-5.0   | 0.10-0.30-0.45                | 100-180-270                         |
| MU  | 1.8-3.0-6.0         |  | 0.20-0.35-0.60  | 130-200-280                         | 1.8-3.0-6.0   | 0.20-0.35-0.60                | 80-150-230                          |
| ME  | 1.0-3.0-6.0         |  | 0.20-0.45-0.70  | 130-200-280                         | 1.0-3.0-6.0   | 0.20-0.45-0.70                | 80-150-230                          |
| CNM□16 SNM□15                                   | HG                  | 3.0-4.5-8.0  | 0.35-0.50-0.80  | 100-180-260                         | 3.0-4.5-8.0   | 0.35-0.50-0.80                | 60-130-200                          |
|   | GU・GE・UX            | 0.8-3.5-5.0  | 0.15-0.30-0.45  | 130-200-280                         | 0.8-3.5-5.0   | 0.15-0.30-0.45                | 100-160-230                         |
|   | MU                  | 1.8-4.5-6.0  | 0.20-0.40-0.60  | 100-180-260                         | 1.8-4.5-6.0   | 0.20-0.40-0.60                | 80-140-210                          |
|   | ME                  | 1.5-4.5-7.0  | 0.20-0.50-0.70  | 100-180-260                         | 1.5-4.5-7.0   | 0.20-0.50-0.70                | 80-140-210                          |
| CNM□19 SNM□19<br>CNM□25 SNM□25<br>DNM□19 TNM□27 | HG                  | 3.0-5.0-8.0  | 0.35-0.60-0.80  | 80-160-240                          | 3.0-5.0-8.0   | 0.35-0.60-0.80                | 70-120-180                          |
|   | MU                  | 1.8-5.0-6.0  | 0.20-0.40-0.60  | 100-180-260                         | 1.8-5.0-6.0   | 0.20-0.40-0.60                | 80-140-210                          |
|   | ME                  | 2.0-5.0-8.0  | 0.20-0.50-0.70  | 100-180-260                         | 2.0-5.0-8.0   | 0.20-0.50-0.70                | 80-140-210                          |
|   | HG                  | 3.0-6.5-9.0  | 0.35-0.60-0.80  | 80-160-240                          | 3.0-6.5-9.0   | 0.35-0.60-0.80                | 70-120-180                          |
|   | HF                  | 4.5-8.0-13.5   | 0.45-0.80-1.10  | 135-170-220                         | 4.5-8.0-13.5  | 0.45-0.80-1.15                | 105-140-190                         |

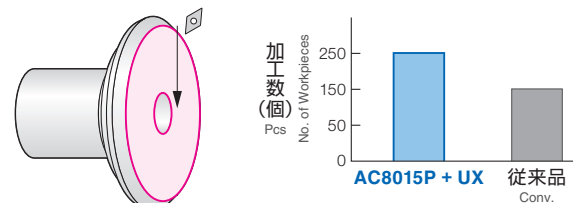
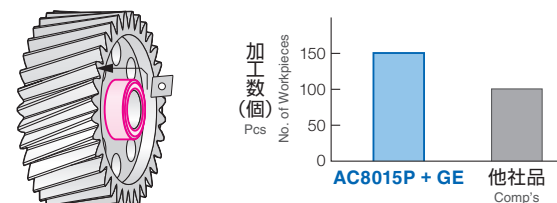
## AC8035P

下限値 - 推奨値 - 上限値  
Min. Optimum Max.

| チップ形状・切刃長<br>Insert specification               | ブレーカ<br>Chipbreaker | 軟鋼(SS400など) 低炭素鋼(S10Cなど)<br>低合金鋼(SCM415など) 180HB以下<br><small>Soft steel (e.g., SS400), low carbon steel (e.g., S10C), and low alloy steel (e.g., SCM415) up to 180HB</small> |  |                                     | 高炭素鋼(S45Cなど) 高合金鋼(SCM435など) 180HB以上<br><small>High-carbon steel (e.g., S45C) and high-alloy steel (e.g., SCM435) in excess of 180HB</small> |                               |                                     |
|---|---------------------|--|--|-------------------------------------|---|-------------------------------|-------------------------------------|
|   |                     | 切込み $a_p$ (mm)<br>Depth of Cut   | 送り量 $f$ (mm/rev)<br>Feed Rate  | 切削速度 $v_c$ (m/min)<br>Cutting Speed | 切込み $a_p$ (mm)<br>Depth of Cut  | 送り量 $f$ (mm/rev)<br>Feed Rate | 切削速度 $v_c$ (m/min)<br>Cutting Speed |
|   |                     | CNM□12 TNM□16<br>DNM□15 TNM□22<br>SNM□12 WNM□08  | FE  | 0.1-0.4-1.2                         | 0.10-0.25-0.45  | 120-200-300                   | 0.1-0.4-1.2                         |
| LU・SU・SE  | 0.5-1.3-2.0         |  | 0.10-0.20-0.40   | 120-200-300                         | 0.5-1.3-2.0   | 0.10-0.20-0.40                | 120-180-250                         |
| SEW   | 0.8-2.2-5.0         |  | 0.10-0.30-0.45   | 120-200-300                         | 0.8-2.2-5.0   | 0.10-0.30-0.45                | 100-150-200                         |
| GU・GE・UX  | 1.8-3.0-6.0         |  | 0.20-0.35-0.60   | 100-180-250                         | 1.8-3.0-6.0   | 0.20-0.35-0.60                | 80-130-180                          |
| MU  | 1.0-3.0-6.0         |  | 0.20-0.45-0.70   | 100-180-250                         | 1.0-3.0-6.0   | 0.20-0.45-0.70                | 80-130-180                          |
| ME  | 3.0-4.5-8.0         |  | 0.35-0.50-0.80   | 100-150-200                         | 3.0-4.5-8.0   | 0.35-0.50-0.80                | 70-100-160                          |
| CNM□16 SNM□15                                   | HG                  | 0.8-3.5-5.0  | 0.15-0.30-0.45   | 100-180-250                         | 0.8-3.5-5.0   | 0.15-0.30-0.45                | 90-130-170                          |
|   | GU・GE・UX            | 1.8-4.5-6.0  | 0.20-0.40-0.60   | 100-150-200                         | 1.8-4.5-6.0   | 0.20-0.40-0.60                | 70-110-150                          |
|   | MU                  | 1.5-4.5-7.0  | 0.20-0.50-0.70   | 100-150-200                         | 1.5-4.5-7.0   | 0.20-0.50-0.70                | 70-110-150                          |
|   | ME                  | 3.0-5.0-8.0  | 0.35-0.60-0.80   | 80-130-180                          | 3.0-5.0-8.0   | 0.35-0.60-0.80                | 60-100-140                          |
| CNM□19 SNM□19<br>CNM□25 SNM□25<br>DNM□19 TNM□27 | HG                  | 1.8-5.0-6.0  | 0.20-0.40-0.60   | 100-150-200                         | 1.8-5.0-6.0   | 0.20-0.40-0.60                | 70-110-150                          |
|   | MU                  | 2.0-5.0-8.0  | 0.20-0.50-0.70   | 100-150-200                         | 2.0-5.0-8.0   | 0.20-0.50-0.70                | 70-110-150                          |
|   | ME                  | 3.0-6.5-9.0  | 0.35-0.60-0.80   | 80-130-180                          | 3.0-6.5-9.0   | 0.35-0.60-0.80                | 60-100-140                          |
|   | HG                  | 4.5-8.0-13.5   | 0.45-0.80-1.15   | 120-150-190                         | 4.5-8.0-13.5  | 0.45-0.80-1.15                | 90-120-160                          |
|   | HF                  | 5.0-8.0-27.0   | 0.80-1.20-1.60   | 70-110-150                          | 5.0-8.0-27.0  | 0.80-1.20-1.60                | 50-80-120                           |

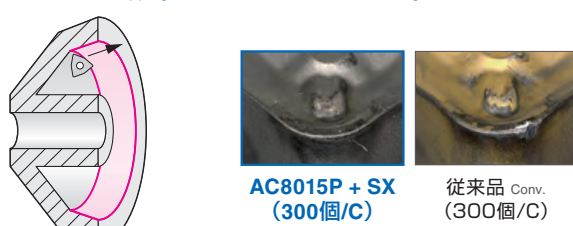
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| <h3>SCM421 ギア Gear</h3> <p><b>AC8015Pは摩耗抑制、寿命1.5倍</b><br/>AC8015P ensures minimal wear and a 1.5x extension of tool life</p>  <p><math>V_{Bmax}</math>: 0.148mm (AC8015P + UX) vs 0.155mm (他社品 Comp's)</p> <p>他社品 Comp's (100個/C)</p> | <h3>SCM435H リングギア Ring gear</h3> <p><b>AC8015Pはクレータ摩耗抑制、寿命1.5倍</b><br/>AC8015P ensures minimal crater wear and a 1.5x extension of tool life</p>  <p>他社品 Comp's (100個/C)</p> |
| <p>チップ: CNMG120412N-UX (AC8015P)<br/>Insert<br/>切削条件: <math>v_c=280</math>m/min <math>f=0.25</math>mm/rev <math>a_p=2.0-2.5</math>mm Wet<br/>Cutting Conditions</p>  | <p>チップ: CNMG120412N-GE (AC8015P)<br/>Insert<br/>切削条件: <math>v_c=200-260</math>m/min <math>f=0.3-0.4</math>mm/rev <math>a_p=1.5</math>mm Wet<br/>Cutting Conditions</p>   |

|  |  |
|--|--|
| <h3>炭素鋼 パイプ Carbon steel</h3> <p><b>AC8015Pはチッピング抑制、寿命2倍</b><br/>AC8015P's excellent chipping resistance ensures minimal damage and a 2x extension of tool life</p>  <p>他社品 Comp's (12個/C)</p> | <h3>SUJ2 ツールホルダ Tool holder</h3> <p><b>AC8015Pは欠損抑制、寿命1.7倍</b><br/>AC8015P ensures minimal breakage and a 1.7x extension of tool life</p>  <p>他社品 Comp's (300個/C)</p> |
| <p>チップ: CNMG120412N-MU (AC8015P) 粗加工<br/>Insert Roughing<br/>切削条件: <math>v_c=160</math>m/min <math>f=0.45</math>mm/rev <math>a_p=2.5</math>mm Wet<br/>Cutting Conditions</p>   | <p>チップ: TNMG160404N-GE (AC8015P)<br/>Insert<br/>切削条件: <math>v_c=210-270</math>m/min <math>f=0.2</math>mm/rev <math>a_p=3.3</math>mm Wet<br/>Cutting Conditions</p>   |

| <h3>S55C ハブ Hub</h3> <p><b>AC8015Pは摩耗抑制、寿命1.7倍</b><br/>AC8015P ensures minimal wear and a 1.7x extension of tool life</p>  <p>加工数 (個) Pcs No. of Workpieces</p> <table border="1"> <tr><th>加工条件</th><th>加工数 (個)</th></tr> <tr><td>AC8015P + UX</td><td>250</td></tr> <tr><td>従来品 Conv.</td><td>150</td></tr> </table> | 加工条件   | 加工数 (個) | AC8015P + UX | 250 | 従来品 Conv. | 150 | <h3>SCM435H ギア Gear</h3> <p><b>AC8015Pはチッピング抑制、寿命1.5倍</b><br/>AC8015P's excellent chipping resistance ensures minimal damage and a 1.5x extension of tool life</p>  <p>加工数 (個) Pcs No. of Workpieces</p> <table border="1"> <tr><th>加工条件</th><th>加工数 (個)</th></tr> <tr><td>AC8015P + GE</td><td>150</td></tr> <tr><td>他社品 Comp's</td><td>100</td></tr> </table> | 加工条件 | 加工数 (個) | AC8015P + GE | 150 | 他社品 Comp's | 100 |
|--|--|---------|--------------|-----|-----------|-----|---|------|---------|--------------|-----|------------|-----|
| 加工条件   | 加工数 (個)  |         |              |     |           |     |   |      |         |              |     |            |     |
| AC8015P + UX   | 250  |         |              |     |           |     |   |      |         |              |     |            |     |
| 従来品 Conv.  | 150  |         |              |     |           |     |   |      |         |              |     |            |     |
| 加工条件   | 加工数 (個)  |         |              |     |           |     |   |      |         |              |     |            |     |
| AC8015P + GE   | 150  |         |              |     |           |     |   |      |         |              |     |            |     |
| 他社品 Comp's   | 100  |         |              |     |           |     |   |      |         |              |     |            |     |
| <p>チップ: DNMG150412N-UX (AC8015P)<br/>Insert<br/>切削条件: <math>v_c=240</math>m/min <math>f=0.5</math>mm/rev <math>a_p=1.0-2.5</math>mm Wet<br/>Cutting Conditions</p>   | <p>チップ: CNMG120412N-GE (AC8015P)<br/>Insert<br/>切削条件: <math>v_c=200-260</math>m/min <math>f=0.3-0.4</math>mm/rev <math>a_p=2.0</math>mm Wet<br/>Cutting Conditions</p> |         |              |     |           |     |   |      |         |              |     |            |     |

### SCM420相当 CVT部品 CVD Part

**AC8015Pはチッピング抑制**  
AC8015P's excellent chipping resistance ensures minimal damage



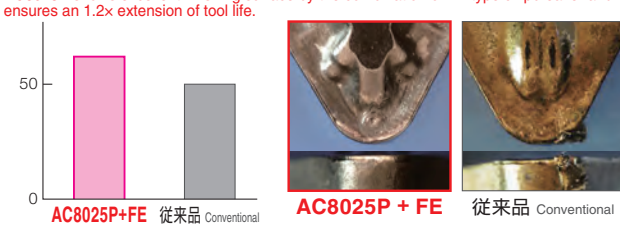
他社品 Conv. (300個/C)



チップ: WNMG080412N-SX (AC8015P) 黒皮加工  
Insert Mill-Scaled Work  
切削条件:  $v_c=300$ m/min  $f=0.2-0.3$ mm/rev  $a_p=1.0$ mm Wet  
Cutting Conditions

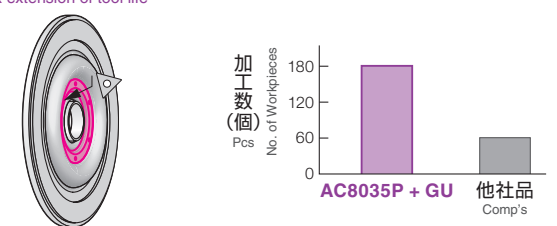
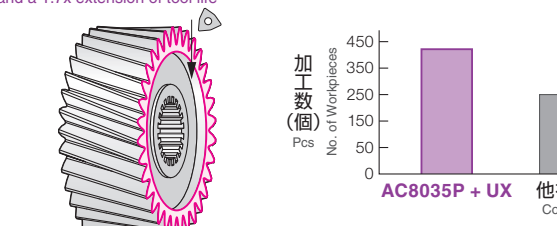
|   |   |
|---|---|
| <b>S45C 自動車足回り部品 Axle end</b>   | <b>SCr415 リングギア Ring gear</b>   |
| <p><b>AC8025Pはクレータ摩耗抑制</b><br/>AC8025P ensures minimal crater wear.</p>  <p>チップ : CNMM120416N-MP (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=180-200\text{m/min}</math> <math>f=0.43-0.55\text{mm/rev}</math> <math>a_p=1.0-3.0\text{mm}</math> Wet<br/>Cutting Conditions</p> | <p><b>AC8025Pはチッピング抑制、寿命1.5倍</b><br/>AC8025P ensures a 1.5x extension of tool life</p>  <p>チップ : WNMG080416N-ME (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=250\text{m/min}</math> <math>f=0.30-0.45\text{mm/rev}</math> <math>a_p=2.5\text{mm}</math> Wet<br/>Cutting Conditions</p> |

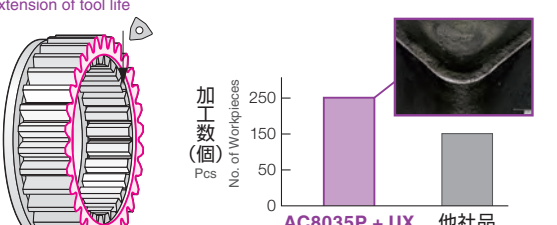

|   |   |
|---|---|
| <b>SCM415 ツールホルダ Tool holder</b>  | <b>S45C リング Ring</b>  |
| <p><b>AC8025Pは溶着欠損抑制、安定加工可能</b><br/>AC8025P's excellent chipping resistance ensures minimal damage</p>  <p>チップ : DNMG150608N-EM (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=150\text{m/min}</math> <math>f=0.4\text{mm/rev}</math> <math>a_p=4.0\text{mm}</math> Wet<br/>Cutting Conditions</p> | <p><b>AC8025Pはクレータ摩耗抑制、寿命3倍</b><br/>AC8025P ensures a 3x extension of tool life.</p>  <p>チップ : CNMG120408N-GE (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=200-250\text{m/min}</math> <math>f=0.25\text{mm/rev}</math> <math>a_p=1.0\text{mm}</math> Wet<br/>Cutting Conditions</p> |

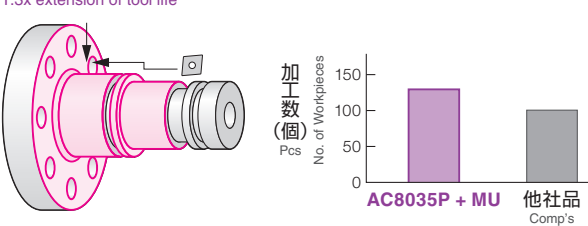
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| <b>鉄板材 シリンダ Soft steel cylinder</b>  | <b>SMnC420H ブッシュ Bush</b>  |
| <p><b>AC8025Pはチッピング抑制、寿命2倍</b><br/>AC8025P's excellent chipping resistance ensures minimal damage after attaining a 2x life</p>  <p>チップ : DCMT11T308N-SU (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=210\text{m/min}</math> <math>f=0.15\text{mm/rev}</math> <math>a_p=1.0\text{mm}</math> Wet<br/>Cutting Conditions</p> | <p><b>AC8025Pは逃げ面摩耗抑制</b><br/>AC8025P ensures excellent flank wear resistance</p>  <p>チップ : CNMG120416N-ME (AC8025P)<br/>Insert<br/>切削条件 : <math>v_c=260\text{m/min}</math> <math>f=0.5-1.0\text{mm/rev}</math> <math>a_p=1.5-2.0\text{mm}</math> Wet<br/>Cutting Conditions</p> |

|  |
|--|
| <b>鉄板材 フロントカバー Soft steel front cover</b>  |
| <p><b>AC8025PとFE型ブレーカの組合せで<br/>むしろ改善、寿命1.2倍</b><br/>AC8025P shows excellent finishing surface by the combination of FE type chipbreaker and ensures an 1.2x extension of tool life.</p>  <p>チップ : TNMG160408N-FE (AC8025P)<br/>Insert<br/>切削条件 端面 Facing : <math>v_c=450-480\text{m/min}</math> <math>f=0.25-0.32\text{mm/rev}</math> <math>a_p=0.05-0.25\text{mm}</math> Wet<br/>切削条件 内径 Internal : <math>v_c=400\text{m/min}</math> <math>f=0.2-0.3\text{mm/rev}</math> <math>a_p=0.2-0.3\text{mm}</math> Wet</p> |

|   |  |
|---|--|
| <b>S35C プラネタリ・ピニオン</b> Planetary pinion   | <b>S25C相当 自動車部品</b> Automotive part  |
| <p><b>AC8035Pは欠損大幅抑制、寿命1.5倍</b><br/>                 AC8035P's excellent breakage resistance ensures minimal damage and a 1.5x extension of tool life</p>  <p><b>AC8035P + UX (300個/C)</b>      従来品 Conv. (200個/C)</p> | <p><b>AC8035Pは欠損大幅抑制、寿命延長可能</b><br/>                 AC8035P's excellent breakage resistance ensures minimal damage and an extended tool life</p>  <p><b>AC8035P + UX (120個/C)</b>      従来品 Conv. (120個/C)</p> |
| チップ：CNMG120412N-UX (AC8035P) 断続加工<br>Insert Interrupted<br>切削条件： $v_c=180\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=2.0\text{mm}$ Wet<br>Cutting Conditions  | チップ：CNMG120408N-UX (AC8035P) 断続加工<br>Insert Interrupted<br>切削条件： $v_c=100\text{-}130\text{m/min}$ $f=0.2\text{mm/rev}$ $a_p=1.0\text{-}3.2\text{mm}$ Wet<br>Cutting Conditions   |

|  |   |
|--|---|
| <b>SPH440 フランジ</b> Flange  | <b>SNCN材 ギア</b> Gear  |
| <p><b>AC8035Pはチッピング抑制、寿命3倍</b><br/>                 AC8035P's excellent chipping resistance ensures minimal damage and a 3x extension of tool life</p>  <p><b>AC8035P + GU</b>      他社品 Comp's</p> | <p><b>AC8035Pはチッピング抑制、寿命1.7倍</b><br/>                 AC8035P's excellent chipping resistance ensures minimal damage and a 1.7x extension of tool life</p>  <p><b>AC8035P + UX</b>      他社品 Comp's</p> |
| チップ：TNMG160408N-GU (AC8035P) 粗断続加工<br>Insert Roughing / Interrupted<br>切削条件： $v_c=100\text{m/min}$ $f=0.3\text{mm/rev}$ $a_p=1.5\text{mm}$ Wet<br>Cutting Conditions   | チップ：WNGM080408N-UX (AC8035P) 粗断続加工<br>Insert Roughing / Interrupted<br>切削条件： $v_c=180\text{m/min}$ $f=0.15\text{-}0.40\text{mm/rev}$ $a_p=1.0\text{mm}$ Wet<br>Cutting Conditions   |

|   |  |
|---|--|
| <b>SCr420相当 リバースギア</b> Reverse gear   | <b>SCr440 フランジ</b> Flange  |
| <p><b>AC8035Pはチッピング抑制、寿命1.6倍</b><br/>                 AC8035P's excellent chipping resistance ensures minimal damage and a 1.6x extension of tool life</p>  <p><b>AC8035P + UX</b>      他社品 Comp's</p> | <p><b>AC8035Pはチッピング抑制、寿命1.5倍</b><br/>                 AC8035P's excellent chipping resistance ensures minimal damage and a 1.5x extension of tool life</p>  <p><b>AC8035P + GU (90個/C)</b>      他社品 Comp's (60個/C)</p> |
| チップ：WNGM080408N-UX (AC8035P) 粗断続加工<br>Insert Roughing / Interrupted<br>切削条件： $v_c=230\text{m/min}$ $f=0.15\text{-}0.30\text{mm/rev}$ $a_p=1.0\text{-}2.0\text{mm}$ Wet<br>Cutting Conditions  | チップ：WNGM080412N-GU (AC8035P) 粗断続加工<br>Insert Roughing / Interrupted<br>切削条件： $v_c=80\text{-}200\text{m/min}$ $f=0.2\text{mm/rev}$ $a_p=1.5\text{mm}$ Dry<br>Cutting Conditions   |

|   |
|---|
| <b>合金鋼 自動車用足回り部品</b> Axle End   |
| <p><b>AC8035Pはチッピング抑制、寿命1.3倍</b><br/>                 AC8035P's excellent chipping resistance ensures minimal damage and a 1.3x extension of tool life</p>  <p><b>AC8035P + MU</b>      他社品 Comp's</p> |
| チップ：CNMG190616N-MU (AC8035P) 黒皮連続～断続加工<br>Insert Mill-Scaled Work / Continuous to Interrupted<br>切削条件： $v_c=140\text{-}280\text{m/min}$ $f=0.5\text{mm/rev}$ $a_p=\text{最大}5\text{mm}$ Dry<br>Cutting Conditions  |


















# 在庫表













## ネガティブチップ Negative insert

# Stock items

### ◆ ネガティブ 80° 菱形 Negative 80° Diamond Type

| 形状<br>Appearance  | 型番<br>Cat. No.   | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|---|------------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|   |                  | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|    | CNMG 090308N-FL  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 120404N-FL  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-FL  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|    | CNMG 090304N-FE  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-FE  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 090404N-FE  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|   | CNMG 090408N-FE  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|   | CNMG 120402N-FE  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.2                  |
|   | CNMG 120404N-FE  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|    | CNMG 090304N-LU  | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-LU  | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 120404N-LU  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|    | CNMG 120408N-LU  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-LU  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120412N-LU  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|    | CNMG 120404N-LWU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-LWU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-LWU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 090304N-SU  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-SU  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 09T304N-SU  | ●           | ●       | ●       | 9.525                   | 3.97            | 3.81       | 0.4                  |
|   | CNMG 09T308N-SU  | ●           | ●       | ●       | 9.525                   | 3.97            | 3.81       | 0.8                  |
|   | CNMG 090404N-SU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|   | CNMG 090408N-SU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|   | CNMG 090412N-SU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 1.2                  |
|   | CNMG 120404N-SU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-SU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-SU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 120404N-SE  | ●           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-SE  | ●           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-SE  | ●           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 090404N-SEW | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|   | CNMG 090408N-SEW | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|   | CNMG 120404N-SEW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|  | CNMG 120408N-SEW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-SEW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120412N-SEW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 120404N-EF  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-EF  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-EF  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 120404N-SX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-SX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-SX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 090304N-GU  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-GU  | ●           | ●       | ●       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 090404N-GU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|   | CNMG 090408N-GU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|   | CNMG 090412N-GU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 1.2                  |
|   | CNMG 120404N-GU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-GU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-GU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120416N-GU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-GU  | ●           | ●       | ●       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|  | CNMG 160612N-GU  | ●           | ●       | ●       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-GU  | ●           | ●       | ●       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190612N-GE  | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|   | CNMG 190616N-GE  | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|   | CNMG 120404N-GE  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|  | CNMG 120408N-GE  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-GE  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120416N-GE  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|  | CNMG 160612N-GUW | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-GUW | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190612N-GUW | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|  | CNMG 090304N-UX  | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-UX  | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 120404N-UX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-UX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-UX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120416N-UX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-UX  | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-UX  | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-UX  | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190608N-UX  | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 0.8                  |
| CNMG 190612N-UX   | ○                | ●           | ○       | 19.05   | 6.35                    | 7.94            | 1.2        |                      |
| CNMG 190616N-UX   | ○                | ●           | ○       | 19.05   | 6.35                    | 7.94            | 1.6        |                      |

### ◆ ネガティブ 80° 菱形(つづき) Negative 80° Diamond Type (Con't)

| 形状<br>Appearance  | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|---|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|   |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|    | CNMG 090304N-UG | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.4                  |
|   | CNMG 090308N-UG | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.8                  |
|   | CNMG 09T304N-UG | ○           | ●       | ○       | 9.525                   | 3.97            | 3.81       | 0.4                  |
|    | CNMG 09T308N-UG | ○           | ●       | ○       | 9.525                   | 3.97            | 3.81       | 0.8                  |
|   | CNMG 090404N-UG | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|   | CNMG 090408N-UG | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|   | CNMG 120404N-UG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-UG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-UG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|    | CNMG 120416N-UG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-UG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-UG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|    | CNMG 160616N-UG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190608N-UG | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 0.8                  |
|   | CNMG 190612N-UG | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|    | CNMG 190616N-UG | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|   | CNMG 120404N-EG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|   | CNMG 120408N-EG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-EG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 160608N-EG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-EG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-EG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190612N-EG | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|   | CNMG 190616N-EG | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | CNMG 120408N-MU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-MU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|   | CNMG 120416N-MU | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-MU | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-MU | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-MU | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|  | CNMG 190608N-MU | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 0.8                  |
|   | CNMG 190612N-MU | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|   | CNMG 190616N-MU | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|   | CNMG 190624N-MU | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  | CNMG 250924N-MU | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|   | CNMG 120408N-EM | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-EM | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 120416N-EM | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-EM | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-EM | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|   | CNMG 160616N-EM | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|   | CNMG 190612N-EM | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|   | CNMG 190616N-EM | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | CNMG 190624N-EM | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|   | CNMG 250924N-EM | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|   | CNMG 120408N-ME | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|   | CNMG 120412N-ME | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | CNMG 120416N-ME | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.6                  |
|   | CNMG 160608N-ME | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 0.8                  |
|   | CNMG 160612N-ME |             |         |         |                         |                 |            |                      |

◆ ネガティブ 80° 菱形 (つづき) Negative 80° Diamond Type (Con't)

Table with columns for Shape, Cat. No., Stock (AC8015P, AC8025P, AC8035P), and Dimensions (Inscribed circle, Thickness, Hole, Nose radius). Rows include MP, HG, HP, HF types.

◆ ネガティブ 55° 菱形 (つづき) Negative 55° Diamond Type (Con't)

Table with columns for Shape, Cat. No., Stock (AC8015P, AC8025P, AC8035P), and Dimensions (Inscribed circle, Thickness, Hole, Nose radius). Rows include GU, GE, UX, UG, EG, MU, EM, ME, MX, UZ, HM, MP types.

◆ ネガティブ 55° 菱形 Negative 55° Diamond Type



Table with columns for Shape, Cat. No., Stock (AC8015P, AC8025P, AC8035P), and Dimensions (Inscribed circle, Thickness, Hole, Nose radius). Rows include FL, FE, LU, SU, SE, SEW, EF, SX types.

※ 近似値、ISO 規格に準拠していません。Approximation, ISO standard non-compliance














●印: 標準在庫品, ○印: 在庫予定品 (2017年10月), 無印: 受注生産品, ㊟印: ワイパーチップ, ●mark: Standard stock item, ○mark: Planned stock(Oct.2017), Blank: Made to order item, ㊟印: Wiper insert

















### ◇ ネガティブ55°菱形(つづき) Negative 55° Diamond Type (Con't)

| 形状<br>Appearance   | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法(mm)<br>Dimensions    |                 |            |                      |
|--|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|  |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|  MP | DNMM 150604N-MP |             |         |         |                         |                 | 0.4        |                      |
|  | 150608N-MP      | ○           | ●       | ○       | 12.7                    | 6.35            | 5.16       | 0.8                  |
|  | 150612N-MP      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | 150616N-MP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  HP | DNMM 150404N-HP |             |         |         |                         |                 | 0.4        |                      |
|  | 150408N-HP      |             |         |         | 12.7                    | 4.76            | 5.16       | 0.8                  |
|  | 150412N-HP      |             |         |         |                         |                 |            | 1.2                  |
|  | 150416N-HP      |             |         |         |                         |                 |            | 1.6                  |
|  | DNMM 150604N-HP |             |         |         |                         |                 |            | 0.4                  |
|  | 150608N-HP      |             |         |         | 12.7                    | 6.35            | 5.16       | 0.8                  |
|  | 150612N-HP      |             |         |         |                         |                 |            | 1.2                  |
|  | 150616N-HP      |             |         |         |                         |                 |            | 1.6                  |

### ○ ネガティブ正方形 Negative Square Type

|  |  |                 |   |       |        |      |      |      |     |
|--|--|-----------------|---|-------|--------|------|------|------|-----|
|  FL   | SNMG 120408N-FL  |                 |   |       | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  |  FE | SNMG 120404N-FE | ● | ●     | ●      |      |      |      | 0.4 |
|  |  | 120408N-FE      | ● | ●     | ●      | 12.7 | 4.76 | 5.16 | 0.8 |
| 120412N-FE   |  | ●               | ● | ●     |        |      |      | 1.2  |     |
|  LU   | SNMG 120408N-LU  | ○               | ● |       | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  | 120412N-LU   | ○               | ● |       |        |      |      | 1.2  |     |
|  SU   | SNMG 120408N-SU  | ●               | ● | ●     | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  |  SE | SNMG 120408N-SE | ● | ●     | ○      | 12.7 | 4.76 | 5.16 | 0.8 |
| 120412N-SE   |  | ●               | ● | ○     |        |      |      | 1.2  |     |
|  EF  | SNMG 120404N-EF  | ○               | ● | ○     | 12.7   | 4.76 | 5.16 | 0.4  |     |
|  | 120408N-EF   | ○               | ● | ○     |        |      |      | 0.8  |     |
|  SX | SNMG 120408N-SX  | ○               | ● | ○     | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  | 120412N-SX   | ○               | ● | ○     |        |      |      | 1.2  |     |
|  GU | SNMG 090304N-GU  |                 |   | ●     |        |      |      | 0.4  |     |
|  | 090308N-GU   | ●               | ● | ●     | 9.525  | 3.18 | 3.81 | 0.8  |     |
|  | SNMG 120404N-GU  | ●               | ● | ●     |        |      |      | 0.4  |     |
|  | 120408N-GU   | ●               | ● | ●     | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  | 120412N-GU   | ●               | ● | ●     |        |      |      | 1.2  |     |
|  | 120416N-GU   | ●               | ● | ●     |        |      |      | 1.6  |     |
|  | SNMG 150608N-GU  | ●               | ● | ●     |        |      |      | 0.8  |     |
|  | 150612N-GU   | ●               | ● | ●     | 15.875 | 6.35 | 6.35 | 1.2  |     |
| 150616N-GU   | ●  | ●               | ● |       |        |      | 1.6  |      |     |
|  GE | SNMG 120408N-GE  | ●               | ● | ●     |        |      |      | 0.8  |     |
|  | 120412N-GE   | ●               | ● | ●     | 12.7   | 4.76 | 5.16 | 1.2  |     |
|  | 120416N-GE   | ●               | ● | ●     |        |      |      | 1.6  |     |
|  | SNMG 150608N-GE  | ●               | ● | ●     |        |      |      | 0.8  |     |
|  | 150612N-GE   | ●               | ● | ●     | 15.875 | 6.35 | 6.35 | 1.2  |     |
|  | 150616N-GE   | ●               | ● | ●     |        |      |      | 1.6  |     |
|  UX | SNMG 090308N-UX  |                 |   | ○     | 9.525  | 3.18 | 3.81 | 0.8  |     |
|  | SNMG 120404N-UX  |                 |   | ○     |        |      |      | 0.4  |     |
|  | 120408N-UX   | ○               | ● | ○     | 12.7   | 4.76 | 5.16 | 0.8  |     |
|  | 120412N-UX   | ○               | ● | ○     |        |      |      | 1.2  |     |
|  | 120416N-UX   | ○               | ● | ○     |        |      |      | 1.6  |     |
|  | SNMG 190612N-UX  | ○               | ● | ○     | 19.05  | 6.35 | 7.94 | 1.2  |     |
| 190616N-UX   | ○  | ●               | ○ |       |        |      | 1.6  |      |     |
|  UG | SNMG 090308N-UG  |                 |   | ○     | 9.525  | 3.18 | 3.81 | 0.8  |     |
|  | SNMG 120408N-UG  |                 |   | ○     |        |      |      | 0.8  |     |
|  | 120412N-UG   |                 |   | ○     | 12.7   | 4.76 | 5.16 | 1.2  |     |
|  | 120416N-UG   |                 |   | ○     |        |      |      | 1.6  |     |
|  | SNMG 150612N-UG  |                 |   | ○     | 15.875 | 6.35 | 6.35 | 1.2  |     |
|  | 150616N-UG   |                 |   | ○     | 19.05  | 6.35 | 7.94 | 1.6  |     |
| 250924N-UG   |  |                 | ○ | 25.4  | 9.52   | 9.12 | 2.4  |      |     |
|  EG | SNMG 120404N-EG  | ○               | ● | ○     | 12.7   | 4.76 | 5.16 | 0.4  |     |
|  | 120408N-EG   | ○               | ● | ○     |        |      |      | 0.8  |     |
|  | 120412N-EG   | ○               | ● | ○     |        |      |      | 1.2  |     |
|  | SNMG 150608N-EG  | ○               | ● | ○     |        |      |      | 0.8  |     |
|  | 150612N-EG   | ○               | ● | ○     | 15.875 | 6.35 | 6.35 | 1.2  |     |
|  | 150616N-EG   | ○               | ● | ○     |        |      |      | 1.6  |     |
| 190612N-EG   | ○  | ●               | ○ | 19.05 | 6.35   | 7.94 | 1.2  |      |     |
| 190616N-EG   | ○  | ●               | ○ |       |        |      | 1.6  |      |     |
|  MU | SNMG 120408N-MU  | ○               | ● | ○     |        |      |      | 0.8  |     |
|  | 120412N-MU   | ○               | ● | ○     | 12.7   | 4.76 | 5.16 | 1.2  |     |
|  | 120416N-MU   | ○               | ● | ○     |        |      |      | 1.6  |     |
|  | SNMG 150608N-MU  | ○               | ● | ○     |        |      |      | 0.8  |     |
|  | 150612N-MU   | ○               | ● | ○     | 15.875 | 6.35 | 6.35 | 1.2  |     |
|  | 150616N-MU   | ○               | ● | ○     |        |      |      | 1.6  |     |

### ○ ネガティブ正方形(つづき) Negative Square Type (Con't)

| 形状<br>Appearance   | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法(mm)<br>Dimensions    |                 |            |                      |
|--|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|  |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|  MU   | SNMG 190612N-MU | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | 190616N-MU      | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | 190624N-MU      | ○           | ●       | ○       |                         |                 |            | 2.4                  |
|  | SNMG 250924N-MU | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  EM   | SNMG 120408N-EM | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|  | 120412N-EM      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | SNMG 150608N-EM | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 150612N-EM      | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
| 150616N-EM   | ○               | ●           | ○       |         |                         |                 | 1.6        |                      |
|  EM   | SNMG 190612N-EM | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | 190616N-EM      | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | 190624N-EM      | ○           | ●       | ○       |                         |                 |            | 2.4                  |
|  | SNMG 250924N-EM | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  ME   | SNMG 120408N-ME | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-ME      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | 120416N-ME      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMG 150608N-ME | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| 150612N-ME   | ○               | ●           | ○       | 15.875  | 6.35                    | 6.35            | 1.2        |                      |
| 150616N-ME   | ○               | ●           | ○       |         |                         |                 | 1.6        |                      |
|  ME   | SNMG 190612N-ME | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | 190616N-ME      | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | 190624N-ME      | ○           | ●       | ○       |                         |                 |            | 2.4                  |
|  | SNMG 250924N-ME | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  MX   | SNMG 120408N-MX | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-MX      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | 120416N-MX      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMG 150612N-MX | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
| 150616N-MX   | ○               | ●           | ○       |         |                         |                 | 1.6        |                      |
|  MX  | SNMG 190612N-MX | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|  | 190616N-MX      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMG 120408N-UZ | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-UZ      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
| 120416N-UZ   | ○               | ●           | ○       |         |                         |                 | 1.6        |                      |
|  UZ | SNMG 150612N-UZ | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|  | 190612N-UZ      | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|  | 190616N-UZ      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMG 120408R-HM | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| 120408L-HM   | ○               | ●           | ○       | 12.7    | 4.76                    | 5.16            | 0.8        |                      |
|  MP | SNMM 120408N-MP | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-MP      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | 120416N-MP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | 120420N-MP      | ○           | ●       | ○       |                         |                 |            | 2.0                  |
|  | SNMM 150612N-MP | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                  |
|  | 150616N-MP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMM 190612N-MP | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|  | 190616N-MP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  MP | SNMM 250724N-MP | ○           | ●       | ○       | 25.4                    | 7.94            | 9.12       | 2.4                  |
|  | SNMM 250924N-MP | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  | SNMM 310924N-MP | ○           | ●       | ○       | 31.75                   | 9.52            | 8.8        | 2.4                  |
|  | SNMM 120408N-HG | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-HG      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | 120416N-HG      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  HG | SNMM 150616N-HG | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                  |
|  | SNMM 190612N-HG | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|  | 190616N-HG      | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | 190624N-HG      | ○           | ●       | ○       |                         |                 |            | 2.4                  |
|  HP | SNMM 120408N-HP | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|  | 120412N-HP      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|  | 120416N-HP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMM 190612N-HP | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.2                  |
|  | 190616N-HP      | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|  | SNMM 250724N-HP | ○           | ●       | ○       | 25.4                    | 7.94            | 9.12       | 2.4                  |
| 250924N-HP   | ○               | ●           | ○       | 25.4    | 9.52                    | 9.12            | 2.4        |                      |
| 310924N-HP   | ○               | ●           | ○       | 31.75   | 9.52                    | 8.8             | 2.4        |                      |
|  HU | SNMM 250724N-HU | ○           | ●       | ○       | 25.4                    | 7.94            | 9.12       | 2.4                  |
|  | SNMM 250924N-HU | ○           | ●       | ○       | 25.4                    | 9.52            | 9.12       | 2.4                  |
|  | SNMM 310924N-HU | ○           | ●       | ○       | 31.75                   | 9.52            | 8.8        | 2.4                  |
|  | SNMM 250724N-HW | ○           | ●       | ○       | 25.4                    | 7.94            | 9.12       | 2.4                  |
| 250924N-HW   | ○               | ●           | ○       | 25.4    | 9.52                    | 9.12            | 2.4        |                      |
| 310924N-HW   | ○               | ●           | ○       | 31.75   | 9.52                    | 8.8             | 2.4        |                      |
|  HF | SNMM 190616N-HF | ○           | ●       | ○       | 19.05                   | 6.35            | 7.94       | 1.6                  |
|  | 190624N-HF      | ○           | ●       | ○       |                         |                 |            | 2.4                  |
|  | SNMM 250724N-HF | ○           | ●       | ○       | 25.4                    | 7.94            | 9.12       | 2.4                  |
|  | 250             |             |         |         |                         |                 |            |                      |





















# 在庫表








## ネガティブチップ Negative insert

## Stock items

### △ ネガティブ三角形 Negative Triangular Type

| 形状<br>Appearance  | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                          |
|---|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|--------------------------|
|   |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ<br>半径<br>Nose radius |
|  FL   | TNMG 160404N-FL | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|   | 160408N-FL      | ●           | ●       | ●       |                         |                 |            | 0.8                      |
|  FE   | TNMG 160402N-FE | ●           | ●       | ●       |                         |                 |            | 0.2                      |
|   | 160404N-FE      | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|   | 160408N-FE      | ●           | ●       | ●       |                         |                 |            | 0.8                      |
|   | 160412N-FE      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|  LU   | TNMG 160404N-LU | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|   | 160408N-LU      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-LU      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|  SU   | TNMG 160404N-SU | ●           | ●       | ●       |                         |                 |            | 0.4                      |
|   | 160408N-SU      | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-SU      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|  SE   | TNMG 160404N-SE | ●           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|   | 160408N-SE      | ●           | ●       | ○       |                         |                 |            | 0.8                      |
|   | 160412N-SE      | ●           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 220404N-SE | ●           | ●       | ○       |                         |                 |            | 0.4                      |
|   | 220408N-SE      | ●           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|   | 220412N-SE      | ●           | ●       | ○       |                         |                 |            | 1.2                      |
|  EF   | TNMG 160404N-EF | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|   | 160408N-EF      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  SX   | TNMG 160304N-SX | ○           | ●       | ○       | 9.525                   | 3.18            | 3.81       | 0.4                      |
|   | 160308N-SX      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|   | TNMG 160404N-SX | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|   | 160408N-SX      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|   | TNMG 220404N-SX | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|   | 220408N-SX      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|  GU   | TNMG 160404N-GU | ●           | ●       | ●       |                         |                 |            | 0.4                      |
|   | 160408N-GU      | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|  GE | 160412N-GU      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|   | 160416N-GU      | ●           | ●       | ●       |                         |                 |            | 1.6                      |
|   | TNMG 220404N-GU | ●           | ●       | ●       |                         |                 |            | 0.4                      |
|   | 220408N-GU      | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|   | 220412N-GU      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|   | TNMG 160404N-GE | ●           | ●       | ●       |                         |                 |            | 0.4                      |
|  UX | 160408N-GE      | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-GE      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|   | TNMG 220408N-GE | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|   | 220412N-GE      | ●           | ●       | ●       |                         |                 |            | 1.2                      |
|  UG | TNMG 160404N-UX | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|   | 160408N-UX      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-UX      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 220408N-UX | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|  EG | 220412N-UX      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 160404N-UG | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|  MU | 160408N-UG      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-UG      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | 160416N-UG      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|   | TNMG 220408N-UG | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|   | 220412N-UG      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 160404N-EG | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|  EM | 160408N-EG      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-EG      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 160408N-MU | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-MU      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 220408N-MU | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|   | 220412N-MU      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                      |
|  ME | 220416N-MU      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|   | TNMG 270612N-MU | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | 270616N-MU      | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.6                      |
|   | TNMG 160408N-EM | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|  MX | 160412N-EM      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 330924N-EM | ○           | ●       | ○       | 19.05                   | 9.52            | 7.93       | 2.4                      |
|   | TNMG 160408N-ME | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|   | 160412N-ME      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|  EM | TNMG 220408N-ME | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|   | 220412N-ME      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                      |
|   | 220416N-ME      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|   | TNMG 160408N-MX | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|  MX | 160412N-MX      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|   | TNMG 220408N-MX | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|   | 220412N-MX      | ○           | ●       | ○       |                         |                 |            | 1.2                      |

### △ ネガティブ三角形 (つづき) Negative Triangular Type (Con't)

| 形状<br>Appearance   | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                          |
|--|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|--------------------------|
|  |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ<br>半径<br>Nose radius |
|  UZ   | TNMG 160404N-UZ | ●           | ○       | ○       |                         |                 |            | 0.4                      |
|  | 160408N-UZ      | ●           | ○       | ○       |                         |                 |            | 0.8                      |
|  | 160412N-UZ      | ●           | ○       | ○       | 9.525                   | 4.76            | 3.81       | 1.2                      |
|  | TNMG 160416N-UZ | ●           | ○       | ○       |                         |                 |            | 1.6                      |
|  | 160420N-UZ      | ●           | ○       | ○       |                         |                 |            | 2.0                      |
|  | TNMG 220408N-UZ | ●           | ○       | ○       |                         |                 |            | 0.8                      |
|  | 220412N-UZ      | ●           | ○       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                      |
|  | 220416N-UZ      | ●           | ○       | ○       |                         |                 |            | 1.6                      |
|  HM   | TNMG 270608N-UZ | ●           | ○       | ○       |                         |                 |            | 0.8                      |
|  | 270612N-UZ      | ●           | ○       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                      |
|  | 270616N-UZ      | ●           | ○       | ○       |                         |                 |            | 1.6                      |
|  | TNMG 160404R-HM | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|  MP   | 160404L-HM      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                      |
|  | 160408R-HM      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  | 160408L-HM      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  | TNMG 220404R-HM | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|  | 220404L-HM      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                      |
|  | 220408R-HM      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  HG   | 220408L-HM      | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  | TNMM 160404N-MP | ○           | ●       | ○       |                         |                 |            | 0.4                      |
|  | 160408N-MP      | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|  | 160412N-MP      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|  | TNMM 220408N-MP | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                      |
|  | 220412N-MP      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|  HP | TNMM 220416N-MP | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|  | TNMM 270612N-MP | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                      |
|  | 270616N-MP      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|  | TNMM 220408N-HG | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  HP | 220412N-HG      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                      |
|  | 220416N-HG      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|  | TNMM 160408N-HP | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                      |
|  | 160412N-HP      | ○           | ●       | ○       |                         |                 |            | 1.2                      |
|  | TNMM 220408N-HP | ○           | ●       | ○       |                         |                 |            | 0.8                      |
|  | 220412N-HP      | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                      |
|  HP | 220416N-HP      | ○           | ●       | ○       |                         |                 |            | 1.6                      |
|  | TNMM 270612N-HP | ○           | ●       | ○       | 15.875                  | 6.35            | 6.35       | 1.2                      |
|  | 270616N-HP      | ○           | ●       | ○       |                         |                 |            | 1.6                      |

●印：標準在庫品、○印：在庫予定品（2017年10月）、無印：受注生産品、：ワイパーチップ  
 ●mark : Standard stock item, ○mark : Planned stock(Oct.2017), Blank : Made to order item,  : Wiper insert

### ネガティブ 35° 菱形 Negative 35° Diamond Type

| 形状<br>Appearance | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|------------------|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|                  |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
| FL               | VNMG 160404N-FL | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-FL      | ●           | ●       | ●       |                         |                 |            | 0.8                  |
| FE               | VNMG 160402N-FE | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.2                  |
|                  | 160404N-FE      | ●           | ●       | ●       |                         |                 |            | 0.4                  |
|                  | 160408N-FE      | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 160412N-FE      | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| LU               | VNMG 160404N-LU | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-LU      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 160412N-LU      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| SU               | VNMG 160404N-SU | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-SU      | ●           | ●       | ●       |                         |                 |            | 0.8                  |
| SE               | VNMG 160404N-SE | ●           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-SE      | ●           | ●       | ○       |                         |                 |            | 0.8                  |
| EF               | VNMG 160402N-EF | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.2                  |
|                  | 160404N-EF      | ○           | ●       | ○       |                         |                 |            | 0.4                  |
|                  | 160408N-EF      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| SX               | VNMG 160404N-SX | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-SX      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| GU               | VNMG 160404N-GU | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-GU      | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 160412N-GU      | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| GE               | VNMG 160404N-GE | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-GE      | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 160412N-GE      | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| UX               | VNMG 160404N-UX | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-UX      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 160412N-UX      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| UG               | VNMG 160404N-UG | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-UG      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| EG               | VNMG 160404N-EG | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160408N-EG      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 160412N-EG      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| UZ               | VNMG 160404N-UZ | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 160412N-UZ      | ○           | ●       | ○       |                         |                 |            | 0.8                  |

### ネガティブ六角形 (つづき) Negative Trigon Type (Con't)

| 形状<br>Appearance | 型番<br>Cat. No.   | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|------------------|------------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|                  |                  | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
| SE               | WNMG 080404N-SE  | ●           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-SE       | ●           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-SE       | ●           | ●       | ○       |                         |                 |            | 1.2                  |
| SEW              | WNMG 060404N-SEW | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 060408N-SEW      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | WNMG 080404N-SEW | ○           | ●       | ○       |                         |                 |            | 0.4                  |
|                  | 080408N-SEW      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| SEW              | WNMG 080404N-SEW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-SEW      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-SEW      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| EF               | WNMG 060404N-EF  | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 060408N-EF       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | WNMG 080404N-EF  | ○           | ●       | ○       |                         |                 |            | 0.4                  |
| EF               | WNMG 080404N-EF  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-EF       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-EF       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| SX               | WNMG 080404N-SX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-SX       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-SX       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| GU               | WNMG 060404N-GU  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.4                  |
|                  | 060408N-GU       | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 060412N-GU       | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| GU               | WNMG 080404N-GU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-GU       | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 080412N-GU       | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| GE               | WNMG 060408N-GE  | ●           | ●       | ●       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | 060412N-GE       | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| GE               | WNMG 080404N-GE  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-GE       | ●           | ●       | ●       |                         |                 |            | 0.8                  |
|                  | 080412N-GE       | ●           | ●       | ●       |                         |                 |            | 1.2                  |
| GUW              | WNMG 060408N-GUW | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | WNMG 080408N-GUW | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-GUW      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| GUW              | WNMG 080404N-GUW | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-GUW      | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-GUW      | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| UX               | WNMG 080404N-UX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-UX       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-UX       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| UG               | WNMG 06T304N-UG  | ○           | ●       | ○       | 9.525                   | 3.97            | 3.81       | 0.4                  |
|                  | 06T308N-UG       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | WNMG 060404N-UG  | ○           | ●       | ○       |                         |                 |            | 0.4                  |
| UG               | WNMG 060408N-UG  | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | 080404N-UG       | ○           | ●       | ○       |                         |                 |            | 0.4                  |
|                  | 080408N-UG       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| UG               | WNMG 080412N-UG  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|                  | 080412N-UG       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|                  | 080412N-UG       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| EG               | WNMG 060408N-EG  | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | 060412N-EG       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|                  | WNMG 080404N-EG  | ○           | ●       | ○       |                         |                 |            | 0.4                  |
| EG               | WNMG 080408N-EG  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|                  | 080412N-EG       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|                  | 080412N-EG       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| MU               | WNMG 060408N-MU  | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | 060412N-MU       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|                  | WNMG 080408N-MU  | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| MU               | WNMG 080412N-MU  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|                  | 080416N-MU       | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|                  | 080416N-MU       | ○           | ●       | ○       |                         |                 |            | 1.6                  |
| EM               | WNMG 080408N-EM  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|                  | 080412N-EM       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| ME               | WNMG 060408N-ME  | ○           | ●       | ○       | 9.525                   | 4.76            | 3.81       | 0.8                  |
|                  | 060412N-ME       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
|                  | WNMG 080408N-ME  | ○           | ●       | ○       |                         |                 |            | 0.8                  |
| ME               | WNMG 080412N-ME  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 1.2                  |
|                  | 080416N-ME       | ○           | ●       | ○       |                         |                 |            | 1.6                  |
|                  | 080416N-ME       | ○           | ●       | ○       |                         |                 |            | 1.6                  |
| MX               | WNMG 080408N-MX  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.8                  |
|                  | 080412N-MX       | ○           | ●       | ○       |                         |                 |            | 1.2                  |
| UZ               | WNMG 080404N-UZ  | ○           | ●       | ○       | 12.7                    | 4.76            | 5.16       | 0.4                  |
|                  | 080408N-UZ       | ○           | ●       | ○       |                         |                 |            | 0.8                  |
|                  | 080412N-UZ       | ○           | ●       | ○       |                         |                 |            | 1.2                  |

### ネガティブ六角形 Negative Trigon Type















|     |                  |   |   |   |       |      |      |     |
|-----|------------------|---|---|---|-------|------|------|-----|
| FL  | WNMG 080404N-FL  | ○ | ● | ○ | 12.7  | 4.76 | 5.16 | 0.4 |
|     | 080408N-FL       | ○ | ● | ○ |       |      |      | 0.8 |
| FE  | WNMG 060404N-FE  | ● | ● | ● | 9.525 | 4.76 | 3.81 | 0.4 |
|     | 060408N-FE       | ● | ● | ● |       |      |      | 0.8 |
|     | WNMG 080402N-FE  | ● | ● | ● |       |      |      | 0.2 |
|     | 080404N-FE       | ● | ● | ● |       |      |      | 0.4 |
| FE  | 080408N-FE       | ● | ● | ● | 12.7  | 4.76 | 5.16 | 0.8 |
|     | 080412N-FE       | ● | ● | ● |       |      |      | 1.2 |
|     | 080412N-FE       | ● | ● | ● |       |      |      | 1.2 |
| LU  | WNMG 060404N-LU  | ○ | ● | ○ | 9.525 | 4.76 | 3.81 | 0.4 |
|     | 060408N-LU       | ○ | ● | ○ |       |      |      | 0.8 |
|     | 060412N-LU       | ○ | ● | ○ |       |      |      | 1.2 |
| LU  | WNMG 080404N-LU  | ○ | ● | ○ | 12.7  | 4.76 | 5.16 | 0.4 |
|     | 080408N-LU       | ○ | ● | ○ |       |      |      | 0.8 |
|     | 080412N-LU       | ○ | ● | ○ |       |      |      | 1.2 |
| LUW | WNMG 060404N-LUW | ○ | ● | ○ | 9.525 | 4.76 | 3.81 | 0.4 |
|     | 060408N-LUW      | ○ | ● | ○ |       |      |      | 0.8 |
| LUW | WNMG 080404N-LUW | ○ | ● | ○ | 12.7  | 4.76 | 5.16 | 0.4 |
|     | 080408N-LUW      | ○ | ● | ○ |       |      |      | 0.8 |
|     | 080412N-LUW      | ○ | ● | ○ |       |      |      | 1.2 |
| SU  | WNMG 06T304N-SU  | ○ | ● | ○ | 9.525 | 3.97 | 3.81 | 0.4 |
|     | 06T308N-SU       | ○ | ● | ○ |       |      |      | 0.8 |
|     | WNMG 060404N-SU  | ○ | ● | ○ |       |      |      | 0.4 |
| SU  | 060408N-SU       | ○ | ● | ○ | 9.525 | 4.76 | 3.81 | 0.8 |
|     | 060412N-SU       | ○ | ● | ○ |       |      |      | 1.2 |
|     | WNMG 080404N-SU  | ○ | ● | ○ |       |      |      | 0.4 |
| SU  | 080408N-SU       | ○ | ● | ○ | 12.7  | 4.76 | 5.16 | 0.8 |
|     | 080412N-SU       | ○ | ● | ○ |       |      |      | 1.2 |
|     | 080412N-SU       | ○ | ● | ○ |       |      |      | 1.2 |

# 在庫表








## ポジティブチップ Positive insert

## Stock items




### ◇ ポジティブ 80° 菱形 Positive 80° Diamond Type

| 形状<br>Appearance   | 逃げ角<br>Relief angle | 型番<br>Cat. No.   | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|--|---------------------|------------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|  |                     |                  | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|    | 7°                  | CCMT 060202N-LU  | ○           | ●       |         | 6.35                    | 2.38            | 2.8        | 0.2                  |
|  |                     | 060204N-LU       | ○           | ●       |         | 6.35                    | 2.38            | 2.8        | 0.4                  |
|  |                     | CCMT 09T304N-LU  | ○           | ●       |         | 9.525                   | 3.97            | 4.4        | 0.4                  |
|    | 7°                  | 09T308N-LU       | ○           | ●       |         | 9.525                   | 3.97            | 4.4        | 0.8                  |
|  |                     | CCMT 09T304N-LUW | ○           | ●       |         | 9.525                   | 3.97            | 4.4        | 0.4                  |
|  |                     | 09T308N-LUW      | ○           | ●       |         | 9.525                   | 3.97            | 4.4        | 0.8                  |
|    | 7°                  | CCMT 060202N-LB  |             | ●       | ○       | 6.35                    | 2.38            | 2.8        | 0.2                  |
|  |                     | 060204N-LB       |             | ●       | ○       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|  |                     | 060208N-LB       |             | ●       | ○       | 6.35                    | 2.38            | 2.8        | 0.8                  |
|    | 7°                  | CCMT 09T302N-LB  |             | ●       | ○       | 9.525                   | 3.97            | 4.4        | 0.2                  |
|  |                     | 09T304N-LB       |             | ●       | ○       | 9.525                   | 3.97            | 4.4        | 0.4                  |
|  |                     | 09T308N-LB       |             | ●       | ○       | 9.525                   | 3.97            | 4.4        | 0.8                  |
|    | 7°                  | CCMT 060202N-SU  | ●           | ●       | ●       | 6.35                    | 2.38            | 2.8        | 0.2                  |
|  |                     | 060204N-SU       | ●           | ●       | ●       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|  |                     | 060208N-SU       | ●           | ●       | ●       | 6.35                    | 2.38            | 2.8        | 0.8                  |
|    | 7°                  | CCMT 09T302N-SU  | ●           | ●       | ●       | 9.525                   | 3.97            | 4.4        | 0.2                  |
|  |                     | 09T304N-SU       | ●           | ●       | ●       | 9.525                   | 3.97            | 4.4        | 0.4                  |
|  |                     | 09T308N-SU       | ●           | ●       | ●       | 9.525                   | 3.97            | 4.4        | 0.8                  |
|    | 7°                  | CCMT 120404N-SU  | ●           | ●       | ●       | 12.7                    | 4.76            | 5.5        | 0.4                  |
|  |                     | 120408N-SU       | ●           | ●       | ●       | 12.7                    | 4.76            | 5.5        | 0.8                  |
|  |                     | CCMT 060204N-SC  |             | ●       |         | 6.35                    | 2.38            | 2.8        | 0.4                  |
|    | 7°                  | CCMT 080304N-SC  |             | ●       |         | 7.94                    | 3.18            | 3.4        | 0.4                  |
|  |                     | CCMT 090308N-SC  |             | ●       |         | 9.525                   | 3.18            | 4.4        | 0.8                  |
|  |                     | CCMT 120408N-SC  |             | ●       |         | 12.7                    | 4.76            | 5.5        | 0.8                  |
|   | 7°                  | CCMT 09T304N-MU  | ○           | ●       | ●       | 9.525                   | 3.97            | 4.4        | 0.4                  |
|  |                     | 09T308N-MU       | ○           | ●       | ●       | 9.525                   | 3.97            | 4.4        | 0.8                  |
|  |                     | CPMT 080204N-LU  | ○           | ●       |         | 7.94                    | 2.38            | 3.4        | 0.4                  |
|  | 11°                 | CPMT 090304N-LU  | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.4                  |
|  |                     | 090308N-LU       | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.8                  |
|  |                     | CPMT 090304N-LUW | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.4                  |
|  | 11°                 | 090308N-LUW      | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.8                  |
|  |                     | CPMT 080204N-LB  |             | ●       | ○       | 7.94                    | 2.38            | 3.4        | 0.4                  |
|  |                     | CPMT 090304N-LB  |             | ●       | ○       | 9.525                   | 3.18            | 4.4        | 0.4                  |
|  | 11°                 | 090308N-LB       |             | ●       | ○       | 9.525                   | 3.18            | 4.4        | 0.8                  |
|  |                     | CPMT 080204N-SU  | ●           | ●       | ●       | 7.94                    | 2.38            | 3.4        | 0.4                  |
|  |                     | CPMT 080208N-SU  | ●           | ●       | ●       | 7.94                    | 2.38            | 3.4        | 0.8                  |
|  | 11°                 | CPMT 090304N-SU  | ●           | ●       | ●       | 9.525                   | 3.18            | 4.4        | 0.4                  |
|  |                     | 090308N-SU       | ●           | ●       | ●       | 9.525                   | 3.18            | 4.4        | 0.8                  |
|  |                     | CPMT 080204N-MU  | ○           | ●       |         | 7.94                    | 2.38            | 3.4        | 0.4                  |
|  | 11°                 | CPMT 080208N-MU  | ○           | ●       |         | 7.94                    | 2.38            | 3.4        | 0.8                  |
|  |                     | CPMT 090304N-MU  | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.4                  |
|  |                     | 090308N-MU       | ○           | ●       |         | 9.525                   | 3.18            | 4.4        | 0.8                  |









### ◇ ポジティブ 55° 菱形 Positive 55° Diamond Type

|  |    |                 |   |   |   |       |      |     |     |
|--|----|-----------------|---|---|---|-------|------|-----|-----|
|  | 7° | DCMT 070202N-LU | ○ | ● |   | 6.35  | 2.38 | 2.8 | 0.2 |
|  |    | 070204N-LU      | ○ | ● |   | 6.35  | 2.38 | 2.8 | 0.4 |
|  | 7° | DCMT 11T302N-LU | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.2 |
|  |    | 11T304N-LU      | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.4 |
|  |    | 11T308N-LU      | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.8 |
|  | 7° | DCMT 070202N-LB |   | ● | ○ | 6.35  | 2.38 | 2.8 | 0.2 |
|  |    | 070204N-LB      |   | ● | ○ | 6.35  | 2.38 | 2.8 | 0.4 |
|  |    | 070208N-LB      |   | ● | ○ | 6.35  | 2.38 | 2.8 | 0.8 |
|  | 7° | DCMT 11T302N-LB |   | ● | ○ | 9.525 | 3.97 | 4.4 | 0.2 |
|  |    | 11T304N-LB      |   | ● | ○ | 9.525 | 3.97 | 4.4 | 0.4 |
|  |    | 11T308N-LB      |   | ● | ○ | 9.525 | 3.97 | 4.4 | 0.8 |
|  | 7° | DCMT 070202N-SU | ● | ● | ● | 6.35  | 2.38 | 2.8 | 0.2 |
|  |    | 070204N-SU      | ● | ● | ● | 6.35  | 2.38 | 2.8 | 0.4 |
|  |    | 070208N-SU      | ● | ● | ● | 6.35  | 2.38 | 2.8 | 0.8 |
|  | 7° | DCMT 11T302N-SU | ● | ● | ● | 9.525 | 3.97 | 4.4 | 0.2 |
|  |    | 11T304N-SU      | ● | ● | ● | 9.525 | 3.97 | 4.4 | 0.4 |
|  |    | 11T308N-SU      | ● | ● | ● | 9.525 | 3.97 | 4.4 | 0.8 |
|  | 7° | DCMT 11T304N-MU | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.4 |
|  |    | 11T308N-MU      | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.8 |

### ◎ ポジティブ円形 Positive Round Type

| 形状<br>Appearance  | 逃げ角<br>Relief angle | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|---|---------------------|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|   |                     |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|  | 7°                  | RCMT 1003MON-RX | ○           | ●       |         | 10.0                    | 3.18            | 4.4        | —                    |
|   |                     | 1204MON-RX      | ○           | ●       |         | 12.0                    | 4.76            | 4.4        | —                    |
|   |                     | 1606MON-RX      | ○           | ●       |         | 16.0                    | 6.35            | 5.0        | —                    |
|   |                     | 2006MON-RX      | ○           | ●       |         | 20.0                    | 6.35            | 6.5        | —                    |
|   |                     | 2507MON-RX      | ○           | ●       |         | 25.0                    | 7.94            | 7.6        | —                    |
|  | 7°                  | RCMT 1204MON-RH | ○           | ●       |         | 12.0                    | 4.76            | 4.4        | —                    |
|   |                     | 1606MON-RH      | ○           | ●       |         | 16.0                    | 6.35            | 5.0        | —                    |
|   |                     | 2006MON-RH      | ○           | ●       |         | 20.0                    | 6.35            | 6.5        | —                    |
|  | 7°                  | RCMX 1003MON-RP | ○           | ●       |         | 10.0                    | 3.18            | 3.6        | —                    |
|   |                     | 1204MON-RP      | ○           | ●       |         | 12.0                    | 4.76            | 4.2        | —                    |
|   |                     | 1606MON-RP      | ○           | ●       |         | 16.0                    | 6.35            | 5.2        | —                    |
|   |                     | 2006MON-RP      | ○           | ●       |         | 20.0                    | 6.35            | 6.5        | —                    |
|   |                     | 2507MON-RP      | ○           | ●       |         | 25.0                    | 7.94            | 7.2        | —                    |
|   |                     | 3209MON-RP      | ○           | ●       |         | 32.0                    | 9.52            | 9.5        | —                    |

### ○ ポジティブ正方形 Positive Square Type

|   |     |                 |   |   |   |       |      |     |     |
|---|-----|-----------------|---|---|---|-------|------|-----|-----|
|    | 7°  | SCMT 09T304N-LU | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.4 |
|   |     | 09T308N-LU      | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.8 |
|    | 7°  | SCMT 09T304N-LB |   | ● | ○ | 9.525 | 3.97 | 4.4 | 0.4 |
|   |     | 09T308N-LB      |   | ● | ○ | 9.525 | 3.97 | 4.4 | 0.8 |
|    | 7°  | SCMT 09T304N-SU | ● | ● | ● | 9.525 | 3.97 | 4.4 | 0.4 |
|   |     | 09T308N-SU      | ● | ● | ● | 9.525 | 3.97 | 4.4 | 0.8 |
|   |     | SCMT 120404N-SU | ● | ● | ● | 12.7  | 4.76 | 5.5 | 0.4 |
|    | 7°  | 120408N-SU      | ● | ● | ● | 12.7  | 4.76 | 5.5 | 0.8 |
|   |     | SCMT 09T308N-MU | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.8 |
|   |     | SCMT 120408N-MU | ○ | ● |   | 12.7  | 4.76 | 5.5 | 0.8 |
|  | 7°  | SCMT 09T308N-MU | ○ | ● |   | 9.525 | 3.97 | 4.4 | 0.8 |
|   |     | SCMT 120408N-MU | ○ | ● |   | 12.7  | 4.76 | 5.5 | 0.8 |
|  | 11° | SPMT 090304N-LU | ○ | ● |   | 9.525 | 3.18 | 3.4 | 0.4 |
|   |     | 090308N-LU      | ○ | ● |   | 9.525 | 3.18 | 3.4 | 0.8 |
|  | 11° | SPMT 090304N-LB |   | ● | ○ | 9.525 | 3.18 | 3.4 | 0.4 |
|   |     | 090308N-LB      |   | ● | ○ | 9.525 | 3.18 | 3.4 | 0.8 |
|  | 11° | SPMT 090304N-SF |   | ● | ○ | 9.525 | 3.18 | 3.3 | 0.4 |
|   |     | 090308N-SF      |   | ● | ○ | 9.525 | 3.18 | 3.3 | 0.8 |

●印：標準在庫品、○印：在庫予定品（2017年10月）、無印：受注生産品、：ワイパーチップ  
 ●mark : Standard stock item, ○mark : Planned stock(Oct.2017), Blank : Made to order item,  : Wiper insert



### △ ポジティブ三角形 Positive Triangular Type

| 形状<br>Appearance | 逃げ角<br>Relief angle | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|------------------|---------------------|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|                  |                     |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|                  | 7°                  | TCMT 110204N-LU | ○           | ○       | ○       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|                  |                     | 110208N-LU      | ○           | ○       | ○       | 6.35                    | 2.38            | 2.8        | 0.8                  |
|                  | 7°                  | TCMT 110204N-LB | ●           | ●       | ○       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|                  |                     | 110208N-LB      | ●           | ●       | ○       | 6.35                    | 2.38            | 2.8        | 0.8                  |
|                  | 7°                  | TCMT 110204N-SU | ●           | ●       | ●       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|                  |                     | 110208N-SU      | ●           | ●       | ●       | 6.35                    | 2.38            | 2.8        | 0.8                  |
|                  | 7°                  | TCMT 16T304N-SU | ●           | ●       | ●       | 9.525                   | 3.97            | 4.3        | 0.4                  |
|                  |                     | 16T308N-SU      | ●           | ●       | ●       | 9.525                   | 3.97            | 4.3        | 0.8                  |
|                  | 11°                 | TPMT 090202N-LU | ○           | ○       | ○       | 5.56                    | 2.38            | 2.8        | 0.2                  |
|                  |                     | 090204N-LU      | ○           | ○       | ○       | 5.56                    | 2.38            | 2.8        | 0.4                  |
|                  | 11°                 | TPMT 110304N-LU | ○           | ○       | ○       | 6.35                    | 3.18            | 3.4        | 0.4                  |
|                  |                     | 110308N-LU      | ○           | ○       | ○       | 6.35                    | 3.18            | 3.4        | 0.8                  |
|                  | 11°                 | TPMT 080202N-LB | ●           | ●       | ○       | 4.76                    | 2.38            | 2.4        | 0.2                  |
|                  |                     | 080204N-LB      | ●           | ●       | ○       | 4.76                    | 2.38            | 2.4        | 0.4                  |
|                  |                     | TPMT 090202N-LB | ●           | ●       | ○       | 5.56                    | 2.38            | 2.8        | 0.2                  |
|                  |                     | 090204N-LB      | ●           | ●       | ○       | 5.56                    | 2.38            | 2.8        | 0.4                  |
|                  | 11°                 | TPMT 110302N-LB | ●           | ●       | ○       | 6.35                    | 3.18            | 3.4        | 0.2                  |
|                  |                     | 110304N-LB      | ●           | ●       | ○       | 6.35                    | 3.18            | 3.4        | 0.4                  |
|                  |                     | 110308N-LB      | ●           | ●       | ○       | 6.35                    | 3.18            | 3.4        | 0.8                  |
|                  |                     | TPMT 160304N-LB | ●           | ●       | ○       | 9.525                   | 3.18            | 4.4        | 0.4                  |
| 11°              | TPMT 160308N-LB     | ●               | ●           | ○       | 9.525   | 3.18                    | 4.4             | 0.8        |                      |
|                  | TPMT 160404N-LB     | ●               | ●           | ○       | 9.525   | 4.76                    | 4.4             | 0.4        |                      |
|                  | 160408N-LB          | ●               | ●           | ○       | 9.525   | 4.76                    | 4.4             | 0.8        |                      |
|                  | TPMT 110302N-SU     | ●               | ●           | ●       | 6.35    | 3.18                    | 3.4             | 0.2        |                      |
| 11°              | TPMT 110304N-SU     | ●               | ●           | ●       | 6.35    | 3.18                    | 3.4             | 0.4        |                      |
|                  | 110308N-SU          | ●               | ●           | ●       | 6.35    | 3.18                    | 3.4             | 0.8        |                      |
| 11°              | TPMT 160404N-SU     | ●               | ●           | ●       | 9.525   | 4.76                    | 4.4             | 0.4        |                      |
|                  | 160408N-SU          | ●               | ●           | ●       | 9.525   | 4.76                    | 4.4             | 0.8        |                      |
| 11°              | TPMT 110304N-MU     | ○               | ○           | ○       | 6.35    | 3.18                    | 3.4             | 0.4        |                      |
|                  | 110308N-MU          | ○               | ○           | ○       | 6.35    | 3.18                    | 3.4             | 0.8        |                      |
| 11°              | TPMT 160404N-MU     | ○               | ○           | ○       | 9.525   | 4.76                    | 4.4             | 0.4        |                      |
|                  | 160408N-MU          | ○               | ○           | ○       | 9.525   | 4.76                    | 4.4             | 0.8        |                      |
| 11°              | TPMH 110304N-SF     | ●               | ●           | ○       | 6.35    | 3.18                    | 3.3             | 0.4        |                      |
|                  | 110308N-SF          | ●               | ●           | ○       | 6.35    | 3.18                    | 3.3             | 0.8        |                      |
| 11°              | TPMT 160404N-SF     | ●               | ●           | ○       | 9.525   | 4.76                    | 4.3             | 0.4        |                      |
|                  | 160408N-SF          | ●               | ●           | ○       | 9.525   | 4.76                    | 4.3             | 0.8        |                      |

### ◇ ポジティブ 35° 菱形 Positive 35° Diamond Type

|            |    |                 |   |   |   |       |      |     |     |
|------------|----|-----------------|---|---|---|-------|------|-----|-----|
|            | 5° | VBMT 110304N-LU | ○ | ○ | ○ | 6.35  | 3.18 | 2.8 | 0.4 |
|            |    | 110308N-LU      | ○ | ○ | ○ | 6.35  | 3.18 | 2.8 | 0.8 |
|            |    | VBMT 160404N-LU | ○ | ○ | ○ | 9.525 | 4.76 | 4.4 | 0.4 |
| 160408N-LU | 5° | VBMT 110302N-LB | ● | ● | ○ | 6.35  | 3.18 | 2.8 | 0.2 |
|            |    | 110304N-LB      | ● | ● | ○ | 6.35  | 3.18 | 2.8 | 0.4 |
|            |    | 110308N-LB      | ● | ● | ○ | 6.35  | 3.18 | 2.8 | 0.8 |
| 160404N-LB | 5° | VBMT 160404N-LB | ● | ● | ○ | 9.525 | 4.76 | 4.4 | 0.4 |
|            |    | 160408N-LB      | ● | ● | ○ | 9.525 | 4.76 | 4.4 | 0.8 |
|            |    | 160412N-LB      | ● | ● | ○ | 9.525 | 4.76 | 4.4 | 1.2 |
| 110304N-SU | 5° | VBMT 110304N-SU | ● | ● | ● | 6.35  | 3.18 | 2.8 | 0.4 |
|            |    | 110308N-SU      | ● | ● | ● | 6.35  | 3.18 | 2.8 | 0.8 |
|            |    | VBMT 160404N-SU | ● | ● | ● | 9.525 | 4.76 | 4.4 | 0.4 |
| 160408N-SU | 5° | VBMT 160408N-SU | ● | ● | ● | 9.525 | 4.76 | 4.4 | 0.8 |
|            |    | 160412N-SU      | ● | ● | ● | 9.525 | 4.76 | 4.4 | 1.2 |
|            |    | VCMT 160404N-LU | ○ | ○ | ○ | 9.525 | 4.76 | 4.4 | 0.4 |
| 160408N-LU | 7° | VCMT 160408N-LU | ○ | ○ | ○ | 9.525 | 4.76 | 4.4 | 0.8 |
|            |    | VCMT 080202N-LB | ● | ● | ○ | 4.76  | 2.38 | 2.3 | 0.2 |
| 080204N-LB | 7° | VCMT 080204N-LB | ● | ● | ○ | 4.76  | 2.38 | 2.3 | 0.4 |
|            |    | VCMT 160404N-LB | ● | ● | ○ | 9.525 | 4.76 | 4.4 | 0.4 |
| 160408N-LB | 7° | VCMT 160408N-LB | ● | ● | ○ | 9.525 | 4.76 | 4.4 | 0.8 |
|            |    | VCMT 110304N-SU | ● | ● | ● | 6.35  | 3.18 | 2.8 | 0.4 |
| 110308N-SU | 7° | VCMT 110308N-SU | ● | ● | ● | 6.35  | 3.18 | 2.8 | 0.8 |
|            |    | VCMT 160404N-SU | ● | ● | ● | 9.525 | 4.76 | 4.4 | 0.4 |
| 160408N-SU | 7° | VCMT 160408N-SU | ● | ● | ● | 9.525 | 4.76 | 4.4 | 0.8 |

### △ ポジティブ六角形 Positive Trigon Type

| 形状<br>Appearance | 逃げ角<br>Relief angle | 型番<br>Cat. No.  | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |            |                      |
|------------------|---------------------|-----------------|-------------|---------|---------|-------------------------|-----------------|------------|----------------------|
|                  |                     |                 | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | 穴径<br>Hole | ノーズ半径<br>Nose radius |
|                  | 11°                 | WPMT 110204N-LB | ○           | ○       | ○       | 6.35                    | 2.38            | 2.8        | 0.4                  |
|                  |                     | WPMT 160308N-LB | ○           | ○       | ○       | 9.525                   | 3.18            | 4.4        | 0.8                  |

### □ ポジティブ正方形 (穴なし) Square Type (Without Insert Hole)

|            |     |                 |   |   |   |       |      |   |     |
|------------|-----|-----------------|---|---|---|-------|------|---|-----|
|            | 11° | SPMR 090304N-SF | ● | ○ | ○ | 9.525 | 3.18 | - | 0.4 |
|            |     | 090308N-SF      | ● | ○ | ○ | 9.525 | 3.18 | - | 0.8 |
|            |     | SPMR 120304N-SF | ● | ○ | ○ | 12.7  | 3.18 | - | 0.4 |
| 120308N-SF | 11° | 120312N-SF      | ● | ○ | ○ | 12.7  | 3.18 | - | 1.2 |
|            |     | SPMR 090304N-UJ | ● | ○ | ○ | 9.525 | 3.18 | - | 0.4 |
|            |     | 090308N-UJ      | ● | ○ | ○ | 9.525 | 3.18 | - | 0.8 |
| 120304N-UJ | 11° | SPMR 120304N-UJ | ● | ○ | ○ | 12.7  | 3.18 | - | 0.4 |
|            |     | 120308N-UJ      | ● | ○ | ○ | 12.7  | 3.18 | - | 0.8 |

### △ ポジティブ三角形 (穴なし) Triangular Type (Without Insert Hole)

|            |     |                 |   |   |   |       |      |   |     |
|------------|-----|-----------------|---|---|---|-------|------|---|-----|
|            | 11° | TPMR 110304N-SF | ● | ○ | ○ | 6.35  | 3.18 | - | 0.4 |
|            |     | 110308N-SF      | ● | ○ | ○ | 6.35  | 3.18 | - | 0.8 |
|            |     | TPMR 160304N-SF | ● | ○ | ○ | 9.525 | 3.18 | - | 0.4 |
|            |     | 160308N-SF      | ● | ○ | ○ | 9.525 | 3.18 | - | 0.8 |
| 160312N-SF | 11° | TPMR 110304N-UJ | ● | ○ | ○ | 6.35  | 3.18 | - | 0.4 |
|            |     | 110308N-UJ      | ● | ○ | ○ | 6.35  | 3.18 | - | 0.8 |
| 160304N-UJ | 11° | TPMR 160304N-UJ | ● | ○ | ○ | 9.525 | 3.18 | - | 0.4 |
|            |     | 160308N-UJ      | ● | ○ | ○ | 9.525 | 3.18 | - | 0.8 |

## T-REX チップ (倣い加工用) Inserts for T-REX

### ネガティブ 頂角 55° Negative 55° Apex Angle SumiTurn T-REX

| 形状<br>Appearance | 型番<br>Cat. No. | 在庫<br>Stock |         |         | 寸法 (mm)<br>Dimensions   |                 |                      |
|------------------|----------------|-------------|---------|---------|-------------------------|-----------------|----------------------|
|                  |                | AC8015P     | AC8025P | AC8035P | 内接円<br>Inscribed circle | 厚さ<br>Thickness | ノーズ半径<br>Nose radius |
|                  | TRM 551704-FL  | ●           | ○       | ○       | 10.0                    | 5.0             | 0.4                  |
|                  | 551708-FL      | ●           | ○       | ○       | 10.0                    | 5.0             | 0.8                  |
|                  | TRM 551704-GU  | ●           | ○       | ○       | 10.0                    | 5.0             | 0.4                  |
|                  | 551708-GU      | ●           | ○       | ○       | 10.0                    | 5.0             | 0.8                  |
|                  | 551712-GU      | ●           | ○       | ○       | 10.0                    | 5.0             | 1.2                  |
|                  | TRM 551704-LU  | ●           | ○       | ○       | 10.0                    | 5.0             | 0.4                  |
|                  | 551708-LU      | ●           | ○       | ○       | 10.0                    | 5.0             | 0.8                  |
|                  | 551712-LU      | ●           | ○       | ○       | 10.0                    | 5.0             | 1.2                  |
|                  | TRM 551704-SU  | ●           | ○       | ○       | 10.0                    | 5.0             | 0.4                  |
|                  | 551708-SU      | ●           | ○       | ○       | 10.0                    | 5.0             | 0.8                  |
| 551712-SU        | ●              | ○           | ○       | 10.0    | 5.0                     | 1.2             |                      |



●高温の切りくずが飛散したり長く伸びた切りくずが排出されることがありますので、安全カバーや保護メガネ等の保護具を使用し、防災・防火に十分ご配慮ください。

● Very hot or lengthy chips may be discharged while the machine is in operation. Therefore, machine guards, safety goggles or other protective covers must be used. Fire safety precautions must also be considered.

●鋭い切れ刃を持っているため取扱いにご注意ください。  
●使用方法を誤ったり、使用条件が不適切な場合、工具破損、飛散を招きますので推奨条件の範囲内でご使用ください。

● Please handle with care as this product has sharp edges.  
● Improper cutting conditions or mis-handling of the tool may result in breakages or projectiles. Therefore, please use the tool within its recommended conditions.

●不水溶性の切削液をご使用になる場合は、自動消火装置を設置するなどの対策を講じて頂き、火災にくれぐれもご注意ください。

● When using non-water soluble cutting oil, precautions against fire must be taken and please ensure that a fire extinguisher is placed near the machine.

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\*営業所移転につき、2017年6月より所在地・電話番号・FAXが変更になりました。

(2017.6) I TP