



2026

CATALOGO

KDL CATALOGO

CATALOGO DE
HERRAMIENTAS DE CORTE E
INSERTOS



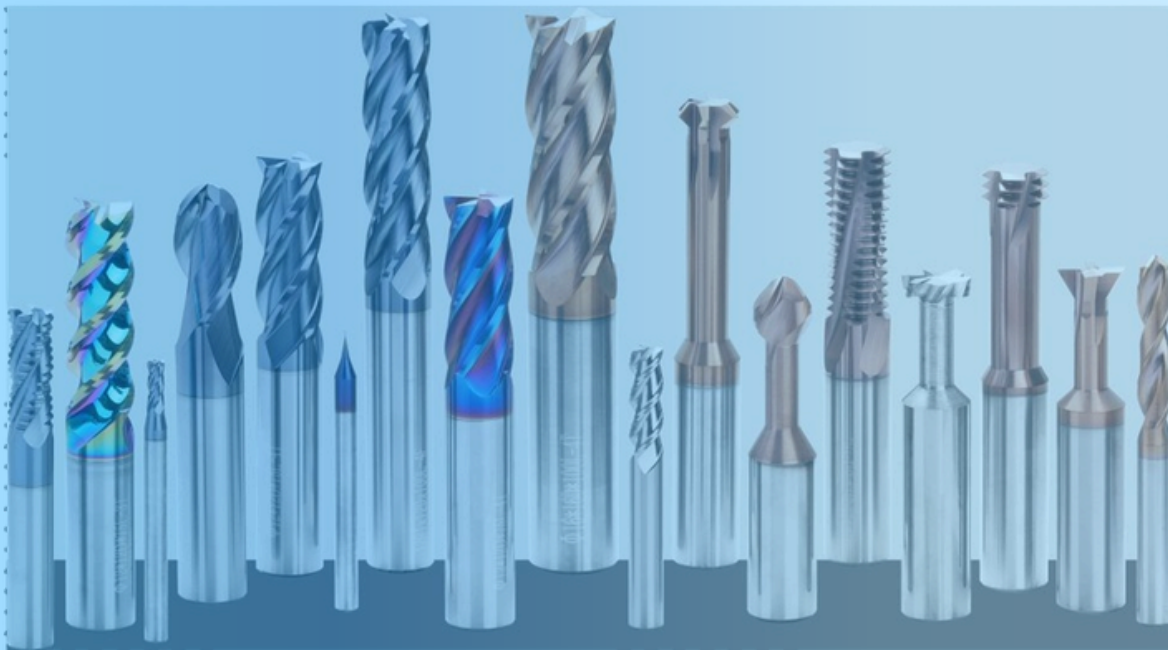
+52 8112273382



kdl.com.mx



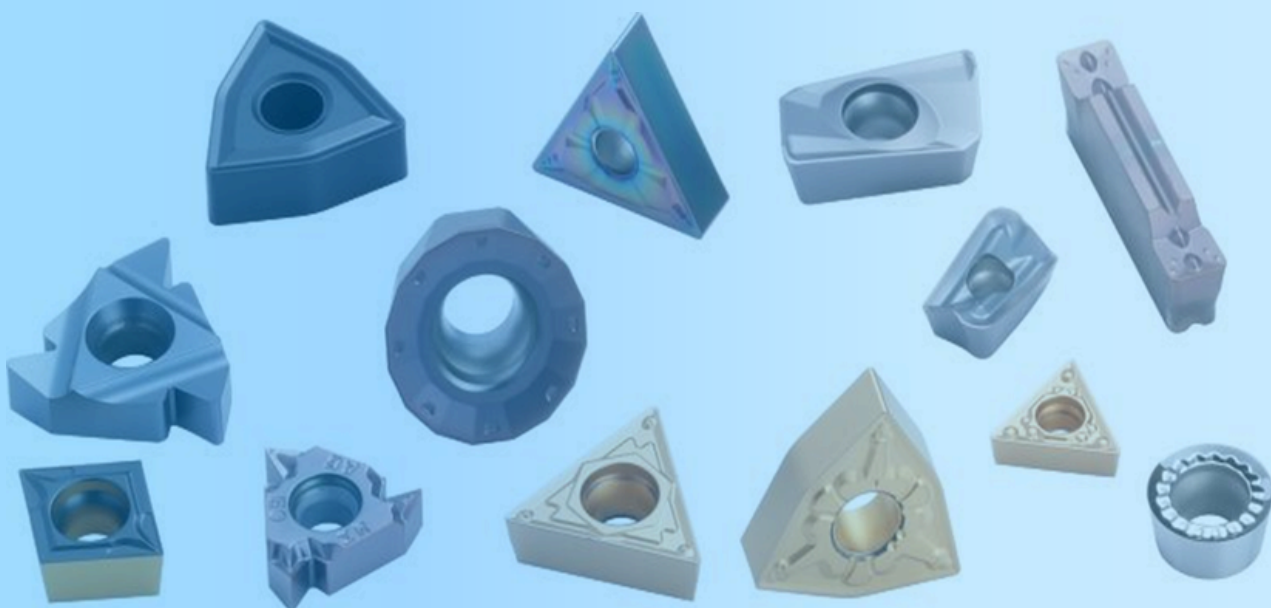
ventas@kdl.com.mx



Herramientas de corte de carburo sólido



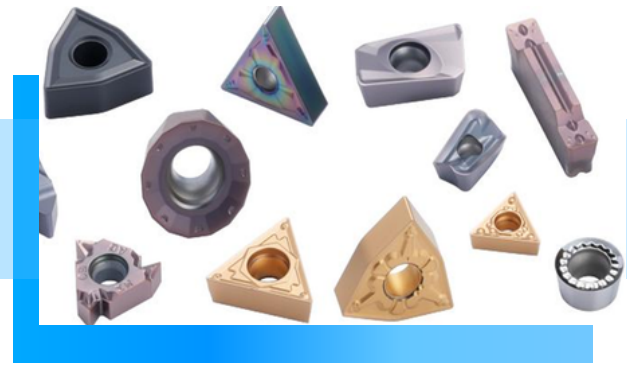
EDICIÓN 2026



Insertos de torneado para acero



Acabado fino (Finishing)



JHQ

Utiliza un ángulo de desprendimiento tridimensional (3 ejes) y un diseño de doble convexidad, lo que proporciona un excelente desempeño de corte.



SPF

Diseño especial del rompevirutas que controla eficazmente el enrollado y la rotura de la viruta.

Filo muy afilado, corte suave y rápido, con excelente calidad superficial.



STF

Filo afilado con corte ligero.

Estructura especial del rompevirutas que permite una excelente rotura de viruta incluso con profundidades de corte pequeñas.

Semiacabado (Semi-Finishing)



SPM

Diseño con chaflán negativo que mejora la resistencia del filo y la resistencia al impacto.

Doble plataforma de rompevirutas que amplía el rango de trabajo.



TM

Diseño de filo plano con alta resistencia al desgaste y a la rotura.

Excelente control de dirección de la viruta.

Desbaste (Roughing)



SPR

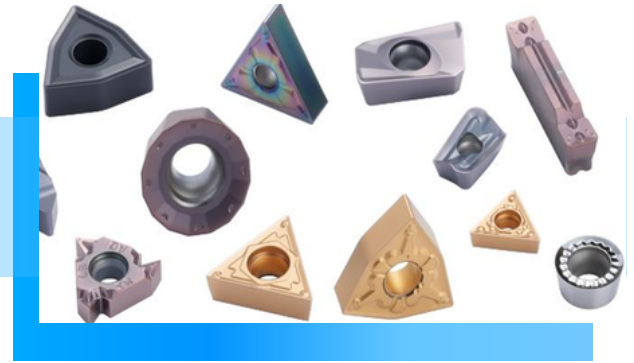
Diseño tridimensional con doble ángulo frontal, banda de filo ancha y chaflán negativo.

Alta resistencia del filo y mayor vida útil.

Ideal para desbaste y mecanizado intermitente en acero.



KDL



Acabado fino (Finishing)

JMQ

Gran ángulo frontal

Baja resistencia al corte que permite un excelente control de la viruta.

MSF

Diseño tridimensional del rompevirutas con doble ángulo frontal
Filo de corte afilado y baja resistencia al corte.

Resuelve eficazmente problemas comunes del mecanizado como filo recrecido, endurecimiento por trabajo y otros desafíos del proceso.

El diseño del ángulo de inclinación del filo controla eficazmente la dirección del flujo de viruta y permite obtener una superficie mecanizada de alta calidad.

SMF

Diseño especial del ángulo frontal y del ángulo de inclinación del filo

Filo de corte afilado y baja fuerza de corte, lo que permite obtener una excelente calidad superficial.

STF

Filo de corte afilado, corte suave y rápido

Estructura exclusiva del rompevirutas que ofrece una excelente capacidad de rotura de viruta incluso con profundidades de corte pequeñas.

Semiacabado (Semi-Finishing)

MAL

Inserto diseñado para resolver problemas comunes del mecanizado de acero inoxidable como:

- Viruta difícil de romper
- Alta temperatura de corte
- Material adherido
- Endurecimiento por trabajo

Permite obtener mayor eficiencia de mecanizado y mejor estabilidad del proceso.





Torneado de hierro fundido Semiacabado



Rompevirutas general

Tipo de ranura recomendado para el torneado de hierro fundido.

Desbaste



Plano (sin ranura)

Tipo de ranura recomendado para condiciones de trabajo inestables en el torneado de hierro fundido.

Aleación de aluminio



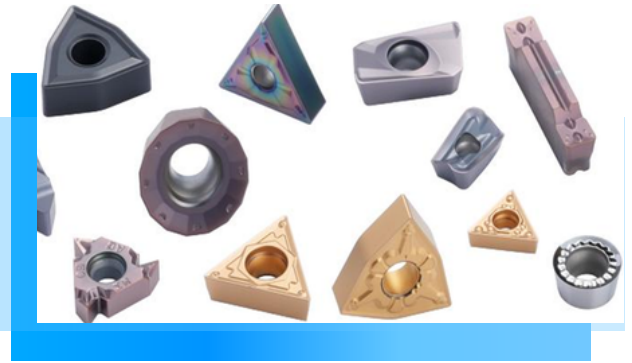
TK

Desde acabado fino hasta desbaste (Finishing to Roughing)

- Gran ángulo frontal y ángulo de despeje, que proporcionan un filo de corte más afilado, optimizando el corte rápido y reduciendo la carga de corte.
- Diseño exclusivo del rompevirutas tridimensional con amplio espacio para la viruta, que mejora la evacuación y estabilidad del proceso.
- Diseño del ángulo de inclinación del filo, que controla eficazmente la dirección del flujo de la viruta.
- Superficie frontal pulida tipo espejo, que permite obtener excelente calidad superficial y prolonga la vida útil del inserto.



Corte y Ranurado Parting and Grooving



M

- Diseño convexo que contribuye a una excelente rotura de viruta y amplía el rango de rotura



- Cabeza redonda, adecuada para ranurado con radio completo y torneado de contornos.

M

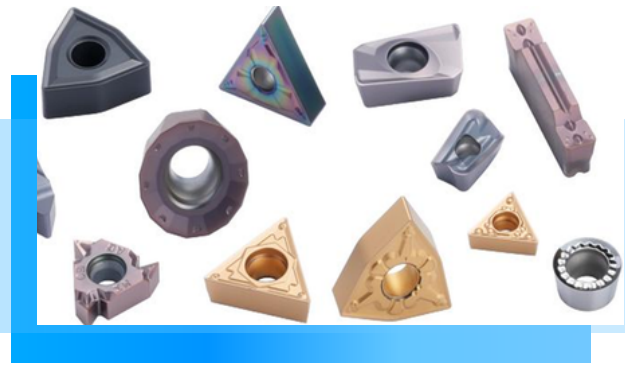
- Diseño convexo en la parte superior que reduce el ancho de la viruta, favoreciendo el enrollado y la rotura de la viruta.



- Aplicación en torneado y ranurado.
- Diseño convexo lateral, que mejora significativamente la rotura de viruta durante el proceso de torneado.



Tabla de grados y recubrimientos



| Grado | Dureza (HV) | Tipo de recubrimiento | Color | Características |
|--------|-------------|-----------------------|----------|--|
| HP1020 | 1530 | CVD | Amarillo | Sustrato de carburo con contenido medio de cobalto y alto contenido de cúbico, combinado con recubrimiento TiCN grueso y Al_2O_3 . Tras un tratamiento especial, ofrece excelente resistencia al desgaste abrasivo. |
| HP1025 | 1530 | CVD | Negro | Sustrato de carburo con bajo contenido de cobalto y alto contenido de cúbico, combinado con recubrimiento TiCN grueso y Al_2O_3 . Tratamiento especial posterior que proporciona alta resistencia al desgaste. Grado recomendado desde semiacabado hasta desbaste en acero. |
| HP1050 | 1480 | CVD | Bicolor | Sustrato de carburo con alto contenido de cúbico y alta tenacidad, excelente resistencia al desgaste y al impacto. Recubrimiento CVD multicapas, con estructura de capa de transición especial que garantiza adhesión uniforme del recubrimiento y distribución homogénea de esfuerzos. Ofrece alta resistencia al desgaste y gran estabilidad. Adecuado para mecanizado de acero desde semiacabado hasta desbaste, especialmente en condiciones de corte exigentes. |



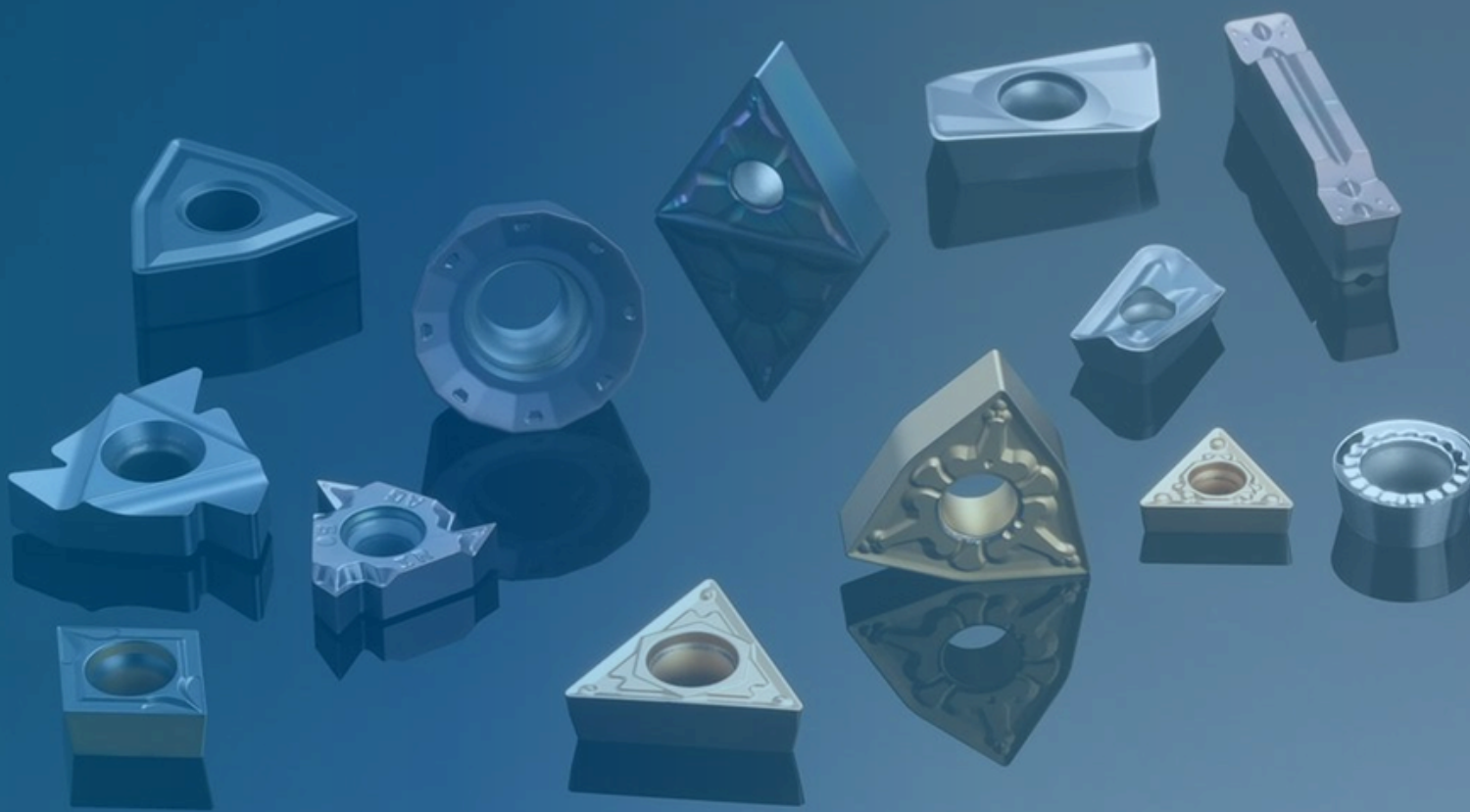
CVD

| Grado | Dureza (HV) | Tipo de recubrimiento | Color | Características |
|--------|-------------|-----------------------|---------|---|
| HK3125 | 1600 | CVD | Bicolor | <p>Recubrimiento MT-CVD TiCN + Al₂O₃, con capa fina de α-Al₂O₃, sobre un sustrato de carburo duro con buena tenacidad.</p> <p>Aplicaciones:</p> <ul style="list-style-type: none">• Torneado de hierro fundido gris y hierro nodular en condiciones severas e interrumpidas.• Torneado de hierro fundido gris y nodular en desbaste, incluso con capa superficial negra. |
| HK3115 | 1580 | CVD | Negro | <p>Sustrato de carburo WC de grano medio, combinado con recubrimiento grueso TiCN y Al₂O₃.</p> <p>Tratamiento posterior especial que proporciona excelente resistencia al desgaste y alta estabilidad.</p> <p>Aplicación:</p> <p>Adecuado para semiacabado de hierro fundido a alta velocidad, bajo condiciones de trabajo estables.</p> |



PVD (Tabla de grados – Recubrimientos PVD)

| Grado | Dureza (HV) | Tipo de recubrimiento | Color | Características |
|--------|-------------|-----------------------|---------------|--|
| HT2015 | 1640 | PVD | Gris | Sustrato con alto contenido de cobalto y carburo WC de grano fino, combinado con recubrimiento PVD AlTiN. Proporciona filo de corte muy afilado, alta resistencia, bajo coeficiente de fricción y excelente resistencia a altas temperaturas. Aplicación: Grado preferido para fresado y taladrado de acero y acero inoxidable. |
| HT2030 | 1560 | PVD | Morado oscuro | Sustrato con alto contenido de cobalto y WC de grano fino, con recubrimiento PVD AlTiN optimizado. Combina alta resistencia del filo, excelente estabilidad térmica y buen desempeño general. Aplicación: Adecuado para fresado, torneado ligero, ranurado y taladrado de acero y acero inoxidable, tanto en semiacabado como acabado. |
| HM2035 | 1550 | PVD | Morado oscuro | Recubrimiento con estructura columnar densa, tamaño de grano fino y excelente estabilidad térmica. Reduce la fricción y el calor generado durante el corte, disminuyendo el desgaste. La fuerte adhesión entre el recubrimiento y el sustrato mejora la resistencia a la rotura y prolonga la vida útil. |
| HT2065 | 1580 | PVD | Dorado | Nuevo sustrato de carburo con excelente resistencia al desgaste y al impacto, combinado con recubrimiento multicapa AlTiN. Ofrece muy alta estabilidad de corte y larga vida útil de la herramienta. Aplicación: Adecuado para fresado general de acero y |



HERRAMIENTAS DE TORNEADO

Reglas de nomenclatura ISO para insertos de torneado

Forma

| | | |
|----------|----------|----------|
| A | B | C |
| | | |
| D | E | H |
| | | |
| K | L | M |
| | | |
| O | P | R |
| | | |
| S | T | T |
| | | |
| V | Y | W |
| | | |

Rompevirutas y orificio

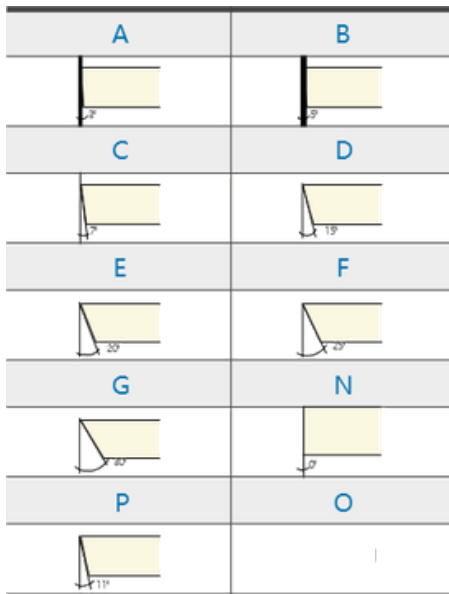
| Símbolo | Orificio central | Rompevirutas | Perfil de inserto | Símbolos | Orificio central | Rompevirutas | Perfil del inserto |
|----------|------------------|--------------|-------------------|----------|------------------|--------------|--------------------|
| B | (Y) | (N) | | N | (N) | (N) | |
| H | (Y) | (S) | | R | (N) | (S) | |
| C | (Y) | (N) | | F | (N) | (D) | |
| J | (Y) | (D) | | A | (Y) | (N) | |
| W | (Y) | (N) | | M | (Y) | (S) | |
| T | (Y) | (S) | | G | (Y) | (D) | |
| Q | (Y) | (N) | | X | | | |
| U | (Y) | (D) | | | | | |

Tolerance

| Símbolo | Radio de punta(m m) | Círculo inscrito IC (d=φI.C(mm)) | Espesor s(mm) | Detalle de tolerancias del grado M (según forma y tamaño) | | | | | | | |
|----------|---------------------|----------------------------------|---------------|---|----------------------|----------|-----------|-----------|-----------|---------|--|
| | | | | Círculo inscrito | Triángulo equilátero | Cuadrado | Rombo 80° | Rombo 55° | Rombo 35° | Redondo | |
| | | | | 635 | ±0.08 | ±0.08 | ±0.08 | ±0.11 | ±0.16 | | |
| A | ±0.005 | ±0.025 | ±0.025 | 15.875 | ±0.15 | ±0.15 | ±0.15 | ±0.18 | | | |
| F | ±0.005 | ±0.013 | ±0.025 | 19.05 | ±0.15 | ±0.15 | ±0.15 | ±0.18 | | | |
| C | ±0.013 | ±0.025 | ±0.025 | 254 | | ±0.18 | | | | | |
| H | ±0.013 | ±0.013 | ±0.013 | (mm) ● Tolerancia del círculo inscrito | | | | | | | |
| E | ±0.025 | ±0.025 | ±0.025 | Círculo inscrito | Triángulo equilátero | Cuadrado | Rombo 80° | Rombo 55° | Rombo 35° | Redondo | |
| G | ±0.025 | ±0.025 | ±0.13 | | | | | | | | |
| J | ±0.005 | ±0.05±0.13 | ±0.025 | 635 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | | |
| K | ±0.013 | ±0.05±0.13 | ±0.025 | 9.525 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | ±0.05 | |
| L | ±0.025 | ±0.05±0.13 | ±0.025 | 127 | ±0.08 | ±0.08 | ±0.08 | ±0.08 | | ±0.08 | |
| M | ±0.08±0.18 | ±0.05±0.13 | ±0.13 | 15.875 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | | ±0.1 | |
| N | ±0.08±0.18 | ±0.05±0.13 | ±0.025 | 19.05 | ±0.1 | ±0.1 | ±0.1 | ±0.1 | | ±0.1 | |
| U | ±0.13±0.38 | ±0.08±0.25 | ±0.13 | 254 | | | | | | ±0.13 | |

Reglas de nomenclatura ISO para insertos de torneado

Ángulo de despeje



Espesor

| Símbolo | Espesor |
|---------|---------|
| 00 | 0.79 |
| T0 | 0.99 |
| 01 | 1.59 |
| T1 | 1.98 |
| 02 | 2.38 |
| T2 | 2.58 |
| 03 | 3.18 |
| T3 | 3.97 |
| 04 | 4.76 |
| T4 | 4.96 |
| 05 | 5.56 |
| T5 | 5.95 |
| 06 | 6.35 |
| T6 | 6.75 |
| 07 | 7.94 |
| 09 | 9.52 |
| T9 | 9.72 |
| 11 | 11.11 |
| 12 | 12.7 |

Radio de punta

| Símbolo | Radio de punta |
|---------|----------------|
| 00 | |
| 02 | 0.2 |
| 04 | 0.4 |
| 08 | 0.8 |
| 12 | 1.2 |
| 16 | 1.6 |
| 20 | 2 |
| 24 | 2.4 |
| 32 | 3.2 |
| X | Especial |

Longitud del filo de corte

| Diámetro del círculo inserto (mm) | Forma del inserto | | | | | | | |
|-----------------------------------|-------------------|----|----|----|----|----|----|----|
| | C | D | R | S | T | V | W | K |
| 3.97 | | | | | 06 | | | |
| 5 | | | 05 | | | | | |
| 5.56 | | | | | 09 | | | |
| 6 | | | 06 | | | | | |
| 6.35 | 06 | 07 | | | 11 | 11 | | |
| 8 | | | 08 | | | | | |
| 9.525 | 09 | 11 | 09 | 09 | 16 | 16 | 06 | 16 |
| 10 | | | 10 | | | | | |
| 12 | | | 12 | | | | | |
| 12.7 | 12 | 15 | 12 | 12 | 22 | 22 | 08 | |
| 15.875 | 16 | | 15 | 15 | 27 | | | |
| 16 | | | 19 | 16 | | | | |
| 19.05 | 19 | | 19 | 19 | 33 | | | |
| 20 | | | 20 | | | | | |
| 25 | 25 | 25 | 25 | | | | | |
| 25.4 | | | 25 | 25 | | | | |
| 31.75 | | | 31 | | | | | |
| 32 | | | 32 | | | | | |

Rompevirutas

| Código | Aplicación |
|--------|-------------|
| JHQ | Acabado |
| JMQ | Acabado |
| MSF | Acabado |
| MSL | Semiacabado |
| MVL | Semiacabado |
| MAL | Semiacabado |
| MF | Semiacabado |
| SPM | Semiacabado |
| STM | Semiacabado |
| TM | Semiacabado |
| SPR | Desbaste |
| STR | Desbaste |

Descripción del inserto

Inserto de torneado (negativo)

| | | | | | |
|---|---|---|---|---|---|
| CNMG-MF | CNMG-JHQ | CNMG-TM | CNMG-TM | CNMG-MAL | CNMG-MSL |
|  A15 |  A15 |  A15 |  A15 |  A15 |  A15 |
| CNMG-S | CNMG-SPM | CNMG-SPR | CNMG-SH | CNGX-SH | CNMG-HP |
|  A15 |  A16 |  A16 |  A16 |  A16 |  A16 |
| CNMG | CNMA | DNMG-MF | DNMG-TFG | DNMG-JHQ | DNMG-JMQ |
|  A17 |  A17 |  A18 |  A18 |  A18 |  A18 |
| CNMG-TM | DNMG-MAL | DNMG-MSL | DNMG-MSL | DNMG-SPM | DNMG-SPR |
|  A18 |  A18 |  A18 |  A19 |  A19 |  A19 |
| DNMG | DNMA | SNMG-JHQ | SNMG-TM | SNMG-S | SNMG-MAL |
|  A19 |  A19 |  A20 |  A20 |  A20 |  A20 |
| SNMG-MSL | SNMG-SPR | SNMG-SPM | SNMG-TM | SNMG | SNMA |
|  A20 |  A20 |  A21 |  A21 |  A21 |  A21 |

Descripción del inserto

Inserto de torneado (negativo)

| | | | | | |
|---|---|---|--|---|---|
| TNMG-JHQ | TNMG-TM | TNMG-S | TNMG-MAL | TNMG-MF | TNMG-MSL |
|  A22 |  A22 |  A22 |  A22 |  A22 |  A22 |
| TNMG-MAL | TNMG-MAL | TNMG-SH | TNMG-ZEM | TNMG-ZEF | TNMG-SOM |
|  A22 |  A22 |  A23 |  A23 |  A23 |  A23 |
| TNMG-SPM | TNMG-SPR | TNMG | TNMA | TNGG-SE | TNGG-S |
|  A23 |  A23 |  A24 |  A24 |  A24 |  A24 |
| VNMG-JHQ | VNMG-JMQ | VNMG-TM | VNMG-MAL | VNMG-MSL | VNMG-SL1 |
|  A25 |  A25 |  A25 |  A25 |  A25 |  A25 |
| VNMG-SPR | VNMG | VNMA | WNMG-SPF | WNMG-SPM | WNMG-MSF |
|  A25 |  A26 |  A26 |  A27 |  A27 |  A27 |
| WNMG-MF | WNMG-JHQ | WNMG-JMQ | WNMG-TM | WNMG-MAL | WNMG-MSL |
|  A27 |  A27 |  A27 |  A27 |  A28 |  A28 |




























Descripción del inserto

Inserto de torneado (negativo)

| | | | | | |
|---|---|---|---|---|---|
| WNMG-SPR | WNMG-TM | WNMG-S | WNMG-SH | WNMG | WNMA |
|  A28 |  A28 |  A28 |  A28 |  A28 |  A29 |
| KNUX | CCMT-JMQ | CCMT-JHQ | CCMT-SL1 | CCMT-FML | CCMT-STR |
|  A29 |  A30 |  A30 |  A30 |  A30 |  A30 |
| DCGT-JGQ | DCGT-JF | DCGT-JU | DCMT-MVL | DCMT-SL1 | DCMT-JMQ |
|  A31 |  A31 |  A31 |  A32 |  A32 |  A32 |
| DCMT-JHQ | DCMT-SH | DCMT-STR | DCGT-JGQ | DCGT-JF | DCGT-JU |
|  A32 |  A32 |  A32 |  A33 |  A33 |  A33 |
| RCLT-QPR | RCMX-Q | RCMT-Q | SCMT-STF | SCMT-JHQ | SCMT-TMT |
|  A34 |  A34 |  A34 |  A35 |  A35 |  A35 |
| SCMT-STM | SCMT-STR | TCMT-JHQ | TCMT-SL1 | TCMT-FML | TCMT-STM |
|  A35 |  A35 |  A36 |  A36 |  A36 |  A36 |

Descripción del inserto

Inserto de torneado (negativo)













| | | | | | |
|---|---|---|--|---|---|
| TCMT-STR | VBMT-JHQ | VBMT-FML | VBMT-MVL | VBMT-SH | VBMT-STM |
|  |  |  |  |  |  |
| A36 | A37 | A37 | A37 | A37 | A37 |
| VBMT-STR | VBMT-MVL | VBGT-SE | VBGT-JF | VBGT-JY | VCMT-SL1 |
|  |  |  |  |  |  |
| A37 | A37 | A38 | A38 | A38 | A39 |
| VCMT-FML | VCMT-STF | VCMT-STM | VCMT-SL1 | VCGT-SE | VCGT-JF |
|  |  |  |  |  |  |
| A39 | A39 | A39 | A39 | A40 | A40 |
| VCGT-JY | TBGH | TPGH | TBGT | TBMT-JDP | TPGH-F |
|  |  |  |  |  |  |
| A40 | A41 | A41 | A41 | A41 | A42 |
| TPMH-MVL | TPMT-JHQ | WBMT-JDP | | | |
|  |  |  | | | |
| A43 | A43 | A44 | | | |

Descripción del inserto

Inserto para aluminio

| | | | | | |
|---|---|---|---|---|--|
| CNMG-TK  A45 | DNMG-TK  A45 | SNMG-TK  A45 | DNMG-TK  A45 | WNMG-TK  A45 | VNMG-TK  A45 |
| TNGG-TK  A46 | CCGT-TK  A46 | DCGT-TK  A46 | SCGT-TK  A46 | TCGT-TK  A47 | VBGT-TK  A47 |
| VCGT-TK  A47 | RCGT-TK  A48 | RPGT-TK  A48 | TPGH-FS  A48 | | |

Insertos de cermet

| | | | | | |
|--|--|--|--|--|---|
| CNMG-JHQ  A49 | DNMG-MA  A49 | SNMG-MA  A49 | TNMG-JHQ  A49 | VNMG-JHQ  A50 | WNMG-JHQ  A50 |
| CCMT-JHQ  A50 | DCMT-JHQ  A50 | SCMT-JHQ  A51 | TCMT-JHQ  A51 | TPMT-JHQ  A51 | VBMT-JHQ  A51 |

Insertos cerámicos



| | | | | | | |
|--|--|--|--|---|--|--|
| VCMT  A52 | TNGG-F  A52 | CNGA  A53 | DNGA  A53 | TNGA  A53 | WNGA  A53 | VNGA  A53 |
|--|--|--|--|---|--|--|

Inserto de tronzado y ranurado

| | | | | | |
|---|--|---|--|--|--|
| DGN  A59 | DGR  A59 | MGMN-GS  A60 | MGMN-G/M  A61 | MGMN-T-2  A61 | MGMN-DR  A62 |
| MGMR-PT  A62 | MRMN-M  A63 | N151.2-4E  A63 | TDJ  A64 | TDKU  A64 | TDXU  A65 |

Descripción del inserto

Inserto para aluminio

| | |
|---|---|
| ZTED-ZMG | SP |
|  |  |
| A65 | A66 |

Descripción general del inserto de corte para torno tipo suizo

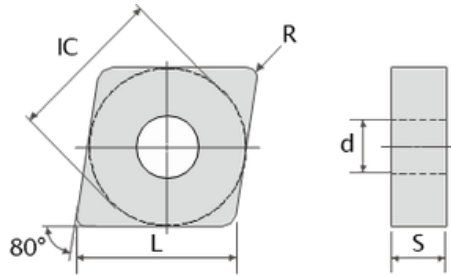
| | | | | | |
|---|---|---|---|---|--|
| 6GR | 7GR | 8GR | 9GR | ABS15R | ABW23R |
|  |  |  |  |  |  |
| A67 | A67 | A67 | A68 | A69 | A69 |
| CTP-FR | CTP-FRN | CTPA-FR | CTPA-FRN | FC1604R | GBA |
|  |  |  |  |  |  |
| A70 | A71 | A71 | A71 | A72 | A73 |
| GER-A | GER-B | GER-C | GER-D | TER | TNR |
|  |  |  |  |  |  |
| A76 | A76 | A77 | A78 | A79 | A80 |
| TGF | TKF-S | TKF-S-16DR | PENTA24N | | |
|  |  |  |  | | |
| A81 | A82 | A82 | A84 | | |

Inserto de roscado

| | | | | | |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| A87 | A88 | A89 | A90 | A91 | A92 |
|  |  |  |  |  |  |
| A93 | A94 | A95 | A96 | A97 | A98 |
|  |  |  |  |  | |
| A98 | 99 | A99 | A100 | A101 | |

Descripción general del inserto

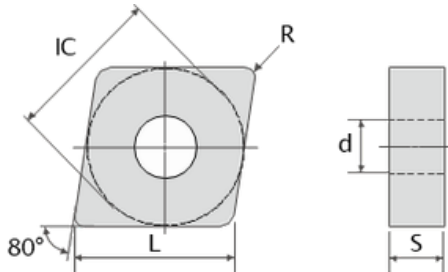
Inserto de torneado (negativo) CN





| | | Dimension | | | | | P | | | | | M | K | S | H | | |
|--|--------------------------|----------------|------|--------|-------|------|-------|--------|--------|--------|--------|-----|--------|--------|-----|-----|--------|
| | | L | IC | S | d | R | CVD | | | PVD | | PVD | CVD | | PVD | CVD | |
| | | | | | | | HP020 | HP1025 | HP1050 | HT2015 | HT2030 | | HM2035 | HM2055 | | | HK3115 |
| | Semi-finishing | CNMG160608-SPM | 16.1 | 15.875 | 6.35 | 6.35 | 0.8 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG160612-SPM | 16.1 | 15.875 | 6.35 | 6.35 | 1.2 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG160616-SPM | 16.1 | 15.875 | 6.35 | 6.35 | 1.6 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190608-SPM | 19.3 | 19.05 | 6.35 | 7.94 | 0.8 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190612-SPM | 19.3 | 19.05 | 6.35 | 7.94 | 1.2 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190616-SPM | 19.3 | 19.05 | 6.35 | 7.94 | 1.6 | ● | ○ | ● | | ● | ● | | | | |
| | Roughing | CNMG120408-SPR | 12.9 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ○ | ● | | | | | | | |
| | | CNMG120412-SPR | 12.9 | 12.7 | 4.76 | 5.16 | 1.2 | ● | ○ | ● | | | | | | | |
| | | CNMG120416-SPR | 12.9 | 12.7 | 4.76 | 5.16 | 1.6 | ● | ○ | ● | | | | | | | |
| | | CNMG160608-SPR | 16.1 | 15.875 | 6.35 | 6.35 | 0.8 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG160612-SPR | 16.1 | 15.875 | 6.35 | 6.35 | 1.2 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG160616-SPR | 16.1 | 15.875 | 6.35 | 6.35 | 1.6 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190608-SPR | 19.3 | 19.05 | 6.35 | 7.94 | 0.8 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190612-SPR | 19.3 | 19.05 | 6.35 | 7.94 | 1.2 | ● | ○ | ● | | ● | ● | | | | |
| | | CNMG190616-SPR | 19.3 | 19.05 | 6.35 | 7.94 | 1.6 | ● | ○ | ● | | ● | ● | | | | |
| | Finishing-Semi-finishing | CNMG120404-SH | 16.1 | 12.7 | 6.35 | 6.35 | 0.4 | | | | | | | | | | ● |
| | | CNGX 120408-SH | 16.1 | 12.7 | 6.35 | 6.35 | 0.8 | | | | | | | | | | |
| | Heavy load machining | CNMM 190612-HP | 19.3 | 19.05 | 6.35 | 7.94 | 1.2 | ○ | ● | ○ | | | | | | | |
| | | CNMM 190616-HP | 19.3 | 19.05 | 6.35 | 7.94 | 1.6 | ○ | ● | ○ | | | | | | | |
| | | CNMM 190624-HP | 19.3 | 19.05 | 6.35 | 7.94 | 2.4 | ○ | ● | ○ | | | | | | | |
| | | CNMM 250724-HP | 25.4 | 25.4 | 7.94 | 9.12 | 2.4 | ○ | ● | ○ | | | | | | | |
| | | CNMM 250924-HP | 25.4 | 25.4 | 9.525 | 9.12 | 2.4 | ○ | ● | ○ | | | | | | | |

Descripción general del inserto

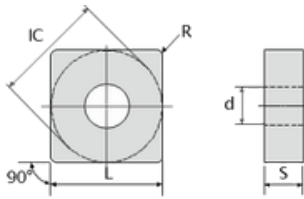
Inserto de torneado (negativo) CN



| | | Dimension | | | | | P | | | M | K | S | H | | | | |
|---|----------------|------------|-------|--------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PVD | CVD | PVD | CVD | | | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 |
|  | Semi Finishing | CNMG120404 | 12.9 | 12.7 | 4.76 | 5.16 | 0.4 | ○ | ○ | ○ | | | | ● | | | |
| | | CNMG120408 | 12.9 | 12.7 | 4.76 | 5.16 | 0.8 | ○ | ○ | ○ | | | | ● | | | |
| | | CNMG120412 | 12.9 | 12.7 | 4.76 | 6.35 | 1.2 | ○ | ○ | ○ | | | | ● | | | |
| | | CNMG160608 | 16.1 | 15.875 | 6.35 | 6.35 | 0.8 | ● | ○ | ● | | | | ● | | | |
| | | CNMG160612 | 16.1 | 15.875 | 6.35 | 6.35 | 1.2 | ● | ○ | ● | | | | ● | | | |
| | | CNMG160616 | 16.1 | 15.875 | 6.35 | 6.35 | 1.6 | ● | ○ | ● | | | | ● | | | |
| | | CNMG190608 | 19.3 | 19.05 | 6.35 | 7.94 | 0.8 | ● | ○ | ● | | | | ● | | | |
| | | CNMG190612 | 19.3 | 19.05 | 6.35 | 7.94 | 1.2 | ● | ○ | ● | | | | ● | | | |
|  | Roughing | CNMA120404 | 12.9 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | | | ● | | | |
| | | CNMA120408 | 12.9 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | ● | | | |
| | | CNMA120412 | 12.9 | 12.7 | 4.76 | 6.35 | 1.2 | | | | | | | ● | | | |
| | | CNMA160608 | 16.1 | 15.875 | 6.35 | 6.35 | 0.8 | | | | | | | ● | | | |
| | | CNMA160612 | 16.1 | 15.875 | 6.35 | 6.35 | 1.2 | | | | | | | ● | | | |
| | | CNMA160616 | 16.1 | 15.875 | 6.35 | 6.35 | 1.6 | | | | | | | ● | | | |
| | | CNMA190608 | 19.3 | 19.05 | 6.35 | 7.94 | 0.8 | | | | | | | ● | | | |
| | | CNMA190612 | 19.3 | 19.05 | 6.35 | 7.94 | 1.2 | | | | | | | ● | | | |
| | CNMA190616 | 19.3 | 19.05 | 6.35 | 7.94 | 1.6 | | | | | | | ● | | | | |

Descripción general del inserto

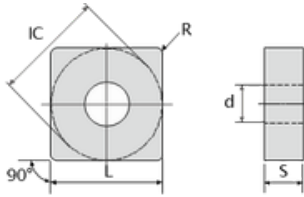
Inserto de torneado (negativo) CN

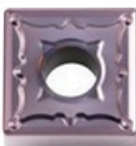




| | | Dimension | | | | | P | | | | | M | K | S | H | | | |
|--|----------------|----------------|------|------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | PVD | | PVD | CVD | PVD | CVD | | | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 | HH6120 |
| | Finishing | SNMG120404-JHQ | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | ● | ○ | ● | | ○ | ○ | | | | | |
| | | SNMG120408-JHQ | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ○ | ● | | ○ | ○ | | | | | |
| | Semi Finishing | SNMG120404-TM | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | ● | ● | ● | | | | | | | | |
| | | SNMG120408-TM | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ● | ● | | | | | | | | |
| | | SNMG120412-TM | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | ● | ● | ● | | | | | | | | |
| | Semi Finishing | SNMG120408R-S | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ○ | ○ | ● | | ● | ● | | | | | |
| | | SNMG120408L-S | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ○ | ○ | ● | | ● | ● | | | | | |
| | Semi Finishing | SNMG120404-MAL | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | ● | ● | | | | | |
| | | SNMG120408-MAL | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | ● | ● | | | | | |
| | | SNMG120412-MAL | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | ● | ● | | | | | |
| | Semi Finishing | SNMG120404-MSL | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | ● | ● | | | | | |
| | | SNMG120408-MSL | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | ● | ● | | | | | |
| | | SNMG120412-MSL | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | ● | ● | | | | | |
| | Roughing | SNMG120408-SPR | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ○ | ● | | | | | | | | |
| | | SNMG120412-SPR | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | ● | ○ | ● | | | | | | | | |
| | | SNMG150608-SPR | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG150612-SPR | 15.9 | 15.9 | 6.35 | 6.35 | 1.2 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG150616-SPR | 15.9 | 15.9 | 6.35 | 6.35 | 1.6 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG190612-SPR | 19.1 | 19.1 | 6.35 | 7.94 | 1.2 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG190616-SPR | 19.1 | 19.1 | 6.35 | 7.94 | 1.6 | ● | ○ | ● | | ● | ● | | | | | |

Descripción general del inserto

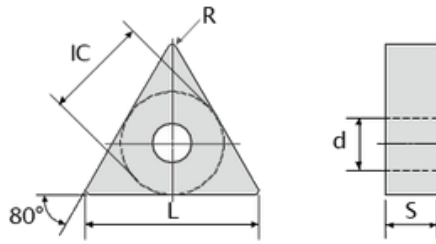
Inserto de torneado (negativo) CN



| | | Dimension | | | | | P | | | M | K | S | H | | | | | |
|---|----------------|----------------|-------|-------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PVD | CVD | PVD | CVD | | | | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 | HH6120 |
|  | Semi Finishing | SNMG150612-SPM | 15.9 | 15.9 | 6.35 | 6.35 | 1.2 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG150616-SPM | 15.9 | 15.9 | 6.35 | 6.35 | 1.6 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG190612-SPM | 19.1 | 19.1 | 6.35 | 7.94 | 1.2 | ● | ○ | ● | | ● | ● | | | | | |
| | | SNMG120404-MAL | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | | | | | | | ● |
| | | SNMG120408-MAL | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | | | | | ○ |
|  | Semi Finishing | SNMG120404 | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | ○ | ○ | ○ | | | | ● | | | | |
| | | SNMG120408 | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ○ | ○ | ○ | | | | ● | | | | |
| | | SNMG120412 | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | ○ | ○ | ○ | | | | ● | | | | |
| | | SNMG120416 | 12.7 | 12.7 | 4.76 | 5.16 | 1.6 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG150608 | 15.88 | 15.8 | 6.35 | 6.35 | 0.8 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG150612 | 15.88 | 15.8 | 6.35 | 6.35 | 1.2 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG190612 | 19.05 | 19.05 | 6.35 | 7.94 | 1.2 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG190616 | 19.05 | 19.05 | 6.35 | 7.94 | 1.6 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG250724 | 25.4 | 25.4 | 7.94 | 9.12 | 2.4 | ○ | ○ | ● | | | | ● | | | | |
| | | SNMG250924 | 25.4 | 25.4 | 9.53 | 9.12 | 2.4 | ○ | ○ | ● | | | | ● | | | | |
|  | Roughing | SNMA120408 | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | ● | | | | |
| | | SNMA120412 | 12.7 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | | | ● | | | | |
| | | SNMA120416 | 12.7 | 12.7 | 4.76 | 5.16 | 1.6 | | | | | | | ● | | | | |

Descripción general del inserto

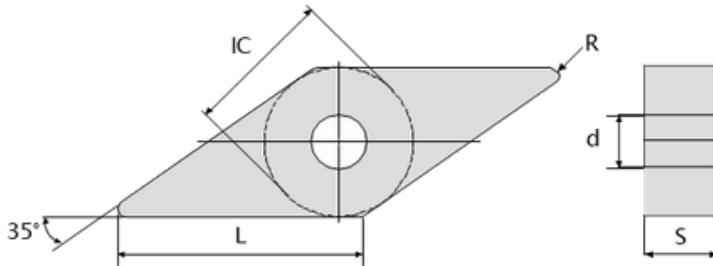
Inserto de torneado (negativo) CN





| | | Dimension | | | | | P | | | | | M | K | | S | H | | |
|--|-------------------------|---------------|-------|-------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PD | | PD | CVD | | PD | CVD | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 | HH6120 |
| | Semi finishing | TNMG160404 | 16.5 | 9.525 | 4.76 | 3.81 | 0.4 | ○ | ○ | ○ | | | | | ● | | | |
| | TNMG160408 | 16.5 | 9.525 | 4.76 | 3.81 | 0.8 | ○ | ○ | ○ | | | | | ● | | | | |
| | TNMG160412 | 16.5 | 9.525 | 4.76 | 3.81 | 1.2 | ○ | ○ | ○ | | | | | ● | | | | |
| | TNMG220408 | 22 | 12.7 | 4.76 | 5.16 | 0.8 | ● | ● | ● | | | | | ● | | | | |
| | TNMG220412 | 22 | 12.7 | 4.76 | 5.16 | 1.2 | ● | ● | ● | | | | | ● | | | | |
| | TNMG220416 | 22 | 12.7 | 4.76 | 5.16 | 1.6 | ● | ● | ● | | | | | ● | | | | |
| | Roughing | TNMA160404 | 16.5 | 9.525 | 4.76 | 3.81 | 0.4 | | | | | | | | ● | | | |
| | | TNMA160408 | 16.5 | 9.525 | 4.76 | 3.81 | 0.8 | | | | | | | | ● | | | |
| | | TNMA160412 | 16.5 | 9.525 | 4.76 | 3.81 | 1.2 | | | | | | | | ● | | | |
| | | TNMA220408 | 22 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | | ● | | | |
| | | TNMA220412 | 22 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | | | | ● | | | |
| | Finishing | TNGG160402-SE | 16.5 | 9.525 | 4.76 | 3.81 | 0.2 | | | | ● | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | Semi Finishing-Roughing | TNGG160401R-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.1 | | | | ● | | | | | | | |
| | | TNGG160401L-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.1 | | | | ● | | | | | | | |
| | | TNGG160402R-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.2 | | | | ● | | | | | | | |
| | | TNGG160402L-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.2 | | | | ● | | | | | | | |
| | | TNGG160404R-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.4 | | | | ● | | | | | | | |
| | | TNGG160404L-S | 16.5 | 9.525 | 4.76 | 3.81 | 0.4 | | | | ● | | | | | | | |

Descripción general del inserto

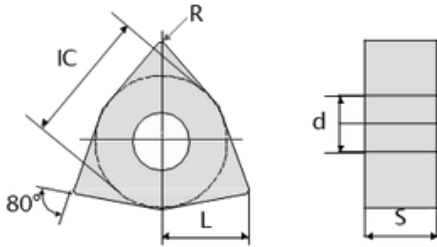
Inserto de torneado (negativo) CN



| | | Dimension | | | | | P | | | M | K | S | H | | | | |
|---|----------------|------------|------|-------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PVD | CVD | | PVD | CVD | | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 |
|  | Semi-finishing | VNMG160404 | 16.6 | 9.525 | 4.76 | 3.81 | 0.4 | ○ | ○ | ○ | | | | ● | | | |
| | | VNMG160408 | 16.6 | 9.525 | 4.76 | 3.81 | 0.8 | ○ | ○ | ○ | | | | ● | | | |
| | | VNMG160412 | 16.6 | 9.525 | 4.76 | 3.81 | 1.2 | ○ | ○ | ○ | | | | ● | | | |
|  | Roughing | VNMA160404 | 16.6 | 9.525 | 4.76 | 3.81 | 0.4 | | | | | | ○ | | | | |
| | | VNMA160408 | 16.6 | 9.525 | 4.76 | 3.81 | 0.8 | | | | | | ● | | | | |
| | | VNMA160412 | 16.6 | 9.52 | 4.76 | 3.81 | 1.2 | | | | | | ○ | | | | |

Descripción general del inserto

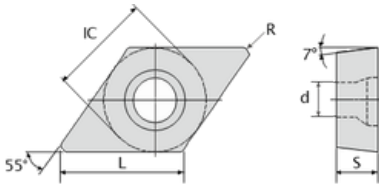
Inserto de torneado (negativo) CN



| | | Dimension | | | | | P | | | | | M | K | S | H | | |
|--|--------------------------|----------------|-----|------|------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PD | | PD | CVD | PD | CVD | | |
| | | | | | | | HPI020 | HPI025 | HPI050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 |
| | Finishing | WNMG080404-MAL | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | • | • | | | | |
| | | WNMG080408-MAL | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | • | • | | | | |
| | | WNMG080412-MAL | 8.7 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | • | • | | | | |
| | Semi-finishing | WNMG080404-MSL | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | • | • | | | | |
| | | WNMG080408-MSL | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | • | • | | | | |
| | | WNMG080412-MSL | 8.7 | 12.7 | 4.76 | 5.16 | 1.2 | | | | | • | • | | | | |
| | Roughing | WNMG080408-SPR | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | • | ○ | • | | | | | | | |
| | | WNMG080412-SPR | 8.7 | 12.7 | 4.76 | 5.16 | 1.2 | • | ○ | • | | | | | | | |
| | Finishing-Semi-finishing | WNMG080408-MSL | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | | | • | |
| | Semi-finishing | WNMG080404R-S | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | • | ○ | • | | • | • | | | | |
| | | WNMG080408R-S | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | • | ○ | • | | • | • | | | | |
| | | WNMG080404L-S | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | • | ○ | • | | • | • | | | | |
| | | WNMG080408L-S | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | • | ○ | • | | • | • | | | | |
| | Finishing-Semi-finishing | WNMG080404-SH | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | | | | | | | | | | • |
| | | WNMG080408-SH | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | | | | | | | | | | • |
| | Semi-finishing | WNMG080404 | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | ○ | ○ | ○ | | | | • | | | |
| | | WNMG080408 | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | ○ | ○ | ○ | | | | • | | | |
| | | WNMG080412 | 8.7 | 12.7 | 4.76 | 5.16 | 1.2 | ○ | ○ | ○ | | | | • | | | |

Descripción general del inserto

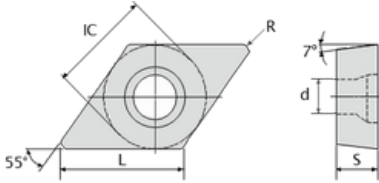
Inserto de torneado (positivo)



| | | Dimension | | | | | P | | | | | M | K | S | H | | | |
|--|--------------------------|----------------|------|-------|------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PVD | | PVD | CVD | | PVD | CVD | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 | HH6120 |
| | Finishing-Semi finishing | DCMT070202-MVL | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | ● | ● | | | ● | ● | | | | | |
| | | DCMT070204-MVL | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | ● | ● | | | ● | ● | | | | | |
| | | DCMT070208-MVL | 7.8 | 6.35 | 2.38 | 2.8 | 0.8 | ● | ● | | | ● | ● | | | | | |
| | | DCMT11T302-MVL | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | ● | ● | | | ● | ● | | | | | |
| | | DCMT11T304-MVL | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ● | | | ● | ● | | | | | |
| | | DCMT11T308-MVL | 11.6 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ● | | | ● | ● | | | | | |
| | Semi finishing | DCMT070204-SL1 | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | ● | ● | ● | | ● | ● | ● | | | | |
| | | DCMT11T304-SL1 | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ● | ● | | ● | ● | ● | | | | |
| | | DCMT11T308-SL1 | 11.6 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ● | ● | | ● | ● | ● | | | | |
| | Finishing | DCMT070204-JMQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | | ● | ● | | | | | |
| | | DCMT11T304-JMQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | | ● | ● | | | | | |
| | Finishing | DCMT070204-JHQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | ● | ○ | ● | | ○ | ○ | | | | | |
| | | DCMT070208-JHQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.8 | ● | ○ | ● | | ○ | ○ | | | | | |
| | | DCMT11T304-JHQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ○ | ● | | ○ | ○ | | | | | |
| | | DCMT11T308-JHQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ○ | ● | | ○ | ○ | | | | | |
| | Finishing-Semi finishing | DCMT11T304-SH | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | | | | | | | ● | |
| | Roughing | DCMT11T304-STR | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ○ | ● | | ● | ● | | | | | |
| | | DCMT11T308-STR | 11.6 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ○ | ● | | ● | ● | | | | | |

Descripción general del inserto

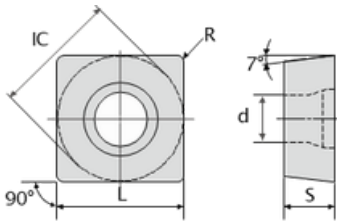
Inserto de torneado (positivo)



| | | Dimension | | | | | P | | | | | M | K | S | H | |
|--|----------------|----------------|-------|-------|------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | | PVD | | PVD | CVD | PVD | CVD | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 |
| | DCGT070201-JGQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.1 | | | | • | | | | | | |
| | DCGT070202-JGQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | | | | • | | | | | | |
| | DCGT070204-JGQ | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | • | | | | | | |
| | DCGT11T301-JGQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.1 | | | | • | | | | | | |
| | DCGT11T302-JGQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | | | | • | | | | | | |
| | DCGT11T304-JGQ | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | • | | | | | | |
| | Finishing | DCGT070201L-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.1 | | | | • | | | | | |
| | | DCGT070201R-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.1 | | | | • | | | | | |
| | | DCGT070202L-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | | | | • | | | | | |
| | | DCGT070202R-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | | | | • | | | | | |
| | | DCGT070204L-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | • | | | | | |
| | | DCGT070204R-JF | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | • | | | | | |
| | | DCGT11T301L-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.1 | | | | • | | | | | |
| | | DCGT11T301R-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.1 | | | | • | | | | | |
| | | DCGT11T302L-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | | | | • | | | | | |
| | | DCGT11T302R-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | | | | • | | | | | |
| | | DCGT11T304L-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | • | | | | | |
| | | DCGT11T304R-JF | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | • | | | | | |
| | DCGT070201L-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.1 | | | | • | | | | | | |
| | DCGT070201R-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.1 | | | | • | | | | | | |
| | DCGT070202L-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | | | | • | | | | | | |
| | DCGT070202R-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | | | | • | | | | | | |
| | DCGT070204L-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | • | | | | | | |
| | DCGT070204R-JU | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | | | | • | | | | | | |
| | DCGT11T301L-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.1 | | | | • | | | | | | |
| | DCGT11T301R-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.1 | | | | • | | | | | | |
| | DCGT11T302L-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | | | | • | | | | | | |
| | DCGT11T302R-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | | | | • | | | | | | |
| | DCGT11T304L-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | • | | | | | | |
| | DCGT11T304R-JU | 11.6 | 9.525 | 3.97 | 4.4 | 0.4 | | | | • | | | | | | |

Descripción general del inserto

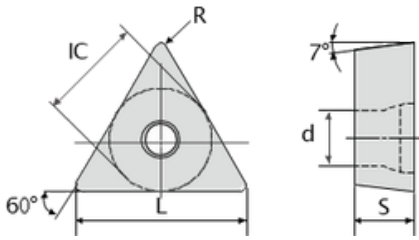
Inserto de torneado (positivo)



| | | Dimension | | | | | P | | | M | K | S | H | | | | |
|--|----------------|-----------------|-------|-------|------|-----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | PD | | PD | CVD | PD | CVD | | | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 | HK3115 | HK3125 | HS5210 | HS5220 |
| | Finishing | SCMT09T 304-STF | 9.525 | 9.525 | 3.97 | 4.4 | 0.4 | ○ | ○ | ● | ● | | | | | | |
| | | SCMT09T 308-STF | 9.525 | 9.525 | 3.97 | 4.4 | 0.8 | ○ | ○ | ● | ● | | | | | | |
| | | SCMT120404-STF | 12.7 | 12.7 | 4.76 | 5.5 | 0.4 | | | | | | | | | | |
| | Finishing | SCMT09T 308-JHQ | 9.525 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ○ | ● | ○ | ○ | | | | | |
| | Semi-finishing | SCMT120404-TMT | 12.7 | 12.7 | 4.76 | 5.5 | 0.4 | ● | | | | | | | | | |
| | | SCMT120408-TMT | 12.7 | 12.7 | 4.76 | 5.5 | 0.8 | ● | | | | | | | | | |
| | Semi-finishing | SCMT09T 304-STM | 9.525 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ● | ● | ● | ● | | | | | |
| | | SCMT09T 308-STM | 9.525 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ● | ● | ● | ● | | | | | |
| | | SCMT120404-STM | 12.7 | 12.7 | 4.76 | 5.5 | 0.4 | ● | ● | ● | ● | ● | | | | | |
| | | SCMT120408-STM | 12.7 | 12.7 | 4.76 | 5.5 | 0.8 | ● | ● | ● | ● | ● | | | | | |
| | | SCMT120412-STM | 12.7 | 12.7 | 4.76 | 5.5 | 1.2 | ● | ● | ● | ● | ● | | | | | |
| | Roughing | SCMT09T 304-STR | 9.525 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ○ | ● | | | ● | | | | |
| | | SCMT09T 308-STR | 9.525 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ○ | ● | | | ● | | | | |
| | | SCMT120404-STR | 12.7 | 12.7 | 4.76 | 5.5 | 0.4 | ● | ○ | ● | | | ● | | | | |
| | | SCMT120408-STR | 12.7 | 12.7 | 4.76 | 5.5 | 0.8 | ● | ○ | ● | | | ● | | | | |
| | | SCMT120412-STR | 12.7 | 12.7 | 4.76 | 5.5 | 1.2 | ● | ○ | ● | | | ● | | | | |

Descripción general del inserto

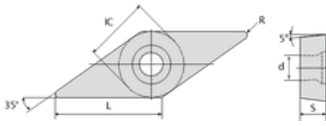
Inserto de torneado (positivo)



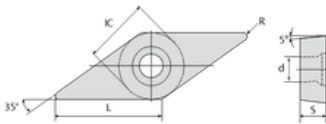
| | | Dimension | | | | | P | | | | | M | K | S | H | | |
|--|----------------|----------------|------|-------|------|-----|--------|--------|--------|--------|--------|-----|--------|--------|-----|-----|--------|
| | | L | IC | S | d | R | CVD | | | PVD | | PVD | CVD | | PVD | CVD | |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | | HM2035 | HM2055 | | | HK3115 |
| | Finishing | TCMT110204-JHQ | 11 | 6.35 | 2.38 | 2.8 | 0.4 | ● | ○ | ● | ○ | ○ | | | | | |
| | | TCMT110208-JHQ | 11 | 6.35 | 2.38 | 2.8 | 0.8 | ● | ○ | ● | ○ | ○ | | | | | |
| | | TCMT16T304-JHQ | 16.5 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ○ | ● | ○ | ○ | | | | | |
| | | TCMT16T308-JHQ | 16.5 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ○ | ● | ○ | ○ | | | | | |
| | Semi Finishing | TCMT090202-SL1 | 9.6 | 5.56 | 2.38 | 2.5 | 0.2 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT090204-SL1 | 9.6 | 5.56 | 2.38 | 2.5 | 0.4 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT110202-SL1 | 11 | 6.35 | 3.97 | 2.8 | 0.2 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT110204-SL1 | 11 | 6.35 | 3.97 | 2.8 | 0.4 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT110208-SL1 | 11 | 6.35 | 3.97 | 2.8 | 0.8 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT16T304-SL1 | 16.5 | 9.525 | 3.97 | 4.4 | 0.4 | ● | ● | ● | ● | ● | ● | | | | |
| | | TCMT16T308-SL1 | 16.5 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ● | ● | ● | ● | ● | | | | |
| | Semi Finishing | TCMT090204-FML | 9.6 | 5.56 | 2.38 | 2.5 | 0.4 | | | | ● | ● | | | | | |
| | | TCMT090204-STM | 9.6 | 5.56 | 2.38 | 2.5 | 0.4 | | | | ● | ● | | | | | |
| | | TCMT090208-STM | 9.6 | 5.56 | 2.38 | 2.5 | 0.8 | | | | ● | ● | | | | | |
| | | TCMT110204-STM | 11 | 6.35 | 2.38 | 2.8 | 0.4 | | | | ● | ● | | | | | |
| | | TCMT110208-STM | 11 | 6.35 | 2.38 | 2.8 | 0.8 | | | | ● | ● | | | | | |
| | | TCMT16T304-STM | 16.5 | 9.525 | 3.97 | 4.4 | 0.4 | | | | ● | ● | | | | | |
| | | TCMT16T308-STM | 16.5 | 9.525 | 3.97 | 4.4 | 0.8 | | | | ● | ● | | | | | |
| | | TCMT16T312-STM | 16.5 | 9.525 | 3.97 | 4.4 | 1.2 | | | | ● | ● | | | | | |
| | Roughing | TCMT16T308-STR | 16.5 | 9.525 | 3.97 | 4.4 | 0.8 | ● | ● | ○ | | | ● | | | | |
| | | TCMT220408-STR | 22 | 12.7 | 4.76 | 5.5 | 0.8 | ● | ● | ○ | | | ● | | | | |

Descripción general del inserto

Inserto de torneado (positivo)



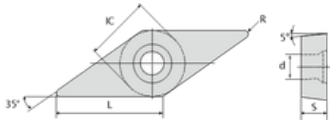
| | | Dimension | | | | | P | | | M | K | S | H |
|--|----------------|-----------|------|------|-----|-----|--------|--------|--------|----|-----|----|-----|
| | | L | IC | S | d | R | CVD | | | PD | CVD | PD | CVD |
| | | | | | | | HP1020 | HP1025 | HP1030 | | | | |
| | VBGT110301-SE | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | | | | | |
| | VBGT110302-SE | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | | | | |
| | VBGT110301L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | | | | | |
| | VBGT110301R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | | | | | |
| | VBGT110302L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | | | | |
| | VBGT110302R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | | | | |
| | VBGT110304L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | | | | | |
| | VBGT110304R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | | | | | |
| | VBGT110301L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | | | | | |
| | VBGT110301R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | | | | | |
| | VBGT110302L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | | | | |
| | VBGT110302R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | | | | |
| | VBGT110304L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | | | | | |
| | VBGT110304R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | | | | | |



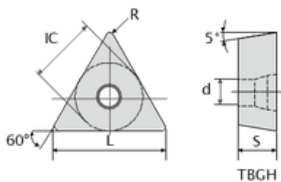
| | | Dimension | | | | | P | | | M | K | S | H | |
|--|----------------|----------------|------|-------|------|-----|--------|--------|--------|----|-----|----|-----|---|
| | | L | IC | S | d | R | CVD | | | PD | CVD | PD | CVD | |
| | | | | | | | HP1020 | HP1025 | HP1030 | | | | | |
| | Semi finishing | VCMT110304-SL1 | 11 | 6.35 | 3.18 | 2.8 | 0.4 | ● | ○ | ● | ● | ● | ● | |
| | | VCMT110308-SL1 | 11 | 6.35 | 3.18 | 2.8 | 0.8 | | | ○ | ○ | | | |
| | | VCMT160404-SL1 | 16.5 | 9.525 | 4.76 | 4.4 | 0.4 | ● | ○ | ● | ● | ● | ● | |
| | | VCMT160408-SL1 | 16.5 | 9.525 | 4.76 | 4.4 | 0.8 | ● | ○ | ● | ● | ● | ● | |
| | Finishing | VCMT110302-FML | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | | ● | ● | | |
| | | VCMT110302-STF | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | ● | ● | ● | | | |
| | | VCMT110304-STF | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | ● | ● | ● | | | |
| | | VCMT160404-STF | 16.5 | 9.525 | 4.76 | 4.4 | 0.4 | | ● | ● | ● | | | |
| | Semi finishing | VCMT160404-STM | 16.5 | 9.525 | 4.76 | 4.4 | 0.4 | ● | ○ | ● | ● | ● | ● | |
| | | VCMT160408-STM | 16.5 | 9.525 | 4.76 | 4.4 | 0.8 | ● | ○ | ● | ● | ● | ● | |
| | | VCMT160408-SL1 | 16.5 | 9.525 | 4.76 | 4.4 | 0.8 | | | | | | | ● |

Descripción general del inserto

Inserto de torneado (positivo)



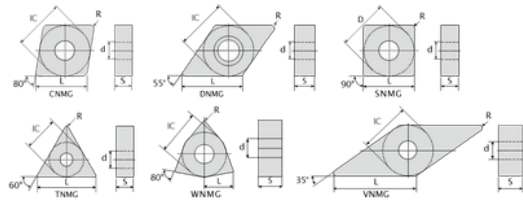
| | | Dimensión | | | | | P | | | M | K | S | H |
|--|---------------|----------------|------|------|------|-----|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | PVD | PVD | CVD | PVD | CVD |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 |
| | VCGT110301-SE | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | ● | | | | |
| | VCGT110302-SE | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | ● | | | | |
| | Barrilado | VCGT110301L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | ● | | | |
| | | VCGT110301R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | ● | | | |
| | | VCGT110302L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | ● | | | |
| | | VCGT110302R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | ● | | | |
| | | VCGT110304L-JF | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | ● | | | |
| | | VCGT110304R-JF | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | ● | | | |
| | | VCGT110301L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | ● | | | |
| | | VCGT110301R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.1 | | | ● | | | |
| | | VCGT110302L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | ● | | | |
| | | VCGT110302R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.2 | | | ● | | | |
| | | VCGT110304L-JY | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | ● | | | |
| | | VCGT110304R-JY | 11 | 6.35 | 3.18 | 2.8 | 0.4 | | | ● | | | |



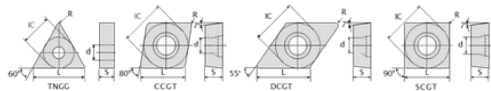
| | | Dimensión | | | | | P | | | M | K | S | H |
|--|-------------|----------------|------|------|------|------|--------|--------|--------|--------|--------|--------|--------|
| | | L | IC | S | d | R | CVD | | PVD | PVD | CVD | PVD | CVD |
| | | | | | | | HP1020 | HP1025 | HP1050 | HT2015 | HT2030 | HM2035 | HM2055 |
| | TBGH060202L | 6.4 | 3.97 | 2.38 | 2.3 | 0.2 | | | ● | ● | | | |
| | | | | | | | | | | | | | |
| | Barrilado | TPGH080202L | 8.2 | 4.76 | 2.38 | 2.4 | 0.2 | | | ● | ● | | |
| | | TPGH080204L | 8.2 | 4.76 | 2.38 | 2.4 | 0.4 | | | ● | ● | | |
| | | TPGH090202L | 9.6 | 5.56 | 2.38 | 2.8 | 0.2 | | | ● | ● | | |
| | | TPGH090204L | 9.6 | 5.56 | 2.38 | 2.8 | 0.4 | | | ● | ● | | |
| | | TPGH110302L | 11 | 6.35 | 3.18 | 3.18 | 0.2 | | | ● | ● | | |
| | | TPGH110304L | 11 | 6.35 | 3.18 | 3.18 | 0.4 | | | ● | ● | | |
| | | TBGT060101R | 6.4 | 3.97 | 2.38 | 2.3 | 0.1 | | | ● | | | |
| | | TBGT060102R | 6.4 | 3.97 | 2.38 | 2.3 | 0.2 | | | ● | | | |
| | | TBGT060104R | 6.4 | 3.97 | 2.38 | 2.3 | 0.4 | | | ● | | | |
| | | TBGT060101L | 6.4 | 3.97 | 2.38 | 2.3 | 0.1 | | | ● | | | |
| | | TBGT060102L | 6.4 | 3.97 | 2.38 | 2.3 | 0.2 | | | ● | | | |
| | | TBGT060104L | 6.4 | 3.97 | 2.38 | 2.3 | 0.4 | | | ● | | | |
| | | TBMT060102-JDP | 6.4 | 3.97 | 2.38 | 2.3 | 0.2 | | ○ | ● | ● | | |
| | | TBMT060104-JDP | 6.4 | 3.97 | 2.38 | 2.3 | 0.4 | | ○ | ● | ● | | |

Descripción general del inserto

Inserto de torneado (positivo)



| | | Dimension | | | | | N |
|--|---------------|-----------|-------|------|------|-----|------|
| | | L | IC | S | d | R | BN01 |
| | CNMG120402-TK | 12.9 | 12.7 | 4.76 | 5.16 | 0.2 | ● |
| | CNMG120404-TK | 12.9 | 12.7 | 4.76 | 5.16 | 0.4 | ● |
| | CNMG120408-TK | 12.9 | 12.7 | 4.76 | 5.16 | 0.8 | ● |
| | DNMG150404-TK | 15.5 | 12.7 | 4.76 | 5.16 | 0.4 | ● |
| | DNMG150408-TK | 15.5 | 12.7 | 4.76 | 5.16 | 0.8 | ● |
| | DNMG150604-TK | 15.5 | 12.7 | 6.35 | 5.16 | 0.4 | ● |
| | DNMG150608-TK | 15.5 | 12.7 | 6.35 | 5.16 | 0.8 | ● |
| | SNMG120402-TK | 12.7 | 12.7 | 4.76 | 5.16 | 0.2 | ● |
| | SNMG120404-TK | 12.7 | 12.7 | 4.76 | 5.16 | 0.4 | ● |
| | SNMG120408-TK | 12.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● |
| | TNMG160402-TK | 16.5 | 9.525 | 4.76 | 3.81 | 0.2 | ● |
| | TNMG160404-TK | 16.5 | 9.525 | 4.76 | 3.81 | 0.4 | ● |
| | TNMG160408-TK | 16.5 | 9.525 | 4.76 | 3.81 | 0.8 | ● |
| | WNMG080402-TK | 8.7 | 12.7 | 4.76 | 5.16 | 0.2 | ● |
| | WNMG080404-TK | 8.7 | 12.7 | 4.76 | 5.16 | 0.4 | ● |
| | WNMG080408-TK | 8.7 | 12.7 | 4.76 | 5.16 | 0.8 | ● |
| | VNMG160402-TK | 16.6 | 9.525 | 4.76 | 3.81 | 0.2 | ● |
| | VNMG160404-TK | 16.6 | 9.525 | 4.76 | 3.81 | 0.4 | ● |
| | VNMG160408-TK | 16.6 | 9.525 | 4.76 | 3.81 | 0.8 | ● |



| | | L | IC | S | d | R | BN01 |
|---------------|---------------|-------|---------------|------|-------|------|------|
| | | | TNGG160402-SL | 16.5 | 9.525 | 4.76 | 3.81 |
| TNGG160404-SL | 16.5 | | 9.525 | 4.76 | 3.81 | 0.4 | ● |
| TNGG160408-SL | 16.5 | | 9.525 | 4.76 | 3.81 | 0.8 | ● |
| | CCGT060202-TK | 6.4 | 6.35 | 2.38 | 2.5 | 0.2 | ● |
| | CCGT060204-TK | 6.4 | 6.35 | 2.38 | 2.5 | 0.4 | ● |
| | CCGT060208-TK | 6.4 | 6.35 | 2.38 | 2.5 | 0.8 | ● |
| | CCGT09T302-TK | 9.7 | 9.525 | 2.38 | 2.8 | 0.2 | ● |
| | CCGT09T304-TK | 9.7 | 9.525 | 2.38 | 2.8 | 0.4 | ● |
| | CCGT09T308-TK | 9.7 | 9.525 | 2.38 | 2.8 | 0.8 | ● |
| | CCGT120402-TK | 12.9 | 12.7 | 3.97 | 4.4 | 0.2 | ● |
| | CCGT120404-TK | 12.9 | 12.7 | 3.97 | 4.4 | 0.4 | ● |
| | CCGT120408-TK | 12.9 | 12.7 | 3.97 | 4.4 | 0.8 | ● |
| | DCGT070202-TK | 7.8 | 6.35 | 2.38 | 2.8 | 0.2 | ● |
| | DCGT070204-TK | 7.8 | 6.35 | 2.38 | 2.8 | 0.4 | ● |
| | DCGT070208-TK | 7.8 | 6.35 | 2.38 | 2.8 | 0.8 | ● |
| | DCGT11T302-TK | 11.6 | 9.525 | 3.97 | 4.4 | 0.2 | ● |
| | DCGT11T304-TK | 11.6 | 9.525 | 3.97 | 4.4 | 0.8 | ● |
| | SCGT09T302-TK | 9.525 | 9.525 | 3.97 | 4.4 | 0.2 | ● |
| | SCGT09T304-TK | 9.525 | 9.525 | 3.97 | 4.4 | 0.4 | ● |
| | SCGT09T308-TK | 9.525 | 9.525 | 3.97 | 4.4 | 0.8 | ● |
| | SCGT120402-TK | 12.7 | 12.7 | 4.76 | 5.5 | 0.2 | ● |
| | SCGT120404-TK | 12.7 | 12.7 | 4.76 | 5.5 | 0.4 | ● |
| SCGT120408-TK | 12.7 | 12.7 | 4.76 | 5.5 | 0.8 | ● | |

KDL - CATALOGO

2026

**Soluciones Integrales para tu Empresa: automatización,
control y sistemas eléctricos**