

# COMO INTERPRETAR LA ESTANDARIZACION DE LAS HERRAMIENTAS HSK-T

## ● Cómo está organizada esta página de sección

① Organizado por aplicación. (Consultar el índice en la siguiente página).

### TIPO DE PRODUCTO

Indica las cuatro primeras letras de la descripción, así como, aplicaciones de corte

### NOMBRE DE PRODUCTO APLICACION

#### HERRAMIENTAS HSK-T

#### PARA MAQUINAS CON CARRUSEL

**PCLN**

Torneado • Careado

Acabado: LP, LF, MP, Medio, Medio, Medio, Inoxidables, CBN, MM

| Descripción       | Estándar | Descripción del inserto | Dimensiones (mm) | WT (kg) | Asiento | Perno | Palanca | Trinillo Montaje | Llave |        |         |        |
|-------------------|----------|-------------------------|------------------|---------|---------|-------|---------|------------------|-------|--------|---------|--------|
| H63TH-PCLNRL-DX12 | RE       | CH-A                    | 430              | 63      | 65      | 45    | 2.9     | LLSCN42          | LLP14 | LLCL14 | LLCS108 | HKY30R |

\*1 Torque sujeción (lbf-pulg): LLCS108=29  
\*2 WT: Peso

### FIGURA MOSTRANDO LA APLICACION DE LA HERRAMIENTA

Las ilustraciones y las flechas indican las aplicaciones de mecanizado tal como torneado exterior, copiado, careado y chaflanado junto con los ángulos de ataque.

### GEOMETRIA

### ROMPEVIRUTAS POR APLICACION DE CORTE

**PCMN**

Torneado • Careado

Acabado: LP, LF, MP, Medio, Medio, Medio, Inoxidables, CBN, MM

| Descripción     | Estándar | Descripción del inserto | Dimensiones (mm) | WT (kg) | Asiento | Perno | Palanca | Trinillo Montaje | Llave  |         |           |        |
|-----------------|----------|-------------------------|------------------|---------|---------|-------|---------|------------------|--------|---------|-----------|--------|
| H63TH-PCMNN-H12 | RE       | CH-A                    | 430              | 63      | 100     | 3.7   | LLSCN42 | LLP14            | LLCL14 | LLCS108 | HGM-PT108 | HKY30R |
| H63TH-PCMNN-L12 | RE       | CH-A                    | 430              | 63      | 140     | 6.0   | LLSCN42 | LLP14            | LLCL14 | LLCS108 | HGM-PT108 | HKY30R |

\*1 Torque sujeción (lbf-pulg): LLCS108=29  
\*2 WT: Peso

**DCLN**

Torneado • Careado

Tipo DOBLE SUJECION

Acabado: LP, LF, MP, Medio, Medio, Medio, Inoxidables, CBN, MM

| Descripción       | Estándar | Descripción del inserto | Dimensiones (mm) | WT (kg) | Asiento | Perno | Montaña | Resorte | Trinillo Montaje | Llave   |        |
|-------------------|----------|-------------------------|------------------|---------|---------|-------|---------|---------|------------------|---------|--------|
| H63TH-DCLNRL-DX12 | RE       | CH-A                    | 430              | 63      | 65      | 45    | 2.9     | LLSCN42 | LLP14            | DC0621T | TKY20F |

\*1 Torque sujeción (lbf-pulg): DC0621T=44  
\*2 WT: Peso

**DCMN**

Torneado • Careado

Tipo DOBLE SUJECION

Acabado: LP, LF, MP, Medio, Medio, Medio, Inoxidables, CBN, MM

| Descripción     | Estándar | Descripción del inserto | Dimensiones (mm) | WT (kg) | Asiento | Perno | Montaña | Resorte | Trinillo Montaje | Llave  |
|-----------------|----------|-------------------------|------------------|---------|---------|-------|---------|---------|------------------|--------|
| H63TH-DCMNN-H12 | RE       | CH-A                    | 430              | 63      | 100     | 3.7   | LLSCN42 | LLP14   | DC0621T          | TKY20F |
| H63TH-DCMNN-L12 | RE       | CH-A                    | 430              | 63      | 140     | 6.0   | LLSCN42 | LLP14   | DC0621T          | TKY20F |

\*1 Torque sujeción (lbf-pulg): DC0621T=44  
\*2 WT: Peso

Nota 1) Se muestran las dimensiones para el inserto con RE: 031 ppgs

Nota 2) El inserto en la foto es un ejemplo. Las letras muestran el rompeviruta, la figura muestra el círculo inserto.

H006

### LEYENDA PARA EXISTENCIA

Se muestra en la parte izquierda de cada doble página.

**PAGINA DE REFERENCIA PARA APLICACION DE LOS INSERTOS**  
Indica la referencia de las páginas que dan detalles sobre la aplicación en cada producto.

### PAGINA DE REFERENCIA ·REFACCIONES

Indica la referencia de la página, incluida, en cada parte derecha de la doble página.

H007

### PRODUCTO ESTANDAR

indica referencia, existencia (mano derecha/izquierda) insertos recomendados, dimensiones y refacciones.

● Para pedido: Por favor especificar referencia y posición de la herramienta (derecha/izquierda).

# HERRAMIENTAS HSK-T

RESUMEN GENERAL DE HERRAMIENTAS HSK-T ..... H002

CLASIFICACION DE HERRAMIENTAS HSK-T ..... H004

## HERRAMIENTAS ESTANDAR HSK-T

### TORNEADO • CAREADO

CN<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H006

DN<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H011

### TORNEADO • CAREADO • MANDRINADO

CN<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H008

### TORNEADO • COPIADO

DN<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H009

### TORNEADO • CAREADO • COPIADO

RC<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H012

### CAREADO • COPIADO

VB<sup>00</sup> INSERTOS PORTAHERRAMIENTAS ..... H013

### RANURADO

MG INSERTOS PORTAHERRAMIENTAS ..... H014

### ROSCADO

MMT INSERTOS PORTAHERRAMIENTAS ..... H016

MT INSERTOS PORTAHERRAMIENTAS ..... H017

PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR ... H019

BARRA DE MANDRINADO ..... H021

BUJE PARA BARRA DE MANDRINADO ..... H022

\*Organizado por orden alfabetico.

H022 H100TH-B<sup>000000</sup>  
H020 H100TH-EN3232R/L-130  
H019 H100TH-EV3232R/L-180  
H008 H63TH-A<sup>0000</sup>DCLNR/L12  
H021 H63TH-B<sup>0000</sup>  
H008 H63TH-DCLNL-L12-3  
H006 H63TH-DCLNR/L-DX12  
H007 H63TH-DCMNN-H/L12  
H011 H63TH-DDJNL-L15-3  
H009 H63TH-DDJNR/L-DX15  
H010 H63TH-DDNNN-H/L15  
H020 H63TH-EN2525R/L-115  
H021 H63TH-EV2020R/L-105-3  
H019 H63TH-EV2525R/L-112

H014 H63TH-MGHR/L-DX43<sup>00</sup>  
H016 H63TH-MMTENR-H/L16  
H016 H63TH-MMTER-DX16  
H017 H63TH-MTHR/L-DX43  
H006 H63TH-PCLNR/L-DX12  
H007 H63TH-PCMNN-H/L12  
H009 H63TH-PDJNR/L-DX15  
H010 H63TH-PDNNN-H/L15  
H012 H63TH-PRDCN-H/L12  
H012 H63TH-PRGCR/L-DX12  
H013 H63TH-SVPBR/L-DX16  
H013 H63TH-SVVBH-H/L16  
H022 SL32<sup>0000</sup>-90



H001

## Sistema HSK-T

HSK-T es un nuevo sistema HSK diseñado para el torneado en máquinas multi-tarea que son compatibles con el tipo HSK-A Norma ISO (ISO12164-1:2001).

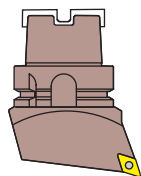
El sistema HSK fue desarrollado por un consorcio de 17 fabricantes japoneses y registrado en la Norma ISO (ISO12164-3: 2008) bajo el nombre HSK-T en 2008 y la Norma JIS (JIS B6064-3) en 2013.



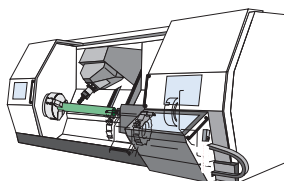
## Alta precisión en la posición del filo de corte.

El tipo HSK-T tiene una tolerancia más cerrada entre la cuña de husillo y el cuñero del porta herramienta que el tipo HSK-A. Esto da como resultado una mayor precisión en la posición del filo de corte. Para fresado se puede continuar utilizando herramientas convencionales HSK-A.

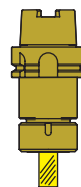
## Compatible con máquinas multi-tarea y centros de mecanizado



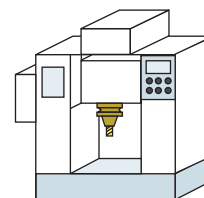
Porta Herramientas HSK  
para torneado



Máquinas con carrusel  
con husillo para HSK-T



Porta herramienta rotativa  
HSK-A63 (Estandar ISO)



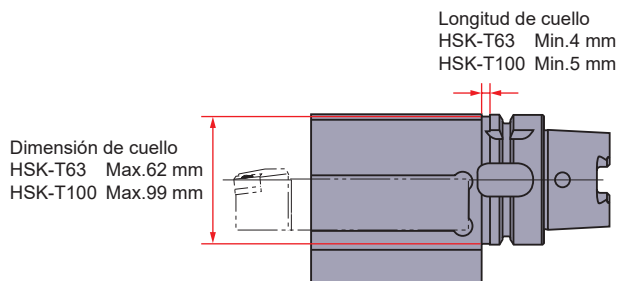
Centro de maquinado  
con husillo tipo HSK-A

H

HERRAMIENTAS HSK-T

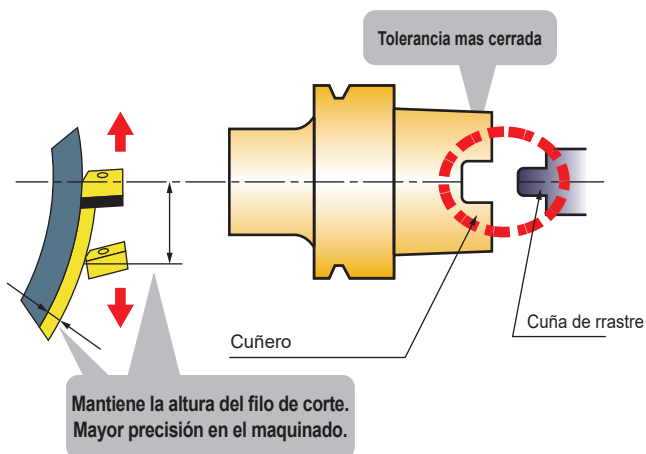
### \*Nota

Longitud del cuello corta de la brida y cuerpo grueso de las herramientas de torneado HSK-T como se muestra en la figura de la izquierda. Debido a que hay máquinas multitarea con especificaciones de ATC que no se puede montar (HSK-A) por favor cheque antes. Además debe ser cuidadoso de que no exista interferencia con herramientas adyacentes.



HSK-T herramienta de torneado estándar (Ejemplo)

## Mejora en la tolerancia de la ranura



### Comparación de tolerancias (mm)

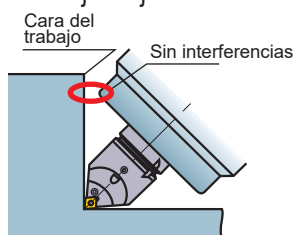
|         | 12.2 | 12.3  | 12.4                        | 12.5                        | 12.6               |
|---------|------|-------|-----------------------------|-----------------------------|--------------------|
| HSK A63 |      |       |                             |                             |                    |
|         |      | 12.25 | 12.35                       | 12.45                       | 12.55              |
|         |      |       | 0.10 Tolerancia de la llave |                             |                    |
|         |      |       | 0.15 Juego mínimo           |                             |                    |
|         |      |       |                             | 0.08                        |                    |
|         |      |       |                             | 12.25 Tolerancia del cuñero | 12.58              |
|         |      |       |                             |                             | 0.33 Juego máximo  |
| HSK T63 |      |       |                             |                             |                    |
|         |      |       | 12.385                      | 12.41                       | 12.435             |
|         |      |       | 0.025                       |                             |                    |
|         |      |       | Juego mínimo 0.015          |                             |                    |
|         |      |       |                             | 0.035                       |                    |
|         |      |       |                             | 12.425                      | 12.46              |
|         |      |       |                             |                             | 0.075 Juego máximo |

# Sistema de herramientas HSK-T altamente exacto y rígido para utilizarse en máquinas tipo carrusel.

## Herramientas rectas convenientes para utilizarse en máquinas con carrusel

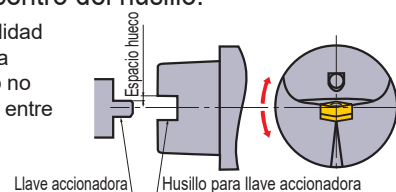
Evita interferencias con la pieza de trabajo mejorando la accesibilidad de la herramienta.

Al inclinar el husillo B de la máquina (eje principal de la herramienta) a 45°, la interferencia entre el husillo, portaherramienta y la pieza pueden ser evitados.



Mejora la altura de la línea de centros posicionando el filo de corte en el centro del husillo.

Se logra una mayor estabilidad y precisión, debido a que la altura de la línea de centro no se ve afectada por el claro entre el husillo y la cuña.



## Nuevo sistema de doble sujeción con un solo movimiento

El mecanismo de doble sujeción ofrece una gran rigidez, precisión y confiabilidad al garantizar una segura sujeción del inserto. Por lo tanto es adecuado para el maquinado de materiales difíciles de cortar como acero inoxidable y aleaciones termoresistentes.



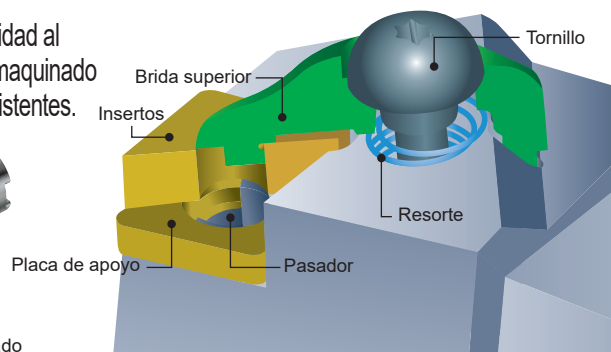
Herramienta para torneado y refrentado



De tipo recto para torneado y refrentado



Para torneado, refrentado y mandrinado



## Herramientas 3 en 1 para consolidar procesos y herramientas

3 insertos de torneado de la misma geometría se pueden colocar en la misma herramienta.

Se puede instalar el mismo tipo de insertos para cambios rápidos junto con sus refacciones.

Se puede instalar diferentes tipos de insertos para distintas aplicaciones (desbaste, semiacabado y acabado)

Se pueden colocar insertos con diferentes grados para cubrir varios tipos de piezas.



## Nuevo tamaño HSK-T100 para piezas de trabajo grandes

Las dimensiones del mango son más grandes para una alta eficiencia.

Tipo mango cuadrado



Barra de mandrinar / Tipo Broca

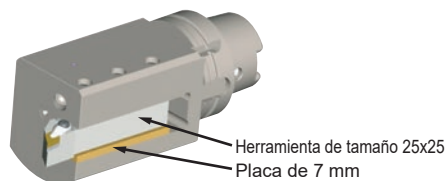


Manga



**Una única herramienta puede utilizarse con diferentes herramientas.**

- Disponible para usar con herramientas JIS B4126 (ISO 5610) 32x32 y 32x25.
- Es posible adaptar una herramienta 25x25 usando una placa de 7 mm.
- Es posible ajustar la herramienta de 1"x 1" utilizando una placa de 6.6 mm.
- \*Por favor prepare la placa usted mismo.

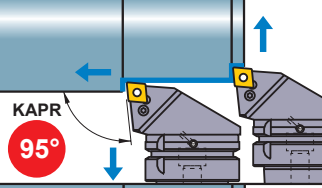
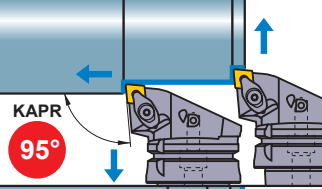
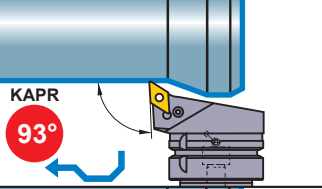
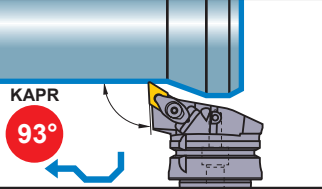
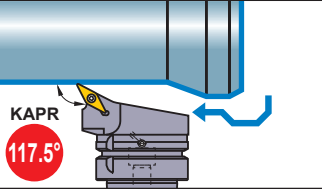
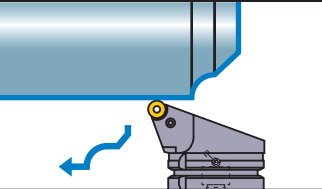
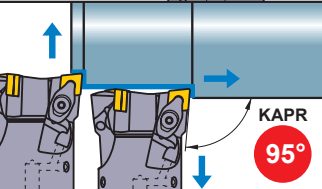
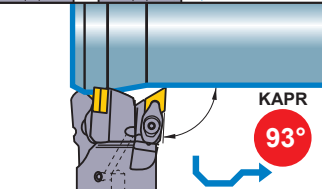


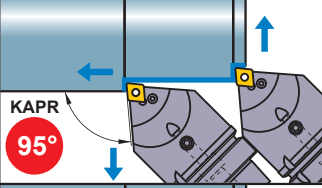
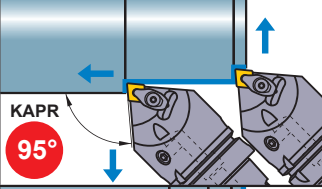
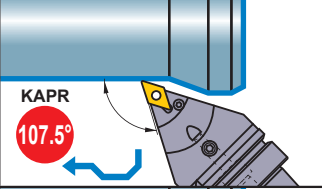
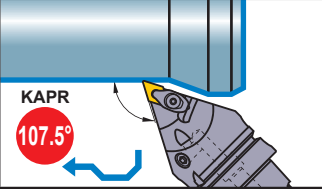
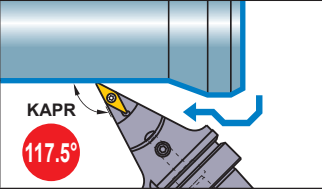
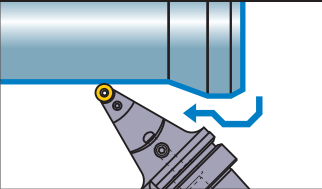
H

HERRAMIENTAS HSK-T

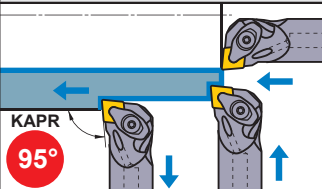
# CLASIFICACION DE HERRAMIENTAS HSK-T

## TORNEADO • CAREADO • COPIADO

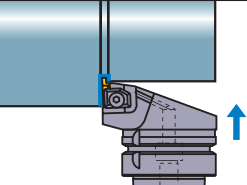
| Descripción                                                                                                         | Tipo de Corte                                                                                      |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| H63TH-PCLNR/L-DX12<br><br>→ H006   | <br>KAPR 95°      |
| H63TH-DCLNR/L-DX12<br><br>→ H006   | <br>KAPR 95°      |
| H63TH-PDJNR/L-DX15<br><br>→ H009   | <br>KAPR 93°      |
| H63TH-DDJNR/L-DX15<br><br>→ H009  | <br>KAPR 93°     |
| H63TH-SVPBR/L-DX16<br><br>→ H013 | <br>KAPR 117.5° |
| H63TH-PRGCR/L-DX12<br><br>→ H012 | <br>KAPR 93°    |
| H63TH-DCLNL-L12-3<br><br>→ H008  | <br>KAPR 95°    |
| H63TH-DDJNL-L15-3<br><br>→ H011  | <br>KAPR 93°    |

| Descripción                                                                                                         | Tipo de Corte                                                                                        |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| H63TH-PCMNN-H/L12<br><br>→ H007   | <br>KAPR 95°      |
| H63TH-DCMNN-H/L12<br><br>→ H007   | <br>KAPR 95°      |
| H63TH-PDNNN-H/L15<br><br>→ H010   | <br>KAPR 107.5°   |
| H63TH-DDNNN-H/L15<br><br>→ H010  | <br>KAPR 107.5°  |
| H63TH-SVVBH-H/L16<br><br>→ H013 | <br>KAPR 117.5° |
| H63TH-PRDCN-H/L12<br><br>→ H012 | <br>KAPR 93°    |

## TORNEADO • CAREADO • MANDRINADO

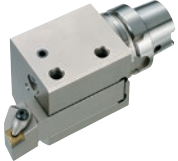
| Descripción                                                                                                                                  | Tipo de Corte                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| H63TH-A25KDCLNR/L12<br>H63TH-A32LDCLNR/L12<br><br>→ H008 | <br>KAPR 95° |

## RANURADO

| Descripción                                                                                                   | Tipo de Corte                                                                     |
|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>H63TH-MGHR/L-DX43</b><br> |  |

➔ H014

## PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

| Descripción                      | Portaherramientas                                                                     |
|----------------------------------|---------------------------------------------------------------------------------------|
| <b>H63TH-EV2525R/L-112</b><br>   |    |
| <b>H100TH-EV3232R/L-180</b><br>  |    |
| <b>H63TH-EN2525R/L-115</b><br>   |    |
| <b>H100TH-EN3232R/L-130</b><br>  |   |
| <b>H63TH-EV2020R/L-105-3</b><br> |  |

➔ H019

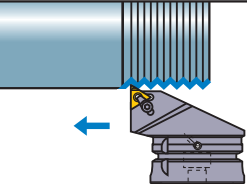
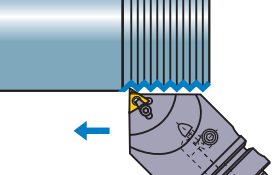
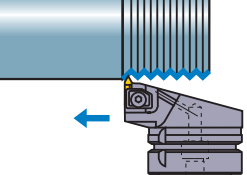
➔ H019

➔ H020

➔ H020

➔ H021

## ROSCADO

| Descripción                                                                                                      | Tipo de Corte                                                                       |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>H63TH-MMTER-DX16</b><br>   |  |
| <b>H63TH-MMTENR-H/L16</b><br> |  |
| <b>H63TH-MTHR/L-DX43</b><br>  |  |

➔ H016

➔ H016

➔ H017

## SUJECION PARA BARRA DE MANDRINADO

| Descripción              | Portaherramientas                                                                     |
|--------------------------|---------------------------------------------------------------------------------------|
| <b>H63TH-B</b><br>       |  |
| <b>H100TH-B</b><br>      |  |
| <b>SL32-90</b><br>(Buje) |  |

➔ H021

➔ H022

➔ H022

\*1 Mitsubishi Materials esta autorizada por MORI SEIKI Co., LTD para producir y distribuir estas herramientas BAJO PATENTE DE Japón N° 3720202.

\*2 El buje SL32-90 es para utilizarse con H100TH-B32-135.

Nota 1) El zanco tipo HSK63A tiene un tubo para refrigerante incorporado para su instalación.

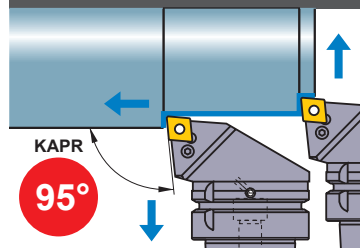
H

HERRAMIENTAS HSK-T

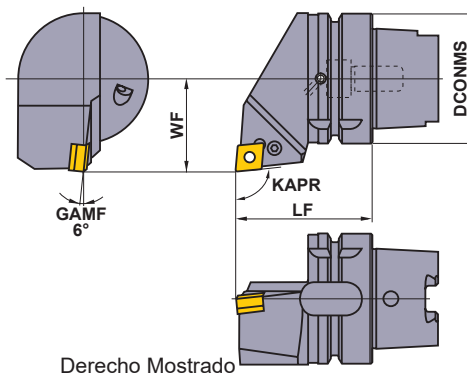
H005

# PARA MAQUINAS CON CARRUSEL

## PCLN



### Torneado • Careado



Derecho Mostrado

| Acabado                                                                                                         | Ligero                                                                                                          | Medio                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| FP<br><br>(4)                | LP<br><br>(4)                | MP<br><br>(4)                     |
| Medio<br>MK<br><br>(4)       | Medio<br>Estándar<br><br>(4) | Medio a desbaste<br>RP<br><br>(4) |
| Inoxidables<br>MM<br><br>(4) | CBN<br><br>(4)               |                                                                                                                      |

| Descripción        | Existencia |   | Descripción del inserto | Dimensiones (mm) |    |    | *2<br>WT<br>(lbs) |  |  |  |  *1 |  |        |
|--------------------|------------|---|-------------------------|------------------|----|----|-------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                    | R          | L |                         | DCONMS           | LF | WF |                   | Asiento                                                                            | Perno                                                                               | Palanca                                                                             | Tornillo Mordaza                                                                       | Llave                                                                               |        |
| H63TH-PCLNR/L-DX12 | ★          | ★ | CNOA<br>CNOG<br>CNOM    | 43               | 63 | 65 | 45                | 2.9                                                                                | LLSCN42                                                                             | LLP14                                                                               | LLCL14                                                                                 | LLCS108                                                                             | HKY30R |

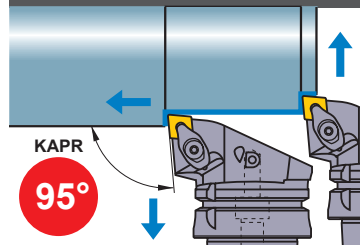
\*1 Torque de apriete (lbf-plgs) : LLCS108=29

\*2 WT : Peso

H

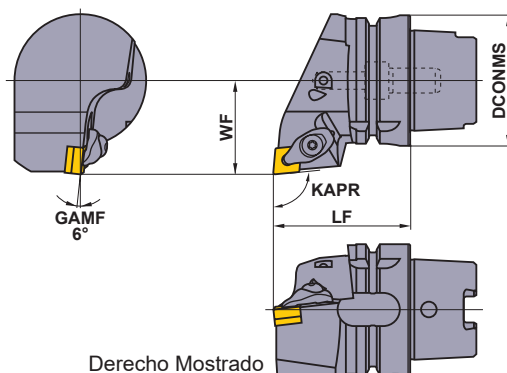
HERRAMIENTAS HSK-T

## DCLN



### Torneado • Careado

### Tipo DOBLE SUJECION



Derecho Mostrado

| Acabado                                                                                                           | Ligero                                                                                                            | Medio                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| FP<br><br>(4)                | LP<br><br>(4)                | MP<br><br>(4)                     |
| Medio<br>MK<br><br>(4)       | Medio<br>Estándar<br><br>(4) | Medio a desbaste<br>RP<br><br>(4) |
| Inoxidables<br>MM<br><br>(4) | CBN<br><br>(4)               |                                                                                                                        |

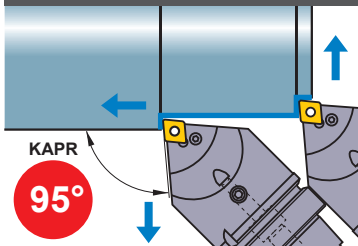
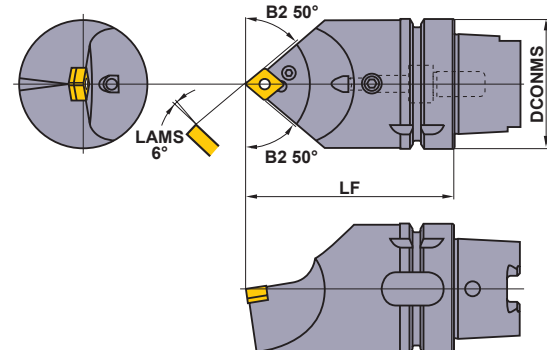
| Descripción        | Exis-<br>tencia |   | Descripción del<br>inserto | Dimensiones<br>(mm) |    |    | *2<br>WT<br>(lbs) |  |  |  |  |  *1 |  |        |
|--------------------|-----------------|---|----------------------------|---------------------|----|----|-------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|                    | R               | L |                            | DCONMS              | LF | WF |                   | Asiento                                                                              | Perno                                                                                 | Mordaza                                                                               | Resorte                                                                               | Tornillo Mordaza                                                                         | Llave                                                                                 |        |
| H63TH-DCLNR/L-DX12 | ★               | ★ | CNOA<br>CNOG<br>CNOM       | 43                  | 63 | 65 | 45                | 2.9                                                                                  | LLSCN42                                                                               | LLP14                                                                                 | DCK2613                                                                               | DCS1                                                                                     | DC0621T                                                                               | TKY20F |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 WT : Peso

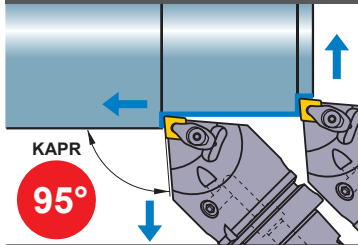
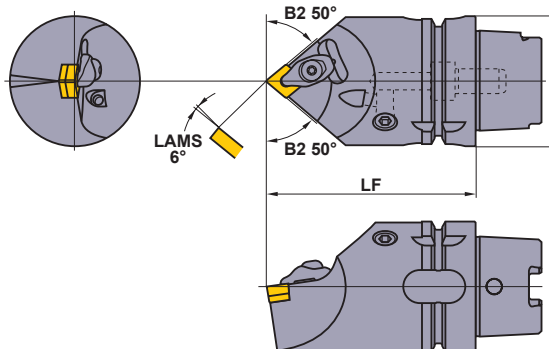
Nota 1) Se muestran las dimensiones para el inserto con RE .031 plgs

Nota 2) El inserto mostrado en la foto es un ejemplo. Las letras muestran el rompeviruta y los números el tamaño del círculo inscrito.

| PCMN                                                                              |                 |                            |    | Torneado • Careado                                                                 |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | Acabado                                                                             |                                                                                     |                                                                                     | Ligero |  | Medio |  |
|-----------------------------------------------------------------------------------|-----------------|----------------------------|----|------------------------------------------------------------------------------------|-----|-------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--|-------|--|
|  |                 |                            |    |  |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | FP                                                                                  | LP                                                                                  | MP                                                                                  |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | (4)                                                                                 | (4)                                                                                 | (4)                                                                                 |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | Medio                                                                               | Medio                                                                               | Medio a desbaste                                                                    |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | MK                                                                                  | Estándar                                                                            | RP                                                                                  |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |  |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | (4)                                                                                 | (4)                                                                                 | (4)                                                                                 |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | Inoxidables                                                                         | CBN                                                                                 |                                                                                     |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | MM                                                                                  |                                                                                     |                                                                                     |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |  |  |                                                                                     |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  | (4)                                                                                 | (4)                                                                                 |                                                                                     |        |  |       |  |
|                                                                                   |                 |                            |    |                                                                                    |     |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |        |  |       |  |
| Descripción                                                                       | Exis-<br>tencia | Descripción del<br>inserto |    | Dimensiones<br>(mm)                                                                |     | *2<br>WT<br>(lbs) |  |  |  |  |  |  |  |                                                                                     |                                                                                     |                                                                                     |        |  |       |  |
|                                                                                   |                 |                            |    | DCONMS                                                                             | LF  |                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |  |                                                                                     |                                                                                     |                                                                                     |        |  |       |  |
| H63TH-PCMNN-H12                                                                   | ★               | CNOA                       | 43 | 63                                                                                 | 100 | 3.7               | LLSCN42                                                                           | LLP14                                                                             | LLCL14                                                                              | LLCS108                                                                             | HGM-PT1/8                                                                           | HKY30R                                                                              |  |                                                                                     |                                                                                     |                                                                                     |        |  |       |  |
| H63TH-PCMNN-L12                                                                   | ★               | CNOG<br>CNOM               |    | 63                                                                                 | 140 | 6.0               | LLSCN42                                                                           | LLP14                                                                             | LLCL14                                                                              | LLCS108                                                                             | HGM-PT1/8                                                                           | HKY30R                                                                              |  |                                                                                     |                                                                                     |                                                                                     |        |  |       |  |

\*1 Torque de apriete (lbf-plgs) : LLCS108=29

\*2 WT : Peso

| DCMN                                                                                |                 | Torneado • Careado                                                                   |                     | Tipo DOBLE SUJECION |                   | Acabado                                                                                      |                                                                                     | Ligero                                                                                       |                                                                                       | Medio                                                                                        |                                                                                       |
|-------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------|---------------------|---------------------|-------------------|----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |                 |  |                     |                     |                   | FP                                                                                           |                                                                                     | LP                                                                                           |                                                                                       | MP                                                                                           |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | <br>(4) |                                                                                     | <br>(4) |                                                                                       | <br>(4) |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | Medio                                                                                        |                                                                                     | Medio                                                                                        |                                                                                       | Medio a desbaste                                                                             |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | MK                                                                                           |                                                                                     | Estándar                                                                                     |                                                                                       | RP                                                                                           |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | <br>(4) |                                                                                     | <br>(4) |                                                                                       | <br>(4) |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | Inoxidables                                                                                  |                                                                                     | CBN                                                                                          |                                                                                       |                                                                                              |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | MM                                                                                           |                                                                                     |                                                                                              |                                                                                       |                                                                                              |                                                                                       |
|                                                                                     |                 |                                                                                      |                     |                     |                   | <br>(4) |                                                                                     | <br>(4) |                                                                                       |                                                                                              |                                                                                       |
| Descripción                                                                         | Exis-<br>tencia | Descripción del<br>inserto                                                           | Dimensiones<br>(mm) |                     | *2<br>WT<br>(lbs) |           |  |         |  | *1<br>  |  |
|                                                                                     |                 |                                                                                      | DCONMS              | LF                  |                   | Asiento                                                                                      | Perno                                                                               | Mordaza                                                                                      | Resorte                                                                               | Tornillo Mordaza                                                                             | Llave                                                                                 |
| H63TH-DCMNN-H12                                                                     | ★               | CNOA                                                                                 | 63                  | 100                 | 3.7               | LLSCN42                                                                                      | LLP14                                                                               | DCK2613                                                                                      | DCS1                                                                                  | DC0621T                                                                                      | TKY20F                                                                                |
| H63TH-DCMNN-L12                                                                     | ★               | CNOG<br>CNOM                                                                         | 63                  | 140                 | 6.0               | LLSCN42                                                                                      | LLP14                                                                               | DCK2613                                                                                      | DCS1                                                                                  | DC0621T                                                                                      | TKY20F                                                                                |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

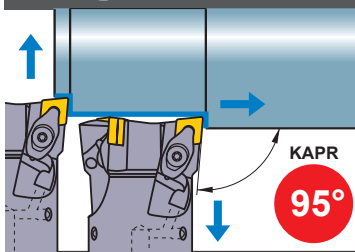
\*2 WT : Peso

Insertos Tipo PCMN  > A104-A111  
 Insertos Tipo DCMN  > A104-A111  
 Insertos CBN y PCD > B028-B030, B059

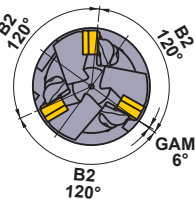
CONDICIONES DE CORTE > VER SECCION A  
 REFACCIONES > N001  
 INFORMACION TECNICA > P001

# PARA MAQUINAS CON CARRUSEL

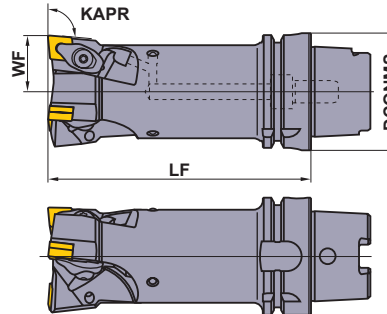
## DCLN



**Torneado • Careado**



**Tipo DOBLE SUJECION**



Acabado

FP



(4)

Medio

MK



(4)

Inoxidables

MM



(4)

Ligero

LP



(4)

Medio

Estándar



(4)

CBN



(4)

Medio

MP



(4)

Medio a desbaste

RP



(4)

Herramienta izquierda únicamente.

| Descripción       | Exis-<br>tencia | Descripción del<br>inserto | Dimensiones<br>(mm) |    |     | *2<br>WT<br>(lbs) |  |  |  |  |  *1 |  |        |
|-------------------|-----------------|----------------------------|---------------------|----|-----|-------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|
|                   | L               |                            | DCONMS              | LF | WF  |                   | Asiento                                                                           | Perno                                                                              | Mordaza                                                                             | Resorte                                                                             | Tornillo Mordaza                                                                       | Llave                                                                               |        |
| H63TH-DCLNL-L12-3 | ★               | CN○A<br>CN○G<br>CN○M       | 43○                 | 63 | 140 | 30                | 4.9                                                                               | LLSCN42                                                                            | LLP14                                                                               | DCK2613                                                                             | DCS1                                                                                   | DC0621T                                                                             | TKY20F |

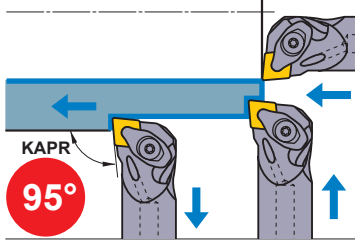
\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 WT : Peso

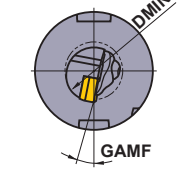
H

HERRAMIENTAS HSK-T

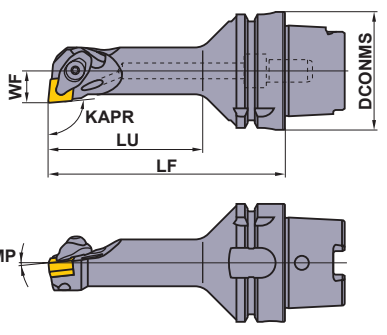
## DCLN



**Torneado • Careado • Mandrinado**



**Tipo DOBLE SUJECION**



Acabado

FP



(4)

Medio

MK



(4)

Inoxidables

MM



(4)

Ligero

LP



(4)

Medio

Estándar



(4)

CBN



(4)

Medio

MP



(4)

Medio a desbaste

RP



(4)

Derecho Mostrado

| Descripción         | Exis-<br>tencia |   | Descripción del<br>inserto | Dimensiones<br>(mm) |    |     |     |      | DMIN<br>(mm) | *2<br>WT<br>(lbs) |  |  |  |  |  |  |        |
|---------------------|-----------------|---|----------------------------|---------------------|----|-----|-----|------|--------------|-------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--------|
|                     | R               | L |                            | DCONMS              | LF | LU  | WF  | GAMF |              |                   | Asiento                                                                               | Perno                                                                                 | Mordaza                                                                               | Resorte                                                                               | Tornillo<br>Mordaza                                                                   | Llave                                                                                 |        |
| H63TH-A25KDCLNR/L12 | ★               | ★ | CNOA<br>CNOG<br>CNOM       | 43                  | 63 | 125 | 82  | 17   | 11°          | 32                | 2.4                                                                                   | LLSCP42                                                                               | LLP14                                                                                 | DCK2613                                                                               | DCS1                                                                                  | DC0621T                                                                               | TKY20F |
| H63TH-A32LDCLNR/L12 | ★               | ★ |                            |                     | 63 | 140 | 100 | 22   | 13°          | 40                | 3.9                                                                                   | LLSCN42                                                                               | LLP14                                                                                 | DCK2613                                                                               | DCS1                                                                                  | DC0621T                                                                               | TKY20F |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 WT : Peso

Nota 1) Se muestran las dimensiones para el inserto con RE .031 plgs

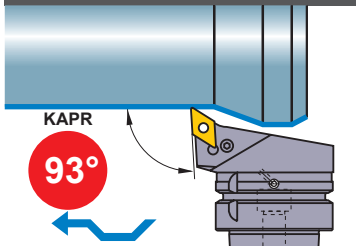
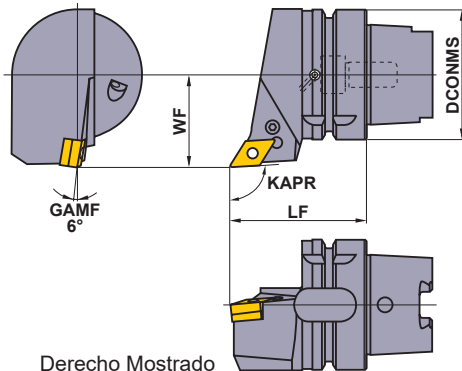
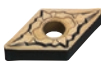
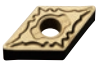
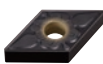
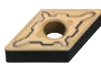
Nota 2) El inserto mostrado en la foto es un ejemplo. Las letras muestran el rompeviruta y los números el tamaño del círculo inscrito.

★ : Existencia en Japón

Insertos Tipo DCLN○ &gt; A104-A111

Insertos CBN y PCD &gt; B028-B030, B059

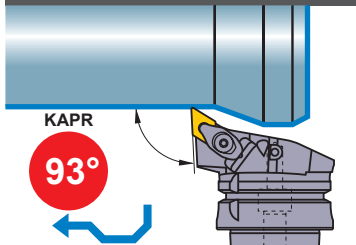
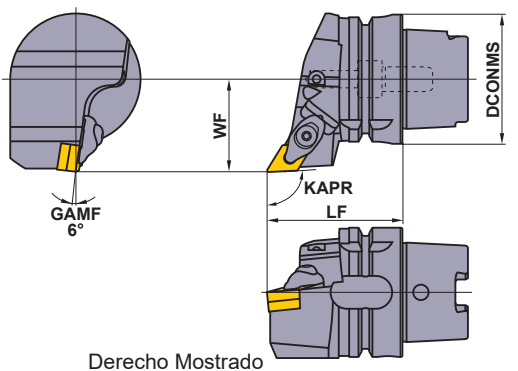
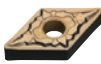
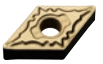
CONDICIONES DE CORTE &gt; VER SECCION A

| PDJN                                                                              |                 |   |                              | Torneado • Copiado                                                                 |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | Terminación                                                                         |         | Ligero                                                                              |       | Medio                                                                               |  |
|-----------------------------------------------------------------------------------|-----------------|---|------------------------------|------------------------------------------------------------------------------------|----|----|-------------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|---------|-------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------|--|
|  |                 |   |                              |  |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | FP                                                                                  |         | LP                                                                                  |       | MP                                                                                  |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         |  |         |  |       |  |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | (4)                                                                                 |         | (4)                                                                                 |       | (4)                                                                                 |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | Medio                                                                               |         | Semi-desbaste                                                                       |       | Inoxidable                                                                          |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | MK                                                                                  |         | RP                                                                                  |       | MM                                                                                  |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         |  |         |  |       |  |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | (4)                                                                                 |         | (4)                                                                                 |       | (4)                                                                                 |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | Clase G                                                                             |         | CBN                                                                                 |       |                                                                                     |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | R/L                                                                                 |         |                                                                                     |       |                                                                                     |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         |  |         |  |       |                                                                                     |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         | (4)                                                                                 |         | (4)                                                                                 |       |                                                                                     |  |
|                                                                                   |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         |                                                                                     |         |                                                                                     |       |                                                                                     |  |
| Derecho Mostrado                                                                  |                 |   |                              |                                                                                    |    |    |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     |         |                                                                                     |         |                                                                                     |       |                                                                                     |  |
| Descripción                                                                       | Exis-<br>tencia |   | Descripción del<br>inserto   | Dimensiones<br>(mm)                                                                |    |    | *3<br>WT<br>(lbs) | *2<br> |  |  | *1<br> |  |         |                                                                                     |         |                                                                                     |       |                                                                                     |  |
|                                                                                   | R               | L |                              | DCONMS                                                                             | LF | WF |                   |                                                                                         |                                                                                     |                                                                                     |                                                                                           |                                                                                     | Asiento | Perno                                                                               | Palanca | Tornillo Mordaza                                                                    | Llave |                                                                                     |  |
| H63TH-PDJNR/L-DX15                                                                | ★               | ★ | DNOA<br>DNOG<br>DNOB<br>DNMX | 430                                                                                | 63 | 65 | 45                | 2.6                                                                                     | LLSDN43<br>(LLSDN42)                                                                | LLP14                                                                               | LLCL24                                                                                    | LLCS108                                                                             | HKY30R  |                                                                                     |         |                                                                                     |       |                                                                                     |  |

\*1 Torque de apriete (lbf-plgs) : LLCS108=29

\*2 Por favor para insertos de .25 pulgadas de espesor utilice asientos n° LLSDN42. Cuando utilice insertos de .25 pulgadas, solicite el asiento por separado.

\*3 WT : Peso

| DDJN                                                                                |  |  | Torneado • Copiado                                                                   |   |                                            |     |                     | Tipo DOBLE SUJECION |    |                   |                                                                                     |                                                                                      | Terminación                                                                           |                                                                                       | Ligero                                                                                |                                                                                       | Medio |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|--|--|--------------------------------------------------------------------------------------|---|--------------------------------------------|-----|---------------------|---------------------|----|-------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | FP                                                                                    | LP                                                                                    | MP                                                                                    |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       |  |  |  |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | (4)                                                                                   | (4)                                                                                   | (4)                                                                                   |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | Medio                                                                                 | Semi-desbaste                                                                         | Inoxidable                                                                            |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | MK                                                                                    | RP                                                                                    | MM                                                                                    |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       |  |  |  |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | (4)                                                                                   | (4)                                                                                   | (4)                                                                                   |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | Clase G                                                                               | CBN                                                                                   |                                                                                       |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | R/L                                                                                   |                                                                                       |                                                                                       |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       |  |  |                                                                                       |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | (4)                                                                                   | (4)                                                                                   |                                                                                       |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |       | Derecho Mostrado                                                                      |                                                                                       |                                                                                       |
| Descripción                                                                         |  |  | Exis-<br>tencia                                                                      |   | Descripción del<br>inserto                 |     | Dimensiones<br>(mm) |                     |    | *3<br>WT<br>(lbs) |  |  |  |  |  |  |       |                                                                                       |                                                                                       |                                                                                       |
|                                                                                     |  |  |                                                                                      |   |                                            |     |                     |                     |    |                   |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       | R     | L                                                                                     | DCONMS                                                                                | LF                                                                                    |
| H63TH-DDJNR/L-DX15                                                                  |  |  | ★                                                                                    | ★ | <div>DNØA<br/>DNØG<br/>DNØM<br/>DNMX</div> | 430 | 63                  | 65                  | 45 | 2.6               | LLSDN43<br>(LLSDN42)                                                                | LLP24                                                                                | DCK2613                                                                               | DCS1                                                                                  | DC0621T                                                                               | TKY20F                                                                                |       |                                                                                       |                                                                                       |                                                                                       |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 Por favor para insertos de .25 pulgadas de espesor utilice asientos n° LLSDN42. Cuando utilice insertos de .25 pulgadas, solicite el asiento por separado.

\*3 WT : Peso

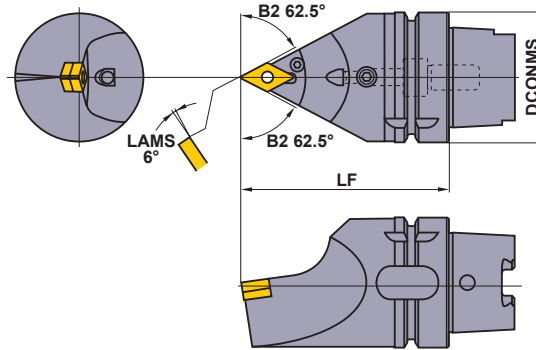
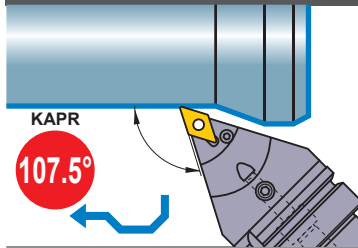
Insertos Tipo PDJN  > A112-A118  
 Insertos Tipo DDJN  > A112-A118  
 Insertos CBN y PCD > B031-B034, B059

CONDICIONES DE CORTE > VER SECCION A  
 REFACCIONES > N001  
 INFORMACION TECNICA > P001

# PARA MAQUINAS CON CARRUSEL

## PDNN

Torneado • Copiado



| Terminación                                                                                                  | Ligero                                                                                                            | Medio                                                                                                          |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| FP<br><br>(4)             | LP<br><br>(4)                  | MP<br><br>(4)               |
| Medio<br>MK<br><br>(4)    | Semi-desbaste<br>RP<br><br>(4) | Inoxidable<br>MM<br><br>(4) |
| Clase G<br>R/L<br><br>(4) | CBN<br><br>(4)                 |                                                                                                                |

| Descripción     | Exis-<br>tencia | Descripción del<br>inserto                             |            | Dimensiones<br>(mm) |     | *3<br>WT<br>(lbs) | *2  |  |  | (*)<br>*1  | (*)<br> |  |
|-----------------|-----------------|--------------------------------------------------------|------------|---------------------|-----|-------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                 |                 |                                                        |            | DCONMS              | LF  |                   | Asiento                                                                               | Perno                                                                               | Palanca                                                                             | Tornillo Mordaza                                                                              | Opresor                                                                                    | Llave                                                                               |
| H63TH-PDNNN-H15 | ★               | DN $\odot$ OA<br>DN $\odot$ OG<br>DN $\odot$ M<br>DNMX | 43 $\odot$ | 63                  | 100 | 3.5               | LLSDN43<br>(LLSDN42)                                                                  | LLP14                                                                               | LLCL24                                                                              | LLCS108                                                                                       | HGM-PT1/8                                                                                  | HKY30R                                                                              |
| H63TH-PDNNN-L15 | ★               |                                                        |            | 63                  | 140 | 5.5               | LLSDN43<br>(LLSDN42)                                                                  | LLP14                                                                               | LLCL24                                                                              | LLCS108                                                                                       | HGM-PT1/8                                                                                  | HKY30R                                                                              |

\*1 Torque de apriete (lbf-plgs) : LLCS108=29

\*2 Por favor utilice asiento n° LLSDN42 con inserto de .25 pulgadas de espesor. El asiento tiene que ser ordenado por separado.

\*3 WT : Peso

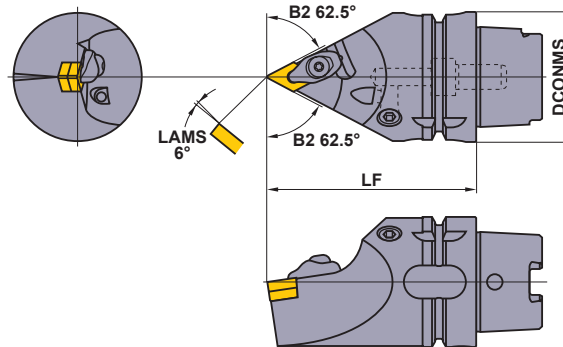
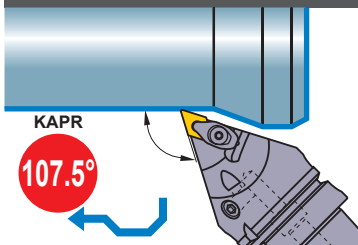
H

HERRAMIENTAS HSK-T

## DDNN

Torneado • Copiado

Tipo DOBLE SUJECION



| Terminación                                                                                                    | Ligero                                                                                                              | Medio                                                                                                            |
|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| FP<br><br>(4)             | LP<br><br>(4)                  | MP<br><br>(4)               |
| Medio<br>MK<br><br>(4)    | Semi-desbaste<br>RP<br><br>(4) | Inoxidable<br>MM<br><br>(4) |
| Clase G<br>R/L<br><br>(4) | CBN<br><br>(4)                 |                                                                                                                  |

| Descripción     | Existencia | Descripción del inserto      |    | Dimensiones (mm) |     | *3<br>WT (lbs) | *2  |  |  |  | *1  |  |
|-----------------|------------|------------------------------|----|------------------|-----|----------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                 |            |                              |    | DCONMS           | LF  |                | Asiento                                                                                | Perno                                                                                 | Mordaza                                                                               | Resorte                                                                               | Tornillo Mordaza                                                                         | Llave                                                                                 |
| H63TH-DDNNN-H15 | ★          | DNOA<br>DNOG<br>DNOM<br>DNMX | 43 | 63               | 100 | 3.5            | LLSDN43<br>(LLSDN42)                                                                   | LLP24                                                                                 | DCK2613                                                                               | DCS1                                                                                  | DC0621T                                                                                  | TKY20F                                                                                |
| H63TH-DDNNN-L15 | ★          |                              |    | 63               | 140 | 5.5            | LLSDN43<br>(LLSDN42)                                                                   | LLP24                                                                                 | DCK2613                                                                               | DCS1                                                                                  | DC0621T                                                                                  | TKY20F                                                                                |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 Por favor utilice asiento n° LLSDN42 con inserto de .25 pulgadas de espesor. El asiento tiene que ser ordenado por separado.

\*3 WT : Peso

Nota 1) Se muestran las dimensiones para el inserto con RE .031 plgs

Nota 2) El inserto mostrado en la foto es un ejemplo. Las letras muestran el rompeviruta y los números el tamaño del círculo inscrito.

Insertos Tipo PDNN  $\odot$  > A112-A118Insertos Tipo DDNN  $\odot$  > A112-A118

Insertos CBN y PCD &gt; B031-B034, B059

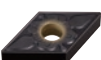
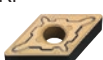
CONDICIONES DE CORTE &gt; VER SECCION A

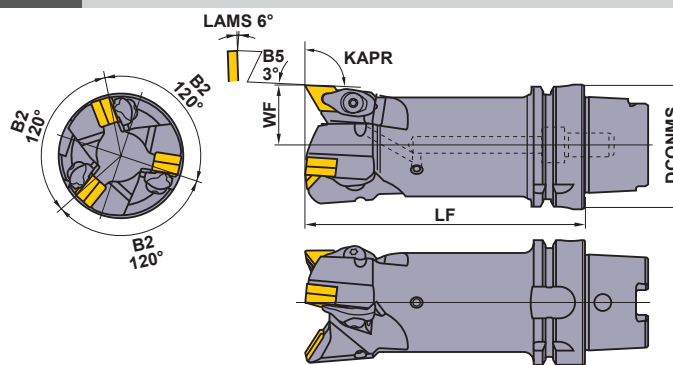
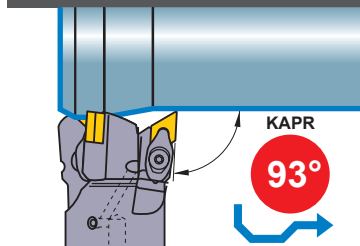
★ : Existencia en Japón

# DDJN

Torneado • Careado

Tipo DOBLE SUJECION

| Acabado                                                                             | Ligero                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| FP                                                                                  | LP                                                                                  |
|  |  |
| (4)                                                                                 | (4)                                                                                 |
| Medio                                                                               | Medio                                                                               |
| MP                                                                                  | MK                                                                                  |
|  |  |
| (4)                                                                                 | (4)                                                                                 |
| Medio a Desbaste                                                                    | Inoxidables                                                                         |
| RP                                                                                  | MM                                                                                  |
|  |  |
| (4)                                                                                 | (4)                                                                                 |



Unicamente Izquierdo

| Descripción       | Exis-<br>tencia | Descripción del<br>inserto   | Dimensiones<br>(mm) |    |     | *3<br>WT<br>(lbs) | *2  |  |  |  | (*)<br>*1  | (*)<br> |        |
|-------------------|-----------------|------------------------------|---------------------|----|-----|-------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------|
|                   | L               |                              | DCONMS              | LF | WF  | Asiento           | Perno                                                                                 | Mordaza                                                                             | Resorte                                                                             | Tornillo Mordaza                                                                    | Llave                                                                                         |                                                                                            |        |
| H63TH-DDJNL-L15-3 | ★               | DNCA<br>DNCG<br>DNOM<br>DNMX | 43                  | 63 | 140 | 30                | 4.9                                                                                   | LLSDN43<br>(LLSDN42)                                                                | LLP24                                                                               | DCK2613                                                                             | DCS1                                                                                          | DC0621T                                                                                    | TKY20F |

\*1 Torque de apriete (lbf-plgs) : DC0621T=44

\*2 Por favor utilice asiento n° LLSDN42 con inserto de .25 pulgadas de espesor. El asiento tiene que ser ordenado por separado.

\*3 WT : Peso

Nota 1) Se muestran las dimensiones para el inserto con RE .031 plgs

H

HERRAMIENTAS HSK-T

Insertos Tipo DDJN  > A112-A118  
Insertos CBN y PCD > B031-B034, B059

CONDICIONES DE CORTE > VER SECCION A  
REFACCIONES > N001  
INFORMACION TECNICA > P001

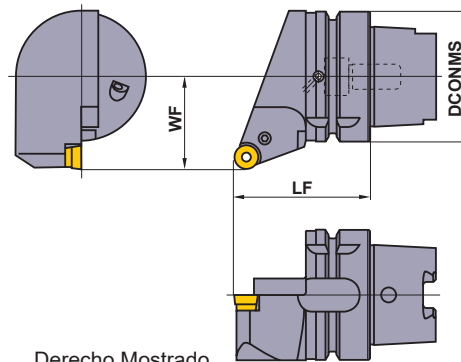
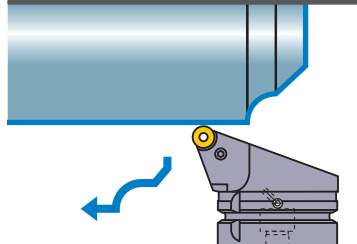
H011

# PARA MAQUINAS CON CARRUSEL

## PRGC

Torneado • Careado • Copiado

Medio



Derecho Mostrado



| Descripción        | Exis-<br>tencia |   | Descripción del<br>inserto | Dimensiones<br>(mm) | *2     |    |    | Asiento | Perno    | Palanca | Tornillo Mordaza | *1      | Llave  |
|--------------------|-----------------|---|----------------------------|---------------------|--------|----|----|---------|----------|---------|------------------|---------|--------|
|                    | R               | L |                            |                     | DCONMS | LF | WF |         |          |         |                  |         |        |
| H63TH-PRGCR/L-DX12 | ★               | ★ | RCMX                       | 1204M0              | 63     | 65 | 45 | 2.6     | LLSRN123 | LLP13   | LLCL112          | LLCS106 | HKY25R |

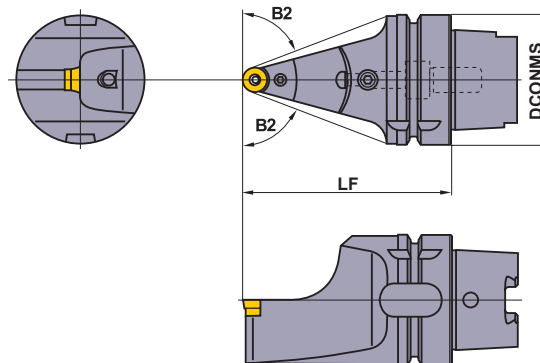
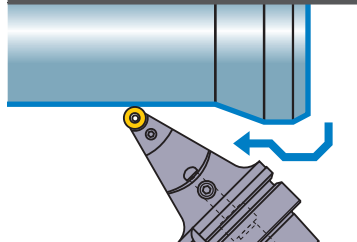
\*1 Torque de apriete (lbf-plgs) : LLCS106=19

\*2 WT : Peso

## PRDC

Torneado • Careado • Copiado

Medio



| Descripción     | Exis-<br>tencia |   | Descripción del<br>inserto | Dimensiones<br>(mm) | *2     |     |     | Asiento | Perno    | Palanca | Tornillo<br>Mordaza | *1      | Opresor   | Llave  |
|-----------------|-----------------|---|----------------------------|---------------------|--------|-----|-----|---------|----------|---------|---------------------|---------|-----------|--------|
|                 | R               | L |                            |                     | DCONMS | LF  | B2  |         |          |         |                     |         |           |        |
| H63TH-PRDCN-H12 | ★               |   | RCMX                       | 1204M0              | 63     | 100 | 69° | 3.1     | LLSRN123 | LLP13   | LLCL112             | LLCS106 | HGM-PT1/8 | HKY25R |
| H63TH-PRDCN-L12 | ★               |   |                            |                     | 63     | 140 | 75° | 5.1     | LLSRN123 | LLP13   | LLCL112             | LLCS106 | HGM-PT1/8 | HKY25R |

\*1 Torque de apriete (lbf-plgs) : LLCS106=19

\*2 WT : Peso

## CONDICIONES DE CORTE RECOMENDADAS

|   | Material                        | Dureza      | Tipo de Corte | Rompe<br>viruta | Grado  | Velocidad de Corte<br>(SFM) |
|---|---------------------------------|-------------|---------------|-----------------|--------|-----------------------------|
| P | Acero Blando                    | ≤180HB      | Corte Medio   | Estándar        | UE6110 | 670—1150                    |
|   | Acero Aleado<br>Acero al Carbón | 180HB—350HB | Corte Medio   | Estándar        | UE6110 | 490—850                     |
| M | Acero Inoxidable                | ≤200HB      | Corte Medio   | Estándar        | US735  | 230—425                     |

Nota 1) El inserto mostrado en la foto es un ejemplo. Las letras muestran el rompeviruta y los números el tamaño del círculo inscrito.

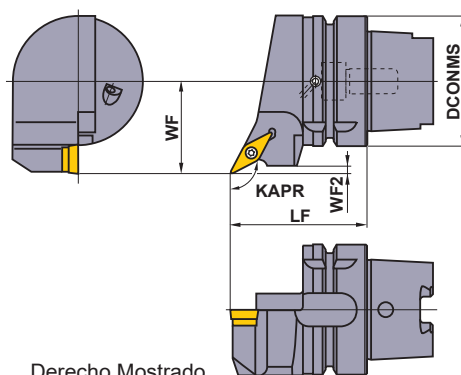
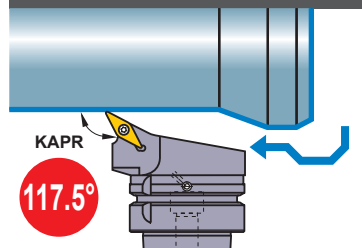
★ : Existencia en Japón

Insertos Tipo PRGC ○ ○ ○ &gt; A167

Insertos Tipo PRDC ○ ○ ○ &gt; A167

# SVPB

## Careado • Copiado



Derecho Mostrado

| Acabado | Ligero |
|---------|--------|
| R/L-F   | SV     |
| (3)     | (3)    |
| Medio   | Medio  |
| MV      | MP     |
| (3)     | (3)    |
| CBN     |        |
| (3)     |        |

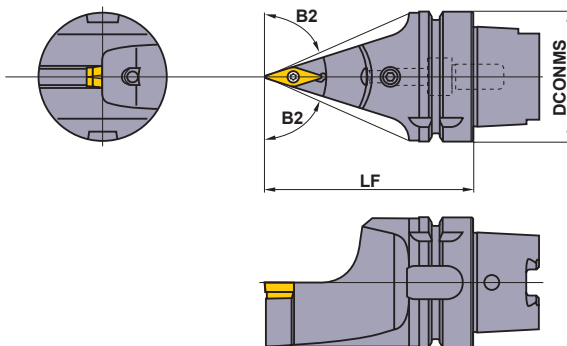
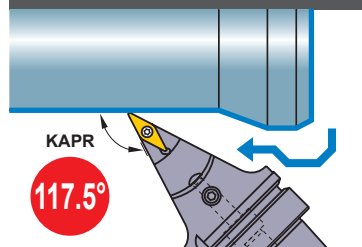
| Descripción        | Exis-<br>tencia |   | Descripción del<br>inserto | 33 | Dimensiones<br>(mm) |    |    |     | *2<br>WT<br>(lbs) | Asiento | Perno  | Tornillo | Llave  |
|--------------------|-----------------|---|----------------------------|----|---------------------|----|----|-----|-------------------|---------|--------|----------|--------|
|                    | R               | L |                            |    | DCONMS              | LF | WF | WF2 |                   |         |        |          |        |
| H63TH-SVPBR/L-DX16 | ★               | ★ | VBOT<br>VBOW               | 33 | 63                  | 65 | 45 | 3.8 | 2.4               | SPSVN32 | BCP141 | TS35D    | TKY15F |

\*1 Torque de apriete (lbf-plgs) : TS35D=31

\*2 WT : Peso

# SVVB

## Careado • Copiado



| Acabado | Ligero |
|---------|--------|
| R/L-F   | SV     |
| (3)     | (3)    |
| Medio   | Medio  |
| MV      | MP     |
| (3)     | (3)    |
| CBN     |        |
| (3)     |        |

| Descripción     | Exis-<br>tencia |   | Descripción del<br>inserto | 33 | Dimensiones<br>(mm) |     |       | *2<br>WT<br>(lbs) | Asiento | Perno  | Tornillo | Opresor   | Llave  |
|-----------------|-----------------|---|----------------------------|----|---------------------|-----|-------|-------------------|---------|--------|----------|-----------|--------|
|                 | R               | L |                            |    | DCONMS              | LF  | B2    |                   |         |        |          |           |        |
| H63TH-SVVBH-H16 | ★               | ★ | VBOT<br>VBOW               | 33 | 63                  | 100 | 66.5° | 2.9               | SPSVN32 | BCP141 | TS35D    | HGM-PT1/8 | TKY15F |
| H63TH-SVVBH-L16 | ★               | ★ | VBOT<br>VBOW               | 33 | 63                  | 140 | 72.5° | 4.9               | SPSVN32 | BCP141 | TS35D    | HGM-PT1/8 | TKY15F |

\*1 Torque de apriete (lbf-plgs) : TS35D=31

\*2 WT : Peso

## CONDICIONES DE CORTE RECOMENDADAS

|   | Material                        | Dureza                           | Tipo de Corte | Rompe<br>viruta | Grado  | Velocidad de Corte<br>(SFM) |
|---|---------------------------------|----------------------------------|---------------|-----------------|--------|-----------------------------|
| P | Acero Blando                    | ≤180HB                           | Acabado       | F               | AP25N  | 820 (490—985)               |
|   |                                 |                                  | Corte Medio   | MV              | UE6020 | 655 (490—820)               |
|   | Acero Aleado<br>Acero al Carbón | 180HB—350HB                      | Acabado       | F               | AP25N  | 690 (490—850)               |
|   |                                 |                                  | Corte Medio   | MV              | UE6020 | 555 (390—690)               |
| M | Acero Inoxidable                | ≤200HB                           | Corte Medio   | MM              | US735  | 330 (230—395)               |
| K | Fundición Gris                  | Resistencia a la tensión ≤350MPa | Corte Medio   | MV              | UE6020 | 555 (460—655)               |

Nota 1) Se muestran las dimensiones para el inserto con RE .031 plgs

Nota 2) El inserto mostrado en la foto es un ejemplo. Las letras muestran el rompeviruta y los números el tamaño del círculo inscrito.

Insertos Tipo SVPB > A179—A183

Insertos Tipo SVVB > A179—A183  
Insertos CBN > B053

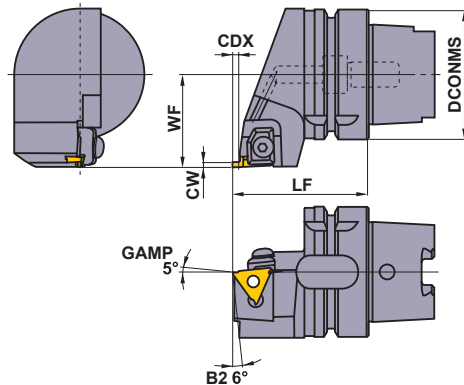
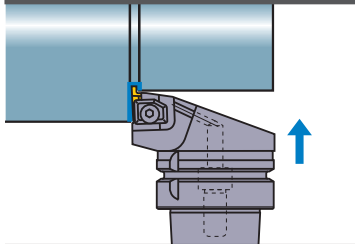
REFACCIONES > N001  
INFORMACION TECNICA > P001

H013

H

HERRAMIENTAS HSK-T

# PARA MAQUINAS CON CARRUSEL

**MG**
**Ranurado**

**Derecho Mostrado**

| Descripción                | Exis-<br>tencia |   | Descripción del<br>inserto           | Dimensiones (mm)       |     |        |    |    | *2<br>WT<br>(lbs) |  |  |  |  |
|----------------------------|-----------------|---|--------------------------------------|------------------------|-----|--------|----|----|-------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                            | R               | L |                                      | CW                     | CDX | DCONMS | LF | WF |                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>H63TH-MGHR/L-DX4315</b> | ★               | ★ | <b>MGTR/L</b><br>43125<br> <br>43470 | 1.25                   | 1.2 | 63     | 65 | 45 | 2.6               | MTK1R/L                                                                             | HBH06020                                                                            | MES3                                                                                | HKY40R                                                                              |
|                            |                 |   |                                      | 1.45                   | 1.5 |        |    |    |                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>H63TH-MGHR/L-DX4323</b> | ★               | ★ |                                      | $1.5 \leq CW \leq 2.3$ | 3   |        |    |    |                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>H63TH-MGHR/L-DX4333</b> | ★               | ★ |                                      | $2.3 < CW \leq 3.3$    | 4.5 |        |    |    |                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|                            |                 |   |                                      | $3.3 < CW \leq 4.7$    | 4.5 |        |    |    |                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

\*1 Torque de apriete (lbf-plgs) : HBH06020=62

\*2 WT : Peso

**H**

HERRAMIENTAS HSK-T

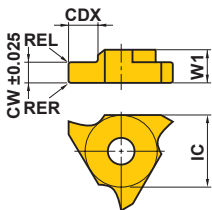
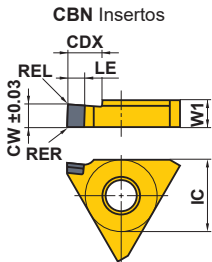
## CONDICIONES DE CORTE RECOMENDADAS

| Material                                    | Dureza                           | Grado         | Velocidad de Corte (SFM) | Avance (IPR)        |
|---------------------------------------------|----------------------------------|---------------|--------------------------|---------------------|
| <b>P</b><br>Acero al Carbón<br>Acero Aleado | 180—350HB                        | <b>VP20MF</b> | 390 (330—460)            | .0039 (.0012—.0071) |
|                                             |                                  | <b>NX2525</b> | 425 (330—525)            | .0047 (.0012—.0079) |
| <b>M</b><br>Acero Inoxidable                | ≤200HB                           | <b>VP20MF</b> | 390 (330—460)            | .0039 (.0012—.0071) |
| <b>K</b><br>Fundición Gris                  | Resistencia a la tensión ≤350MPa | <b>VP20MF</b> | 390 (330—460)            | .0039 (.0012—.0071) |

★ : Existencia en Japón.

&lt;10 insertos por caja&gt; &lt;1 en este caso utilizar inserto de CBN&gt;

## INSERTOS TIPO MG

| Descripción | Existencia |   |        |   |         |   |        | Dimensiones (mm) |     |      |      |       |     | Tipo de Corte                                                                                                                                                                                                       |
|-------------|------------|---|--------|---|---------|---|--------|------------------|-----|------|------|-------|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | Recubierto |   | Cermet |   | Carburo |   | CBN    | CW               | CDX | IC   | W1   | RER/L | LE  |                                                                                                                                                                                                                     |
|             | VP20MF     |   | NX2525 |   | UT120T  |   | MB8025 |                  |     |      |      |       |     |                                                                                                                                                                                                                     |
|             | R          | L | R      | L | R       | L | R      |                  |     |      |      |       |     |                                                                                                                                                                                                                     |
| MGTR/L43125 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 1.25             | 1.2 | 12.7 | 4.76 | 0.2   | 2.7 | <div>MGTR/L...</div> <div></div> <div></div> |
| MGTR/L43145 | ★          | ★ |        |   | ★       | ★ | ★      | 1.45             | 1.5 | 12.7 | 4.76 | 0.2   | —   |                                                                                                                                                                                                                     |
| MGTR/L43150 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 1.5              | 3   | 12.7 | 4.76 | 0.2   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43175 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 1.75             | 3   | 12.7 | 4.76 | 0.2   | —   |                                                                                                                                                                                                                     |
| MGTR/L43200 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 2                | 3   | 12.7 | 4.76 | 0.2   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43230 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 2.3              | 3   | 12.7 | 4.76 | 0.2   | —   |                                                                                                                                                                                                                     |
| MGTR/L43250 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 2.5              | 4.5 | 12.7 | 4.76 | 0.3   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43260 | ★          | ★ | ★      |   | ★       | ★ | ★      | 2.6              | 4.5 | 12.7 | 4.76 | 0.3   | —   |                                                                                                                                                                                                                     |
| MGTR/L43270 | ★          | ★ |        |   | ★       | ★ | ★      | 2.7              | 4.5 | 12.7 | 4.76 | 0.3   | —   |                                                                                                                                                                                                                     |
| MGTR/L43280 |            | ★ |        |   | ★       | ★ | ★      | 2.8              | 4.5 | 12.7 | 4.76 | 0.3   | —   |                                                                                                                                                                                                                     |
| MGTR/L43300 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 3                | 4.5 | 12.7 | 4.76 | 0.3   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43320 | ★          |   |        |   | ★       | ★ | ★      | 3.2              | 4.5 | 12.7 | 4.76 | 0.3   | —   |                                                                                                                                                                                                                     |
| MGTR/L43330 |            | ★ |        |   | ★       | ★ | ★      | 3.3              | 4.5 | 12.7 | 4.76 | 0.3   | —   |                                                                                                                                                                                                                     |
| MGTR/L43350 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 3.5              | 4.5 | 12.7 | 4.76 | 0.3   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43400 | ★          | ★ | ★      |   | ★       | ★ | ★      | 4                | 4.5 | 12.7 | 4.76 | 0.3   | 2.7 |                                                                                                                                                                                                                     |
| MGTR/L43420 | ★          | ★ | ★      |   | ★       | ★ | ★      | 4.2              | 4.5 | 12.7 | 4.76 | 0.4   | —   |                                                                                                                                                                                                                     |
| MGTR/L43430 | ★          | ★ | ★      |   | ★       | ★ | ★      | 4.3              | 4.5 | 12.7 | 4.76 | 0.4   | —   |                                                                                                                                                                                                                     |
| MGTR/L43450 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 4.5              | 4.5 | 12.7 | 4.76 | 0.4   | —   |                                                                                                                                                                                                                     |
| MGTR/L43470 | ★          | ★ | ★      | ★ | ★       | ★ | ★      | 4.7              | 4.5 | 12.7 | 4.76 | 0.4   | —   |                                                                                                                                                                                                                     |

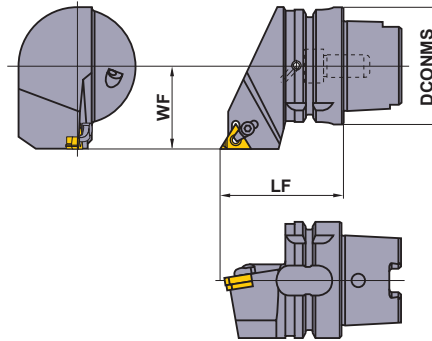
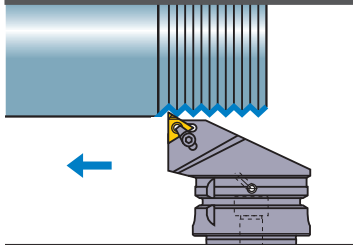
H

HERRAMIENTAS HSK-T

# PARA MAQUINAS CON CARRUSEL

## MMTE

Roscado



Solo Porta Herramienta Deracho

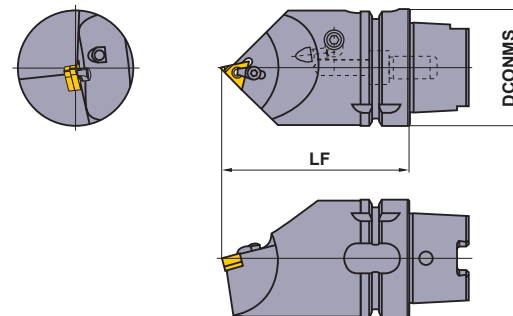
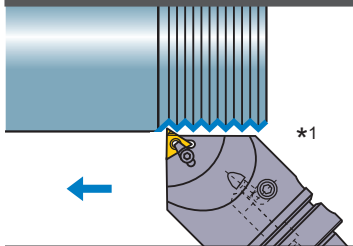
| Descripción      | Exis-<br>tencia | Descripción del inserto | Dimensiones<br>(mm) |    |    | *2<br>WT<br>(lbs) |         |                  |        |           |                     |                  |
|------------------|-----------------|-------------------------|---------------------|----|----|-------------------|---------|------------------|--------|-----------|---------------------|------------------|
|                  | R               |                         | DCONMS              | LF | WF |                   | Mordaza | Tornillo Mordaza | Seguro | Asiento   | Tornillo de Asiento | Llave            |
| H63TH-MMTER-DX16 | ★               | MMT16ER                 | 63                  | 65 | 45 | 2.6               | SETK51  | SETS51           | CR4    | CTE32TP15 | HFC03008            | TKY15F<br>HKY20R |

\*1 Torque de apriete (lbf-plgs) : SETS51=31, HFC03008=13

\*2 WT : Peso

## MMTEN

Roscado



Porta herramientas para inserto derecho solamente.

| Descripción      | Exis-<br>tencia | Descripción del inserto |                                                                                     | Dimensiones<br>(mm) |     | *3<br>WT<br>(lbs) |  |  |  |  |  |  |  |
|------------------|-----------------|-------------------------|-------------------------------------------------------------------------------------|---------------------|-----|-------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                  |                 |                         |                                                                                     | DCONMS              | LF  |                   | Mordaza                                                                             | Tornillo Mordaza                                                                      | Seguro                                                                                | Asiento                                                                               | Tornillo de Asiento                                                                   | Opresor                                                                               | Llave                                                                                 |
| H63TH-MMTENR-H16 | ★               | MMT16ER                 |  | 63                  | 100 | 3.7               | SETK51                                                                              | SETS51                                                                                | CR4                                                                                   | CTE32TP15                                                                             | HFC03008                                                                              | HGM-PT1/8                                                                             | TKY15F<br>HKY20R                                                                      |
| H63TH-MMTENR-L16 | ★               |                         |                                                                                     | 63                  | 140 | 6.0               | SETK51                                                                              | SETS51                                                                                | CR4                                                                                   | CTE32TP15                                                                             | HFC03008                                                                              | HGM-PT1/8                                                                             | TKY15F<br>HKY20R                                                                      |

\*1 Para utilizarse con el eje B inclinado a 45°.

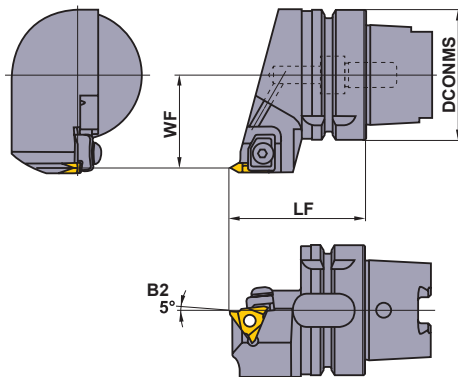
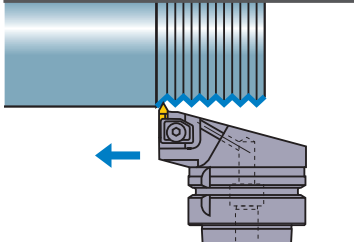
\*2 Torque de apriete (lbf-plgs) : SETS51=31, HFC03008=13

\*3 WT : Peso

## CONDICIONES DE CORTE RECOMENDADAS

|   | Material                        | Dureza                              | Grado  | Velocidad de Corte (SFM) |
|---|---------------------------------|-------------------------------------|--------|--------------------------|
| P | Acero Blando                    | ≤180HB                              | VP10MF | 490 (230—755)            |
|   |                                 |                                     | VP15TF | 330 (195—460)            |
|   | Acero Aleado<br>Acero al Carbón | 180—350HB                           | VP10MF | 460 (260—655)            |
|   |                                 |                                     | VP15TF | 330 (195—460)            |
| M | Acero Inoxidable                | ≤200HB                              | VP10MF | 425 (260—590)            |
|   |                                 |                                     | VP15TF | 260 (130—390)            |
| K | Fundición Gris                  | Resistencia a la tensión<br>≤350MPa | VP10MF | 460 (260—655)            |
|   |                                 |                                     | VP15TF | 295 (195—390)            |

# MT Roscado



Derecho Mostrado

| Descripción              | Exis-<br>tencia |   | Descripción del inserto | Dimensiones<br>(mm) |    |    | *2<br>WT<br>(lbs) |  |  |  |  |
|--------------------------|-----------------|---|-------------------------|---------------------|----|----|-------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                          | R               | L |                         | DCONMS              | LF | WF |                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| <b>H63TH-MTHR/L-DX43</b> | ★               | ★ | <b>MTTR/L</b> 43○○○○    | 63                  | 65 | 45 | 2.6               | MTK1R/L                                                                            | HBH06020                                                                            | MES3                                                                                | HKY40R                                                                              |

\*1 Torque de apriete (lbf-plgs) : HBH06020=62

\*2 WT : Peso

## CONDICIONES DE CORTE RECOMENDADAS

|          | Material                        | Dureza                              | Grado         | Velocidad de Corte (SFM) |
|----------|---------------------------------|-------------------------------------|---------------|--------------------------|
| <b>P</b> | Acero Blando                    | ≤180HB                              | <b>UP20M</b>  | 460 (330–590)            |
|          |                                 |                                     | <b>NX2525</b> | 655 (490–820)            |
|          |                                 |                                     | <b>UTi20T</b> | 390 (330–490)            |
|          | Acero Aleado<br>Acero al Carbón | 180HB–350HB                         | <b>UP20M</b>  | 390 (330–490)            |
|          |                                 |                                     | <b>NX2525</b> | 555 (490–655)            |
|          |                                 |                                     | <b>UTi20T</b> | 330 (230–390)            |
| <b>M</b> | Acero Inoxidable                | ≤200HB                              | <b>UP20M</b>  | 390 (260–490)            |
|          |                                 |                                     | <b>UTi20T</b> | 330 (230–425)            |
| <b>K</b> | Fundición Gris                  | Resistencia a la tensión<br>≤350MPa | <b>UP20M</b>  | 260 (195–330)            |
|          |                                 |                                     | <b>UTi20T</b> | 260 (195–330)            |
|          |                                 |                                     | <b>HTi10</b>  | 330 (230–425)            |

Insertos Tipo MT ➤ H018  
REFACCIONES ➤ N001  
INFORMACION TECNICA ➤ P001

H017

H

HERRAMIENTAS HSK-T

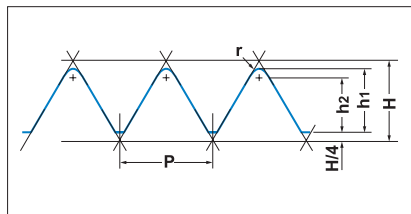
# PARA MAQUINAS CON CARRUSEL

## INSERTOS TIPO MT

| Tipo        | Descripción | Clase | Recubierto | Cermet | Carburo |       | ISO<br>Paso mm<br>(Hilos/pulgada) | Dimensiones (mm) |      |     | Tipo de Corte                                                                                                                                                                                                                          |
|-------------|-------------|-------|------------|--------|---------|-------|-----------------------------------|------------------|------|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             |             |       | UP20M      | NX2525 | UT120T  | HT110 |                                   | IC               | W1   | RE  |                                                                                                                                                                                                                                        |
| General 60° | MTTR436000  | G     |            | ★      | ★       |       | -0.8                              | 12.7             | 4.76 | 0   | <b>MTTR/L(60°)</b> (Clase G)<br><br><br>Inserto derecho Mostrado |
|             | MTTR436001  | G     | ★          | ★      | ★       | ★     | 1.0-1.75                          | 12.7             | 4.76 | 0.1 |                                                                                                                                                                                                                                        |
|             | MTTL436001  | G     | ★          |        | ★       | ★     | 1.0-1.75                          | 12.7             | 4.76 | 0.1 |                                                                                                                                                                                                                                        |
|             | MTTR436002  | G     | ★          | ★      | ★       | ★     | 2.0-2.5                           | 12.7             | 4.76 | 0.2 |                                                                                                                                                                                                                                        |
|             | MTTL436002  | G     |            | ★      | ★       |       | 2.0-2.5                           | 12.7             | 4.76 | 0.2 |                                                                                                                                                                                                                                        |
|             | MTTR436003  | G     | ★          | ★      | ★       | ★     | 3.0-3.5                           | 12.7             | 4.76 | 0.3 |                                                                                                                                                                                                                                        |
|             | MTTL436003  | G     |            | ★      | ★       |       | 3.0-3.5                           | 12.7             | 4.76 | 0.3 |                                                                                                                                                                                                                                        |
|             | MTTR436004  | G     |            | ★      | ★       |       | 4.0-4.5                           | 12.7             | 4.76 | 0.4 |                                                                                                                                                                                                                                        |
| General 55° | MTTR435501  | G     |            | ★      | ★       |       | (28-10)                           | 12.7             | 4.76 | 0.1 | <b>MTTR(55°)</b> (Clase G)<br><br><br>Inserto derecho Mostrado   |
|             | MTTR435502  | G     |            | ★      | ★       |       | (16-8)                            | 12.7             | 4.76 | 0.2 |                                                                                                                                                                                                                                        |
|             | MTTR435503  | G     |            | ★      | ★       |       | (11-8)                            | 12.7             | 4.76 | 0.3 |                                                                                                                                                                                                                                        |
|             |             |       |            |        |         |       |                                   |                  |      |     |                                                                                                                                                                                                                                        |

### ■ Profundidad de corte estándar

- La tabla de la derecha muestra las profundidades de corte cuando se maquina cuerdas externas metricas ISO.
- Al utilizar grados cermet o maquina acero inoxidable, aumente 2 o 3 pasadas.



### ● Tornillo con rosca métrica

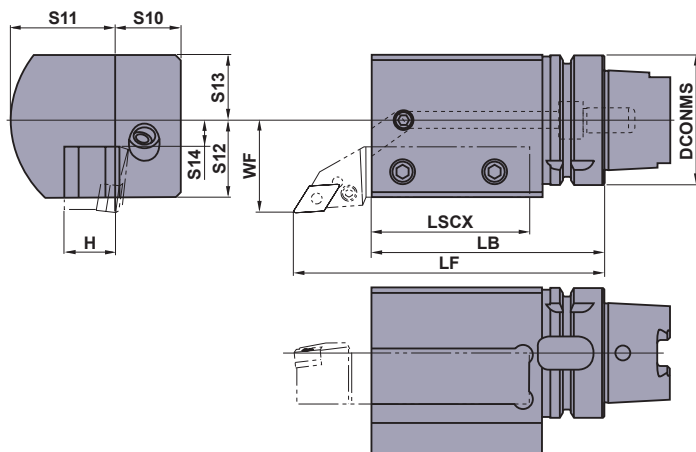
Unidad: mm

| P (Paso)          | 0.75 | 1.00 | 1.25 | 1.50 | 1.75 | 2.00 | 2.50 | 3.00 | 3.50 | 4.00 | 4.50 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|
| h1                | 0.46 | 0.61 | 0.77 | 0.92 | 1.07 | 1.23 | 1.53 | 1.84 | 2.15 | 2.45 | 2.76 |
| h2                | 0.35 | 0.47 | 0.59 | 0.70 | 0.82 | 0.94 | 1.17 | 1.41 | 1.65 | 1.87 | 2.11 |
| r (Radio)         | 0.11 | 0.14 | 0.18 | 0.22 | 0.25 | 0.29 | 0.36 | 0.43 | 0.50 | 0.58 | 0.65 |
| Numero de pasadas | 1    | 0.18 | 0.20 | 0.20 | 0.25 | 0.25 | 0.30 | 0.30 | 0.35 | 0.35 | 0.40 |
|                   | 2    | 0.13 | 0.15 | 0.18 | 0.20 | 0.20 | 0.25 | 0.25 | 0.30 | 0.30 | 0.35 |
|                   | 3    | 0.10 | 0.10 | 0.12 | 0.15 | 0.20 | 0.20 | 0.25 | 0.25 | 0.25 | 0.30 |
|                   | 4    | 0.05 | 0.10 | 0.12 | 0.15 | 0.15 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 |
|                   | 5    |      | 0.06 | 0.10 | 0.10 | 0.12 | 0.15 | 0.20 | 0.20 | 0.25 | 0.25 |
|                   | 6    |      |      | 0.05 | 0.07 | 0.10 | 0.10 | 0.15 | 0.20 | 0.20 | 0.20 |
|                   | 7    |      |      |      |      | 0.05 | 0.08 | 0.10 | 0.15 | 0.15 | 0.20 |
|                   | 8    |      |      |      |      |      | 0.05 | 0.10 | 0.10 | 0.15 | 0.15 |
|                   | 9    |      |      |      |      |      |      | 0.08 | 0.10 | 0.10 | 0.15 |
|                   | 10   |      |      |      |      |      |      | 0.05 | 0.09 | 0.10 | 0.15 |
|                   | 11   |      |      |      |      |      |      |      | 0.05 | 0.10 | 0.10 |
|                   | 12   |      |      |      |      |      |      |      |      | 0.05 | 0.10 |
|                   | 13   |      |      |      |      |      |      |      |      |      | 0.05 |
|                   | 14   |      |      |      |      |      |      |      |      |      | 0.06 |

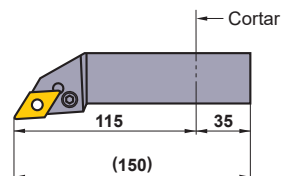
Nota 1) La primer pasada causa alta carga en el filo de corte para evitar daño mantenga la profundidad de corte de 0.4-0.5 mm maximo.

# PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

Torneado • Careado



■ Esta sujeción es para portaherramientas de medida de 25 x 25 por favor corte el portaherramientas como se muestra abajo antes de utilizarse.



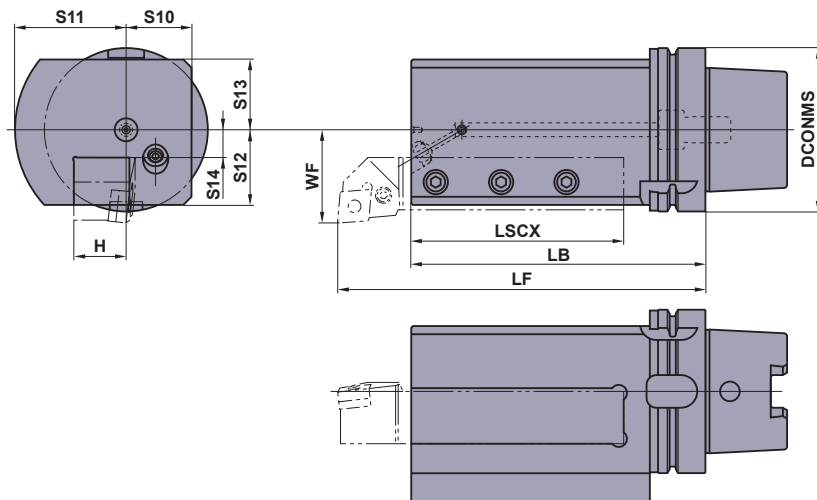
Derecho Mostrado

| Descripción         | Exis-<br>tencia |   | Dimensiones (mm) |     |     |      |    |     |     |    |     |     |     | WT<br>(lbs)<br> |  |  |
|---------------------|-----------------|---|------------------|-----|-----|------|----|-----|-----|----|-----|-----|-----|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                     | R               | L | DCONMS           | LF  | LB  | LSCX | H  | S10 | S11 | WF | S14 | S12 | S13 |                                                                                                    |                                                                                     |                                                                                     |
| H63TH-EV2525R/L-112 | ★               | ★ | 63               | 150 | 112 | 77   | 25 | 32  | 53  | 45 | 13  | 38  | 32  | 8.6                                                                                                | HSS12025                                                                            | HGM-PT1/8                                                                           |

\* WT : Peso

# PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

Torneado • Careado



■ Este portaherramientas es para tamaños de 32x32 y 32x25.

Herramienta derecha.

| Descripción          | Exis-<br>tencia |   | Dimensiones (mm) |     |     |      |    |     |     |    |     |     |     | WT<br>(lbs)<br> |  |  |
|----------------------|-----------------|---|------------------|-----|-----|------|----|-----|-----|----|-----|-----|-----|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                      | R               | L | DCONMS           | LF  | LB  | LSCX | H  | S10 | S11 | WF | S14 | S12 | S13 |                                                                                                      | Tornillo de la Mordaza                                                                | Opresor                                                                               |
| H100TH-EV3232R/L-180 | ★               | ★ | 100              | 220 | 180 | 130  | 32 | 40  | 68  | 57 | 17  | 46  | 43  | 25.8                                                                                                 | HSS14035                                                                              | HSS06006                                                                              |

\* WT : Peso

Nota 1) Posibilidad de adaptar un portaherramienta utilizando una lana de 7 mm.

Es posible ajustar la herramienta de 1"x 1" utilizando una placa de 6.6 mm.

REFACCIONES > N001  
INFORMACION TECNICA > P001

H019

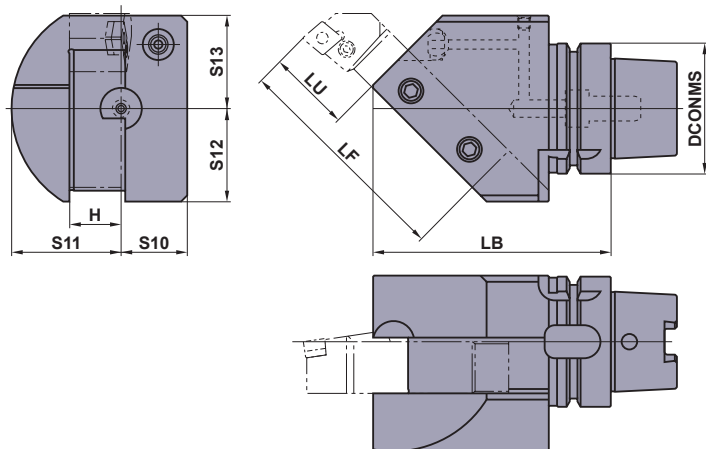
H

HERRAMIENTAS HSK-T

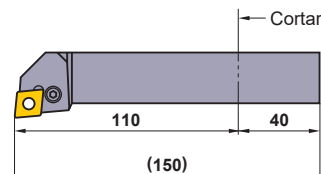
# PARA MAQUINAS CON CARRUSEL

## PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

Torneado • Careado



■ Esta sujeción es para portaherramientas de medida de 25 x 25 por favor corte el portaherramientas como se muestra abajo antes de utilizarse.



Mitsubishi Materials esta autorizada por MORI SEIKI Co., LTD para producir y distribuir estas herramientas BAJO PATENTE DE Japón N° 3720202.

Derecho Mostrado

| Descripción         | Exis-<br>tencia |   | Dimensiones (mm) |     |    |     |    |     |     |     |     | *<br>WT<br>(lbs) |  |  |
|---------------------|-----------------|---|------------------|-----|----|-----|----|-----|-----|-----|-----|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                     | R               | L | DCONMS           | LB  | LU | LF  | H  | S10 | S11 | S12 | S13 |                  | Tornillo de la Mordaza                                                              | Opresor                                                                             |
| H63TH-EN2525R/L-115 | ★               | ★ | 63               | 115 | 40 | 110 | 25 | 32  | 53  | 45  | 45  | 8.2              | HSS12030                                                                            | HSS06006                                                                            |

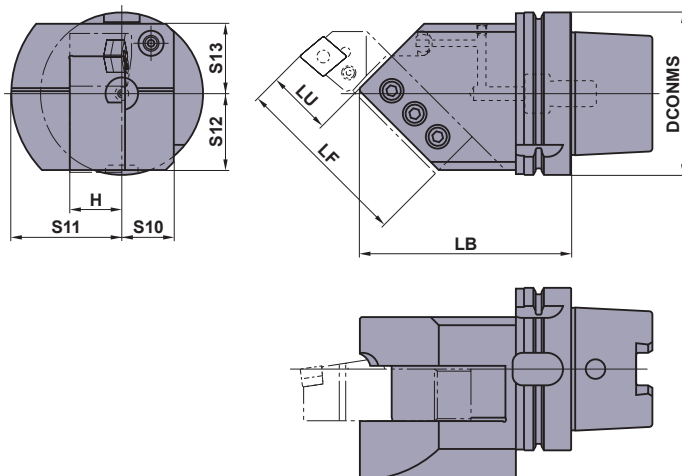
\* WT : Peso

H

HERRAMIENTAS HSK-T

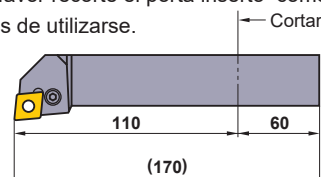
## PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

Torneado • Careado



■ Este portaherramientas es para tamaños de 32x32 y 32x25.

Por favor recorte el porta inserto como se muestra antes de utilizarse.



Mitsubishi Materials esta autorizada por MORI SEIKI Co., LTD para producir y distribuir estas herramientas BAJO PATENTE DE Japón N° 3720202.

Derecho Mostrado

| Descripción          | Exis-<br>tencia |   | Dimensiones (mm) |     |    |     |    |     |     |     |     | WT<br>(lbs)<br> |  |  |
|----------------------|-----------------|---|------------------|-----|----|-----|----|-----|-----|-----|-----|------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|                      | R               | L | DCONMS           | LB  | LU | LF  | H  | S10 | S11 | S12 | S13 |                                                                                                      |                                                                                       |                                                                                       |
| H100TH-EN3232R/L-130 | ★               | ★ | 100              | 130 | 40 | 110 | 32 | 32  | 68  | 47  | 43  | 14.6                                                                                                 | HSS14030                                                                              | HSS06006                                                                              |

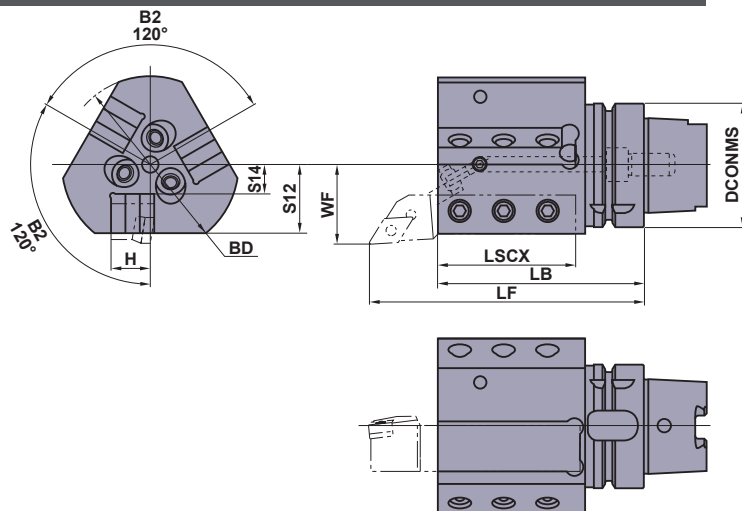
\* WT : Peso

Nota 1) Posibilidad de adaptar un portaherramienta utilizando una lana de 7 mm.  
Es posible ajustar la herramienta de 1"x 1" utilizando una placa de 6.6 mm.

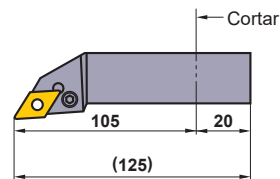
★ : Existencia en Japón

# PORTA HERRAMIENTAS PARA TORNEADO EXTERIOR

Torneado • Careado



■ Esta sujeción es para portaherramientas de medida de 20 x 20 por favor corte el portaherramientas como se muestra abajo antes de utilizarse.



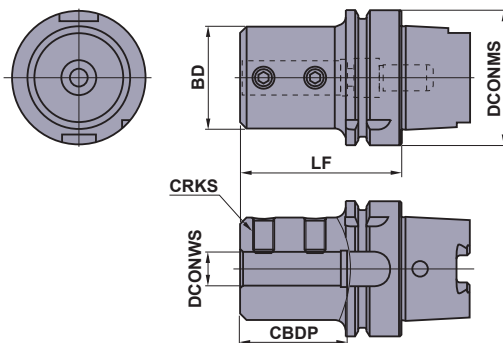
Derecho Mostrado

| Descripción           | Existencia |   | Dimensiones (mm) |     |        |    |    |      |    |    |    | WT<br>(lbs) |  |  |  |
|-----------------------|------------|---|------------------|-----|--------|----|----|------|----|----|----|-------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |            |   | R                | L   | DCONMS | LF | LB | LSCX | H  | BD | WF |             | S14                                                                                 | S12                                                                                 | Tornillo de la Mordaza                                                              |
| H63TH-EV2020R/L-105-3 | ★          | ★ | 63               | 140 | 105    | 70 | 20 | 90   | 40 | 15 | 35 | 6.4         | HSS12030                                                                            | HSS05012                                                                            | HSS06006                                                                            |

\* WT : Peso

# SUJECION PARA BARRA DE MANDRINADO

Mandrinado



| Descripción  | Exis-<br>tencia | Dimensiones (mm) |    |        |    |      |      | WT<br>(lbs) |  |
|--------------|-----------------|------------------|----|--------|----|------|------|-------------|---------------------------------------------------------------------------------------|
|              |                 | DCONMS           | BD | DCONWS | LF | CBDP | CRKS |             | Tornillo de la Mordaza                                                                |
| H63TH-B08-65 | ★               | 63               | 28 | 8      | 65 | 40   | M8   | 2.0         | HSS08010                                                                              |
| H63TH-B10-70 | ★               | 63               | 35 | 10     | 70 | 45   | M8   | 2.2         | HSS08012                                                                              |
| H63TH-B12-70 | ★               | 63               | 42 | 12     | 70 | 45   | M8   | 2.4         | HSS08012                                                                              |
| H63TH-B16-75 | ★               | 63               | 48 | 16     | 75 | 50   | M10  | 2.9         | HSS10016                                                                              |
| H63TH-B20-75 | ★               | 63               | 52 | 20     | 75 | 50   | M10  | 3.1         | HSS10016                                                                              |
| H63TH-B25-83 | ★               | 63               | 62 | 25     | 83 | 58   | M12  | 3.7         | HSS12016                                                                              |
| H63TH-B32-87 | ★               | 63               | 62 | 32     | 87 | 62   | M12  | 3.7         | HSS12016                                                                              |
| H63TH-B40-97 | ★               | 63               | 65 | 40     | 97 | 72   | M16  | 4.0         | HSS16012                                                                              |

\* WT : Peso

Nota 1) Por favor, corte la barra de mandrinado para ajustar la longitud de zanco requerida. Este holder también aplica para brocas indexables.

REFACCIONES > N001  
INFORMACION TECNICA > P001

H021

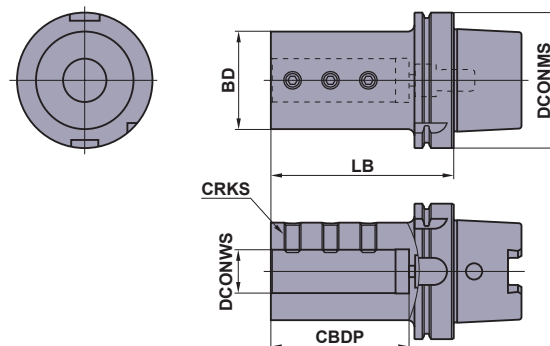
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HERRAMIENTAS HSK-T

# PARA MAQUINAS CON CARRUSEL

## SUJECION PARA BARRA DE MANDRINADO

mandrinado

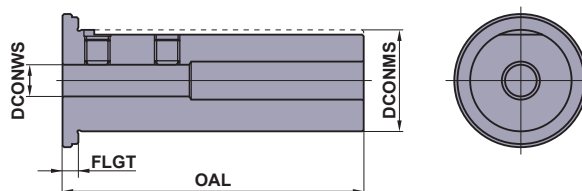


| Descripción    | Exis-<br>tencia | Dimensiones (mm) |    |        |     |      |      | *<br>WT<br>(lbs) | <br>Tornillo de la Mordaza |
|----------------|-----------------|------------------|----|--------|-----|------|------|------------------|---------------------------------------------------------------------------------------------------------------|
|                |                 | DCONMS           | BD | DCONWS | LB  | CDBP | CRKS |                  |                                                                                                               |
| H100TH-B25-120 | ★               | 100              | 62 | 25     | 120 | 88   | M12  | 8.6              | HSS12016                                                                                                      |
| H100TH-B32-135 | ★               | 100              | 72 | 32     | 135 | 102  | M12  | 10.6             | HSS12018                                                                                                      |
| H100TH-B40-150 | ★               | 100              | 82 | 40     | 150 | 117  | M16  | 13.0             | HSS16020                                                                                                      |
| H100TH-B50-180 | ★               | 100              | 92 | 50     | 180 | 147  | M16  | 17.0             | HSS16020                                                                                                      |

★ WT : Peso

Nota 1) Por favor, corte la barra de mandrinado para ajustar la longitud de zanco requerida. Este holder también aplica para brocas indexables.

## BUJES PARA BARRAS DE MANDRINADO H100TH-B32-135



| Descripción | Exis-<br>tencia | Dimensiones (mm) |        |     |      | *<br>WT<br>(lbs) | <br>Tornillo de la Mordaza |
|-------------|-----------------|------------------|--------|-----|------|------------------|-----------------------------------------------------------------------------------------------------------------|
|             |                 | DCONWS           | DCONMS | OAL | FLGT |                  |                                                                                                                 |
| SL3208-90   | ★               | 8                | 32     | 95  | 5    | 1.3              | HSS06008                                                                                                        |
| SL3210-90   | ★               | 10               | 32     | 95  | 5    | 1.1              | HSS08008                                                                                                        |
| SL3212-90   | ★               | 12               | 32     | 95  | 5    | 1.1              | HSS08008                                                                                                        |
| SL3216-90   | ★               | 16               | 32     | 95  | 5    | 1.1              | HSS08006                                                                                                        |
| SL3220-90   | ★               | 20               | 32     | 95  | 5    | 0.9              | HSS08005                                                                                                        |

★ WT : Peso

Nota 1) Estos bujes son solamente compatibles con portaherramienta H100TH-B32-135.

[illegible]