KORLOY TECH-NEWS

# Hexa Blade

## Grooving and Parting tool with precision 6 corners

- Grooving and Parting tool with high economical 6 corners
- Increased reliability and stability in cutting due to high qualified cutting edge

KORLOY

KORLOY
TECH-NEWS

Grooving and Parting tool with precision 6 corners

# Hexa Blade

KORLOY has launched the Hexa Blade, a precision insert grooving and cutting processing that provides high economic efficiency with its 6-cornered design.

The uniquely shaped 6-corner Hexa Blade applies precision manufacturing technology, ensuring consistent assembly dimension even when changing corners, thereby guaranteeing stable processing quality.

The **Hexa Blade 19** insert, for automatic lathe, optimizes precision machining with a newly developed coating, delivering excellent precision machining performance and provides superior fracture resistance and surface finish quality.
The **Hexa Blade 27** insert's bumped chip breaker provides outstanding chip control in various machining process.

The wide cutting face and three-sided clamping system of the Hexa Blade holder offer stable clamping and enhance tool life under various machining conditions. One holder can easily mount various inserts on the clamping side with a screw, ensuring excellent user convenience.

The high-pressure coolant hole of the Hexa Blade holder delivers focused spray of coolant on the cutting edge, maximizing cooling effects and chip control which provides outstanding productivity.

### » High cost efficiency

- 6 cornered insert for Grooving and Parting

### » Excellent Machining Performance

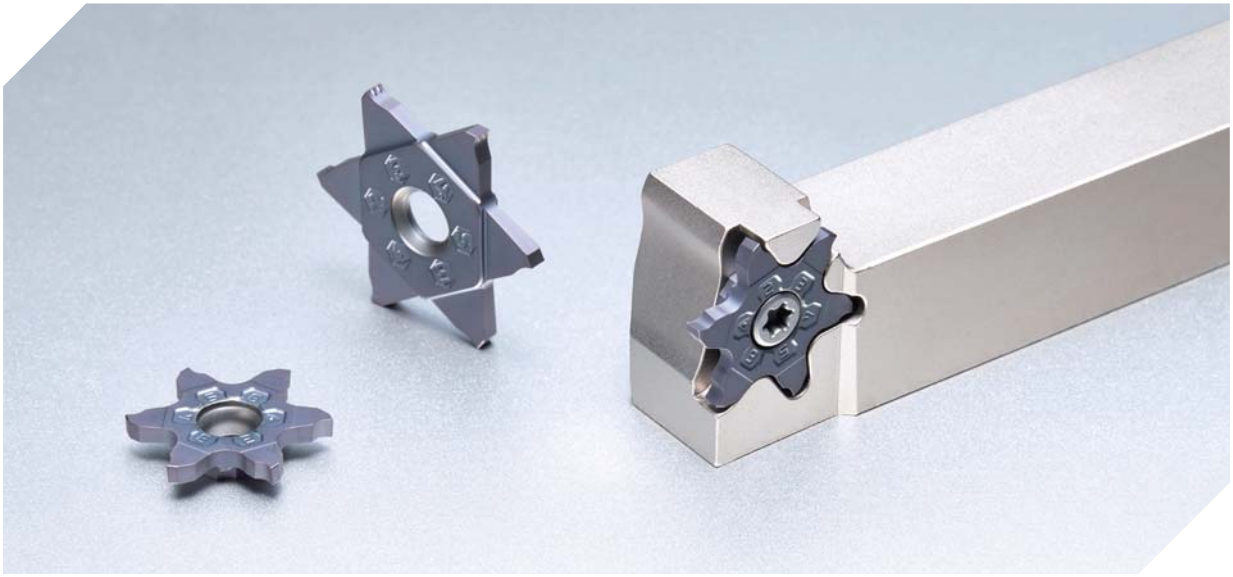
- Achieves superior surface finish with sharp cutting edges (HB19)
- Improves chip control with bumped chip breaker (HB27)

### » Regular cutting quality

- Excellent corner dimension deviation management from precision manufacturing technology

### » High cutting stability

- Strong clamping system from wide clamping side and 3-sided clamping



## Code system

### Insert

| HB | 27 | N | 200 | - | 020 | - | M |
|---|---|---|---|---|---|---|---|
| Hexa Blade | IC<br>19: 19mm<br>27: 27mm | Hand<br>N: Neutral<br>R: Right handed<br>L: Left handed | Cutting width<br>200: 2mm | | Nose R<br>020: 0.2mm | | Chip breaker<br>P<br>M |

### Holder (HB19)

| HB | E | H | R | 20 | 20 | - | 19 | - | (KHP) |
|---|---|---|---|---|---|---|---|---|---|
| Hexa Blade | Application<br>E: External | Holder type<br>H: Horizontal | Hand<br>R: Right handed<br>L: Left handed | Shank height<br>20: 20mm | Shank width<br>20: 20mm | | IC<br>19: 19mm | | KORLOY High Pressure coolant<br>KHP: Hose<br>KHPV: VDI |

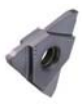
### Holder (HB27)

| HB | E | H | R | 25 | 25 | - | 27 | - | 2 | - | (KHP) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hexa Blade | Application<br>E: External | Holder type<br>H: Horizontal | Hand<br>R: Right handed<br>L: Left handed | Shank height<br>25: 25mm | Shank width<br>25: 25mm | | IC<br>27: 27mm | | Insert size<br>2: BW=2.7mm<br>3: BW=3.7mm<br>4: BW=4.7mm | | KORLOY High Pressure coolant<br>KHP: Hose<br>KHPV: VDI |

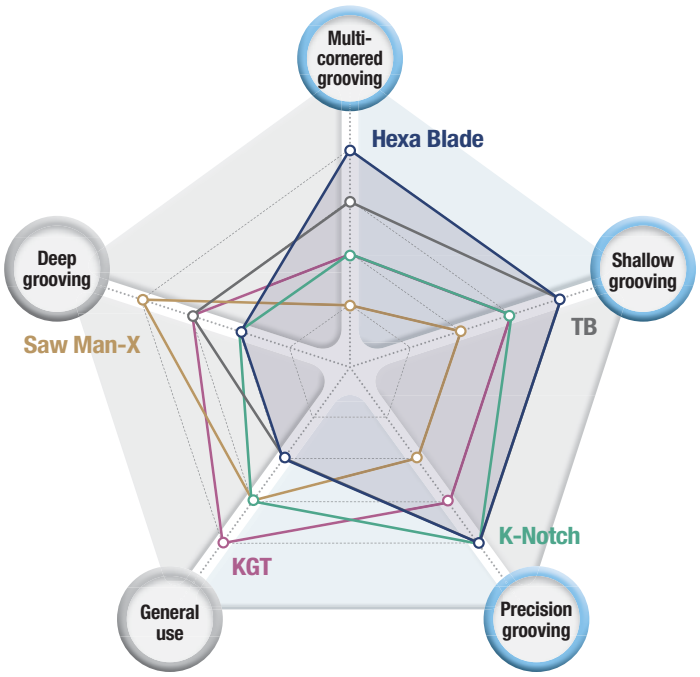
* IC : Inscribed circle diameter

## Cutting width and cutting depth by tools

◎: 1st recommendation ○: 2nd recommendation

| Tool | Cutting width (mm) / Cutting depth maximum (mm) | No. of edges | External cutting | | | | Feature |
|---|---|---|---|---|---|---|---|
| | | | Grooving | Cutting | Turning | Copying | |
| **Hexa Blade 19** (New)  | 0.5 – 3.18 / 4 | 6 | ◎ | ○ | | ○ | • Precision Grade (Sharp Edge)<br>• Offers high economic efficiency<br>• Optimized for automated machining |
| **Hexa Blade 27**  | 1.78 – 4 / 5 | 6 | ◎ | ○ | ○ | | • Precision Grade (C/B Type)<br>• High economic efficiency<br>• Excellent chip control |
| **TB 3, 4**  | 1.25 – 4.5 / 5 | 3 | ◎ | ○ | ○ | | • Precision Grade (Sharp Edge, C/B Type)<br>• Optimized for automated machining |
| **TB 5**  | 1.25 – 4.5 / 6.5 | 3 | ◎ | ◎ | ○ | ○ | • Precision Grade (Sharp Edge, C/B Type)<br>• Excellent chip control |

# Tool selection guide




### Hexa Blade New

- Precision typed and 6 cornered insert
- High economic efficiency and optimized for automated machining
- Precision grooving and multi-cornered grooving

### TB

- Precision typed and 3 cornered insert
- Optimal for automatic cutting
- Precision grooving

### K-Notch

- Precision typed and 2 cornered insert
- Strong clamping system
- Precision grooving

### KGT

- 2 cornered insert
- Various applications
- For general use

### Saw Man-X

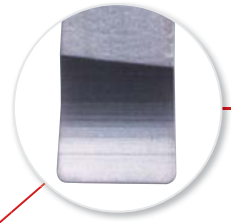
- 1 cornered insert
- Optimal for interrupted and high feed parting
- Deep grooving

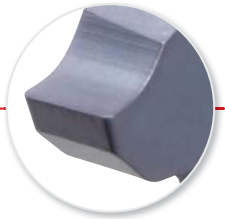
| Tools | Multi-cornered grooving | Shallow grooving | Precision grooving | General use | Deep grooving |
|---|---|---|---|---|---|
| Hexa Blade New | ★★★★ | ★★★★ | ★★★★ | ★★ | ★★ |
| TB | ★★★ | ★★★★ | ★★★★ | ★★ | ★★★ |
| K-Notch | ★★ | ★★★ | ★★★★ | ★★★ | ★★ |
| KGT | ★★ | ★★★ | ★★★ | ★★★★ | ★★★ |
| Saw Man-X | ★ | ★★ | ★★ | ★★★ | ★★★★ |

# Features

## Hexa Blade 19 (P chip breaker) New

- Universal chip breaker usable for various work materials
- Excellent cutting performance and superior surface finish achieved through sharp cutting edges





**Wide lateral clamping surface**

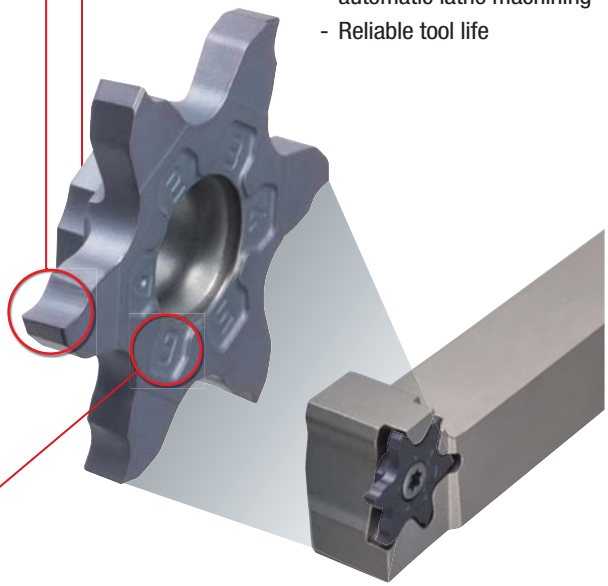
- Increased clamping stability
- Enhanced stability during automatic lathe machining
- Reliable tool life

**Precision grade (sharp edge) insert**

- Excellent dimensional quality
- Superior cutting performance
- Reduced dimensional variation between corners
- Consistent cutting performance

**Provides "zero offset" when clamped in the holder**

- Left and right-hand inserts
- Grooving and parting operations for automatic lathes

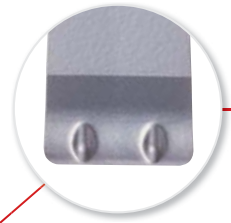



**6-cornered Insert**

- Offers high economic efficiency through multi-corner utilization

## Hexa Blade 27 (M chip breaker)

- Dot-typed chip breaker general cutting for various workpieces
- Good chip control preventing long chip and chip curling
- Stable cutting even in high feed cutting due to strengthened cutting edge structure



**Wide clamping area**

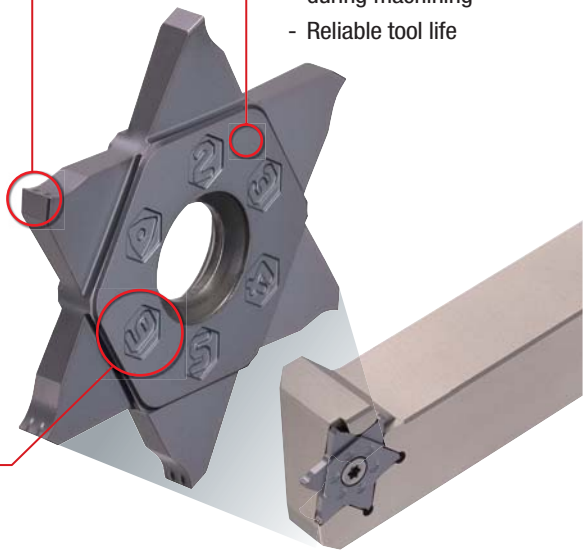
- More stable clamping system
- Strengthen anti-vibration during machining
- Reliable tool life

**Precision insert**

- Superior quality in dimensions
- Excellent corner dimension deviation management
- Equally stable performance

**Strong cutting edge**

- Increased high feed cutting performance



**Neutral hand**

- Convenient use with neutral hand

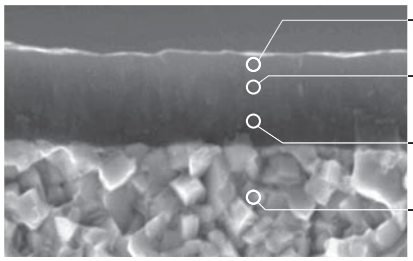
**6 cornered insert**

- High cost efficiency from multi-corners

## Grade features

### PC5300

- PVD coating layer with high hardness and oxidation resistance during machining at high temperature
  → Superior oxidation resistance during machining of steel, cast iron, stainless steel, and heat-resistance alloys
- Ultra fine grain substrate with high toughness and special treatment on the surface
  → Improved welding resistance and chipping resistance



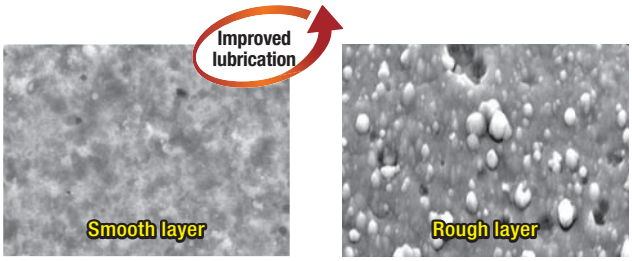
Coating layer with high surface finish → Superior welding resistance

Coating layer with high hardness and oxidation resistance during machining at high temperature → Superb wear resistance during machining at high speeds

Coating layer with high toughness and high adhesive strength
→ Excellent chipping resistance

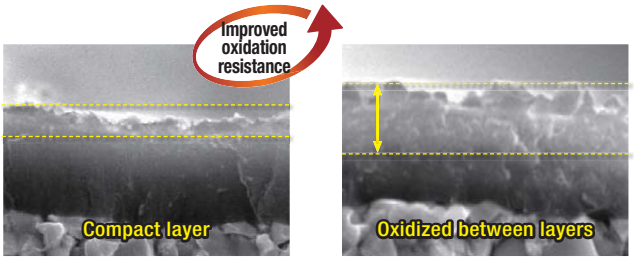
Ultra fine grain substrate with high toughness
→ Great fracture resistance and stability in machining

- **Special treatment on the surface**
  (Attached pictures if surface of coating layer)




[ PC5300 ] [ Existing coating layer ]

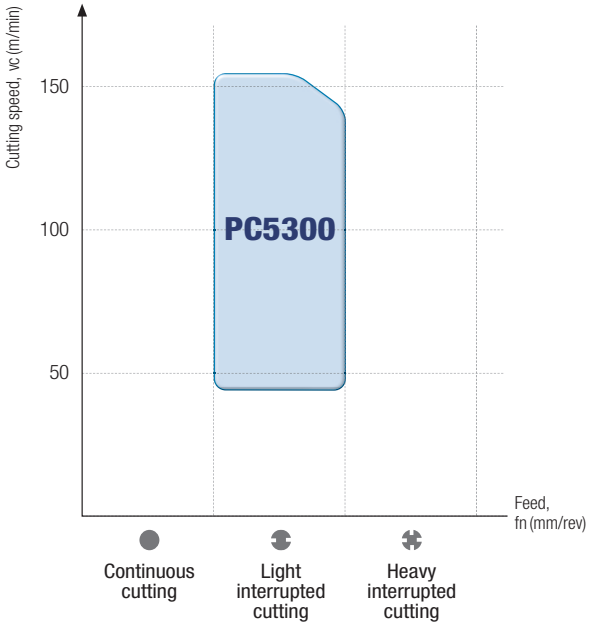
- **Coating layer with oxidation resistance during machining at high temperature**
  (after 900° heat treatment)



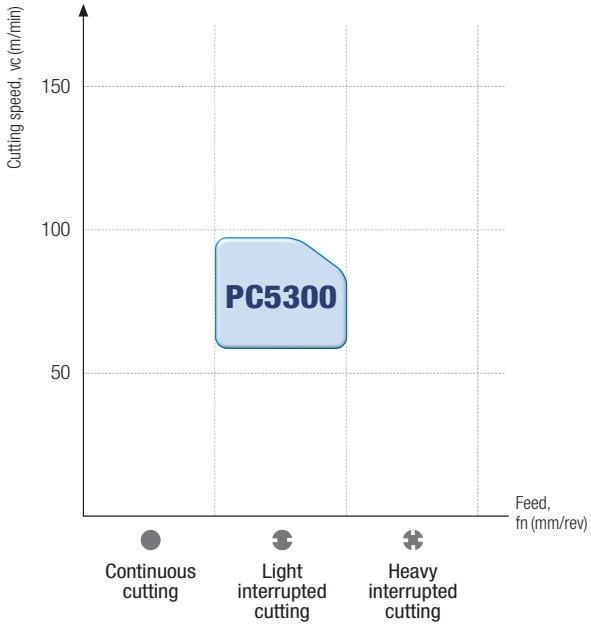

[ PC5300 ] [ Competitor ]

## Application range

**P** Steel




**M** Stainless steel



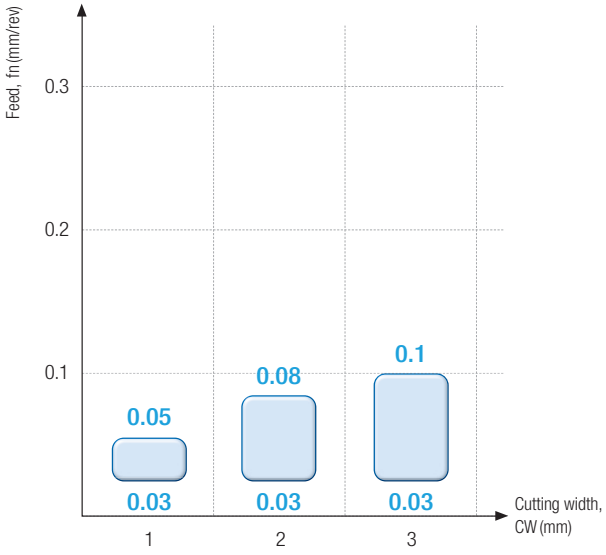
## Recommended cutting conditions

* fn, ap : CW = Based on 2mm

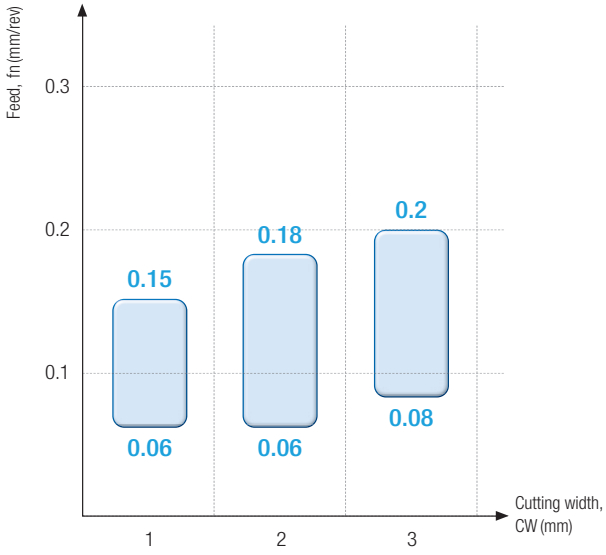
| Workpiece | | | | | | | PC5300 | Hexa Blade 19 | | Hexa Blade 27 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ISO | Workpiece material | | ISO | AISI | Specific cutting force (N/mm²) | Brinell hardness (HB) | vc (m/min) | fn (mm/rev) | ap (mm) | fn (mm/rev) | ap (mm) |
| P | Carbon steel | C = 0.25~0.55% | C35 | 1035 | 1600 | 150 | 110 | 0.08 | | 0.15 | |
| | | | | | | | **130** | **0.05** | | **0.12** | |
| | | | | | | | 150 | 0.03 | | 0.1 | |
| | | C = 0.55~0.80% | C45 | 1045 1046 | 1700 | 170 | 80 | 0.08 | | 0.15 | |
| | | | | | | | **100** | **0.05** | | **0.12** | |
| | | | | | | | 120 | 0.03 | | 0.1 | |
| | Low-alloy steel | Non-hardened | 43CrMo4 | 4140 | 1700 | 180 | 80 | 0.08 | | 0.15 | |
| | | | | | | | **100** | **0.05** | | **0.12** | |
| | | | | | | | 120 | 0.03 | | 0.1 | |
| | | Hardened and Tempered | - | 4145 | 2050 | 350 | 50 | 0.08 | | 0.15 | |
| | | | | | | | **60** | **0.05** | ≤4 | **0.12** | ≤5 |
| | | | | | | | 70 | 0.03 | | 0.1 | |
| | High-alloy steel | Annealed | - | D2 | 1950 | 200 | 60 | 0.08 | | 0.15 | |
| | | | | | | | **75** | **0.05** | | **0.12** | |
| | | | | | | | 90 | 0.03 | | 0.1 | |
| M | Austenite series | | X5CrNi18-9 | 304 | 2000 | 180 | 60 | 0.05 | | 0.1 | |
| | | | | | | | **80** | **0.04** | | **0.08** | |
| | | | | | | | 100 | 0.03 | | 0.06 | |
| | | | X5CrNiMo17-12-2 | 316 | 2000 | 180 | 60 | 0.05 | | 0.1 | |
| | | | | | | | **80** | **0.04** | | **0.08** | |
| | | | | | | | 100 | 0.03 | | 0.06 | |

## Recommended range

### Hexa Blade 19



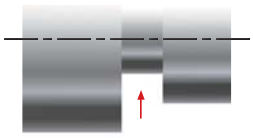

### Hexa Blade 27

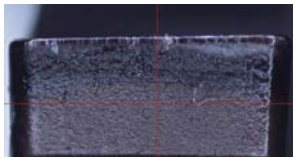


## Performance evaluation

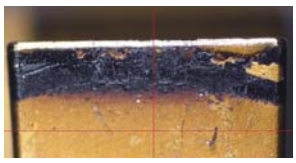
### Wear resistance

| | |
|---|---|
| **Workpiece** | Alloy steel (SUJ2) |
| **Cutting condition** | vc(m/min) = 25~75 (RPM=4,000), fn(mm/rev) = 0.08, ap(mm) = 3.0, Wet |
| **Tool** | Insert HB19R200-020-P (PC5300) Holder HBEHR1212-19 |

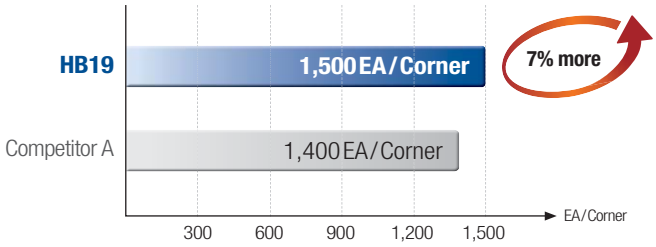




[ HB19 ]

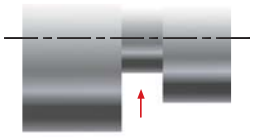


[ Competitor A ]



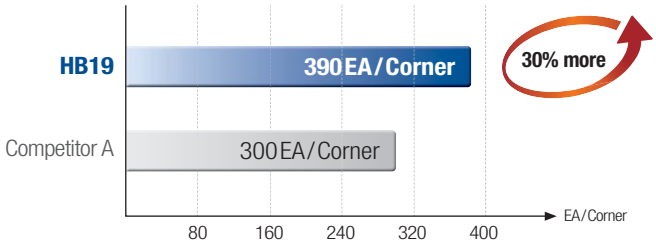

### Wear resistance

| | |
|---|---|
| **Workpiece** | Stainless steel (STS316L) |
| **Cutting condition** | vc(m/min) = 25~75 (RPM=4,000), fn(mm/rev) = 0.08, ap(mm) = 3.0, Wet |
| **Tool** | Insert HB19R200-020-M (PC5300) Holder HBEHR2525-19 |



[ HB19 ]

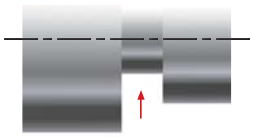
[ Competitor A ]

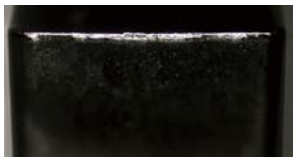


# Performance evaluation

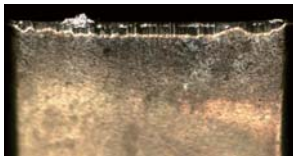
## Grooving

| | |
|---|---|
| **Workpiece** | Alloy steel (SCM440) |
| **Cutting condition** | vc(m/min) = 100, fn(mm/rev) = 0.1, ap(mm) = 2.5, Wet |
| **Tool** | Insert HB27N200-020-M (PC5300) Holder HBEHR2525-27-2 |

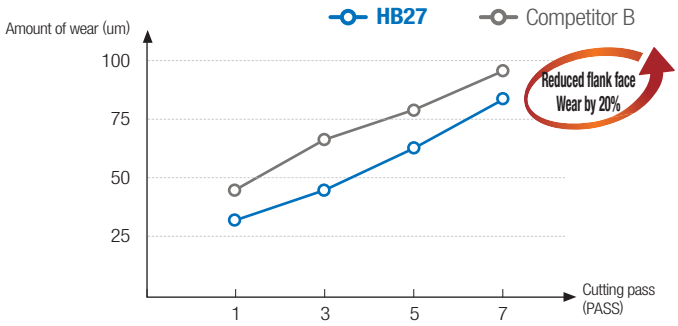




[ HB27 ]

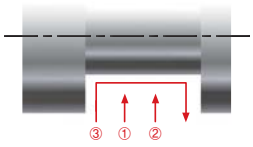


[ Competitor B ]

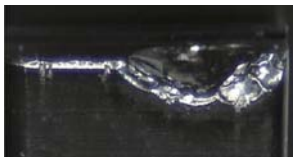



## Grooving and Turning

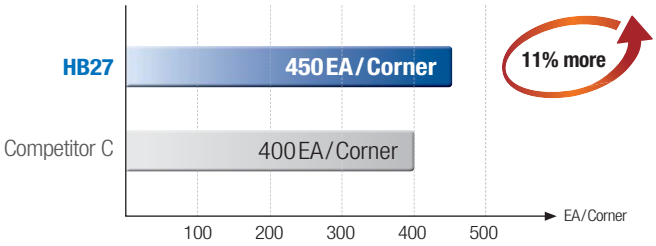
| | |
|---|---|
| **Workpiece** | Carbon steel (SM10C) |
| **Cutting condition** | vc(m/min) = 120, fn(mm/rev) = 0.1, ap(mm) = 3, Wet |
| **Tool** | Insert HB27N300-040-M (PC5300) Holder HBEHR2525-27-3 |




[ HB27 ]

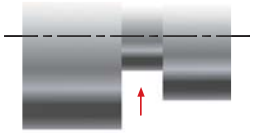


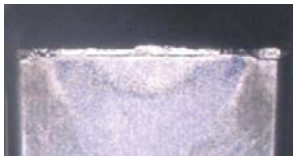
[ Competitor C ]



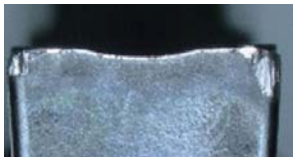

## Grooving

| | |
|---|---|
| **Workpiece** | Alloy steel(SM20C) |
| **Cutting condition** | vc(m/min) = 172, fn(mm/rev) = 0.08, ap(mm) = 3, Wet |
| **Tool** | Insert HB27N196-015-M (PC5300) Holder HBEHR2525-27-2 |

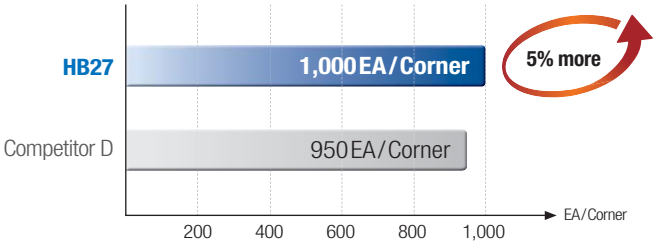




[ HB27 ]

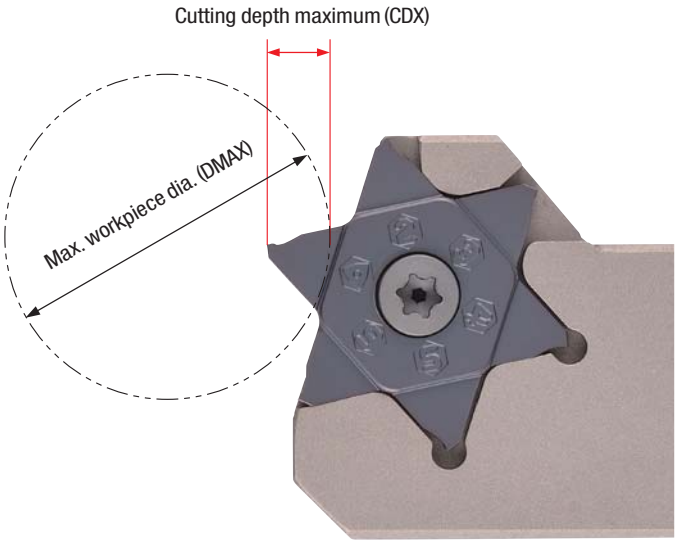


[ Competitor D ]



# Product using guide

| Cutting depth maximum and max. workpiece dia. (mm) | | | | | | |
|---|---|---|---|---|---|---|
| Cutting depth maximum (CDX) | Max. workpiece dia. (DMAX) | | | | | Using guide |
| | Hexa Blade 19 | | | | Hexa Blade 27 | |
| | CW ≤0.5 | CW 0.6~0.8 | CW 0.9~1.4 | CW ≥1.5 | | |
| 5.0 | - | - | - | - | ≤30 | |
| 4.9 | - | - | - | - | ≤34 | |
| 4.8 | - | - | - | - | ≤38 | |
| 4.7 | - | - | - | - | ≤42 | |
| 4.6 | - | - | - | - | ≤46 | |
| 4.5 | - | - | - | - | ≤58 | |
| 4.4 | - | - | - | - | ≤62 | |
| 4.3 | - | - | - | - | ≤66 | |
| 4.2 | - | - | - | - | ≤70 | |
| 4.1 | - | - | - | - | ≤74 | |
| 4.0 | - | - | - | ≤40 | ≤89 | |
| 3.9 | - | - | - | ≤47 | ≤93 | |
| 3.8 | - | - | - | ≤50 | ≤97 | |
| 3.7 | - | - | - | ≤55 | ≤101 | |
| 3.6 | - | - | - | ≤58 | ≤105 | |
| 3.5 | - | - | - | ≤60 | ≤109 | |
| 3.4 | - | - | - | ≤65 | ≤123 | |
| 3.3 | - | - | - | ≤75 | ≤127 | |
| 3.2 | - | - | - | ≤82 | ≤131 | |
| 3.1 | - | - | - | ≤95 | ≤135 | |
| 3.0 | - | - | ≤40 | ≤105 | ≤147 | |
| 2.9 | - | - | ≤60 | ≤125 | ≤151 | |
| 2.8 | - | - | ≤100 | ≤150 | ≤155 | |
| 2.7 | - | - | ≤140 | ≤185 | ≤159 | |
| 2.6 | - | - | ≤170 | ≤200 | ≤163 | |
| 2.5 | - | ≤100 | ≤200 | ≤200 | ≤200 | |
| 2.4 | - | ∞ | ∞ | ∞ | ≤200 | |
| 2.3 | - | ∞ | ∞ | ∞ | ≤200 | |
| 2.2 | - | ∞ | ∞ | ∞ | ≤200 | |
| 2.1 | - | ∞ | ∞ | ∞ | ≤200 | |
| 2.0 | ∞ | ∞ | ∞ | ∞ | ∞ | |




① Hexa Blade 19 offers a maximum cutting depth of 4.0mm. In this case, the maximum machinable workpiece diameter is 40mm.

② When Hexa Blade 19 is used with a cutting depth of 2.4mm, it can be utilized regardless of the workpiece diameter. If the cutting depth exceeds this, the machinable workpiece diameter will vary according to the cutting depth.

③ Hexa Blade 27 provides a maximum cutting depth of 5.0mm. At this depth, the maximum machinable workpiece diameter is 30mm.

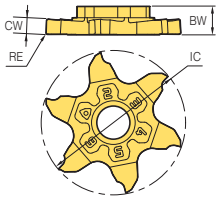
④ When Hexa Blade 27 is used with a cutting depth of 2.0mm, it can be utilized regardless of the workpiece diameter. If the cutting depth exceeds this, the machinable workpiece diameter will vary according to the cutting depth.

⑤ If the workpiece diameter is 65mm, the maximum cutting depth for Hexa Blade 27 is 4.3mm. Machining with a greater cutting depth may cause contact between the workpiece and the holder, potentially leading to issues during operation.

⑥ If the cutting depth is 3.5mm, the maximum machinable workpiece diameter with Hexa Blade 27 is 109mm. Machining workpieces with a diameter larger than this may cause contact between the workpiece and the holder, leading to potential operational problems.

※ Cutting depth maximum and max. workpiece dia. on the chart could be different up to cutting environment.

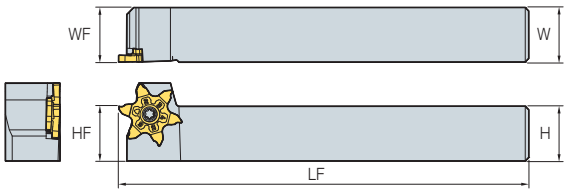
## Hexa Blade 19 New

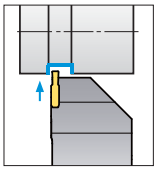
| Picture | Designation | | Coated | Dimension (mm) | | | | | | Geometry |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | PC5300 | CW | RE | CDX | BW | IC | HAND | |
|  | HB | 19R050-000-P | ○ | 0.5 | 0 | 2 | 3.75 | 19 | R |   |
| | | 19R075-000-P | ○ | 0.75 | 0 | 2.5 | 3.75 | 19 | R | |
| | | 19R080-000-P | ○ | 0.8 | 0 | 2.5 | 3.75 | 19 | R | |
| | | 19R080-040-P | ○ | 0.8 | 0.4 | 2.5 | 3.75 | 19 | R | |
| | | 19R095-000-P | ○ | 0.95 | 0 | 3 | 3.75 | 19 | R | |
| | | 19R100-010-P | ○ | 1 | 0.1 | 3 | 3.75 | 19 | R | |
| | | 19R100-050-P | ○ | 1 | 0.5 | 3 | 3.75 | 19 | R | |
| | | 19R120-010-P | ○ | 1.2 | 0.1 | 3 | 3.75 | 19 | R | |
| | | 19R140-010-P | ○ | 1.4 | 0.1 | 3 | 3.75 | 19 | R | |
| | | 19R150-010-P | ○ | 1.5 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R157-010-P | ○ | 1.57 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R157-079-P | ○ | 1.57 | 0.79 | 4 | 3.75 | 19 | R | |
| | | 19R170-010-P | ○ | 1.7 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R175-010-P | ○ | 1.75 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R196-010-P | ● | 1.96 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R200-010-P | ● | 2 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R200-020-P | ● | 2 | 0.2 | 4 | 3.75 | 19 | R | |
| | | 19R200-100-P | ● | 2 | 1 | 4 | 3.75 | 19 | R | |
| | | 19R222-010-P | ● | 2.22 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R230-010-P | ● | 2.3 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R239-010-P | ● | 2.39 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R239-120-P | ● | 2.39 | 1.2 | 4 | 3.75 | 19 | R | |
| | | 19R247-010-P | ● | 2.47 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R250-010-P | ● | 2.5 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R250-020-P | ● | 2.5 | 0.2 | 4 | 3.75 | 19 | R | |
| | | 19R270-010-P | ● | 2.7 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R287-010-P | ● | 2.87 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R300-010-P | ● | 3 | 0.1 | 4 | 3.75 | 19 | R | |
| | | 19R300-020-P | ● | 3 | 0.2 | 4 | 3.75 | 19 | R | |
| | | 19R300-150-P | ● | 3 | 1.5 | 4 | 3.75 | 19 | R | |
| | | 19R318-010-P | ● | 3.18 | 0.1 | 4 | 3.75 | 19 | R | |

●: Stock item
○: Coming soon

# HBEHR

HB19



• R type holder

(mm)

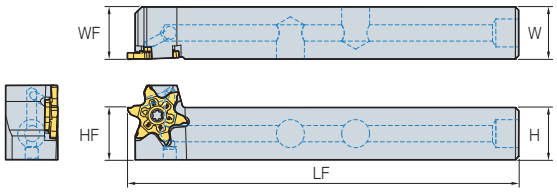
| Designation | | Stock | CW | H | W | LF | HF | WF | Screw | Wrench |
|---|---|---|---|---|---|---|---|---|---|---|
| HBEHR | 1212-19 | ● | 0.75 ~ 3.18 | 12 | 12 | 120 | 12 | 12 | PTMA0512D | TW15P |
| | 1616-19 | ● | 0.75 ~ 3.18 | 16 | 16 | 120 | 16 | 16 | | |

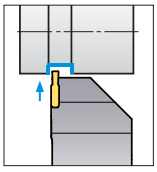
●: Stock item

# HBEHR-KHP

Recommended pressure: 70 bar

HB19



• R type holder

(mm)

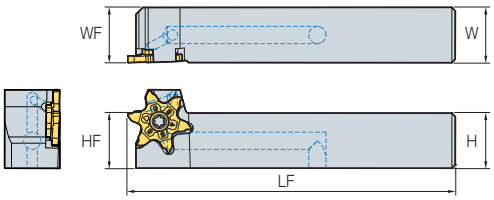
| Designation | | Stock | CW | H | W | LF | HF | WF | Screw | Wrench | Plug |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HBEHR | 1212-19-KHP | ● | 0.75 ~ 3.18 | 12 | 12 | 120 | 12 | 12 | PTMA0512D | TW15P<br>HW50L | KHA0404-NYLOCK<br>KHA5/16UNF-NYLOCK |
| | 1616-19-KHP | ● | 0.75 ~ 3.18 | 16 | 16 | 120 | 16 | 16 | PTMA0512D | TW15P<br>HW50L | KHA0404-NYLOCK<br>KHA1075-W28 |

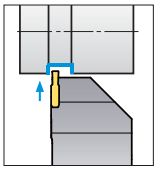
●: Stock item

# HBEHR-KHPV

Recommended pressure: 70 bar

HB19



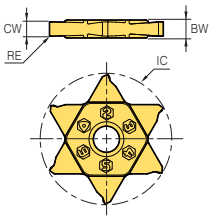
• R type holder

(mm)

| Designation | | Stock | CW | H | W | LF | HF | WF | Screw | Wrench | Plug |
|---|---|---|---|---|---|---|---|---|---|---|---|
| HBEHR | 1616-19-KHPV | ● | 0.75 ~ 3.18 | 16 | 16 | 95 | 16 | 16 | PTMA0512D | TW15P | KHA0404-NYLOCK<br>KHA1075-W28 |

●: Stock item

## Hexa Blade 27

| Picture | Designation | | Coated | Dimension (mm) | | | | | Geometry |
|---|---|---|---|---|---|---|---|---|---|
| | | | PC5300 | CW | RE | BW | IC | HAND | |
|  | HB | 27N178-018-M | ● | 1.78 | 0.18 | 2.7 | 27 | N |   |
| | | 27N185-015-M | ● | 1.85 | 0.15 | 2.7 | 27 | N | |
| | | 27N196-015-M | ● | 1.96 | 0.15 | 2.7 | 27 | N | |
| | | 27N200-020-M | ● | 2 | 0.2 | 2.7 | 27 | N | |
| | | 27N200-040-M | ● | 2 | 0.4 | 2.7 | 27 | N | |
| | | 27N270-010-M | ● | 2.7 | 0.1 | 3.7 | 27 | N | |
| | | 27N287-020-M | ● | 2.87 | 0.2 | 3.7 | 27 | N | |
| | | 27N300-000-M | ● | 3 | 0 | 3.7 | 27 | N | |
| | | 27N300-020-M | ● | 3 | 0.2 | 3.7 | 27 | N | |
| | | 27N300-040-M | ● | 3 | 0.4 | 3.7 | 27 | N | |
| | | 27N374-020-M | ● | 3.74 | 0.2 | 4.7 | 27 | N | |
| | | 27N398-020-M | ● | 3.98 | 0.2 | 4.7 | 27 | N | |
| | | 27N400-040-M | ● | 4 | 0.4 | 4.7 | 27 | N | |

●: Stock item

# HBEHR/L

HB27

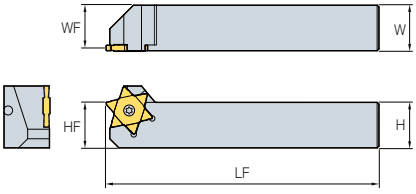



Fig. 1

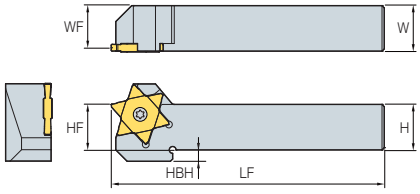
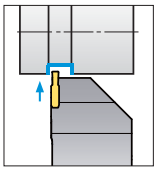



Fig. 2



• R type holder

(mm)

| Designation | | Stock | | CW | H | W | LF | HF | WF | HBH | Screw | Wrench | Fig. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | R | L | | | | | | | | | | |
| HBEHR/L | 1616-27-2 | ● | | 1.78 ~ 2 | 16 | 16 | 100 | 16 | 15 | 9 | | | 2 |
| | 1616-27-3 | ● | | 2.7 ~ 3 | 16 | 16 | 100 | 16 | 14.5 | 9 | | | 2 |
| | 1616-27-4 | ● | | 3.74 ~ 4 | 16 | 16 | 100 | 16 | 14 | 9 | | | 2 |
| | 2020-27-2 | ● | | 1.78 ~ 2 | 20 | 20 | 120 | 20 | 19 | 5 | | | 2 |
| | 2020-27-3 | ● | | 2.7 ~ 3 | 20 | 20 | 120 | 20 | 18.5 | 5 | PTMA0512D | TW15P | 2 |
| | 2020-27-4 | ● | | 3.74 ~ 4 | 20 | 20 | 120 | 20 | 18 | 5 | | | 2 |
| | 2525-27-2 | ● | | 1.78 ~ 2 | 25 | 25 | 150 | 25 | 24 | - | | | 1 |
| | 2525-27-3 | ● | | 2.7 ~ 3 | 25 | 25 | 150 | 25 | 23.5 | - | | | 1 |
| | 2525-27-4 | ● | | 3.74 ~ 4 | 25 | 25 | 150 | 25 | 23 | - | | | 1 |

●: Stock item

# HBEHR/L-KHP

Recommended pressure:
70 bar

HB27

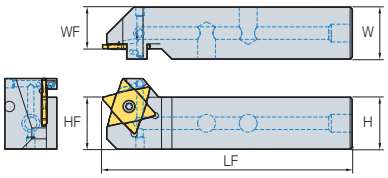



Fig. 1

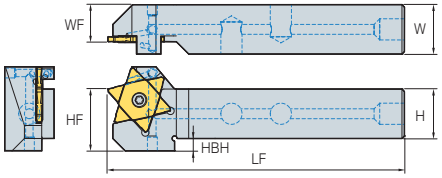
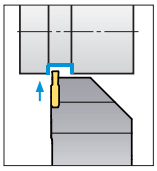



Fig. 2



• R type holder

(mm)

| Designation | | Stock R | Stock L | CW | H | W | LF | HF | WF | HBH | Screw | Wrench | Plug | Fig. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HBEHR/L | 2020-27-2-KHP | | | 1.78 ~ 2 | 20 | 20 | 120 | 20 | 14 | 5 | PTMA0512D | TW15P HW50L | KHA0404-NYLOCK KHA1075-W28 | 2 |
| | 2020-27-3-KHP | | | 2.7 ~ 3 | 20 | 20 | 120 | 20 | 14 | 5 | | | | 2 |
| | 2020-27-4-KHP | | | 3.74 ~ 4 | 20 | 20 | 120 | 20 | 14 | 5 | | | | 2 |
| | 2525-27-2-KHP | | | 1.78 ~ 2 | 25 | 25 | 120 | 25 | 19 | - | | | | 1 |
| | 2525-27-3-KHP | | | 2.7 ~ 3 | 25 | 25 | 120 | 25 | 19 | - | | | | 1 |
| | 2525-27-4-KHP | | | 3.74 ~ 4 | 25 | 25 | 120 | 25 | 19 | - | | | | 1 |

●: Stock item

# HBEHR/L-KHPV

Recommended pressure:
70 bar

HB27

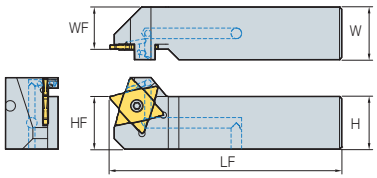



Fig. 1

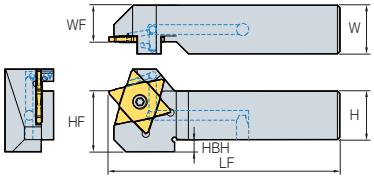
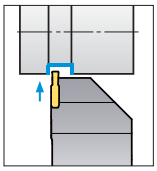



Fig. 2



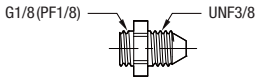
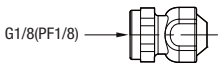
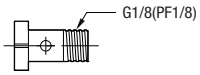
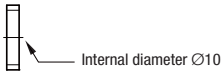
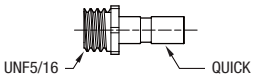
• R type holder

(mm)

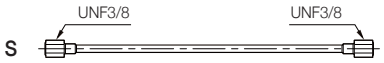
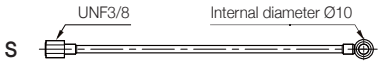
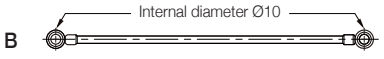
| Designation | | Stock R | Stock L | CW | H | W | LF | HF | WF | Screw | Wrench | Plug | Fig. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HBEHR/L | 2020-27-2-KHPV | | | 1.78 ~ 2 | 20 | 20 | 95 | 20 | 14 | PTMA0512D | TW15P | KHA0404-NYLOCK KHA1075-W28 | 2 |
| | 2020-27-3-KHPV | | | 2.7 ~ 3 | 20 | 20 | 95 | 20 | 14 | | | | 2 |
| | 2020-27-4-KHPV | | | 3.74 ~ 4 | 20 | 20 | 95 | 20 | 14 | | | | 2 |
| | 2525-27-2-KHPV | | | 1.78 ~ 2 | 25 | 25 | 95 | 25 | 19 | | | | 1 |
| | 2525-27-3-KHPV | | | 2.7 ~ 3 | 25 | 25 | 95 | 25 | 19 | | | | 1 |
| | 2525-27-4-KHPV | | | 3.74 ~ 4 | 25 | 25 | 95 | 25 | 19 | | | | 1 |

●: Stock item

## Connecting parts

| Parts | Designation | Shape of parts | |
|---|---|---|---|
| Adaptor | HPA3/8UNF1/8PF |  |   |
| Blank | HPB1/8PF |  |   |
| Banjo screw | HPZ1/8PF |  |   |
| Copper washer | HPW1/8PF |  |   |
| Quick adaptor | HPAQ5/16UNF |  |   |

## High pressure hose

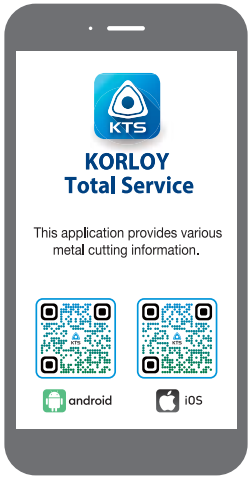
| The shape of the high pressure hose | | Length | Standard S | Standard B | Standard Q |
|---|---|---|---|---|---|
| Straight to straight (HPH3/8UNF) |   | 200mm<br>250mm | UNF3/8 | - | - |
| Straight to banjo (HPH3/8UNF1/8PF) |   | 200mm<br>250mm | UNF3/8 | Internal diameter Ø10 | - |
| Banjo to banjo (HPH1/8PF) |   | 200mm<br>250mm | - | Internal diameter Ø10 | - |
| Quick straight (HPHZ5/16UNF3/8UNF-500) |   | 500mm | - | - | UNF5/16 |

### Notice

- Use a proper spanner for clamping up to the specs.
- Be careful of coolant injection by the residual pressure while using high pressure coolant.
- Clamp the parts completely before usage.
- Clean the turning machine before clamping.
- The O-ring is included in the parts. Don't have to purchase it separately.

## ⚠ For the safe metalcutting

- Use safety supplies such as protective gloves to prevent possible injury while touching the edge of tools.
- Use safety glasses or safety cover to hedge possible dangers. Inappropriate usage or excessive cutting condition may lead tool's breakage or even the fragment's scattering.
- Clamp the workpiece tightly enough to prevent its movement while its machining.
- Properly manage the tool change phase because the inordinately used tool can be easily broken under the excessive cutting load or severe wear, and it may threat the operator's safety.
- Use safety cover because chips evacuated during cutting are hot and sharp and may cause burns and cuts. To remove chips safely, stop machining, put on protective gloves, and use a hook or other tools.
- Prepare for fire prevention measures as the use of the non-water soluble cutting oil may cause fire.
- Use safety cover and other safety supplies because the spare parts or the tools can be pulled out due to centrifugal force while high speed machining.





# KORLOY

**Head Office**: Holystar B/D, 326, Seocho-daero, Seocho-gu, Seoul, 06633, Republic of Korea
Tel: +82-2-522-3181 Fax: +82-2-522-3184, +82-2-3474-4744 Web: www.korloy.com E-mail: sales.khq@korloy.com

## KORLOY AMERICA
620 Maple Avenue, Torrance, CA 90503, USA
Tel : +1-310-782-3800 / +1-888-711-0001 Fax : +1-310-782-3885
E-mail : sales.kai@korloy.com

## KORLOY INDIA
Plot No. 415, Sector 8, IMT Manesar, Gurgaon 122051, Haryana, India
Tel : +91-124-4391790 Fax : +91-124-4050032
E-mail : sales.kip@korloy.com

## KORLOY TURKIYE
Ziya Gokalp, Mah. Seyit Onbasi Cad. No:36, 3 Kat,
iC Kapi No : 5 Basaksehir/Istanbul, Turkiye
Tel : +90-212-813-8874 E-mail : sales.ktl@korloy.com

## KORLOY RUSSIA
115280, Moscow, vn.ter.g. municipal district Danilovsky,
street Masterkova, house 4, premises 1/2
Tel : +7-495-280-1458 Fax : +7-495-280-1459 E-mail : sales.krc@korloy.com

## KORLOY UK
13 Approach Rd, Raynes Park, London SW20 8BA, United Kingdom
E-mail : sales.kul@korloy.com

## KORLOY EUROPE
Gablonzer Str. 25-27, 61440 Oberursel, Germany
Tel : +49-6171-27783-0 Fax : +49-6171-27783-59
E-mail : sales.keg@korloy.com

## KORLOY BRASIL
Av. Aruana 280, conj.12, WLC, Alphaville, Barueri, CEP06460-010, SP, Brasil
Tel : +55-11-4193-3810 Fax : +55-11-4193-5837
E-mail : sales.kbl@korloy.com

## KORLOY CHILE
Av. Providencia 1650, Office 1009, 7500027
Providencia–Santiago, Chile
Tel : +56-229-295-490 E-mail : sales.kcs@korloy.com

## KORLOY MEXICO
Avenida de las Ciencias, No. 3015, Interior 406, Juriquilla Santa Fe,
C.P.76230 Querétaro, Mexico
Tel : +52-442-193-3600 E-mail : sales.kml@korloy.com

## KORLOY FACTORY INDIA
Plot NO. 415, Sector 8, IMT Manesar, Gurgaon 122051, Haryana, India
Tel : +91-124-4391790 Fax : +91-124-4050032
E-mail : pro.kim@korloy.com



PRINTED WITH SOY INK

TN104-EM-03 / 20251230