

X-Treme Shank HSK X-Treme Chuck (INCH Series) **NIKKEN**

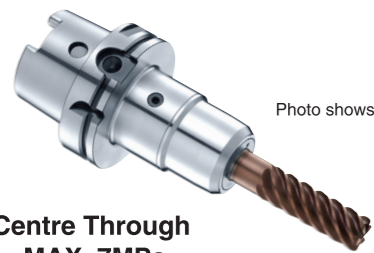
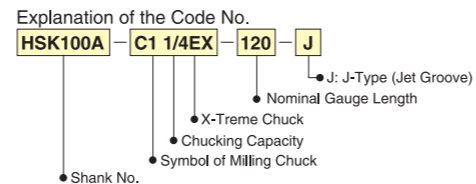
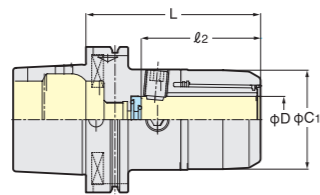


Photo shows HSK Shank.



Centre Through
MAX. 7MPa

* Inch series is for USA and semi-standard items.

PAT.P

| TAPER | Code No. (D - L) | C ₁ | L | l ₂ | End mill with oil hole | | Handle | Weight (kg) |
|---------|---------------------|----------------|-------|----------------|------------------------|--------------------|--------|----------------|
| | | | | | Stopper* | Face cap* | | |
| HSK100A | HSK100A-C 1/2EX- 96 | 40 | 96 | 58 | 9MC 1/2HEX- 6L | 9C 1/2SL-FS-EX-A1 | GH16 | 2.7 |
| | -C 5/8EX-106 | 48 | 106 | 68 | 9MC 5/8HEX-6.5L | 9C 16SL-FS-EX-A1 | GH20 | 3.0 |
| | -C 3/4EX-116 | 55 | 116 | 71 | 9MC 3/4HEX- 7L | 9C 3/4-FS-EX-A1 | GH25 | 3.6 |
| | -C1 EX-116 | 55 | 116.3 | 77.3 | 9MC 25HEX-6.2L | 9C 1SL-FS-EX-A1 | GH25 | 3.5 |
| | -C1 1/4EX-121 | 68 | 121.3 | 83.3 | 9MC1 1/4HEX- 7L | 9C1 1/4SL-FS-EX-A1 | GH32 | 4.0 |
| | -C1 1/2EX-136 | 86 | 136 | 86 | 9MC1 1/2HEX- 9L | 9C1 1/2SL-FS-EX-A1 | 9HC42 | 5.7 |
| NCAT50 | NCAT50-C 1/2EX- 96U | 40 | 96 | 58 | 9MC 1/2HEX- 6L | 9C 1/2SL-FS-EX-A1 | GH16 | 3.4 |
| | -C 5/8EX-106U | 48 | 106 | 68 | 9MC 5/8HEX-6.5L | 9C 16SL-FS-EX-A1 | GH20 | 3.8 |
| | -C 3/4EX-106U | 55 | 106 | 71 | 9MC 3/4HEX- 7L | 9C 3/4-FS-EX-A1 | GH25 | 4.3 |
| | -C1 EX-111U | 55 | 111.3 | 77.3 | 9MC 25HEX-6.2L | 9C 1SL-FS-EX-A1 | GH25 | 4.2 |
| | -C1 1/4EX-116U | 68 | 116.3 | 83.3 | 9MC1 1/4HEX- 7L | 9C1 1/4SL-FS-EX-A1 | GH32 | 4.7 |
| | -C1 1/2EX-126U | 86 | 126 | 86 | 9MC1 1/2HEX- 9L | 9C1 1/2SL-FS-EX-A1 | 9HC42 | 6.2 |

Please use direct chucking without KM collet.

* MAX. 7MPa of center through coolant is available with the stopper.

* Please use J-type X-Treme chuck, when end mill without oil hole is used. eg) HSK100A-C1 1/4EX-121-J

In case of J-type X-Treme chuck, J-type stopper and J-type face cap (with Jet grooves) are attached. 9MC1 1/4HEX-7L-J, 9C1 1/4L-FS-EX-J
 J-type X-Treme chuck is used for the pocket milling and side milling.

Selection of the Accessories

Please select the proper stopper and the face cap according to your application. (end mill with/without coolant hole)
 The stopper and the face cap for the end mill with oil hole are attached as standard accessory.

| | End mill with oil hole | | End mill without oil hole | | Support bolt | Drive bolt |
|---------|------------------------|-----------------|---------------------------|------------------------|--------------|------------|
| | Stopper | Face cap | Stopper*1 | Face cap (V grooves)*1 | | |
| C12EX | 9MC12HEX- 6L(8.5L)*3 | 9C12SL-FS-EX-A1 | 9MC12HEX- 6L(8.5L)*3-J | 9C12SL-FS-EX-J1 | — | M10×16L-EX |
| C16EX | 9MC16HEX-6.5L(9.5L)*3 | 9C16SL-FS-EX-A1 | 9MC16HEX-6.5L(9.5L)*3-J | 9C16SL-FS-EX-J1 | — | M12×16L-EX |
| C20EX*2 | 9MC20HEX-12L(13.5L)*3 | 9C20 -FS-EX-A1 | 9MC20HEX-12L(13.5L)*3-J | 9C20 -FS-EX-J1 | FSMB12-20 | M12×20L-EX |
| C25EX | 9MC25HEX-6.2L(8.7L)*3 | 9C25SL-FS-EX-A1 | 9MC25HEX-6.2L(8.7L)*3-J | 9C25SL-FS-EX-J1 | FSMB16-20-H8 | M16×20L-EX |
| C32EX | 9MC32HEX-7L(10L)*3 | 9C32SL-FS-EX-A1 | 9MC32HEX-7L(10L)*3-J | 9C32SL-FS-EX-J1 | | |
| C42EX | 9MC42HEX-9L(11.5L)*3 | 9C42SL-FS-EX-A1 | 9MC42HEX-9L(11.5L)*3-J | 9C42SL-FS-EX-J1 | | |



O-ring
Please insert the stopper which small hole diameter is located at the end mill side. (C42: Same hole diameter)



Cross groove
Please insert the stopper which cross groove is located at the end mill side.



*1 Please contact us for the stopper for X-Treme chuck Inch series.

*2 The Code No. of the stopper for NBT40-C20EX, HSK63A-C20EX and C8-C20EX is 9MC20HEX-7L(8.5L)

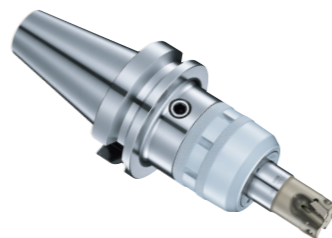
*3 The length in () is used for Code No. of extended stopper. eg. 9MC32HEX-10L

It can be used, when length of end mill become shorter after re-grinding.

* X-Treme chuck with nose ring for C spanner is available as an option.

Please add "-A" at the end of Code No.

eg) NBT50-C25EX-116-J-A



Nose ring with C spanner

| Chuck | Handle |
|------------|--------|
| 12EX-○○○-A | 9HC16 |
| 16EX-○○○-A | 9HC22 |
| 20EX-○○○-A | 9HC25 |
| 25EX-○○○-A | 9HC25 |
| 32EX-○○○-A | 9HC32 |
| 42EX-○○○ | 9HC42 |

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5-1, 1-chome, Minamishinden, Daito-shi, Osaka-fu, Japan, Telephone : +81 (0) 72-869-5820 Telefax : +81 (0) 72-869-6220

| | | | | | |
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| UK | NIKKEN KOSAKUSHO UK LTD. Tel.+44-(0)-1709-366306 | SPAIN | CUTTING TOOL S.L (TOOLING) Tel.+34-(0)-902-820090 | SINGAPORE | NIKKEN KOSAKUSHO ASIA PTE, LTD Tel.+65-6362-7980 |
| F.R.GERMANY | NIKKEN DEUTSCHLAND GmbH Tel.+49-(0)-6142-550600 | PORTUGAL | NIKKEN EUROPE DIMSORES ESPANA (CNC ROTARY TABLE) Tel.+34-(0)-669-603433 | THAILAND | SIAM NIKKEN Co., LTD. Tel.+66(02)178-0503 |

Please give your order to the following agent.

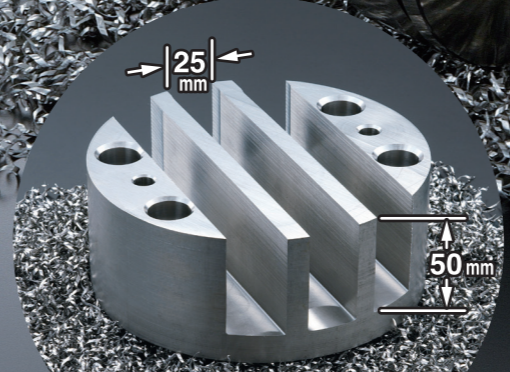
NEW

NIKKEN

X-Treme Shank & X-Treme Chuck

Excellent Run-out & Powerful Gripping

JAPAN, EU PAT.
USA, CHINA, PAT.P



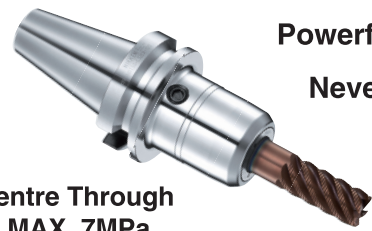
Material: Ti6Al4V Titanium
25mm, 6teeth
Carbide Roughing End Mill
25 X Depth 50mm 1 Path Milling
Never Pull-Out

Industry proven to eliminate Pull-Out.
Exclusively developed for demanding Applications and materials associated With the aircraft and energy industry.

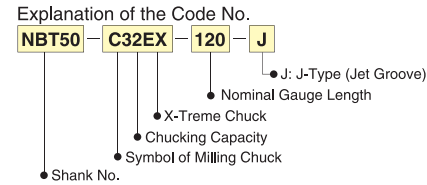
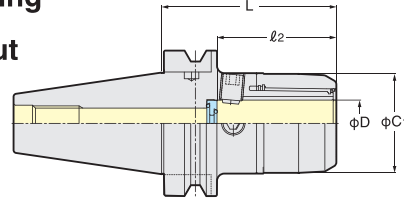
NIKKEN KOSAKUSHO WORKS, LTD.
CAT.NO.2881

D.JJ.0.5

X-Treme Shank 2LOCK NBT X-Treme Chuck



Powerful Gripping & Never Pull-out



Centre Through
MAX. 7MPa

PAT.P

| TAPER | Code No. (φD - L) | C ₁ | L | ℓ ₂ | End mill with oil hole | | Handle | Weight (kg) |
|-------|----------------------|----------------|-------|----------------|------------------------|-----------------|--------|-------------|
| | | | | | Stopper* | Face cap* | | |
| No.40 | NBT40-C12EX- 86 | 40 | 86 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 1.6 |
| | -C16EX- 96 | 48 | 96 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 1.7 |
| | -C20EX- 96 | 55 | 96 | 71 | 9MC20HEX- 7L | 9C20 -FS-EX-A1 | GH25 | 1.8 |
| No.50 | NBT50-C12EX- 96 | 40 | 96 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 4.0 |
| | -C16EX-106 | 48 | 106 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 4.4 |
| | -C20EX-116 | 55 | 116 | 71 | 9MC20HEX- 12L | 9C20 -FS-EX-A1 | GH25 | 5.0 |
| | -C25EX-116 | 55 | 116.3 | 77.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 4.8 |
| | -C32EX-121 | 68 | 121.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 5.3 |
| | -C42EX-126 | 86 | 126 | 86 | 9MC42HEX- 9L | 9C42SL-FS-EX-A1 | 9HC42 | 6.3 |

Please use direct chucking without KM collet.

★ MAX. 7MPa of center through coolant is available with the stopper.

★ Please use J-type X-Treme chuck, when end mill without oil hole is used. eg) NBT50-C32EX-121-J

In case of J-type X-Treme chuck, J-type stopper and J-type face cap (with Jet grooves) are attached. 9MC32HEX-7L-J, 9C32L-FS-EX-J1

J-type X-Treme chuck is used for the pocket milling and side milling.

★ Extended length X-Treme chuck is also available. NBT50-C20EX-136, NBT50-C25EX-136, NBT50-C32EX-136

2LOCK tooling (NBT) can be used as the double face contact tooling on the M/C where spindle is BT double face contact system.

2LOCK tooling can also be used on the M/C with BT standard spindle.

X-Treme Shank 2LOCK NIT/NCAT X-Treme Chuck

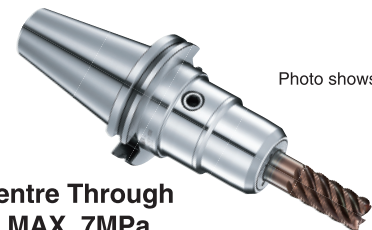
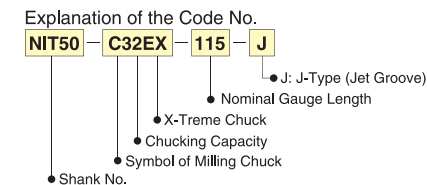
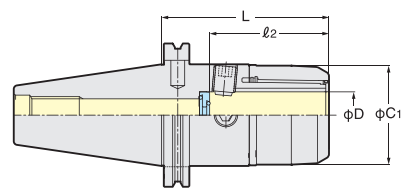


Photo shows NIT Shank.



Centre Through
MAX. 7MPa

PAT.P

| TAPER | Code No. (φD - L) | C ₁ | L | ℓ ₂ | End mill with oil hole | | Handle | Weight (kg) |
|--------|----------------------|----------------|-------|----------------|------------------------|-----------------|--------|-------------|
| | | | | | Stopper* | Face cap* | | |
| NIT50 | NIT50 -C12EX- 96 | 40 | 96 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 3.4 |
| | -C16EX-106 | 48 | 106 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 3.8 |
| | -C20EX-106 | 55 | 106 | 71 | 9MC20HEX- 12L | 9C20 -FS-EX-A1 | GH25 | 4.3 |
| | -C25EX-111 | 55 | 111.3 | 77.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 4.2 |
| | -C32EX-116 | 68 | 116.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 4.7 |
| | -C42EX-126 | 86 | 136 | 86 | 9MC42HEX- 9L | 9C42SL-FS-EX-A1 | 9HC42 | 6.0 |
| NCAT50 | NCAT50-C12EX- 96U | 40 | 96 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 3.4 |
| | -C16EX-106U | 48 | 106 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 3.8 |
| | -C20EX-106U | 55 | 106 | 71 | 9MC20HEX- 12L | 9C20 -FS-EX-A1 | GH25 | 4.3 |
| | -C25EX-111U | 55 | 111.3 | 77.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 4.2 |
| | -C32EX-116U | 68 | 116.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 4.7 |
| | -C42EX-126U | 86 | 126 | 86 | 9MC42HEX- 9L | 9C42SL-FS-EX-A1 | 9HC42 | 6.0 |

Please use direct chucking without KM collet.

★ 2LOCK tooling (NIT/NCAT) can be used as the double face contact tooling on the M/C where spindle is BT double face contact system.

2LOCK tooling can also be used on the M/C with IT/CAT standard spindle.

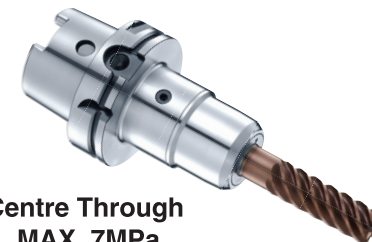
★ MAX. 7MPa of center through coolant is available with the stopper.

★ Please use J-type X-Treme chuck, when end mill without oil hole is used. eg) NCAT50-C32EX-116U-J

In case of J-type X-Treme chuck, J-type stopper and J-type face cap (with Jet grooves) are attached. 9MC32HEX-7L-J, 9C32L-FS-EX-J1

J-type X-Treme chuck is used for the pocket milling and side milling.

X-Treme Shank HSK X-Treme Chuck



Centre Through
MAX. 7MPa

PAT.P

| TAPER | Code No. (φD - L) | C ₁ | L | ℓ ₂ | End mill with oil hole | | Handle | Weight (kg) |
|---------|----------------------|----------------|-------|----------------|------------------------|-----------------|--------|-------------|
| | | | | | Stopper* | Face cap* | | |
| HSK63A | HSK 63A-C12EX- 96 | 40 | 96 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 1.3 |
| | -C16EX-101 | 48 | 101 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 1.5 |
| | -C20EX-106 | 55 | 106 | 71 | 9MC20HEX- 7L | 9C20 -FS-EX-A1 | GH25 | 1.7 |
| HSK100A | HSK100A-C12EX- 96 | 40 | 96 | 58 | 9MC12HEX- 6L | 9C12SL-FS-EX-A1 | GH16 | 2.7 |
| | -C16EX-106 | 48 | 106 | 68 | 9MC16HEX-6.5L | 9C16SL-FS-EX-A1 | GH20 | 3.0 |
| | -C20EX-116 | 55 | 116 | 71 | 9MC20HEX- 12L | 9C20 -FS-EX-A1 | GH25 | 3.6 |
| | -C25EX-116 | 55 | 116.3 | 76.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 3.5 |
| | -C32EX-121 | 68 | 121.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 4.0 |
| | -C42EX-136 | 86 | 136 | 86 | 9MC42HEX- 9L | 9C42SL-FS-EX-A1 | 9HC42 | 5.7 |
| HSK125A | HSK125A-C20EX-121S | 55 | 121 | 71 | 9MC20HEX- 12L | 9C20 -FS-EX-A1 | GH25 | 5.4 |
| | -C25EX-121S | 55 | 121.3 | 77.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 5.3 |
| | -C32EX-136S | 68 | 136.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 6.3 |
| | -C42EX-136S | 86 | 136 | 86 | 9MC42HEX- 9L | 9C42SL-FS-EX-A1 | 9HC42 | 7.1 |

Please use direct chucking without KM collet.

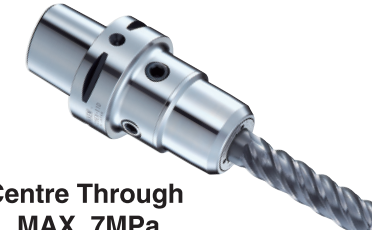
★ MAX. 7MPa of center through coolant is available with the stopper.

★ Please use J-type X-Treme chuck, when end mill without oil hole is used. eg) HSK125A-C32EX-136S-J

In case of J-type X-Treme chuck, J-type stopper and J-type face cap (with Jet grooves) are attached. 9MC32HEX-7L-J, 9C32L-FS-EX-J1

J-type X-Treme chuck is used for the pocket milling and side milling.

X-Treme Shank C8 X-Treme Chuck



Centre Through
MAX. 7MPa

PAT.P

| TAPER | Code No. (φD - L) | C ₁ | L | ℓ ₂ | End mill with oil hole | | Handle | Weight (kg) |
|-------|----------------------|----------------|-------|----------------|------------------------|-----------------|--------|-------------|
| | | | | | Stopper* | Face cap* | | |
| C8 | C8-C20EX-106 | 55 | 106 | 71 | 9MC20HEX- 7L | 9C20 -FS-EX-A1 | GH25 | 3.0 |
| | -C25EX-111 | 55 | 111.3 | 77.3 | 9MC25HEX-6.2L | 9C25SL-FS-EX-A1 | GH25 | 3.0 |
| | -C32EX-116 | 68 | 116.3 | 83.3 | 9MC32HEX- 7L | 9C32SL-FS-EX-A1 | GH32 | 3.5 |

Please use direct chucking without KM collet.

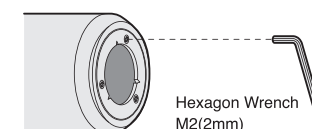
★ MAX. 7MPa of center through coolant is available with the stopper.

★ Please use J-type X-Treme chuck, when end mill without oil hole is used. eg) C8-C32EX-116-J

In case of J-type X-Treme chuck, J-type stopper and J-type face cap (with Jet grooves) are attached. 9MC32HEX-7L-J, 9C32L-FS-EX-J1

J-type X-Treme chuck is used for the pocket milling and side milling.

How to exchange the face caps



The face cap is fixed with 3 pieces of M2.5 screws. (C42EX: M3) The face cap must be centred or centralized, when exchanged. The special centering jig fixture and wrench are provided as an option.

| | Screw |
|---------------------|------------------|
| C12EX, C16EX, C20EX | M2.5-6L |
| C25EX, C32EX | SNSS-M2.5 × 6-SD |
| C42EX | CBS3-6 |

Please refer P.3 the accessories such as the stopper and face cap.