



# "ANNIVERSARY" TYPE MULTI LOCK MILLING CHUCK

NIKKEN  
PAT. VER.12

## INSTRUCTION MANUAL

Thank you for your purchase of NIKKEN products. We can recommend our products with our confidence, however, please read this manual for long terms. And, please keep it where the operator can refer to it whenever necessary.

- Wipe all dust and oil from internal bore of chuck, inside and outside of collet, and shank of cutter. Clean minute dust inside slot grooves of collet by air blow. You are recommended to use CCK collet & CKFN nut to prevent the dust or swarf from getting inside.

**!** When the Milling Chuck is cleaned for maintenance reasons the grease inside the nose ring might also be washed off and this may cause burning out of the bearing mechanism.

- After setting End Mill into collet insert them into the chuck.

- Please use End Mill of h7 tolerance shank.
- Please use End Mill with h6 shank tolerance for high speed machining.
- Please make sure that the cutter is held with the chuck at Min. gripping length shown in the list at the right hand side.
- Protection must be used to grip End Mill teeth.
- Clamp as much of the shank of End Mill as possible.
- Insert Collet into Chuck until the flange of collet touches the surface of the front end, otherwise it can cause a broken End Mill or Collet, even damage to the Chuck itself, if the clamping length of shank is too short.
- Please do not clamp without End Mill.



- After lightly tightening by hand, tighten further by NIKKEN spanner until Chuck Ring contacts with the face of Chuck Body. Only for Finish Milling and higher run-out accuracy is required or C12 chuck, return Chuck Ring just a little (less than 2~3°) after face contact. A spanner is optional accessory for NC TOOLING, please order separately if necessary. For High Speed Milling Chucks, please do some operation as above by GH Handle. Wipe all dust and oil from the external of Chuck Ring and the internal of the GH Handle to tighten/loosen surely.

- Ordinary KM Collet can be used, but better improvement can be found with NIKKEN KM Collet.

- For IT<sup>(ISO)</sup> / CAT taper, please be careful to check the dimension "D" with your machine.

**!** The dimension of "D" of some models are greater than the specification of your machine.

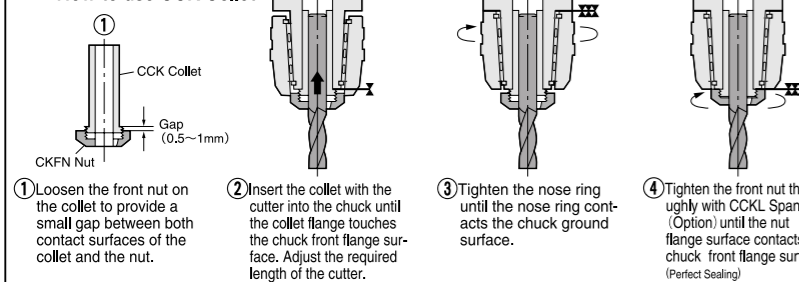
- When removing the cutter from the chuck, please make sure that the nose ring is loosened enough to remove the cutter, then loosen completely.

- NIKKEN all type of milling chucks including standard one can be transited into Centre Through Jet Coolant types by CCK Collet & CKFN Nut. For direct chucking, CKFN-D nut to fix on the cutter shank can be used. (e.g. CKFN32-32D)

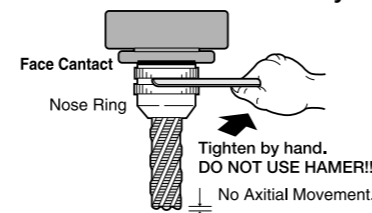
- When using CCK32-16,20,25 Collets with CKFN32T Front Nut, please set the rear slits of the Collet to the same location of the slots of the Milling Chuck.



### How to use CCK Collet.



- When removing the cutter: Loosen the nose ring first, then remove the collet and the cutter. For the next set up, please start from the operation ①.

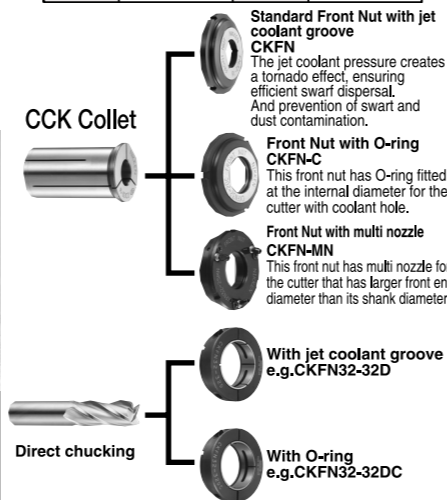


TYPE	SPANNER	TIGHTENING TORQUE (Nm)	TYPE	SPANNER	TIGHTENING TORQUE (Nm)
C12A*	9HC12A*	20~24	C25	9HC25	36~42
C16	9HC16	22~28	C32*2	9HC32*2	65~80
C20	9HC22	26~32	C42	9HC42	80~95
C22	9HC22	30~36	C50	9HC50	90~100

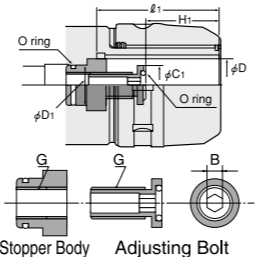
\*1 C12A is new model. 9HC12 has to be used for old model C12.  
\*2 9HC25 has to be used for C32 which nose ring dia=φ64mm.

TYPE	GH HANDLE	TYPE	GH HANDLE
C12G	GH12	C25G	GH25
C16G	GH16	C32G (φ62)	GH32S
C20G	GH20	C32G (φ68)	GH32

TYPE	Min. Gripping Length (mm)	TYPE	Min. Gripping Length (mm)
C12,C12A	45	C25	65
C16	50	C32	75
C20	55	C42	85
C22	55	C50	85



### OPTIONAL ACCESSORY "STOPPER"



CHUCK	STOPPER	H1	D	D1	l1	G	B
C20C,C20F	9MC20	42~47	20	15	58	M10	5
C25C,C25F	9MC25	46~55	25	15	61		
C32C,C32F	9MC32	45~60	32	24	67(70)	M16	8
C42 ,C42F	9MC42	50~70	42	24	74	M20	



- Centre Through Coolant / Flange Through Coolant type Milling Chuck
  - A stopper, ONK, OJK collet can be used, but better improvement can be found with CCK collet & CKFN nut.
  - Direct Chucking

When a shank of End Mill is longer than  $l_1$ , a Stopper is not required. When a shank of End Mill is shorter than  $l_1$ , a Stopper must be used.

A Stopper is optional accessory, please order separately if necessary.

- Please remove a stopper, when ONK, OJK Collet is used. How to remove is:
  - Remove an adjusting boat by using a hexagon wrench. (B dimension)
  - Remove a stopper body by using a bolt. (G dimension)

- With ONK, OJK Collet

- Please adjust the collet grooves centrally between the slot grooves of the Chuck Body and insert into the body.
- ONK Collet is for a cutter with the coolant through hole. OJK Collet is for a cutter without a coolant through hole.



**!** When an OJK Collet is used, please make sure that the back end of the cutter shank doesn't touch the bottom surface of the OJK Collet internal bore.

- In case of OJK32-25S of OJK42-32S Collet, coolant leakage is not a problem for practical use.
- OJK A type Collet (Jet Spray Slot) is highly recommended for use on the machine with the coolant tank delivering high pressure and large volume.



**!** Quotation fee of the repair is always necessary whether repair or not.

This manual is for basic instruction and information for safety use of our product. Please contact with us for the further details. Please note that we could not take a responsibility of the accidental damage on our product which is modified the specifications by the customer without our approval.

## STRAIGHT SHANK TOOL AND THE ATTACHMENT

NIKKEN

Multi Lock Milling Chuck is the Base Holder of NC TOOLING. Various types of Straight Shank Tools are available from the NIKKEN Standard Tooling range. Please refer the NIKKEN NC TOOLING SYSTEM Catalogue.

### With Front End Tool Holders.

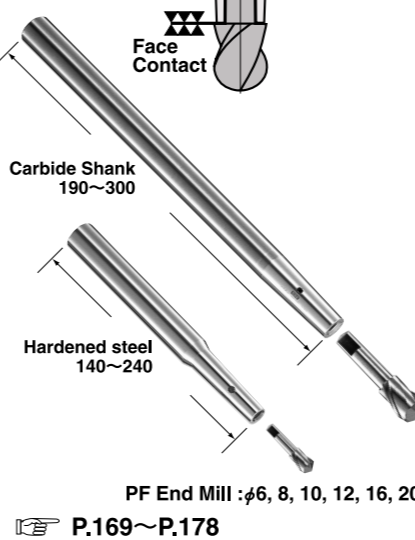
Anniversary type Milling Chuck

BT40-C32-85  
BT50-C32-90



### NEW Straight Shank Press Fit Tool

(Shank : φ 12, 16, 20, 25)  
1/100 Taper Technology



S32-PE φ22, 26, 34, 50, 60, 80  
21, 21, 31, 51, 51, 61 P.89

Side Cutter Metalsaw Special Cutter P.90

KM32 φ6~φ40 P.30  
Reamer P.159~P.168

### With Front End Tool Holders:

- Achieve 100% of the machines capability.
- Reduce set up time.

D32-NPU φ1~φ13 P.45

K32-MT MT1~MT3 P.47  
Reamer

COMZ φ16~φ42 P.179

NZ32 Tapping M3~M24 P.54

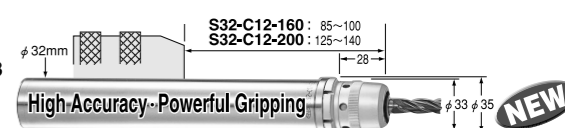
K32-RAC Rough Boring φ25~φ100 P.77

K32-ZMAC Finish Boring φ16~φ70 P.77

K32-DJ Finish Boring φ3~φ50 P.71

S32-UMT TP32 P.111 P.112

C12A style Milling Chuck



Axially Adjustable P.36

S19.5-SK 6-200 : 145~200  
S25 -SK10-250 : 145~200  
S25 -SK10-300 : 195~250  
SK 6 : φ19.5mm  
SK10 : φ27.5mm

Axially Adjustable P.39, 40

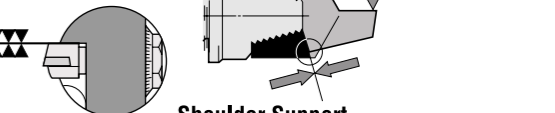
K16-MMP4-150 : 45~100  
High-Precision-Easy-Operation  
Axially Adjustable P.36

Combat Z drill - No vibration with Pilot Drill.

Solid-Carbide S-ZMACX Axially Adjustable P.78

L/D MAX. 8times  
φ12.7~φ32.2

Shoulder Support Double Face Contact



For location of the component. Easy detection of micron positioning.

- Please use a NIKKEN collet for the NIKKEN chucks.
- Please use a NIKKEN chuck for the NIKKEN collets. NIKKEN collet may not be performed 100% using on the other makers chucks.
- Please be careful not to inflict personal injury at your handling of cutting tools.
- Please do not modify the chucks by yourselves.
- Please do not use the KM collet as a reducing sleeve into the larger KM collet.
- Please check if the cutting tool is chucked with the slim chuck properly before the machining.
- Please pay attention not to inflict personal injury with the broken tools or swarfs.
- Please do not touch the tool at its rotating.
- If a cutting tool breaks in machining, please check the run-out accuracy of the chuck and inspection of the crack.
- Please pay attention to prevent from the rust at the storage. We would recommend to use MILLING CHUCK with RPT treatment for rust prevention.
- For High Speed machining, please use the NIKKEN HIGH SPEED MILLING CHUCK with NIKKEN KM Collet.
- Please use NIKKEN pullstud, do not use any pullstud which has damage marks on its draw head area or is deformed.
- The pullstud is considered to consumption item and should be replaced periodically.
- Without hole : 3 years or 150,000 times of ATC. With coolant hole : 2 years or 100,000 times of ATC.

Standard 8 years used RPT 18 years used



Please add "-RPT" at the end of product Code No. e.g. BT40-C32-85-RPT

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