

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.

Product	Instruction & Caution																			
General	<ul style="list-style-type: none"> <li>Please use a <b>NIKKEN</b> collet for the <b>NIKKEN</b> chucks.</li> <li>Please use a <b>NIKKEN</b> chuck for the <b>NIKKEN</b> collets. <b>NIKKEN</b> collet may not be performed 100% using on the other makers chucks.</li> <li>Please be careful not to inflict personal injury at your handling of cutting tools.</li> <li>Please clean the contact surface on a holder &amp; cutting tool shank.</li> <li>Please pay attention to prevent from the rust at the storage. We will recommend to use <b>NIKKEN TOOLINGS</b> with <b>RPT process</b> for rust prevention. <b>Due to the optical system to detect the tool existing on the tool magazine of certain machines, NIKKEN's RP treated tooling may not be detected. Please check your machine's specifications very carefully to avoid this problem before you purchase our RP treated tooling. The taper connection of the tool shank with RPT treatment is more stuck than the taper connection of the tool shank without RPT treatment. Then, the unclamping force for the tool with RPT treatment is required 20% stronger than the unclamping force for the tool without RPT treatment. Please be careful to check the unclamping force of your M/C, when the tool with RPT treatment is chosen.</b></li> <li>Please do not use the tooling that has scratches, damaged or rusted on its taper. This may cause false accuracy readings and reduce cutting performance.</li> <li>Please pay attention not to inflict personal injury with the broken tools or swarfs.</li> <li>Please do not modify the holders by yourselves.</li> <li>Please do not touch the tool at its rotating.</li> <li>Please do not touch the tool just after machining, it might be very hot.</li> <li>Please check if the cutting tool is held with the holder properly before the machining.</li> <li>For high speed application, please use <b>NIKKEN HIGH SPEED TOOLINGS</b> or the pre-balanced toolings.</li> </ul>	<p>Standard 8 years used      RPT 18 years used</p> <p>Please add "-RP" at the end of product Code No. e.g. BT40-C32-85-RP</p>																		
	<ul style="list-style-type: none"> <li>Insert the tool shank into the bore of the holder with adjusting the tang location, and hold them with facing tool front end upwards, and hit the bottom end of the holder (pull stud end) by copper hammer hardly.</li> <li>For removal of the tool, insert a bar into tang hole and hit the bar with hammer with special care to prevent the tool from popping out.</li> <li>Please clamp side lock screw in case of coolant through application. <b>For high pressure coolant through application, please use milling chuck, slim chuck or side lock holder instead of MT adapter.</b></li> </ul>																			
MTA	<ul style="list-style-type: none"> <li>When setting of side cutter or metal saw onto the arbor, please adjust the location of the drive key.</li> </ul>																			
MTB	<ul style="list-style-type: none"> <li>When setting drill chuck onto the arbor please put the chuck onto the arbor with adjusting the locations of male &amp; female tapers and hit the bottom end of the holder (pull stud end) by copper hammer.</li> <li>Please use <b>NIKKEN SLIM CHUCK</b> for high precision and high speed operation.</li> </ul>																			
SCA SCC	<ul style="list-style-type: none"> <li>When setting the drill shank into the bottom, and chuck the shank with the total chucking length of <b>NPU</b>.</li> <li>Please check the run-out accuracy before machining especially for the small diameter drill.</li> <li>When setting the drill onto the chuck, set the drill into the chuck and tighten the chuck ring by hand then tighten the ring by attached spanner to complete.</li> </ul>																			
JTA	<ul style="list-style-type: none"> <li>When setting the tool onto the holder, adjust the locations between notches or flat face of the tool shank and side lock screws, and tighten the screws completely.</li> <li>The dimension of the flat portion of the cutter shank varies, therefore please select a proper holder according to the cutter shank dimension.</li> <li>Code No. of the side lock holder for oil hole drill is <b>SLOC. OK25~OK40</b> collet can be used for <b>SLOC</b>.</li> </ul>	<table border="1"> <thead> <tr> <th>Type</th> <th>Cutter</th> <th>Axial Adjustment</th> </tr> </thead> <tbody> <tr> <td>SL</td> <td>φ 6~φ 16 Drill, Endmill</td> <td>—</td> </tr> <tr> <td>SLA</td> <td>φ 20~φ 42 Endmill</td> <td>○</td> </tr> <tr> <td>SLS*</td> <td>φ 6~φ 50 Endmill</td> <td>—</td> </tr> <tr> <td>WE</td> <td>Inch Size Endmill</td> <td>—</td> </tr> <tr> <td>SLB</td> <td>Drill Used with DSA socket</td> <td>○</td> </tr> </tbody> </table> <p>*SLS is the holder for JIS B 4005 endmill or weldon type endmill.</p>	Type	Cutter	Axial Adjustment	SL	φ 6~φ 16 Drill, Endmill	—	SLA	φ 20~φ 42 Endmill	○	SLS*	φ 6~φ 50 Endmill	—	WE	Inch Size Endmill	—	SLB	Drill Used with DSA socket	○
Type	Cutter	Axial Adjustment																		
SL	φ 6~φ 16 Drill, Endmill	—																		
SLA	φ 20~φ 42 Endmill	○																		
SLS*	φ 6~φ 50 Endmill	—																		
WE	Inch Size Endmill	—																		
SLB	Drill Used with DSA socket	○																		
FMA FMB FMC FMD SMA SMB SMS	<ul style="list-style-type: none"> <li>Please use the bolt specified by the cutter maker.</li> <li>When setting the face milling cutter onto the arbor, insert the spigot of the arbor into the cutter bore and minimize the backlash between the drive key and the slot against the direction of rotation, then tighten the end bolt.</li> <li>For the cutter with coolant through the body, please check the coolant pass in the arbor and the cutter before machining.</li> <li>For high speed application, please perform the balancing operation with the cutter and insert tips fitted.</li> </ul>																			
Q	<ul style="list-style-type: none"> <li>Please use <b>NIKKEN</b> made connection bolt.</li> <li><b>Modular Connection</b> Connection system is the Face Contact System by drawing into with the bolt, which top shape is gentle taper.</li> <li>1) Insert a Head by adjusting the position of a hole.</li> <li>2) Tighten the bolt temporary, then loosen slightly.</li> <li>3) Tighten the bolt again by moving a head clockwise and counterclockwise. This operation is to centralize the each other.</li> <li>4) Then, tighten the bolt completely until face contact.</li> </ul>	<p>Bolt which top shape is gentle taper      Tapered hole</p>																		

**! — 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.

**NIKKEN** NIKKEN KOSAKUSHO WORKS, LTD.

Head office : 5-1, 1-chome, Minamishinden, Daito, Osaka, Japan

Tel : 072-869-5820 Fax : 072-869-6220

http://www.nikken-world.com  
e-mail: export@nikken-kosakusho.co.jp

Product	Instruction & Caution								
DREAM-CUT HOLDER VEGA CHUCK PAT.P	<ol style="list-style-type: none"> <li>Fix VML Collet Fixing/Removing Jig (optional accessory) or Hexagon Wrench in vise.</li> <li>Wipe all dust from internal bore of chuck, inside and outside of collet and shank of cutter. <b>Clean minute dust inside slot grooves of collet by air blow.</b></li> <li>Please paste the small amount of the pure oil into the screw portion of the back end of the collet inside. Do not paste the oil into the internal of the collet (gripping portion).</li> <li>Insert the rear end of VEGA Chuck onto Hexagon Wrench of VML Collet Fixing / Removing Jig.</li> <li>Insert Collet into VEGA Chuck and turn VEGA Chuck clockwise. Collet will be automatically inserted into VEGA Chuck.</li> <li>Insert Cutter into Collet. Please ensure the rear of Cutter does not touch tightening bolt.</li> </ol>	<p>BT30, BT40: VML-40 BT50 : VML-50</p> <p>NCL TOOL CLAMPER</p> <p>Do not use a vise or scroll chuck to clamp DREAM-CUT Holder.</p>							
	<ol style="list-style-type: none"> <li>By using Tool Clamper (NCL) for : #30, #40: Manually screw in VEGA CHUCK into DREAM-CUT Holder, and tighten with pin spanner provided, then tap on the spanner using a soft face hammer to ensure the chuck is fully tightened. (Tightening torque: 120~140N·m)</li> </ol>								
#30, #40 DREAM-CUT Holder	<p>#30, #40 DREAM-CUT Holder</p>								
	<p>#50: Couple DREAM-CUT Holder and VEGA Chuck together using the special Pull stud. Reference of the pull stud for the #50 DREAM-CUT Holder is normally "NC5-85". Please select the suitable pull stud for the machine and add "-NC5-85" to code No. e.g. <b>PS-5-NC5-85</b>. Reference of the Pull stud for the #50 DREAM-CUT Holder with extended gauge length such as <b>BT50-NC5-85F-80</b> or <b>IT50-NC5-85-80</b> is "-NC5-85F-80" or "-NC5-85-80" respectively. e.g. <b>PS-5-NC5-85F-80</b>. DREAM-CUT Holders with extended gauge length such as shown below and Vega Chuck are connected, the total length from gauge line is longer than standard. <b>BT50-NC5-85F-80</b> (Flange Through Coolant type) <b>IT50-NC5-85-80</b> <b>YME CAT50-NC5-85-80</b> (For MAZAK)</p> <p>Special PULL STUD      #50 DREAM-CUT Holder</p>								
PS	<ol style="list-style-type: none"> <li>When removing Collet and Cutter, follow the above procedures in reverse.</li> <li>#30, #40: Locate pin spanner into VEGA Chuck, then split the Chuck from the DREAM-CUT Holder by lightly tapping on the spanner with a soft face hammer.</li> <li>#50: Undo pull stud, Then split the chuck from the DREAM-CUT Holder by lightly tapping on the pull stud with a soft face hammer and then unscrew pull stud. Place VEGA Chuck on Hexagon Wrench and undo Collet by the counter clockwise rotation of the VEGA Chuck with the pin spanner.</li> </ol>								
	<p>When you try to remove Cutter while DREAM-CUT Holder and VEGA Chuck are held vertically, hold Cutter by fingers so that it will not jump up.</p> <p><b>To display dampening effect, this is recommended that a coupling of a DREAM-CUT Holder and a front end chuck such as PRO ENDMILL Arbor is split once and re-couple again in every 3 months.</b></p> <p><b>In case of a Milling Chuck, when a cutter is champed after coupling of DREAM-CUT Holder and a Milling Chuck, please tighten a Milling Chuck into DREAM-CUT Holder again.</b></p> <p>The guide line for pull stud tightening torques are as follows: BT30: 20 ~ 25 N·m BT40: 60 ~ 80 N·m BT50: 200 ~ 250 N·m</p> <p>For high precision BT30 tooling (e.g. Milling Chuck, Slim Chuck and Mini-Mini Chuck etc), the tooling completely with pull studs fitted is also available. Please contact with us to arrange this option.</p> <p><b>MAS BT30</b> centre through pull stud (φd2=7mm) cannot be recommended by its weakness due to thin profile. <b>When purchasing a #30 taper machining centre with centre through coolant capability, we can highly recommend a machine using the NIKKEN NC5-46 spindle. This 1/10 short taper &amp; double face contact system, which has high performance specifications and tooling configurations thanks to its unique pulling mechanism.</b></p> <p>JIS40 type pull stud (φd2=14mm) is highly recommended for centre through coolant machining centre instead of <b>MAS BT40</b> type (φd2=10mm).</p> <p>When pull stud without hole is used on the centre through coolant machining centre, please use the pull stud which top surface is ground.</p> <p>The special pull stud with O ring is required for the machining centre with flange through coolant capability.</p> <p>We recommend you regularly check the measurement of the pulling force to discover any problems at an early stage. Please use <b>NIKKEN Pulling Force Measuring Tool (CLP)</b> to perform this check.</p> <p>Please use <b>NIKKEN</b> pull stud, do not use any pull stud which has damage marks on its draw head area or is deformed.</p> <p>The pull stud is considered to consumption item and should be replaced periodically. The guide line of replace ment is : Without hole : 3 years or 150,000 times of ATC. With coolant hole : 2 years or 100,000 times of ATC.</p> <p>CLP</p>	<table border="1"> <thead> <tr> <th>TAPER</th> <th>Code No.</th> </tr> </thead> <tbody> <tr> <td>BT30</td> <td>BT30-CLP</td> </tr> <tr> <td>BT40</td> <td>BT40-CLP</td> </tr> <tr> <td>BT50</td> <td>BT50-CLP</td> </tr> </tbody> </table>	TAPER	Code No.	BT30	BT30-CLP	BT40	BT40-CLP	BT50
TAPER	Code No.								
BT30	BT30-CLP								
BT40	BT40-CLP								
BT50	BT50-CLP								