



PRODUCT OVERVIEW

Solution & Technology Introduction

Our Company

Since 1958, NIKKEN solutions have been the power behind some of the world's most demanding products, helping to improve productivity and increase competitiveness in some of the most challenging applications possible.

Our world-class solutions include:

- Performance CNC Rotary Tables
- High accuracy NC Tooling Solutions
- Precision Tool Presetters
- Intuitive Tool Management Solutions
- Spindle Optimisation Solutions

Our range of high precision and durable solutions are favoured amongst high stature manufacturing environments covering aerospace, medical, oil and gas, motorsport, power engineering, and the mould and die sectors.

NIKKEN's extensive product range, combined with technical expertise, training and after-sales service, come together to deliver a superior end-to-end experience that allows our customers the opportunity to successfully compete in the global marketplace.

Visit our industry-leading Research and Development centre, the NIKKEN Innovation Centre Europe (NICe), based at the heart of Advanced Manufacturing in Rotherham, to witness first-hand the power of NIKKEN solutions or utilise our state of the art facilities/services.

Our Commitment To Sustainability

NIKKEN are committed to sustainable development from the core of our business. We believe that through careful consideration and development, meeting the needs of the present does not have to impact the ability of future generations to meet their own needs. We aim to demonstrate our commitment through our actions, decisions, and products that we introduce to the market.

Ultimately, our goal is to minimise our environmental impact and that of the manufacturing sector by ensuring that every NIKKEN solution and product that we supply offers ultimate longevity, performance, and durability.



NIKKEN

NIKKEN Machine tool

1960

Name officially changed to
NIKKEN Kosakusho Works Ltd.



1964

Tokyo Sales Office opens.

1973

Opening of Higashi Ishikiri Head
Office.

1981

Merger with Procomo to
create NIKKEN France.

1989

Opening of the NIKKEN UK office.

1963

NIKKEN launch their first Milling
Chuck and Universal Rotary and
Tilt Table.

NIKKEN support building of Japan
Bullet Train.

1968

A team of NIKKEN specialist
engineers develop the Broach
reamer.

1977

Opening of Higashi
Ishikiri Reamer Factory.

1984-5

Launch of the Carbide Worm
System for CNC Rotary Tables and
the AWC system.



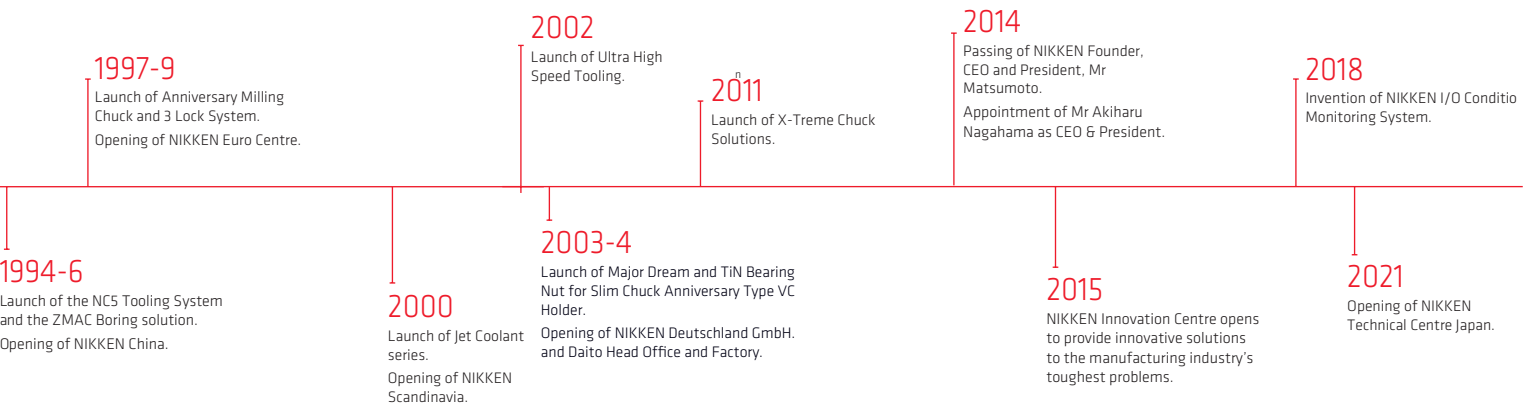
Our History

NIKKEN Kosakusho Europe is a subsidiary of NIKKEN Kosakusho Works Limited, Japan, with principle activities covering the import and distribution of the complete NIKKEN product range.

With operations across three continents, offices in over 70 countries and a 15,000 item strong product range, NIKKEN has earned and maintained a reputation globally for producing quality products.

Our people are at the heart of our operations. Our goal is the same where ever our team members may be: to uphold a unified standard of quality, performance and excellence in our products and to our customers.

NIKKEN Kosakusho are continually striving to improve technology through research and development, innovation and industry knowledge to ensure that our customers can compete and win in their demanding market sectors.



TOOLING SOLUTIONS

High rigidity & high accuracy solutions for all machining applications, including a mechanical chuck series, a collet chuck series, a tool holder series with dampening mechanisms, and boring systems.

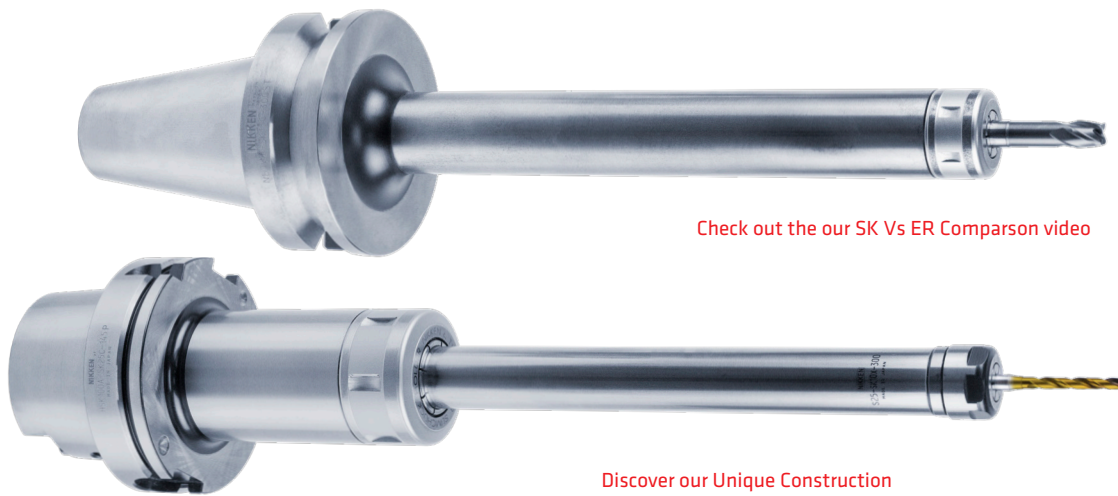


Need help selecting a tool?



Slim Chuck

The Slim Chuck incorporates NIKKEN's exclusive TiN (Titanium Nitrided) Bearing Nut technology. This allows for improved tightening and accuracy, thus delivering better all-round performance.



[Check out the our SK Vs ER Comparison video](#)

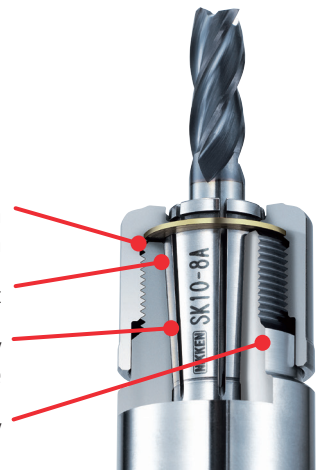
[Discover our Unique Construction](#)

FEATURES

- Slim and compact body and nut
- 8° Collet with square shoulder location
- Superior gripping torque
- Unique TiN Bearing Nut
- Simple, compact and versatile
- Jet & Centre Coolant Options Available
- Clamping Range: Ø0.7 ~ 25.4mm
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

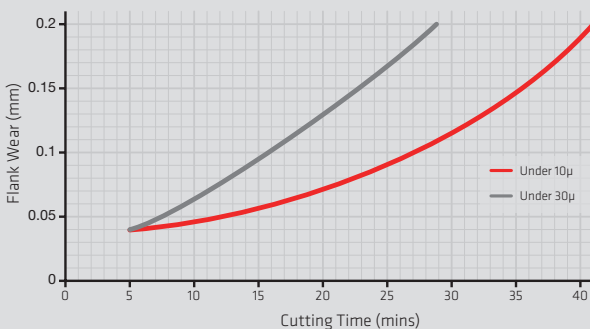
TiN Bearing Nut

- Simple & compact design for high speed rotation
- TiN Bearing Nut
- 8° taper collet for accuracy & gripping torque
- Special coating for high efficiency

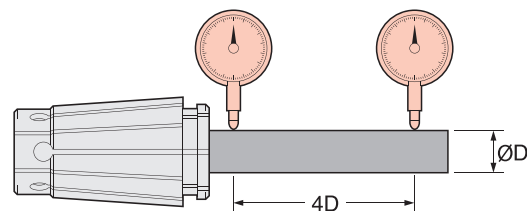


Run-out Vs. Wear (+30% Life)

To consider the effect that physical run-out contributes to decreases in tool life and increased wear, our Zero-Fit Slim Chuck was adopted to actually apply and exaggerate the run-out whilst profile cutting Ti 6Al-4V.



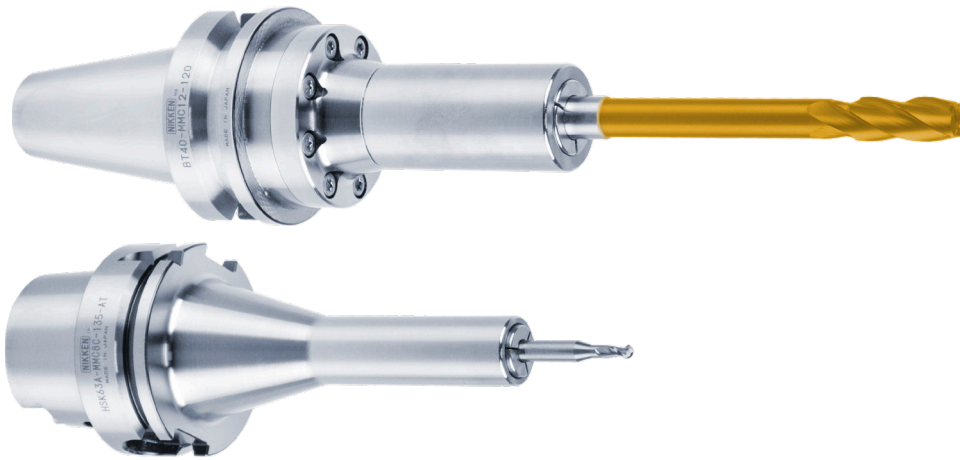
Collet Concentricity (SK)



Collet type	Max run-out	
	At nose	At end
Standard	1µ	5µ
P	1µ	3µ
A/AC	1µ	3µ

Mini-Mini Chuck

Our latest NIKKEN Mini-Mini Advanced Alpha Chuck is simply the most effective product for reduced diameter machining or components and applications where confined access or tight spaces can prove problematic.

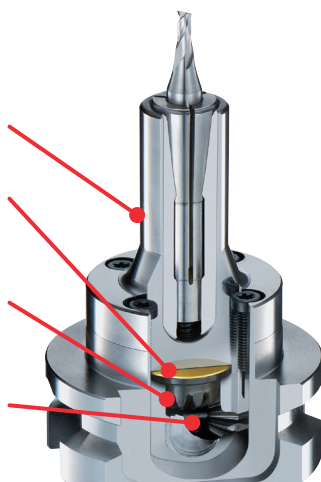


FEATURES

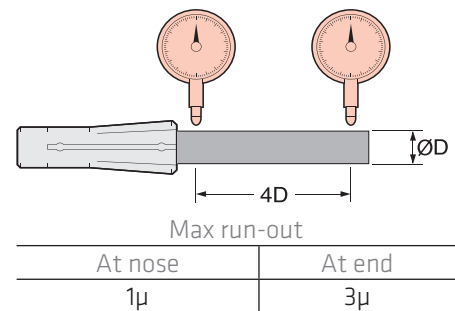
- Compact construction with no external nut
- Improved internal drawbar & gear mechanism
- Clamp/unclamp with single wrench
- 8° Collet with pilot location
- New HSK "AT" direct draw bar variant
- Jet & Centre Coolant Options Available
- Clamping Range: $\varnothing 1 \sim 12\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

Latest Generation Alpha Clamping

- Optimised materials and heat treatment process
- Smooth clamping/unclamping from twin TiN bearing arrangement
- Superior support for draw bar gear with one piece construction
- Improved gear design for increased transmission efficiency

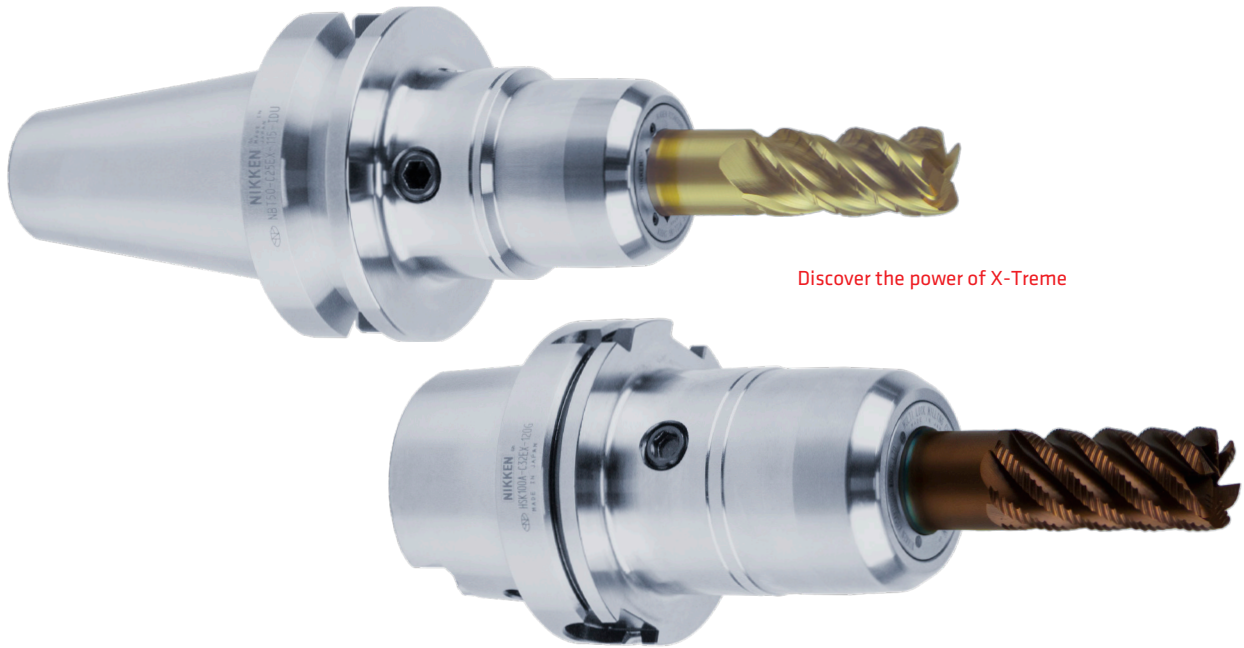


Collet Concentricity (MPK, PMK, VMK)



X-Treme Milling Chuck

Our unique X-Treme Milling Chuck solution provides ultimate performance, control and reliability to meet the requirements associated with challenging components, applications and materials.



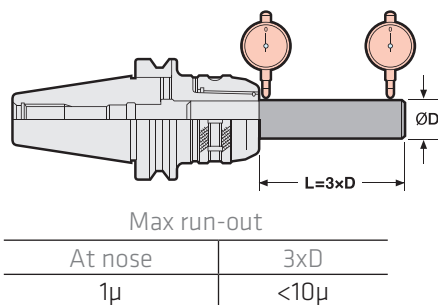
Discover the power of X-Treme

FEATURES

- Designed specifically for demanding applications and materials
- Front nut clamping and accuracy based on Multi-Lock
- Interchangeable face seal and internal stopper
- Positive clamping and retention of tool shank - zero end-mill movement
- Jet & Centre Coolant Options Available
- Clamping Range: $\varnothing 12 \sim 42\text{mm}$
- Shank: NBT/HSK/NIT/POLYGON

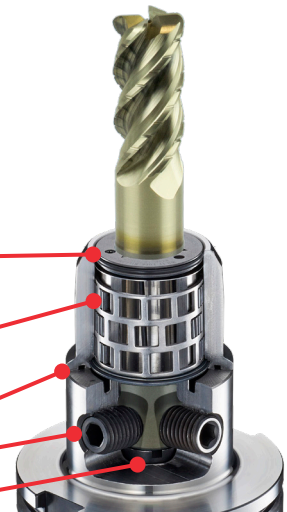


Run-out Accuracy



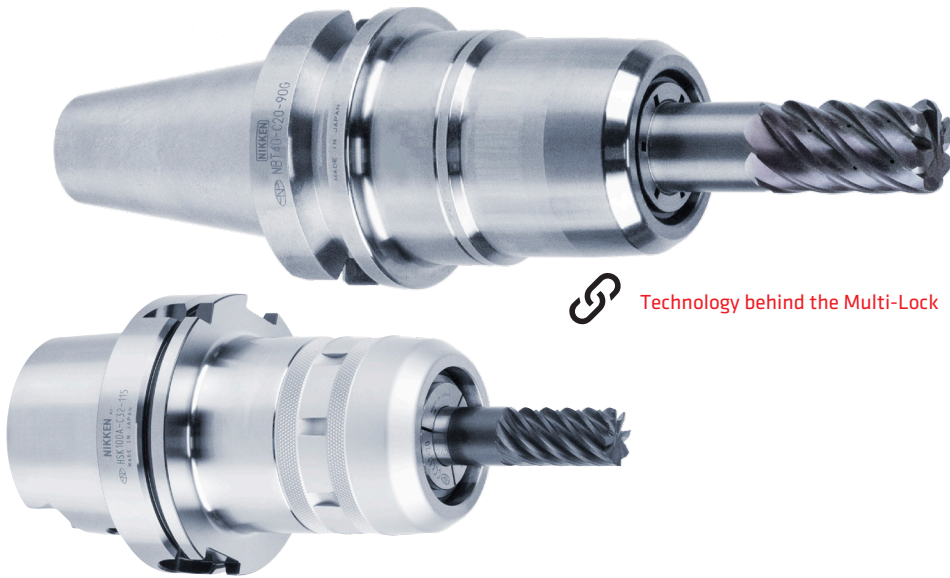
Total Cutter Security

- Dual mode face sealing options
- World renowned multi roller construction
- Mechanical face contact
- Unique bolt retention system
- Dual mode location stopper



Multi-Lock Milling Chuck

The Multi-Lock is an efficient and powerful milling solution that also has a versatility to meet the requirements of various applications. The chuck can be utilised as a superior base holder or, with our expansive precision collet range, grip and adapt to numerous other cutting requirements with negligible loss of clamping power.

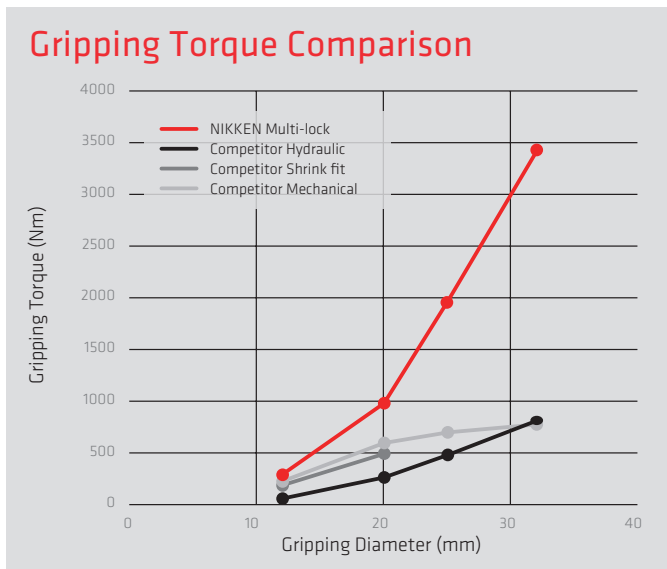
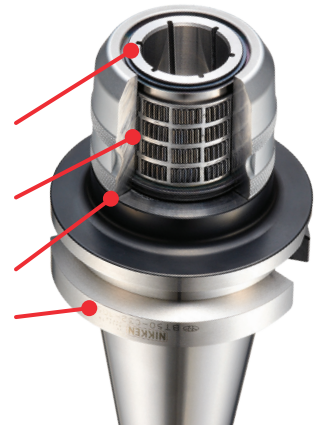


FEATURES

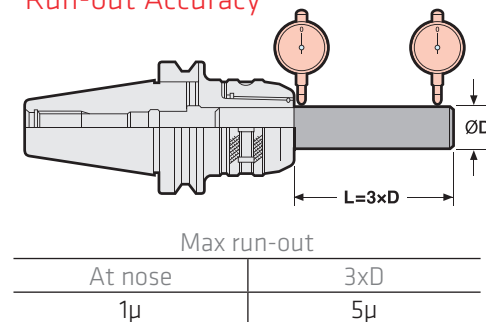
- High accuracy and rigidity
- Ultimate gripping torque
- Nose and root clamping
- Zero axial movement
- Perfect as a base holder
- Jet & Centre Coolant Options Available
- Clamping Range: $\varnothing 2 \sim 42\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

Multi Roller System

- Unique slotted bore for improved gripping
- World renowned multi roller construction
- Mechanical face contact
- Optimum rigidity and performance from NIKKEN's innovative heat treatment process



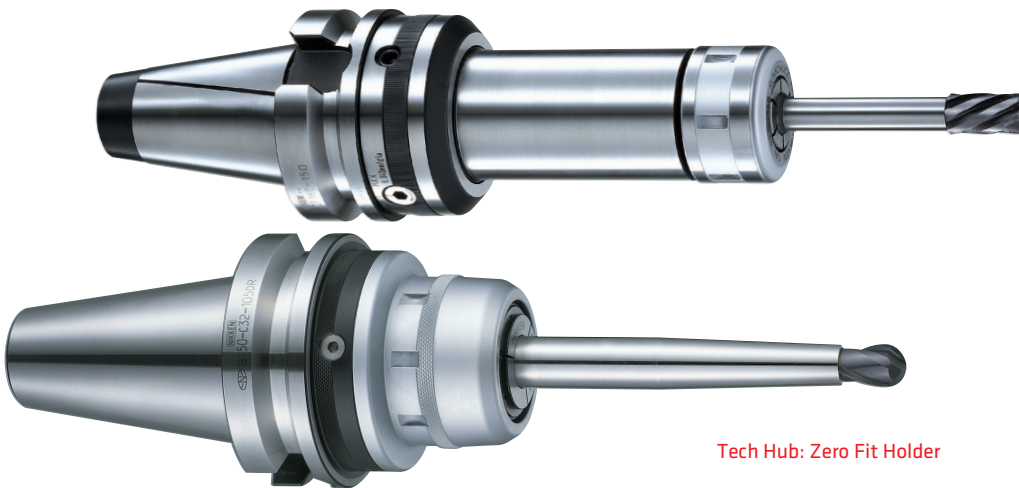
Run-out Accuracy



Zero Fit Holder

When a machine tool has been in operation for 2~3 years, the run-out accuracy of the spindle can decline. The NIKKEN Zero Fit Holder allows correction of any such error back to the “as-new” run-out of 0.001~0.002mm.

Without the Zero Fit Holder, typical run-out, particularly with extended length protrusions, can be in the region of 21 microns - when this is reduced to 3 microns, the tool life can be improved by approximately 5 times.



Tech Hub: Zero Fit Holder

FEATURES

- 2 variants - Slim Chuck (SZF) and Multi-Lock (CZF)
- Easy to use cam adjustment and locking system
- Available with Single Cam or new Multi Cam design
- Simple optimisation of extended length applications
- Jet & Centre Coolant Options Available
- Clamping Range CZF: $\varnothing 2 \sim 42\text{mm}$
- Clamping Range SZF: $\varnothing 0.7 \sim 25.4\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

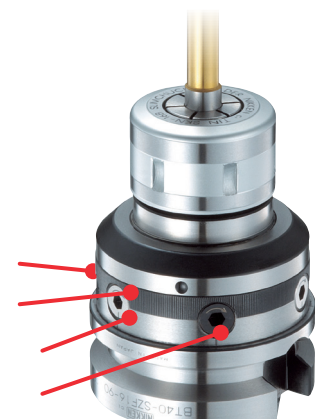
Flange Mount Zero Fit

Optimise prismatic work pieces with our Zero Fit solutions for direct mounting on Rotary Table face plates.



Multi Cam Adjust System

- Twin locking screws
- Balanced adjustment ring
- Fine Adjust Cam (x2)
- Master Cam



Angle Heads - NIKKEN SK

T90cn/T90



NIKKEN are delighted to be able to offer a wide range of Angle Heads and attachments utilising our advanced SK Collet System and patented TiN Bearing Nut. This technology improves tightening and accuracy to deliver better all round performance.

NIKKEN also offer Alberti's extensive standard and special range for any application to suit both machining centre and lathe processes.



FEATURES

[Discover more about Alberti Modular Solutions >](#)

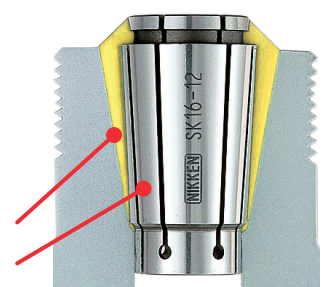
- Cast iron bodies (GS600), 100% machined, to provide long life, thermal stability and stress resistance
- Where possible, mono block spindles for better accuracy and performance
- Special gear material with four-key drive system
- Double high precision, preloaded, angular contact bearings
- Special low friction sealing system with double mechanical seal
- Less set ups, [around 60%]
- Jet & Centre Coolant Options Available
- Clamping Range: $\varnothing 0.7 \sim 25.4\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

Increased Gripping Power & Rigidity

8° taper and wedge increases torque and concentricity

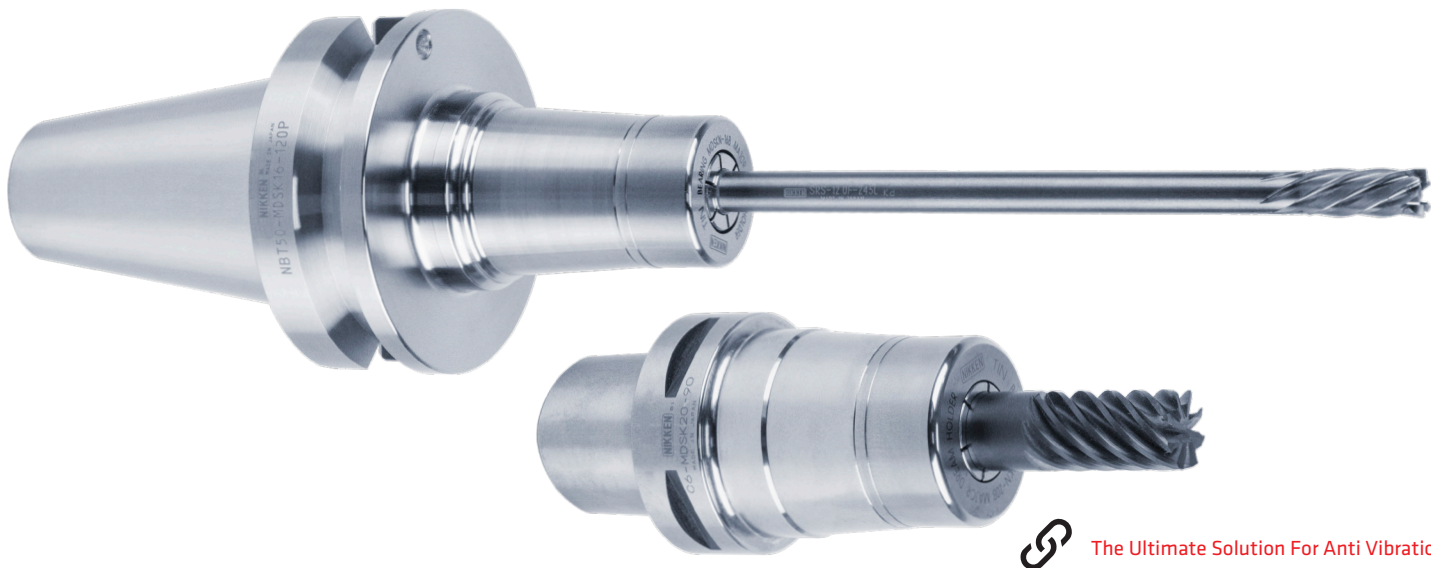
16° Standard ER Collet

8° NIKKEN SK Collet



Major Dream Holder

NIKKEN's Major Dream System provides the optimum anti-vibration tool holder solution. Using NIKKEN's revolutionary micro-dampening mechanism, it is suitable for both heavy-duty and high-speed machining.

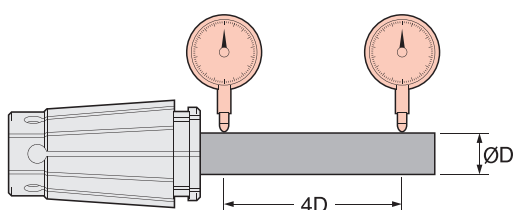


FEATURES

- Run-out guarantee $3\mu\text{m}$ at $4 \times$ Diameter (with recommended 'A' type collet)
- TiN Bearing Nut
- Unique internal construction provides 'built-in' dampening and anti-vibration
- 8° Collet System
- Square Shoulder Pushing
- High-speed options available up to 30,000rpm @ G2.5
- Jet & Centre Coolant Options Available
- Clamping Range: $\varnothing 3 \sim 25.4\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

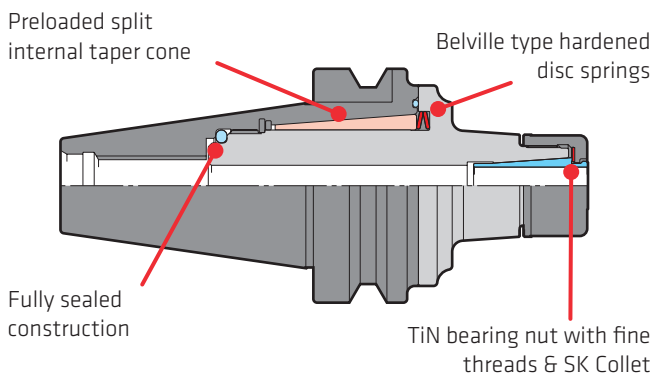


Collet Concentricity (SK)



Collet type	Max run-out	
	At nose	At end
A/AC	1μ	3μ

Internal Dampening Mechanism



Anniversary VC Holder

VC is our solution for tougher milling and drilling processes. Incorporating many proven features and construction elements from the Slim Chuck, we have enhanced the whole product with a focus on performance.

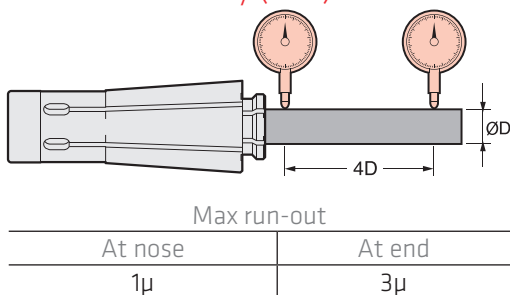


FEATURES

- Strengthened nut and increased body wall thickness
- More suited to the demands of milling processes
- 8° Collet with pilot location
- Superior gripping torque
- Unique TiN bearing nut with finer threads for greater contact
- Jet & Centre Coolant Options Available
- Clamping Range: Ø3 ~ 12 mm
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON K/IT/NIT/POLYGON



Collet Concentricity (VCK)



Increased Milling Capability

Stronger wall construction with fine threads for improved clamping and rigidity

TiN Bearing Nut

8° taper collet for accuracy & gripping torque

Pilot diameter for increased collet support during milling processes



ZMAC Advanced Boring

Our ZMAC Advanced Boring Heads feature a double-contact shoulder support and provide excellent reliability and performance for deep hole boring and high-speed boring operations.



FEATURES

- Unique double contact support
- High precision with simple micron adjustment
- Superior stability and rigidity
- Available as modular solution or more rigid “blade type” system for larger diameters
- Light alloy version available for higher speeds
- Modular Range: Ø15.9 ~ 180.5mm
- Large Range: Ø140 ~ 595mm
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

Fine Boring Solution

Cartridge fully supported throughout travel

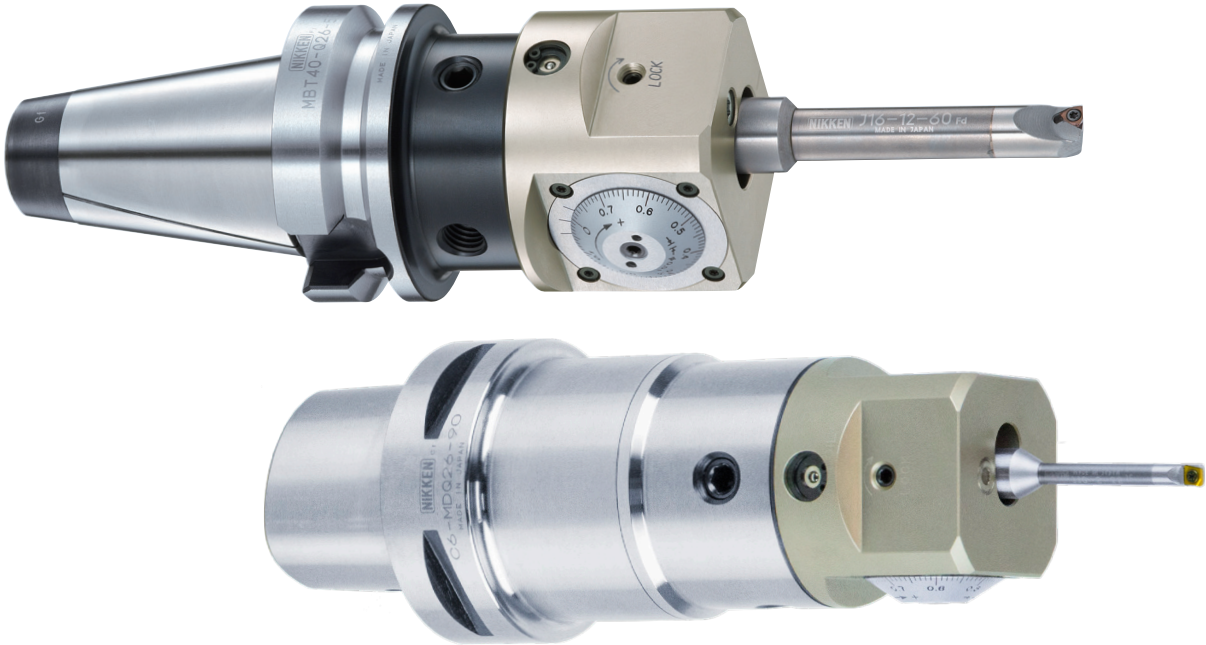
Coolant through capability as standard

Hardened cartridge thread (HRC50-55) with precision grinding to ensure easy micro adjustment



DJ Boring

Adopting two sizes of head and an ever increasing range of boring bits, the DJ Boring System provides the versatility and range to cater for smaller diameter boring processes. The system allows micron accuracy and caters for any requirement by simply replacing the boring bit itself.



FEATURES

- Versatile and easy to use
- Carbide boring bits negate vibration
- Straight forward accurate adjustment
- Compatible with alternative boring bits
- New DJ 8 reduction sleeve - 16mm to 10mm
- Boring Range: Ø3 ~ 50mm
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

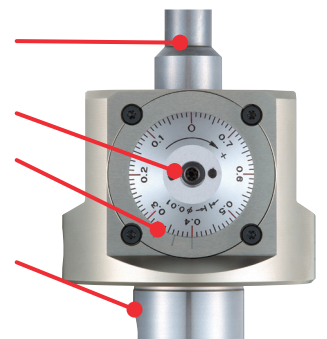
Versatility in Boring

Extensive range covered by a wide variety of boring bits

Easy to set micron accuracy

Graduation main dial is 0.01mm/dia. Vernier reading is 0.005mm

Available for any machine spindle by using a NIKKEN Q26 modular base holder



DJ Boring Bits

A versatile range of boring bits with carbide dampening are available from stock, either individually or included within complete sets.



RAC Advanced Boring

NIKKEN RAC Boring Heads feature a precision ground serration, giving perfect contact and balance between the holder and head. The RAC system provides the rigidity and stability to cater for larger diameter boring operations, including roughing and semi-finishing.

FEATURES

- Both cartridges feature precision ground V form slideways to support each other to negate cutting forces
- Suitable for double cutting and stepped cutting (option)
- Cartridges available to suit various insert styles
- Modular Range: $\varnothing 25 \sim 130\text{mm}$
- Large Range: $\varnothing 130 \sim 580\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON

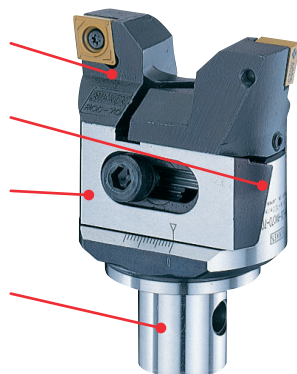
Performance & Rigidity

Double cutting with twin, self supporting cartridges

Precision ground "V" form slideways (NIKKEN scam)

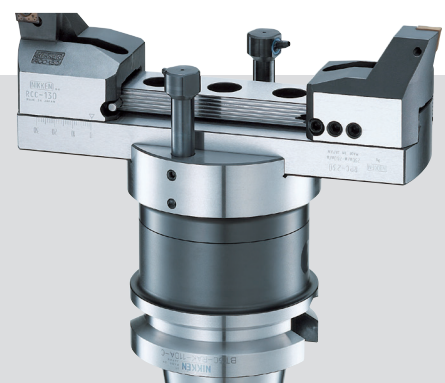
Numerous cartridge options for different materials and processes

Available for any machine spindle by using a NIKKEN Q26 modular base holder



Balance-Cut RAK/RPC Arbor & Blade

For demands from $\varnothing 130 \sim 580\text{mm}$, our Balance-Cut blade system is adopted (now also available in our new lightweight aluminium Alpha configuration). Both solutions incorporate many of the characteristics of the standard modular RAC with the rigidity necessary for larger diameters. Balance-Cut is also available as a ZMAC finishing solution, and both options can be configured for high-pressure coolant.



eMAC-P Digital Boring

The NIKKEN eMAC Digital Boring System is a fine boring head with a digital display indicating the radial slide traverse. The target adjustment can be achieved easily, quickly and precisely. The brand new eMAC-P features improved sealing which provides 'ingress protection' to IP69K instead of original IP67.

FEATURES

- Single button operation for 'On' & 'Reset', and to change between mm/inch
- Adjust screw
- Digital display resolution $\varnothing 2\mu\text{m}$
- Available for any machine spindle by using a NIKKEN Q26 modular base holder
- Modular Range: $\varnothing 6 \sim 200\text{mm}$
- Shank: BT/MBT/NBT/HSK/IT/NIT/POLYGON



Digital Adjustment

Single button operation for 'On' & 'Reset', and to change between mm/inch

Adjust screw

Digital display resolution $\varnothing 2\mu\text{m}$

Available for any machine spindle by using a NIKKEN Q26 modular base holder



EMAC BOXSET

NIKKEN offer a complete EMAC boxed set featuring a free nikken high precision modular base holder, saving you £1,285 off the list price!

Enquire for more information >

V-EX Vacuum Extractor

The cost-effective solution to efficient in-process waste extraction.

Machining non-metallic materials generates a lot of waste by-product and dust. These potentially abrasive particles accelerate the wear of machine tool components, and create a health risk through dust inhalation.

Extracting these particles prolongs machine tool life and ensures compliance with health and safety regulations.

Existing extraction solutions, however, can add up to 10% to the cost of a new machining centre, deterring manufacturers from entering the market for machining materials like composites, plastics and foams, which produce a large amount of dust.

To address the problem, NIKKEN has developed an innovative, low-cost vacuum extraction system that can be retrofitted to any machining centre. With no need for a power supply and no moving parts, the V-Ex is suitable for both wet and dry cutting conditions. With the ability to handle many different particle types and sizes, including conductive dusts, this makes V-EX is a perfect low-cost solution for any non-metallic machining operation.



FEATURES

- A cost effective, retrofittable solution to dust and particle removal for new and existing machining centres.
- Significantly reduces damage and wear caused by abrasive waste materials.
- Suitable for both wet and dry cutting applications.
- Addresses health risks posed by dust inhalation.
- Promotes a smooth cutting operation by removing waste from the cutting zone.
- Requires only an air supply, and can be coupled to many existing extraction systems.

NIKKEN EU SHRINK FIT

We are delighted to launch the ultimate Shrink-Fit solution under our new & exclusive brand for Europe, NIKKEN eu. Developed and manufactured using carefully selected materials and processes, our latest tool holding range has been designed to meet the demands of any application requirement in the most competitive markets.

FEATURES

- Precise tool holder balancing for improved surface finishes.
- Superior tool run-out of less than 0.003mm.
- Greater rigidity with cutting tool shank gripped at 360 degrees for the whole bore length.
- Front bore recess to ease tool loading, reduce shrinking heat and optimise tool holder life.
- All benefits combined provide better distribution of the chip load along the cutting edge and ultimately increased tool life.



[Buy online now >](#)



Internal Coolant Option

NIKKEN EU Shrink Fit is available with an adaptable coolant version. This design allows for coolant supply through the tool or around the cutting edges by the simple use of 3 sealing bolts.



Full Capital Expensing Programme

Take advantage of the UK Governments Full Capital Expensing Scheme and receive 25p for every £1 invested in machinery.

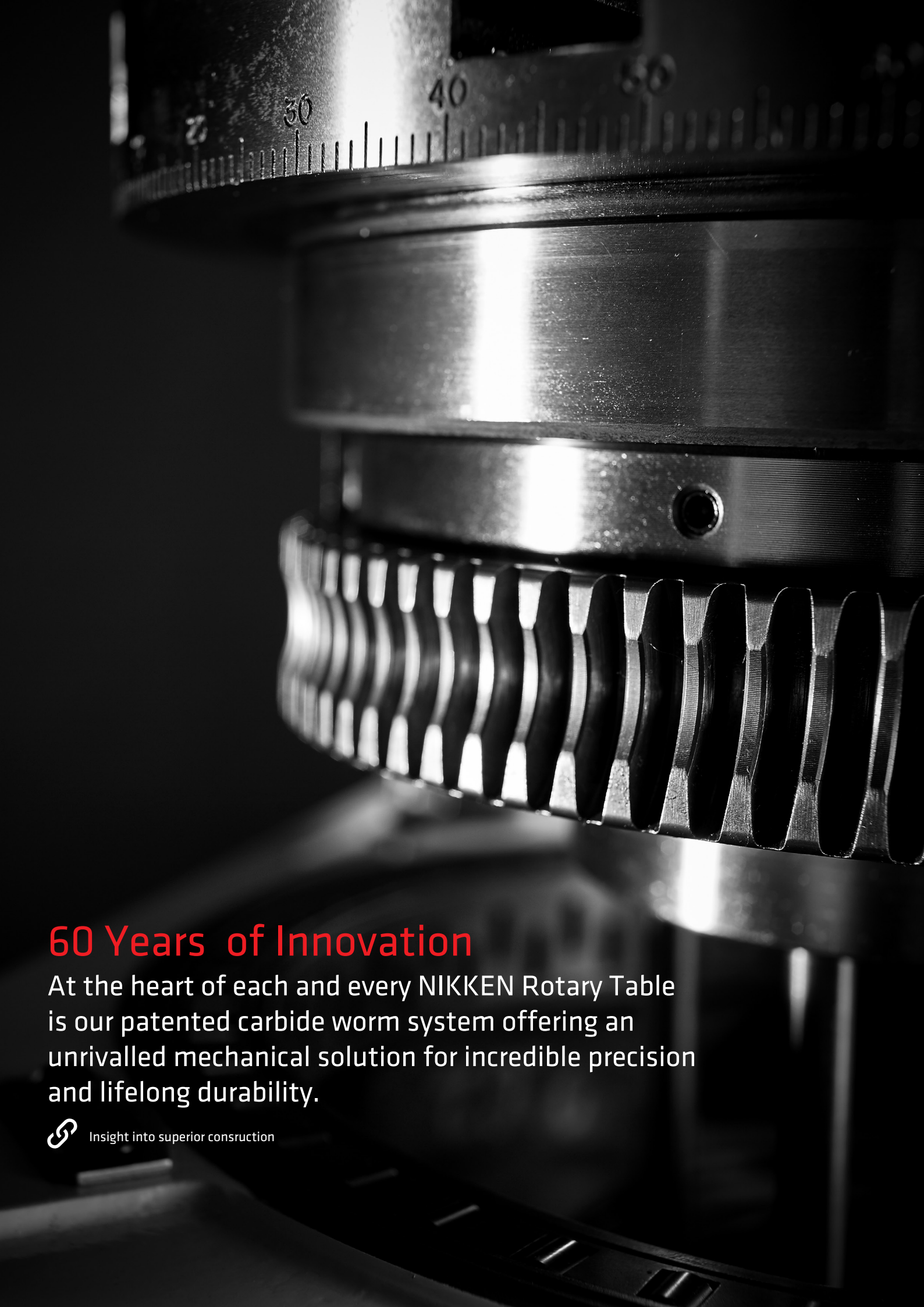
With the tax scheme available until March 2026 and on capital purchases such as:

- Tooling Packages
- Rotary Tables with/without Workholding accessories
- Tool Presetters
- Tool Management Software

Take the opportunity to save on your tax bill whilst gaining long term investment benefits, reducing scrap and enhancing productivity.

Key Facts:

- Full expensing – which offers 100% first-year relief to companies on qualifying new main rate plant and machinery investments from 1 April 2023 until 31 March 2026
- The 50% first-year allowance (FYA) for expenditure by companies on new special rate (including long life) assets until 31 March 2026
- The Annual Investment Allowance (AIA) provides 100% first-year relief for plant and machinery investments up to £1 million, which is available for all businesses, including unincorporated businesses and most partnerships



60 Years of Innovation

At the heart of each and every NIKKEN Rotary Table is our patented carbide worm system offering an unrivalled mechanical solution for incredible precision and lifelong durability.



Insight into superior construction

NIKKEN I/O

NIKKEN IO ensures your Rotary Table performs optimally, producing quality parts repeatably and reliably, as is expected with all NIKKEN products.

With 24/7 monitoring and real-time performance data available at any time of the day, through either an app or desktop device, NIKKEN IO provides manufacturers with valuable data such as uptime, usage, 3 phase current and collision detection.

Live notifications allow manufacturers the opportunity to quickly eliminate unnecessary costs produced from table neglect, collisions, power failures and more.

NIKKEN IO is ideal for manufacturers seeking a sustainable manufacturing process whilst alleviating machine downtime and scrap material.



HOW I/O WORKS

1. Sensors inside the rotary table collect and process real-time data during usual production processes.
2. Key snapshots of information are uploaded to a centralised database for storage and further analysis.
3. The NIKKEN I/O web-based dashboard then provides rich, customisable data visuals with an at a glance flagging system, so you can ensure that your investments are performing at their optimal capability.
4. Scheduled alerts and updates can deliver up-to-date information directly into your mail inbox, highlighting any important information.

STANDARD FUNCTIONALITY:

- Backlash classification,
- Tri-axial collision detection,
- Uptime,
- Usage duration,
- 3-phase current monitoring

ROTARY TABLE CAPABILITIES

World renowned CNC Rotary Tables with proven performance, reliability and accuracy benefits which others simply cannot emulate.



4th VS 5th Axis Rotary Tables

PROUD SUPPLIERS TO:



Direct Drive

NIKKEN Direct Drive Rotary Tables are simple and accurate. Direct Drive tables feature no mechanical reduction mechanism such as the worm system within a standard rotary table.

Direct Drive Rotary Tables have the motor effectively 'built-in' to the rotary table body directly driving the axes and faceplate.

The tables provide extremely high rotation speeds with high acceleration and deceleration. The only limit is the driving torque of the motor! The application needs to be considered but NIKKEN Direct Drive Rotary Tables are suitable for numerous applications where complicated forms and shapes can be machined effectively and quickly.



[Learn more about Direct Drive Capabilities](#)

Direct Drive 4th Axis Range

Table Diameter - **Ø180 ~ 400mm**
 Clamping Torque - **150 ~ 1000Nm**
 Rotation Speed - **125 ~ 200min⁻¹**

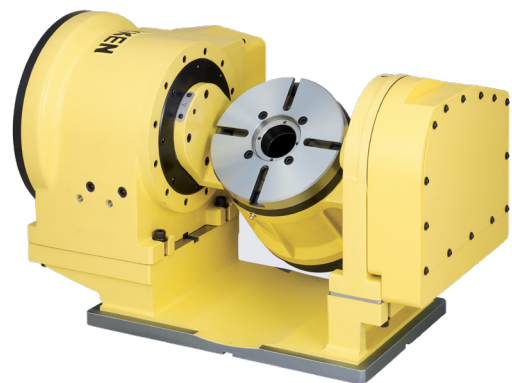


DD250F-150 Direct Drive 4th Axis Table

Diameter of Table	250mm
Clamping System	Pneumatic
Clamping Torque	500Nm
Minimum Increment	0.001°
Indexing Accuracy	±10sec
Max Work Load on the Table	100kg
Max Torque	380Nm

Direct Drive 5th Axis Range

Table Diameter - **Ø90 ~ 200mm**
 Clamping Torque - **75 ~ 500Nm**
 Rotation Speed - **150 ~ 200min⁻¹**



SAX-DD201BF3 Direct Drive 5th Axis Table

Diameter of Table	200mm	
Clamping System	Air	
Clamping Torque	Rotary 150Nm	Tilting 500Nm
Minimum Increment	0.001°	
Indexing Accuracy	Rotary	Tilting
Max Work Load on the Table	0-30° 30Kg	30-90° 30Kg
Driving Torque	Rotary 150Nm	Tilting 500Nm

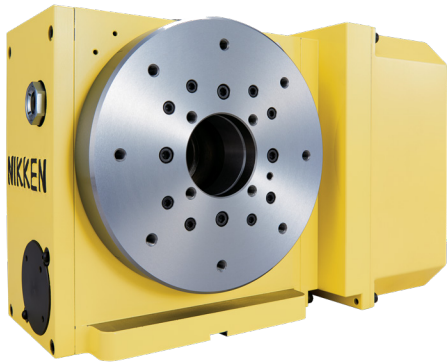
Single Axis CNC Tables

NIKKEN's small to medium single axis CNC Rotary Table range is designed to cater for a wide variety of processes, applications and machine tools where positional accuracy, reliable/repeatable performance and stability are key. Usable either as a direct CNC driven full forth axis or with the addition of our Alpha 21 controller (for either positioning or more complete control with Macro B) our solutions can be adapted to virtually any machine or process.

Our large single axis and Big Bore CNC Rotary Table options provide the performance demanded by larger scale processes, applications and machine tools. Here we excel with all the benefits and characteristics of the smaller range but with increased rigidity and considerations applied to the construction. Again usable either as a direct CNC driven full forth axis or with the addition of our Alpha 21 this range extends capabilities and expectations such components and requirements.

Compact 4th Axis Range

Table Diameter - Ø105 ~ 200mm
 Clamping Torque - 205 ~ 900Nm
 Rotation Speed - 22.2 ~ 66.6min⁻¹

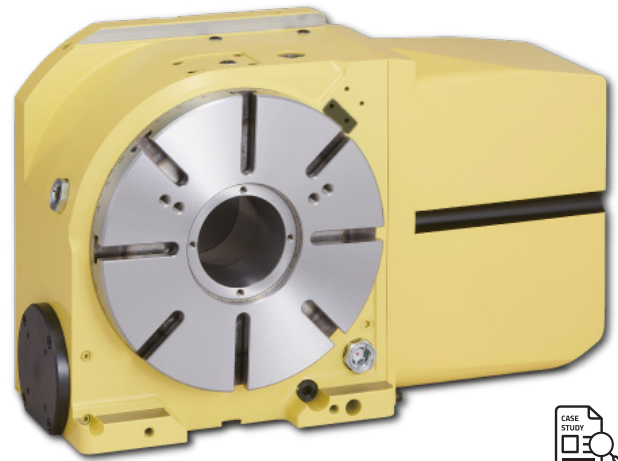


NCT200 Compact 4th Axis Table

Diameter of Table	200mm
Clamping System	Pneumatic
Clamping Torque	900Nm
Minimum Increment	0.001°
Indexing Accuracy	±20sec
Max Work Load on the Table	V=100Kg / H=200Kg
Driving Torque	151Nm

Mid Range 4th Axis Range

Table Diameter - Ø260 ~ 400mm
 Clamping Torque - 588 ~ 1760Nm
 Rotation Speed - 16.6 ~ 66.6min⁻¹



CNC260P Mid Range 4th Axis Table

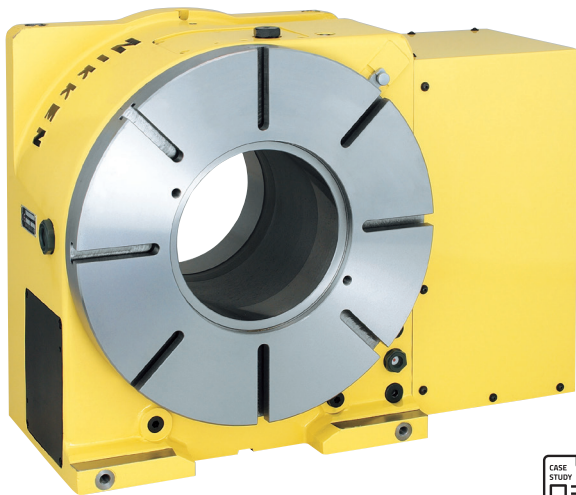
Diameter of Table	260mm
Clamping System	Pneumatic
Clamping Torque	1550Nm
Minimum Increment	0.001°
Indexing Accuracy	20sec
Max Work Load on the Table	V=175Kg / H=350Kg
Driving Torque	192Nm

FEATURES

- Monoblock high performance main spindle
- Ion-nitrided worm wheel HV1100
- Special steel/carbide worm screw system
- Dynamic high-pressure oil film effect (Z series)
- Bespoke work-holding available
- Long life durability and performance from entirely NIKKEN manufactured components

Big Bore 4th Axis Range

Table Diameter - Ø350 ~ 630mm
 Clamping Torque - 3331 ~ 65503Nm
 Rotation Speed - 5.5 ~ 33.3min⁻¹

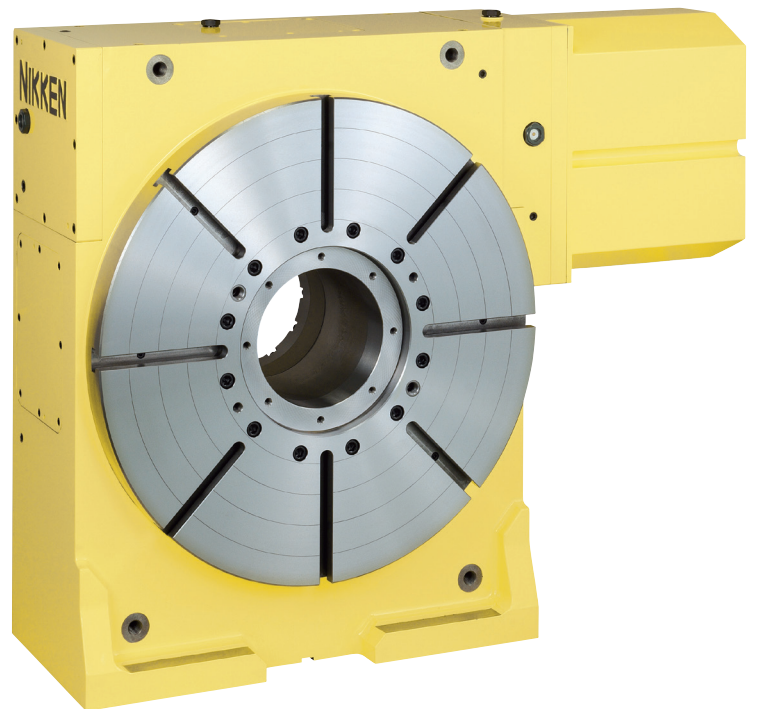


CNCB450 Big Bore 4th Axis Table

Diameter of Table	450mm
Clamping System	Hyd
Clamping Torque	7401Nm
Minimum Increment	0.001°
Indexing Accuracy	15sec
Max Work Load on the Table	V=350Kg / H=700Kg
Driving Torque	576Nm

Large 4th Axis Range

Table Diameter - Ø500 ~ 1600mm
 Clamping Moment - 4655 ~ 35000Nm
 Rotation Speed - 2.7 ~ 33.3min⁻¹



CNC803 Large 4th Axis Table

Diameter of Table	800mm
Clamping System	Hyd
Clamping Torque	27067Nm
Minimum Increment	0.001°
Indexing Accuracy	15sec
Max Work Load on the Table	V=2000Kg / H=4000Kg
Driving Torque	3168Nm

Twin Axis CNC Tables

NIKKEN's small to medium twin axis CNC Rotary Table range is designed to cater for a wide variety of processes, applications and machine tools where positional accuracy, reliable/repeatable performance and stability are key. Usable either as a direct CNC driven full forth axis or with the addition of one or even two of our Alpha 21 controllers (for either positioning or more complete control with Macro B) our solutions can be adapted to virtually any machine or process.

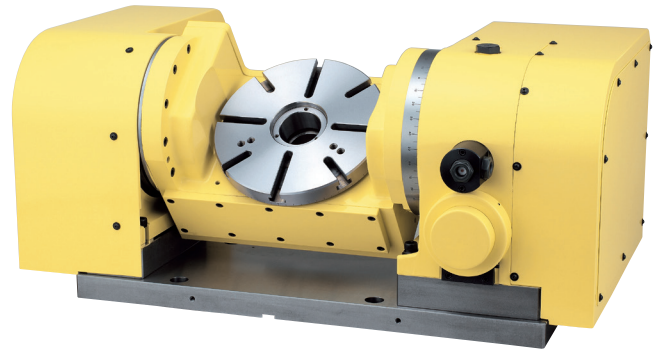
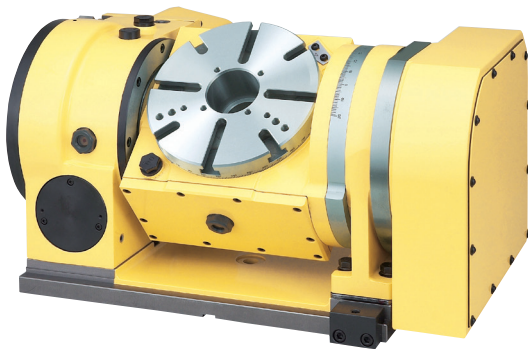
Our large twin axis CNC Rotary Table options provide the performance demanded by larger scale processes, applications and machine tools. Here we excel, with all the benefits and characteristics of the smaller range, but with increased rigidity and considerations applied to the construction. Again usable either as a direct CNC driven full forth axis or with the addition of our Alpha 21 this range extends capabilities and expectations such components and requirements.

Compact 5th Axis Range

Table Diameter - **Ø90 ~ 200mm**
 Clamping Torque - **205 ~ 612Nm**
 Rotation Speed - **11.1 ~ 44.4min⁻¹**

Mid Range 5th Axis Range

Table Diameter - **Ø230 ~ 350mm**
 Clamping Torque - **490 ~ 1568Nm**
 Rotation Speed - **5.5 ~ 33.3min⁻¹**



5AX-201 Compact 5th Axis Table

Diameter of Table	200mm	
Clamping System	Air/Hyd	
Clamping Torque	Rotary 303/588Nm	Tilting 303/612Nm
Minimum Increment	0.001°	
Indexing Accuracy	Rotary 20sec	Tilting 60sec
Max Work Load on the Table	0-30° 60Kg	30-90° 40Kg
Driving Torque	72Nm	

5AX-250 Mid Range 5th Axis Table

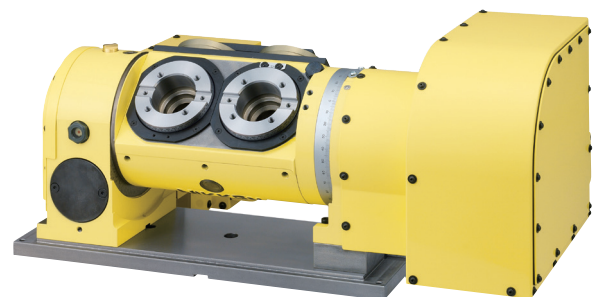
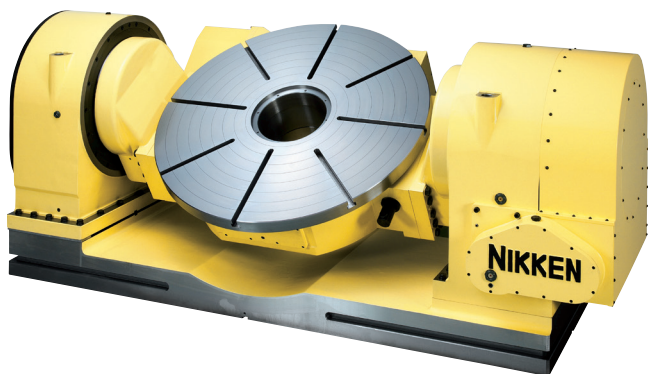
Diameter of Table	250mm	
Clamping System	Hyd	
Clamping Torque	Rotary 588Nm	Tilting 4900Nm
Minimum Increment	0.001°	
Indexing Accuracy	Rotary 20sec	Tilting 60sec
Max Work Load on the Table	0-30° 80Kg	30-90° 50Kg
Driving Torque	144Nm	

FEATURES

- Monoblock high performance main spindle
- Ion-nitrided worm wheel HV1100
- Special steel/carbide worm-screw system
- Ultra-precision index accuracy available as an option
- Long life durability and performance from entirely NIKKEN manufactured components
- Bespoke work-holding available

Large 5th Axis Range

Table Diameter -	Ø550 ~ 1200mm
Clamping Torque -	3430 ~ 19600Nm
Rotation Speed -	5.5 ~ 25min ⁻¹



5AX-1200 Large 5th Axis Table

Diameter of Table	1200mm	
Clamping System	Hyd	
Clamping Torque	Rotary 14700Nm	Tilting 19600Nm
Minimum Increment	0.001°	
Indexing Accuracy	Rotary 20sec (±5)	Tilting 60sec (±10)
Max Work Load on the Table	0-30° 2500Kg	30-90° 1500Kg
Driving Torque	3168Nm	

Extended Scope

To further enhance your productivity, in addition to our standard range of rotary tables, we also provide a choice of multi-spindle options. Available for both our single axis and twin axis rotaries we have a wide range of diameters and pitches to suit any demand.

Workholding



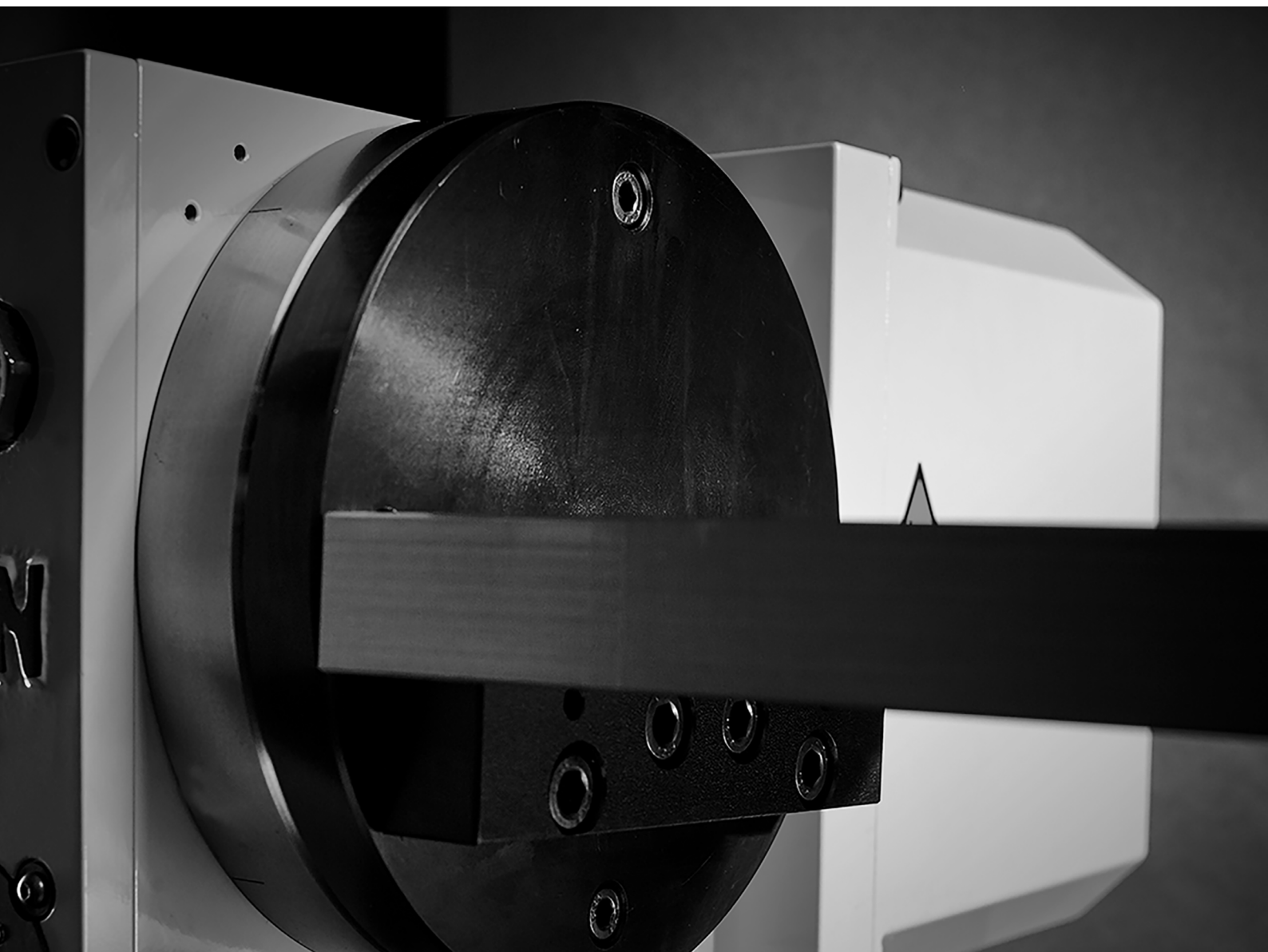
NIKKEN offer a complete range of work holding and fixturing accessories to suit any application to increase the productivity and scope of your platform. Whether it's a standard, off-the-shelf centring vice or fully bespoke fixturing package, our team of skilled engineers are available to create a package to suit your process for either direct supply or as part of a full turn-key solution.

Popular setups include but are not limited to; vices (with various jaw options), tombstones, pallets, trunnion setups and rail systems, all fully zero-point compatible to ensure optimal efficiency, accuracy and repeatability, in addition to being available to view at our Innovation Centre.

Both our own and our partner manufactured accessories and equipment are available on a fast turnaround.


Trunnion

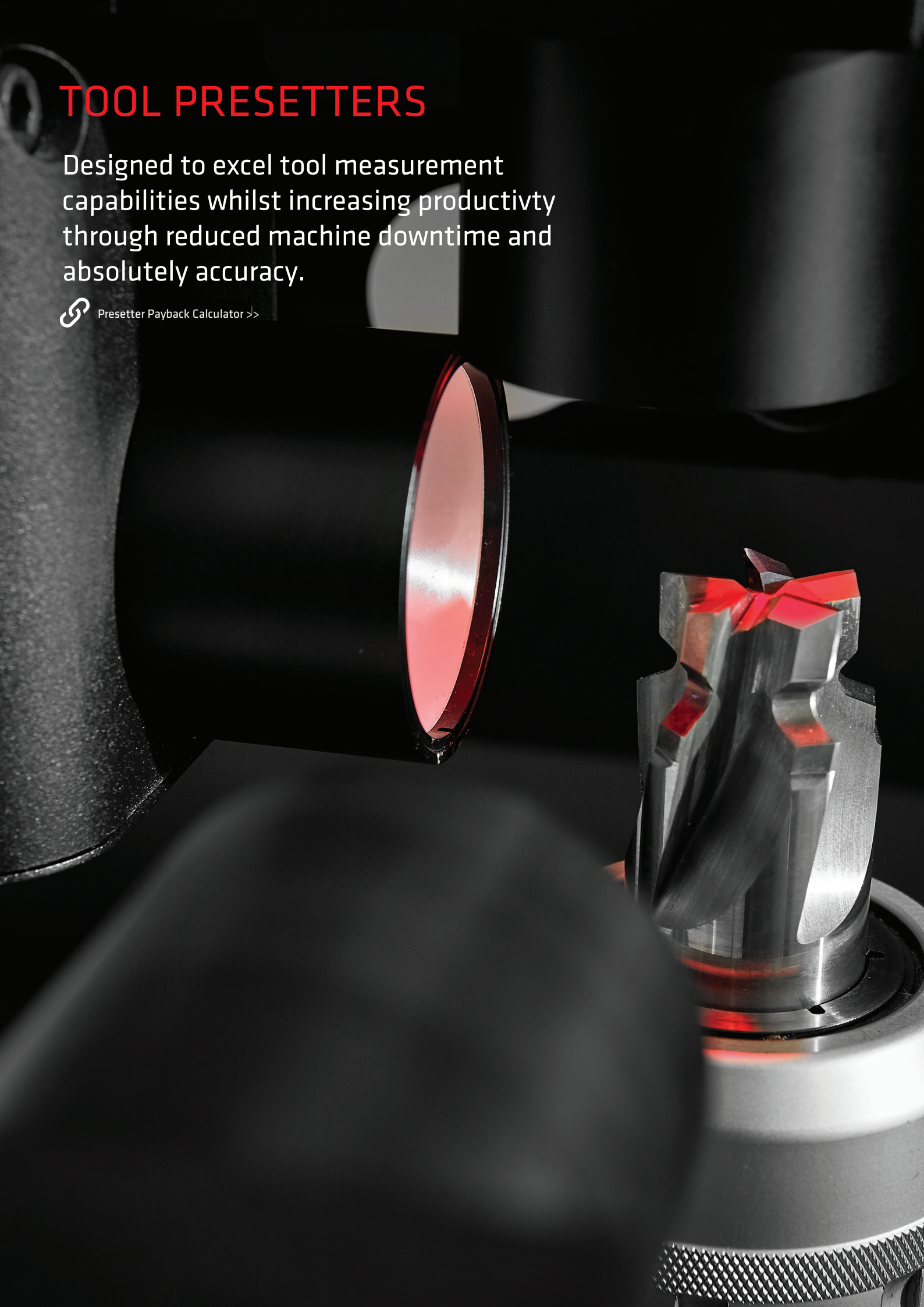
NIKKEN trunnions allow positioning and holding of single workpieces, multiple workpieces or even vices for significantly increased productivity and workflow. This solution has been developed to allow any single axis rotary table to be adapted quickly and easily, in conjunction with a suitable support, like NIKKEN's TAT solution. Our trunnions are suitable for practically every requirement, machine tool and bed length and are available in a variety of designs and lengths to meet any need.



TOOL PRESETTERS

Designed to excel tool measurement capabilities whilst increasing productivity through reduced machine downtime and absolutely accuracy.

 [Presetter Payback Calculator >>](#)



Principles of Presetting

The measuring of individual tools and assemblies is a necessity for the effective operation of a machine tool and its tooling. All CNC Machines, and to some degree, manual machines require offset values or references for the length & diameter of each tool.

Historically, the normal practise has been to establish tool offsets and references on the machine tool using various methods - the component/fixture, some form of gauge or a probe/laser. Machine tools earn money by cutting metal and producing parts, not measuring tool holders and assemblies. Therefore, it is therefore essential, in a modern production facility, to consider a dedicated presetting machine.



Did you know? This is the same software as NASA



E346 V+

- Autofocus function: all new operating mode and capability that allows the machine to measure the tools automatically
- Acquisition of X & Z values with automatic recognition of the cutting edge
- Available with vacuum clamping of the tool shank 9ISO/BT)
- Measuring priority for X or Z axis can be selected
- Absolute maximum measure search and capture with one complete revolution of the spindle.



HATHOR Six A Autofocus

- Autofocus function: all new operating mode and capability that allows the machine to measure the tools automatically
- Acquisition of X & Z values with automatic recognition of the cutting edge
- Electro-mechanical clamping of the tool shank
- Spindle holder identification system (SP-ID)
- Measuring priority for X or Z axis can be selected
- Absolute maximum measure search and capture with one complete fully automatic revolution of the spindle.



E46LA and NEW E68LA Autofocus

- Generate a DXF drawing.
- Automatic search and measurement for single edged tools
- Multi edged cutter acquisition cycle: automatic recognition and measurement of each single cutting edge detected during a complete revolution of the spindle
- Acquisition of X, Z or both values with recognition of whether the measured values are out of tolerance
- Absolute maximum measure search and capture with one complete fully automatic revolution of the spindle.
- Results are quickly visualised in a graphical format for a quick consultation or print
- Possibility to select single measurement for direct positioning on the selected cutter
- DXF profile creation function: automatic rotation of the tool to memorise the geometry developed and built up during full spindle rotation to automatically



E46LAIS and NEW E68LAIS Auto focus

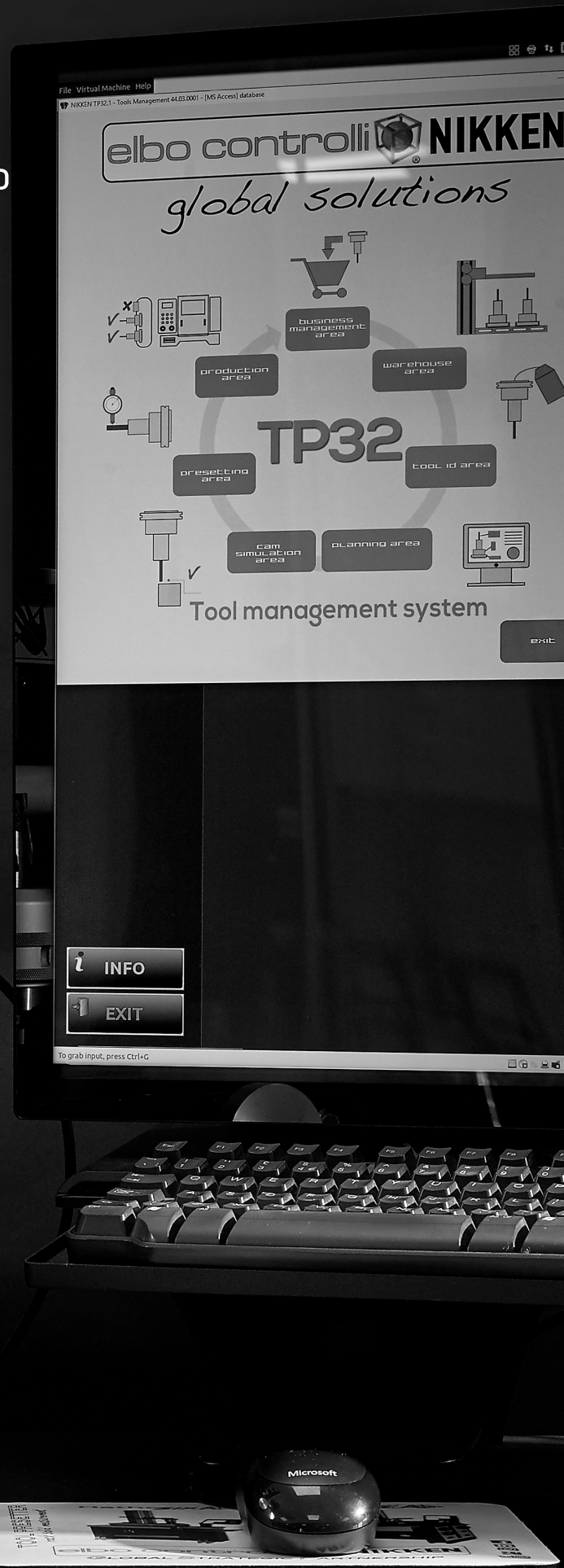
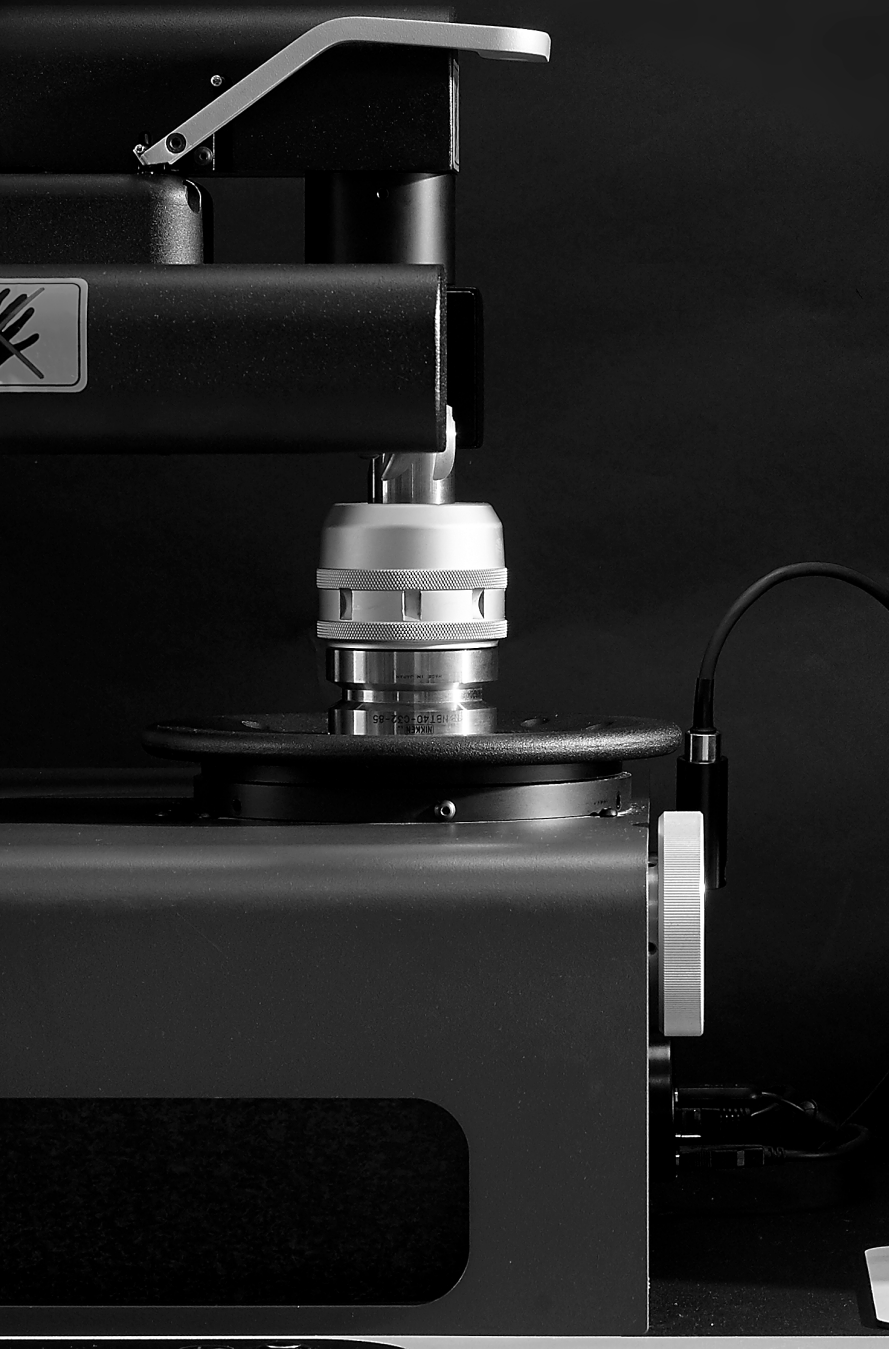
- NEW electronics embedded with twin Operating Systems.
- NEW operator interface through HD Twin Touch Screen system.
- Elbo Controlli NIKKEN TP32 '360 Degree' Tool Management system included as standard.
- Elbo Controlli NIKKEN TiD included capability as standard.
- E68LA IS presetter features NEW X and Z axis servo driven movement system.
- E68LA IS presetter is CN Ready (future software update will provide fully automatic 'CNC' tool measurement).

TOOL MANAGEMENT

Streamline manufacturing processes to save time and money with Elbo-Controlli-NIKKEN's 360° Tool Management Solutions



BOOK YOUR DEMO NOW >>>



TP32

TP32 is a complete 360 degree solution, developed to provide an all-round tool and stock control system for manufacturers and machine shops. TP32 meets the demands for businesses requiring a system capable of managing tool holders, cutting tools, spare parts, inserts, consumables and all associated data and information. TP32 is a program which is fundamentally dedicated to the management of the tool repository, which is woven in as a fundamental component of the productive cycle. As such, the data is inserted and managed within a system which allows all information to be accessible to all members across the manufacturing process and presented in the simplest and most straight forward and useable manner.

Through TP32, it is possible to have the stock repository under full control both as a management solution and also to the teams responsible for the composition and assembly of the individual components. In this way, everyone has all the necessary information that is required for effective production (component availability, assembly verification, etc.) including going as far as individual part and assembly administration (stock values, ordering replenishments from suppliers, e.t.c).



TiD

Tool ID allows you to manage and control tool identification and geometrical data seamlessly. TiD uses a handheld scanner at the presetter to scan and read a data matrix tag (similar to a QR code) located on the tool assembly. A similar scanner is located at the machine tool connected to either a Windows PC or touchscreen console on which the TiD software is also running.

This process allows the tool data (measured or theoretical) to remain centralized within the TiD database and is transferred from the presetter directly into the tool table on the respective machine tool.



The intuitive graphical interface within TiD allows configuration of the format and the mapping for the data required for the tool identification.



NICe Capabilities

The Innovation Centre demonstrates NIKKEN's capabilities on a range of multi-axis machining centres, which cover a diverse cross-section of industry requirements, supported both technically and academically by our advanced manufacturing engineering team.

The team can offer a range of services to support our customers, ranging from specific project-based activity to full technical partnership.

Services Available Include:

- Engineering and design consultancy
- First artefact machining
- Turn-key process delivery
- Offline programming
- Process optimisation
- Tooling recommendation & Cutting trials
- Benchmarking / comparative studies
- Dynamic Analysis-Resolving vibration issues hindering a process
- Investigation and process tuning
- Spindle condition monitoring
- Cutting force predictions using Vericut force module and Cut Pro



Machine Platforms

The NIKKEN Innovation Centre is home to an extensive range of CNC machine tools of varying forms. Given the range of formats, tapers and layouts, we aim to provide a representative machining platform no matter what the application. This enables our team of highly skilled engineers to take processes offline and run optimisation, proof-of-concept, and cutting trials, without affecting production environments. The suite of machines enables us to test the full range of NIKKEN products, and benchmark against other available solutions.



[Book your visit here >>](#)

Advanced NC Tooling System

NIKKEN are able to provide a complete range of innovative spindle tooling to optimise machine performance. All machining disciplines benefit from the additional rigidity and improved accuracy and repeatability delivered by our advanced range of spindle tooling. Capabilities are further enhanced with our range of universal and fixed angle heads that facilitate additional detail and features that would normally require further operations and resources.



[Five reasons to visit NICE](#)



SERVICE & MAINTENANCE

NIKKEN offer a range of service and maintenance options to help keep your equipment in optimum condition.

Combining unrivalled technical expertise paired with exceptional customer support, NIKKEN provide a range of service and maintenance solutions to maximise performance and productivity including:

- Rotary Table Services
- Presetter Calibration
- Repairs
- Health Checks
- Refurbishments
- Presetter Training
- Presetter Services
- Tooling Repairs
- Angle Head Repairs
- Table Installation & Retrofitting
- NIKKEN I/O Table Monitoring

ABOUT OUR SERVICE CENTRES

Maintaining your equipment is critical for increasing machine productivity and reducing the risk of break downs which is why we have NIKKEN Service Centres and local Service Engineers across Europe.

We're proud to support over 20,000 customers from our Service Centres, each stocked with an extensive range of genuine OEM approved spares to ensure repairs are quickly resolved.

As well as our Service Centre's in the UK, France, Germany, Spain & Italy, we have a team of 20 dedicated Service Engineers ready to assist customers and perform all of our service options regardless of your location in Europe.

KEY FACTS

- **20** Service Engineers across Europe
- **5 Service Centre's around Europe** serving all of Europe
- Over **50,000** stocker spare parts
- Over **250** years combined experience
- Support over **25,000** Rotary Tables and Tool Presetters across Europe.

FAQ

How often should I service my NIKKEN Rotary Table/Tool Presetter?

It is recommended that the rotary tables are serviced annually, but may require increased oil changes if running 24 hours a day.

What are the benefits of having my units serviced?

Maintained accuracy and repeatability, reduction of downtime, reduction of costly repairs, increased productivity and meeting of ISO quality standards.

How long does a rotary table service take to complete?

A rotary table service usually takes approximately 2-3 hours to complete. This can vary slightly depending on whether the unit is a 4th or 5th axis and its general condition and prior service history.

How long does a presetter calibration take to complete?

A typical presetter calibration usually takes 2-3 hours. On completion a pass certificate is then issued to the customer to update their ISO records. The pass certificate shows all tolerances and includes all measurements taken during the calibration.



NIKKEN Innovation Centre Europe

Advanced Manufacturing Park, Brindley Way,
Catcliffe, Rotherham, S60 5FS, UK

t: +44 (0)1709 366306 | f: +44 (0)1709 376683

e: info@nikken-world.com | w: www.nikken-world.com

Specifications are subject to change without notice
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The Spirit of Innovation