



MACHINE ACCESSORIES

Machining Center | Milling Machine | Lathe | Mill-turn machines

NO.55-1903A

www.syic.com



ABOUT US

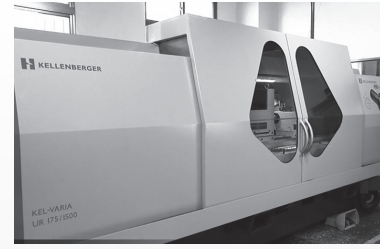
Shin-Yain Industrial Company was established in 1979. Presently, we have nine factories, which specialize in manufacturing precise tool holders, cutting tools, and accessories for lathes, milling machines, CNC machining centers, mill-turn machines, etc. For more than 30 years, SYIC sticks to upgrade the industry and holds a principle, "Quality creates reputation; reputation ensures quality" to pass the accreditation of ISO-9001 Quality Management System and ISO14001 Environmental Management System. With the establishment of ISO-9001 Quality Management System and ISO14001 Environmental Management System, it helps us to ensure and raise the quality of our company's products and make them improve steadily. Our goal is to promote SYIC to countries worldwide and make SYIC an international brand.

SYIC has produced 120 different kinds of products, which include 10,000 types. With nine factories, we have very sufficient stock. Now we have over 450 professional technicians. Also, we have set up professional examination department and precise instrument department to be in charge of examining the taper, concentricity, surface roughness, roundness and balancing of tool holders, cutting tools and other machine accessories.

ADVANCED MANUFACTURING CAPABILITIES

Concerning the manufacturing equipment, we have CNC computer lathes, Mill-turn machines and 5-axis machining centers from Mazak, an universal external and internal cylindrical grinding machine from Switzerland, CNC internal grinding machines and CNC external grinding machines from Japan, also threading machines, surface grinding machines and precision cylindrical grinding machines made domestically.

With all the equipment, SYIC supplies high quality and precision products to countries worldwide.



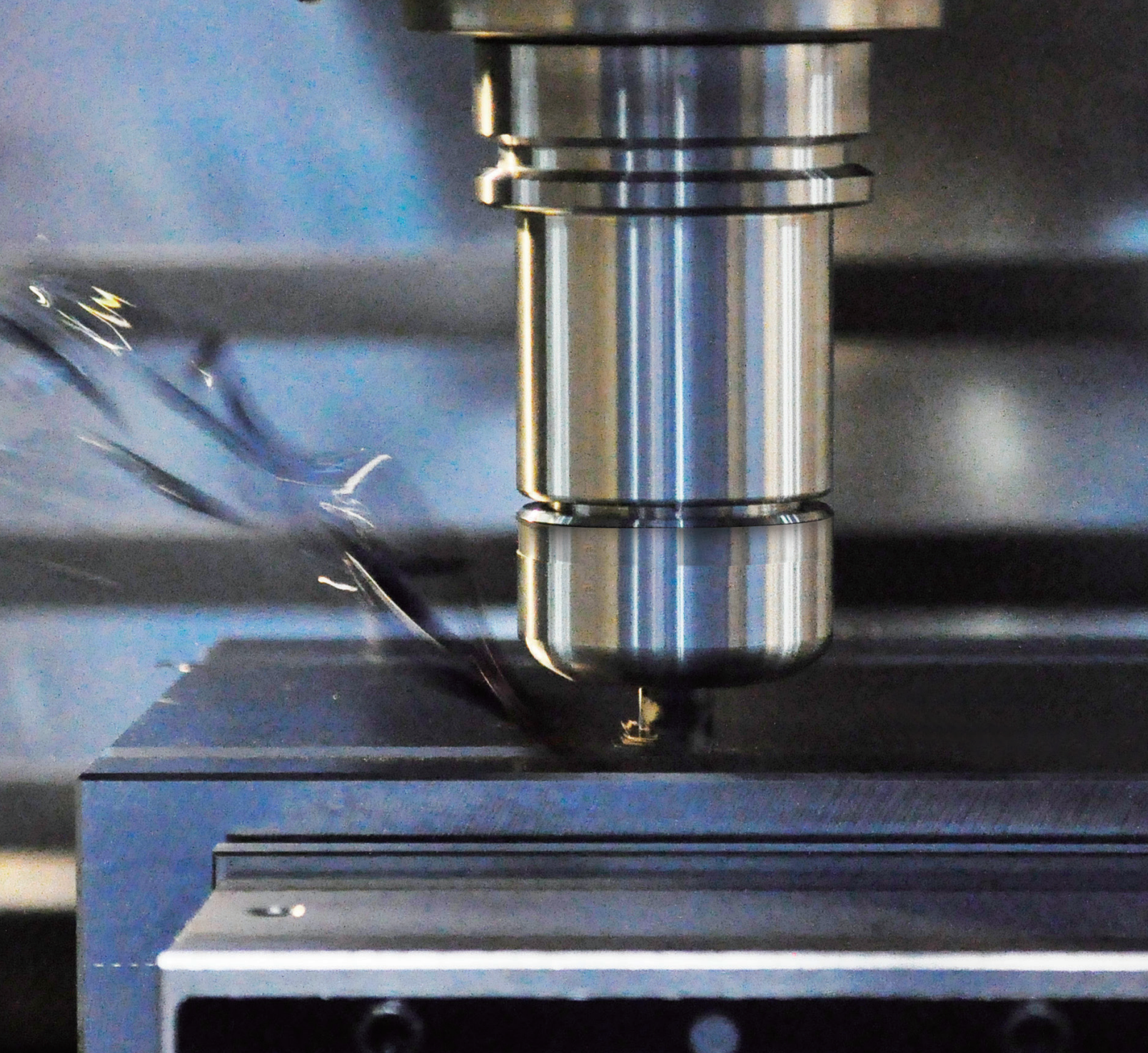
COMPACT INTRODUCTION





NY DUCTION





R&D TEAM EXPERTISE

SYIC have set up design dept. and R&D dept., which focus on developing and improving products. Each year we release new and advanced products. At present, we own 156 domestic patents and 205 overseas patents. Our products can be categorized into tool holder for milling machine (NT, MT), tool holder for machining centers like BT (JIS B6339), DAT (DIN69871), CAT (ANSI B5.50), HSK (DIN69893), PSC (ISO26623-1), VDI (DIN ISO10889), also angle head holder, cutting tool, and other accessories such as boring head, edge finder, Z axial preset gauge and OEM products.

SYIC make efforts in providing quality guaranteed products and solutions to customers. With yearly released advanced products, SYIC help customers improve the machining process and move forward together with them.

PRODUCT CATEGORY

7:24 SERIES | HSK SERIES | PSC SERIES | PRODUCT ACCESSORIES

SPINDLE MASTER BAR [PRECISION TYPE]	08
SILENT DAMPING GENIUS [FOR BORING SERIES]	09
SFC SHRINK FIT CHUCK [CUL TYPE / CP TYPE]	10
SKX COLLET CHUCK SYSTEM	11
SAG-D ANGLE HEAD HOLDER [FOR DUAL SIDE MACHINING]	12
EBL SLIM-FIT COLLET CHUCK SYSTEM	13
STA SYNCHRONIZED TAPPING HOLDER	14
PNER & PTER COLLET CHUCK SYSTEM	15
PSC ONE-PIECE BORING SYSTEM	16
SAF RUNOUT ADJUSTABLE HOLDER	17
PSC SYSTEM FOR LATHE (EXTERNAL SERIES INTERNAL SERIES)	18-19
ANGLE HEAD HOLDER SERIES	20-21
ROUGH BORING FINISH BORING	22-23
SMU BLACK KNIGHT FINISH BORING HEAD	24
HBL COLLET CHUCK + HLB FACE CONTACT TYPE CUTTING TOOLS	25
UT COLLET CHUCK SYSTEM	26
MLD MULTI-LOCK MILLING CHUCK SERIES	27
BLANK SERIES	28
SMALL TOOL HOLDER	29
FNER FAN NUT	30

7:24 SERIES

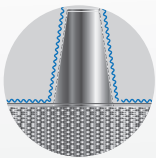
MAS 403
ANSI B5.50
DIN 69871-A



SPINDLE TYPE	FEATURES	TYPES	AVAILABLE TAPER
▶ 7:24	<ul style="list-style-type: none"> ▶ TAPER 7:24 ▶ TAPER TOLERANCE < AT3 ▶ SURFACE ROUGHNESS Ra < 0.25µm ▶ ROUNDNESS < 0.6µm 	<ul style="list-style-type: none"> ▶ REGULAR 	<ul style="list-style-type: none"> ▶ BT 15.20.30.40.50 ▶ CAT 40.50 ▶ DAT 30.40.50 ▶ ISO 15.20.25.30.40
		<ul style="list-style-type: none"> ▶ DualDRIVE+ 	<ul style="list-style-type: none"> ▶ SBT 30.40.50 ▶ SCAT 40.50 ▶ SDAT 40.50

100% CONTACT

- ▶ DualDRIVE+ tool holders can be used for regular spindles and double face contact spindles. With DualDRIVE+ tool holders and spindles, 100% contact can be achieved.



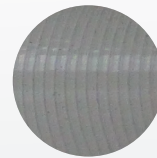
Regular Holders



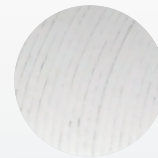
DualDRIVE+ Holders

INCREASE RIGIDITY, IMPROVE THE MACHINING

- ▶ DualDRIVE+ tool holders improve rigidity, decrease vibration, and improve the machining capacity substantially.
- ▶ Improve the processing accuracy on workpiece surface and extend tool life.
- ▶ The surface roughness of workpiece is improved.



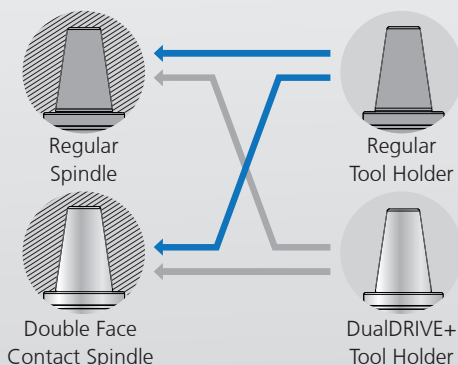
Regular Holders



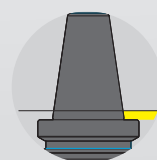
DualDRIVE+ Holders

ECONOMICAL AND COMPATIBLE

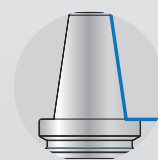
- ▶ DualDRIVE+ tool holders and spindles are compatible with regular tool holders and spindles.



- ▶ The perfect combination of DualDRIVE+ system between machine spindles and tool holders maximizes the function of double face contact. DualDRIVE+ tool holders can also be used for regular machine spindles, but without double face contact. To achieve double face contact performance, both DualDRIVE+ machine spindles as well as DualDRIVE+ tool holders are required.



Clearance



100% Contact

HSK SERIES

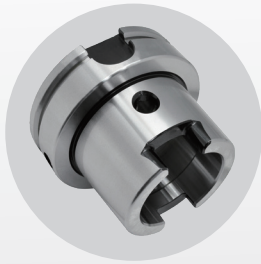
DIN 69893



SPINDLE TYPE	FEATURES	AVAILABLE TAPER
▶ HSK	<ul style="list-style-type: none"> ▶ TAPER 1:9.98 ▶ SURFACE ROUGHNESS $R_a < 0.25\mu\text{m}$ ▶ ROUNDNESS $< 0.6\mu\text{m}$ ▶ DOUBLE FACE CONTACT 	<ul style="list-style-type: none"> ▶ TYPE A (69893-1) 32.40.50.63.80.100 ▶ TYPE E (69893-5) 25.32.40.50.63.80.100 ▶ TYPE F (69893-6) 40.50.63.80 ▶ TYPE T (ICTM) 32.40.50.63.80

HOLLOW SHANK FOR HIGH SPEED

- ▶ Modern machining process often requires higher revolutions. The design of HSK hollow shank decreases weights by 40% compared with BT holders. With double face contact and high torque transmission in X and Z axis, HSK are ideal for high speed machining.



HSK-T (ICTM)

- ▶ The tolerance requirements for the key sizes on HSK-T machine spindles and tool holders are stricter to ensure the positioning accuracy of insert tips during turning process.



HIGH PRECISION

- ▶ Small-scale machining requires revolutions higher than 40,000rpm, small holders of high precision ensure the balance and concentricity for stable processing.



BLANK

- ▶ Make your own tool! HSK blanks allow users to process the shapes they want. Different diameters can be custom made.



PSC SERIES

ISO 26623-1

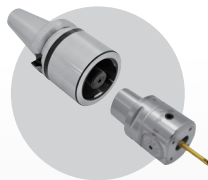


台灣精品 2012
TAIWAN EXCELLENCE

SPINDLE TYPE	FEATURES	AVAILABLE TAPER
▶ PSC	<ul style="list-style-type: none"> ▶ TAPER 1:20 ▶ FORM ACCURACY $\pm 2\mu\text{m}$ ▶ SURFACE ROUGHNESS $R_a < 0.25\mu\text{m}$ ▶ DOUBLE FACE CONTACT 	▶ PSC 32.40.50.63.80.80X

STRENGTHENED STRUCTURE

- ▶ PSC tooling system is in triangle curve form of polygon, adapting 1/20 tapered coupling structure for two-face positioning and clamping. There is no drive key, tool life can be extended.



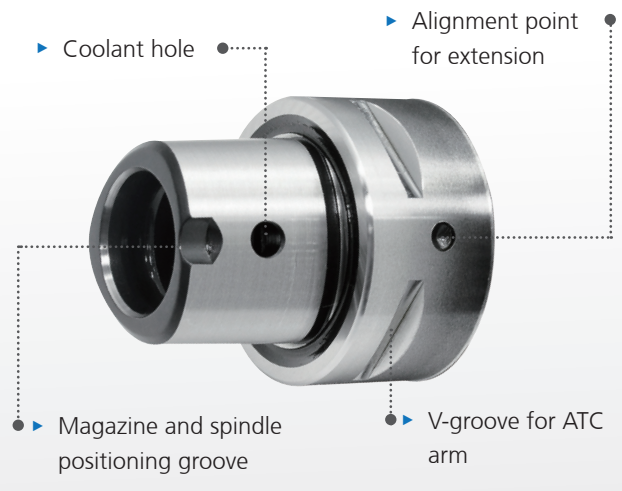
HIGH PRECISION

- ▶ The repeat precision of coupling structure in X, Y and Z directions is $\pm 2\mu\text{m}$, the total runout is $3\mu\text{m}$.



FEATURES

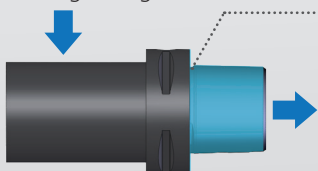
- ▶ Coolant hole
- ▶ Alignment point for extension
- ▶ Magazine and spindle positioning groove
- ▶ V-groove for ATC arm



HIGH TORQUE TRANSMISSION AND HIGH RIGIDITY

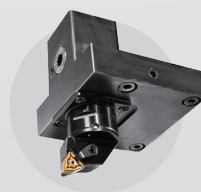
- ▶ Ultra-high torque transmission and bending strength of PSC tooling system increase production efficiency.

- ▶ High bending strength
- ▶ Double faced positioning and clamping.



PROMOTE EFFICIENCY

- ▶ Quick tool change system is applicable for lathes, easy to operate and quick for changing tools. The modular design enhances machine utilization rate and decreases machine downtime.



QUICK TOOL
CHANGE
<30sec.

PRODUCT ACCESSORIES

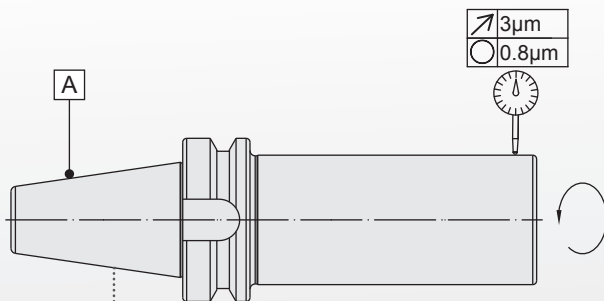
COLLET TYPE					SHRINK TYPE
					
PNER	PTER	UT	ER	SKX	SFC
DRAW BOLT TYPE			MILLING CHUCK	SYNCHRON	SIDE LOCK
					
SBL	EBL	HBL	MLD	STA	SLN
BORING TYPE			FACE MILL	DRILL CHUCK	OIL HOLE
					
SCK	SBJ	SMB	FMA / FMB	SPU	OSL
SIDE CUTTER	FACE MILL CUTTER	INDEXIBLE CUTTER			
					
SCA	SFMC	END MILL			

SPINDLE MASTER BAR PRECISION TYPE

PERSISTENT PRECISION

SPINDLE precision MASTER the accuracy BAR

- ▶ Optimal for checking machine spindle runout accuracy.
- ▶ Measuring spindle accuracy maximizes tool holder performance and increases productivity.
- ▶ Regular spindle inspection with Spindle Master Bar helps detect potential problems of spindle and saves downtime and costly repair cost.



- ▶ Available in DualDRIVE+ SBT, SCAT, PSC & HSK.

TAPER SHANK PRECISION	AT2
ROUNDNESS	0.8µm
SURFACE ROUGHNESS	Ra < 0.15µm
RUNOUT ACCURACY	3µm
CYLINDRICAL	5µm

REMINDER

- ▶ Supplied with an aluminum box for vertical storage.
- ▶ It's recommended to store in stock vertically to prevent deformation.

※ For runout accuracy 5µm Spindle Test Bar, please refer to NO. 75 general catalog.

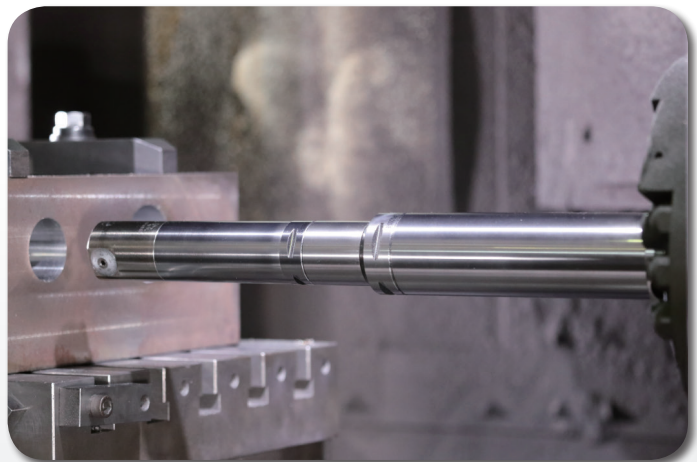
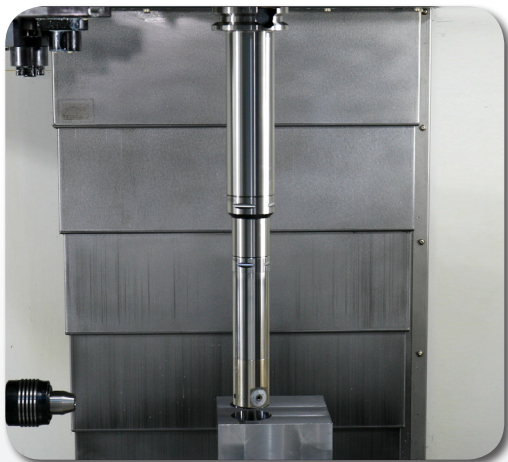
BUILT-IN DAMPING MECHANISM

SILENT DAMPING GENIUS

FOR BORING SERIES



Silent Damping Genius is an anti-vibration technology for long overhanging and deep cavity operations.



- ▶ Silent Damping Genius equipped with damping mechanism eliminates vibration, improves workpiece surface finish, roundness, tool life, maintain spindle precision, and increase the overall production efficiency!



REMINDER

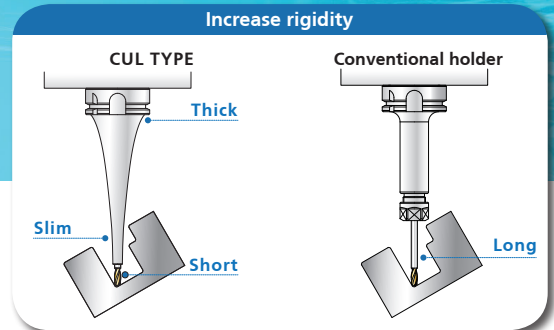
- ▶ The closer vibrating point gets to the damping mechanism, the higher damping effect will be.
- ▶ To maintain runout accuracy, all damping products need to be placed upright in stock.

SFC SHRINK FIT CHUCK

CUL TYPE / CP TYPE

Perfect design for 5-axis machining!

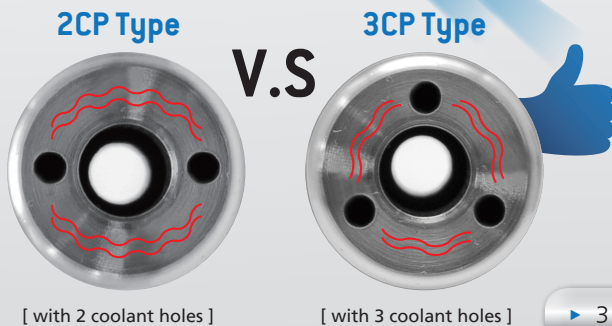
CUL TYPE
CURVE LINE



- Increase rigidity!**
- Avoid interference!**
- Prolong tool life!**



- ▶ Coolant fluid from 3 coolant holes concentrates on tools, optimizing heat dissipation and chip evacuation, and ensuring better surface finish of workpiece.
- ▶ The CP type of 3 coolant holes allows internal holes to expand evenly free from deformation and maintain good runout accuracy, extending the use life of holder.



▶ 3 coolant holes allow more even hole expansion!



- HIGH SPEED
- HIGH RIGIDITY
- HIGH PRECISION
- 5 μ m



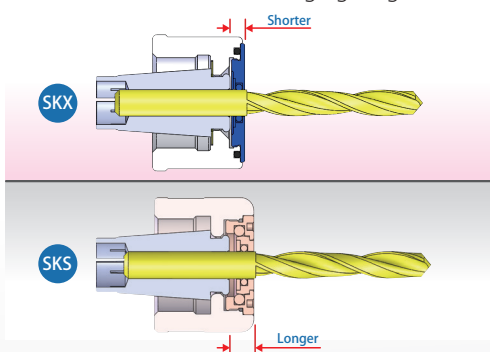
SKX COLLET CHUCK SYSTEM



- SKX sealed nuts and sealed caps are capable of coolant pressure up to 70 bar.



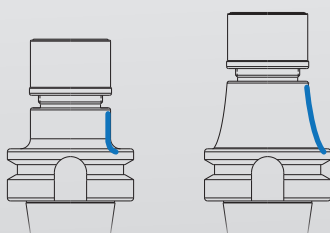
- Compared to other brand, shorter distance between sealed cap, sealed nut and collets allows shorter tool overhanging length.



- Special SKX sealed cap holes avoid the problem of slipping when fastening.



- Besides the standard design of straight neck, SKX tool holders of length over 120mm also have curved line design for better rigidity and less vibration.



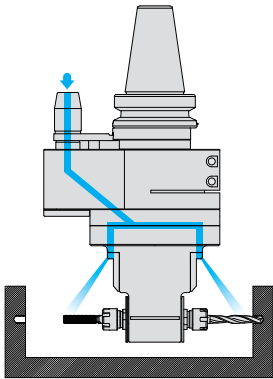
- SKX tool holders and collets are exchangeable with other brands.

- The OD of SKX nut is the same with other brand, so it's workable with other brand spanners.



- REDUCING PRODUCTION COST
- IMPROVING EFFICIENCY
- CONSERVING TOOL MAGAZINE SPACE

SAG-D ANGLE HEAD HOLDER [FOR DUAL SIDE MACHINING]

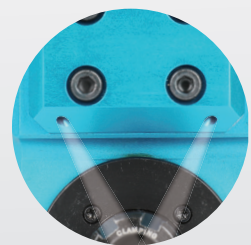


▶ Gear ratio 1:1.

- ▶ Direction of rotation same as machine spindle.
- ▶ Cutting depth recommendation $\leq 2\text{mm}$.
- ▶ For tool shank dia.: 1~13mm.

▶ BT40/ BT50/ SBT40/ SBT50/ HSK63A are available.

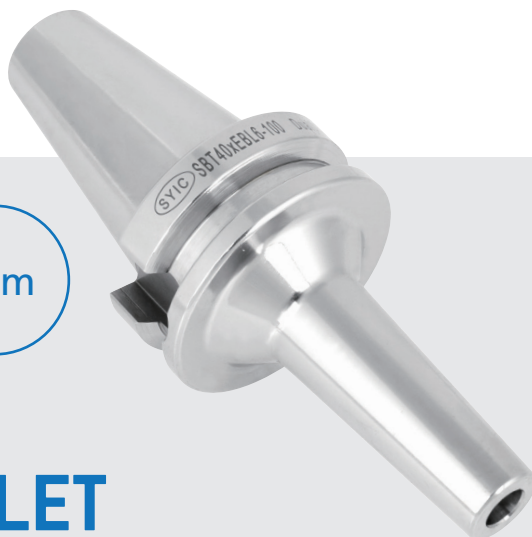
▶ Weight: 5.5kg, suitable for ATC system. The speed can reach 6,000 rpm and the maximum torque is 15 N-m.



▶ Max. coolant pressure: 7kgf/cm².

▶ Direction of rotation opposite to machine spindle.

- HIGH SPEED
- SHORTER TOOL OVERHANGING LENGTH
- SLIM DESIGN
- 5 μ m



EBL SLIM-FIT COLLET CHUCK SYSTEM

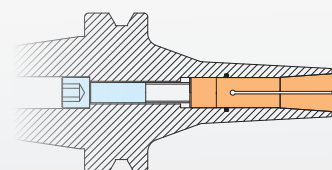
- Taper option: BT/SBT, CAT/SCAT, DAT/SDAT, HSK, PSC, ISO30 and straight shank.



- EBL collet is designed to have extended length which can shorten the tool overhanging length and improve the machining stability. EBL sealed collet is also available.



- The optimized design of thicker neck improves the machining rigidity and eliminates vibration.



Comparison:

Cutting Data
 Material: S45C
 S: 4500rpm
 F: 500mm/min
 Ap: 12mm
 Ae: 0.3mm



BT40 x SBL6 - 70

SBL

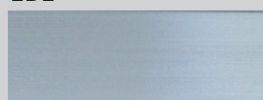


Surface Roughness
Ra: 1.695 μ m



BT40 x EBL6 - 70

EBL



Surface Roughness
Ra: 0.216 μ m

Better

- COMPENSATION FOR INACCURACY
- BETTER TAP USE LIFE
- COOLANT THROUGH



STA SYNCHRONIZED TAPPING HOLDER

▶ BT / SBT, CAT / SCAT, DAT / SDAT, HSK and PSC are available.

▶ Modular design: tap holder body with adapter is modular design, lowering purchase cost.

▶ The special structure design provides compensation for the axial inaccuracy when tapping, improving the thread surface roughness.



▶ If interference occurs, longer adapter can be custom made.

▶ Can be used for coolant-through tap.

▶ The tap use life is increased by at least 2 times compared to traditional tapping system.

Tap capacity	
▶ M3~M5	▶ M3~M16
▶ M3~M6	▶ M6~M18
▶ M3~M12	

- HEAVY DUTY MACHINING
- HIGH RIGIDITY
- HIGH PRECISION
- 3 μ m



PNER & PTER COLLET CHUCK SYSTEM

FEATURES

- ▶ Standard balanced at G2.5 25,000rpm with inspection report.
- ▶ PNER collet is well covered in PNER tool holder, improving overall runout accuracy and the machining stability.
- ▶ PNER improves the surface finish of workpiece, reduces the total processing time, extends the tool use life and prolongs the durability of machine spindle precision. Therefore, PNER system reduces the total production cost and improves the efficiency.

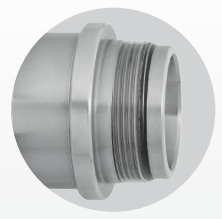
▶ PTER:



MINI TYPE



- ▶ PNER nuts without slots reduce the wind shear at high speed, avoiding tools from vibrating due to the audio frequency arisen by wind shear.



- ▶ There's a design of straight parts above and below the thread, which correspond to the nut, on the front of PNER tool holder. After the nut is locked with the tool holder it makes the tolerance more accurate which improves the runout of tool holder and machining stability.



- ▶ Use PNER coolant nut and SR sealed ring for coolant through cutters.

- ▶ Runout accuracy at 4D: within 0.003mm.



0.003 mm



- ▶ Roundness < 0.6 μ m
- ▶ Surface roughness Ra < 0.2 μ m

- ▶ The tolerance requirement of tool shank diameter: h6

- POLYGONAL TAPER
- RIGIDITY IMPROVED
- MODULAR DESIGN

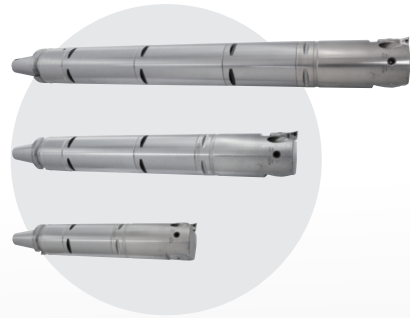


PSC ONE-PIECE BORING SYSTEM

- ▶ Use polygonal taper as coupling structure, achieving high torque transmission and rigidity.

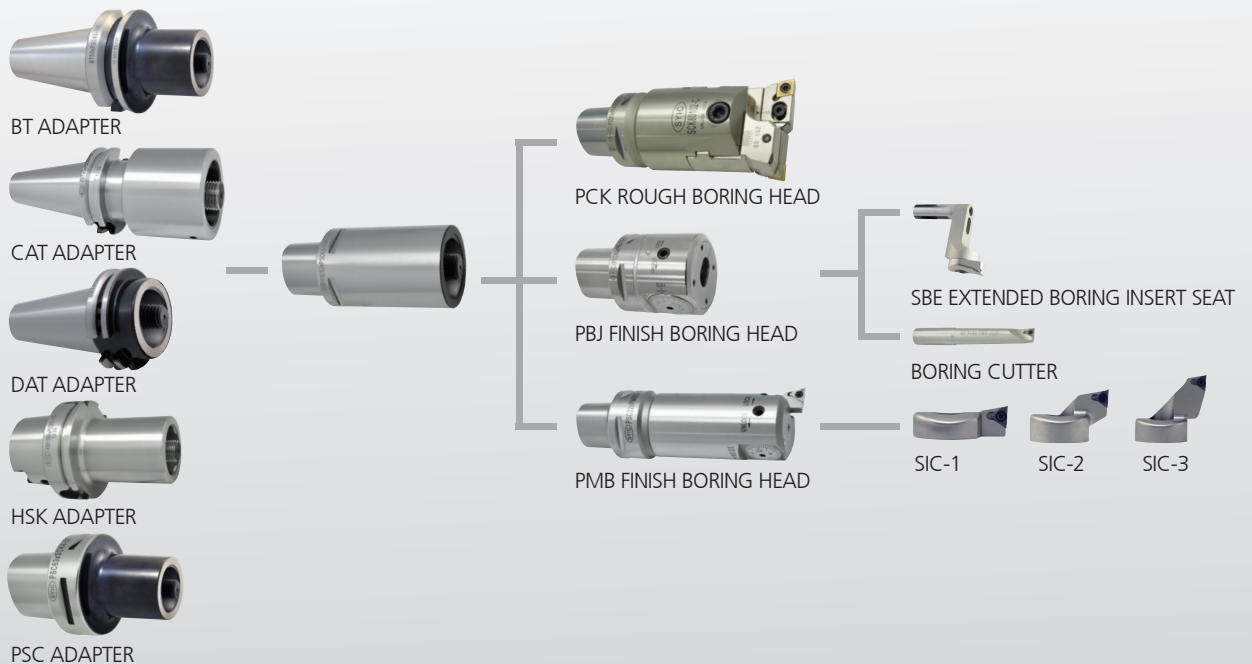


- ▶ PSC one-piece boring head has high rigidity and is convenient to extend the length with PSC extensions.



- ▶ Modular design: applicable for different spindles with the converting of adapters and convenient to change different PSC one-piece boring heads.

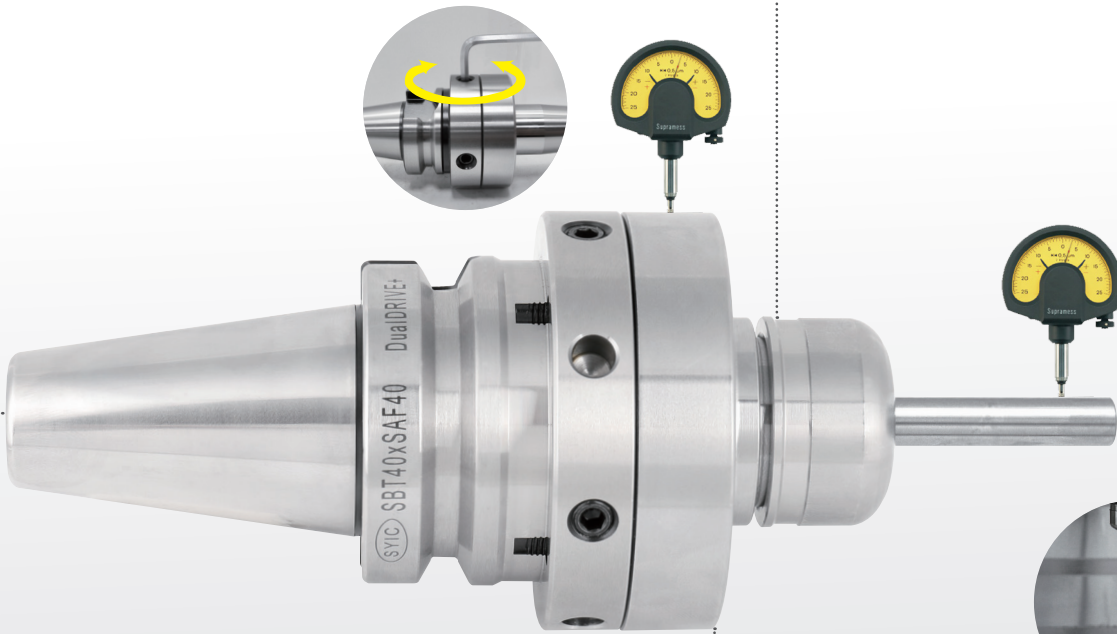
- ▶ To enlarge boring diameter, use different insert seat for PMB finish boring head and use SBE extended boring seat for PBJ finish boring head.



PRECISION
ADJUSTBLE

5 μ m

SAF RUNOUT ADJUSTABLE HOLDER



► Output choices: SK3, PNER,UT and SFC.

0 ~ 5 μ m



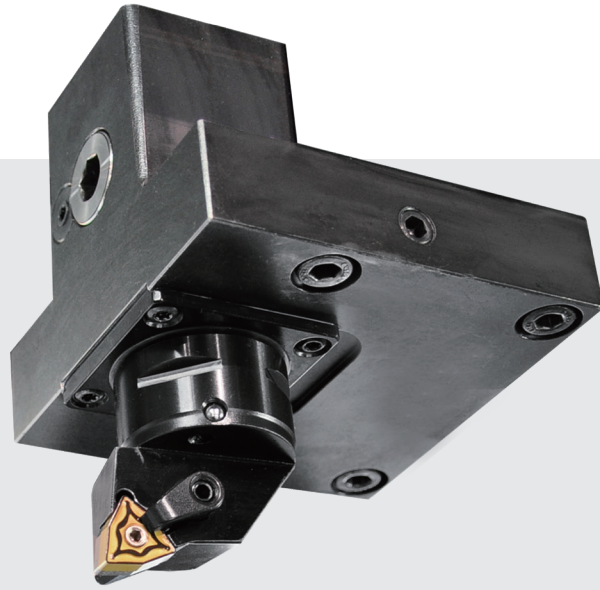
► BT/SBT, CAT/SCAT, DAT/SDAT, HSK and PSC are available.

► Drive axial and radial set screws for precision adjustment and the runout accuracy of the tool edge can be adjusted within 5 μ m.



- QUICK TOOL CHANGE
- HIGH COOLANT PRESSURE
- HIGH PRECISION

PSC SYSTEM FOR LATHE (EXTERNAL SERIES)

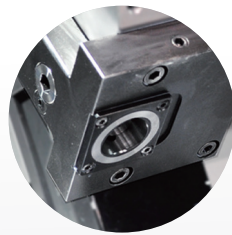


PSC QUICK TOOL CHANGE SYSTEM FOR LATHE

- ▶ Conventional tool holders take longer time on tool change, PSC system saves time on tool change to increase the time for production.



Conventional Tool Holders



New Tool Holders

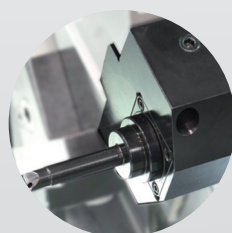
POLYGONAL TAPER (ACCURATE POSITIONING)

- ▶ Use polygonal form from PSC as the coupling structure to achieve ultimate repeated positional precision which is $\pm 2\mu\text{m}$.



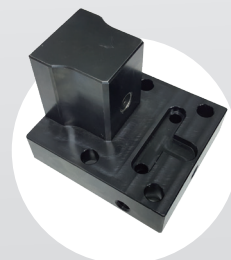
DURABLE FOR HIGH PRESSURE COOLANT SUPPLY

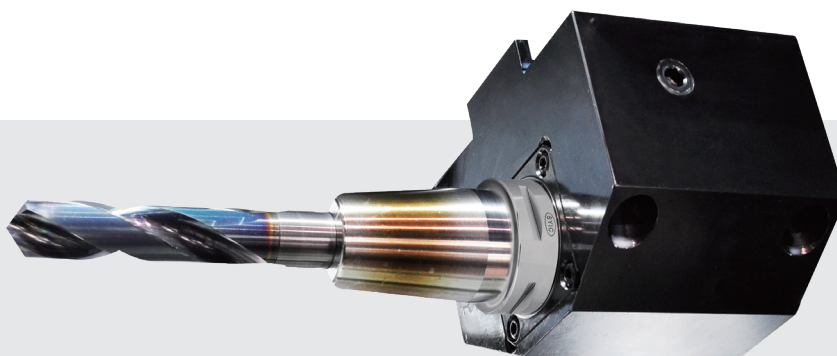
- ▶ Use PSC system with high pressure coolant supply up to 70 bar can improve the efficiency and extend tool use life.



CUSTOM MADE AVAILABLE UPON REQUEST

- ▶ The designs and dimensions of turning tool posts are varied for different brands, the new quick change system of internal and external turning tools can be custom-made upon request.





PSC SYSTEM FOR LATHE [INTERNAL SERIES]



APPLICATION OF SHRINK FIT CLAMPING

- ▶ With PSC system, shrink fit chucks can be used to improve the clamping power and runout accuracy.

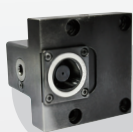


ONE-PIECE DESIGN OF INTERNAL TURNING TOOLS AND HIGH SPEED DRILLS

- ▶ With these tool holders, you can have better productivity and improved processing efficiency.



PSC SYSTEM



One-Piece Tool Post



PSC / MWLN



PSC / DTJN



PSC / MDJN



One-Piece Tool Post



PSC / SPD
High Speed Drill



PSC / SLN
Side Lock
End Mill Holder



PSC / SFC
Shrink
Fit Chuck

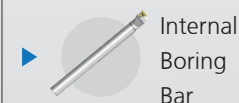
Internal Boring Bar



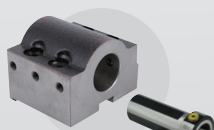
PSC / STUP

PSC / SCLC

PSC / SDUC



Internal
Boring
Bar



PSC / ER
Collet
Chuck



ER Collet



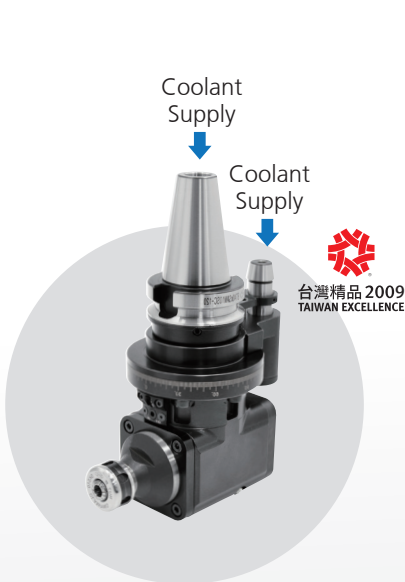
ER Sealed
Collet



Nut

- LATERAL MACHINING
- 360° ADJUSTMENT
- GEAR RATIO 1:1

ANGLE HEAD HOLDER SERIES



SAM

- ▶ Light Machining [Suggested $A_p \leq 2\text{mm}$]



SAC

- ▶ Middle Machining [Suggested $A_p \leq 3\text{mm}$]



SAR

- ▶ Heavy-duty Machining [Suggested $A_p \leq 4\text{mm}$]

TYPE	INTERFACE	OUTPUT	MAX REVOLUTION	DIRECTION OF ROTATION	COOLANT OUTLET	MAX TORQUE	WEIGHT (KGS)
▶ SAM	BT/SBT 40.50 CAT/SCAT 40.50 DAT/SDAT 40.50 HSK63A.HSK100A	ER. SKS. SCA (Not Interchangeable)	4000rpm	Opposite to machine spindle	Through cutting tool or coolant nozzle	20 N-m	5.2 ~ 8.8
▶ SAC	BT/SBT 40.50 CAT/SCAT 40.50 DAT/SDAT 40.50 HSK63A.HSK100A	ER. SKS. Face Mill Cutter. PNER. SCA (Not Interchangeable)	3000rpm	Opposite to machine spindle	N/A	25 N-m	6.4 ~ 8.5
▶ SAR	BT/SBT 50 CAT/SCAT 50 DAT/SDAT 50	SBT30 Tool Holders PSC50 Tool Holders Face Mill Cutter. MLD TPYE (Not Interchangeable)	3000rpm	Same as machine spindle	Coolant nozzle	50 N-m	16.1



SAD

- ▶ Light Machining
[Suggested $A_p \leq 1.5 \text{ mm}$]



SAG

- ▶ Light Machining
[Suggested $A_p \leq 2\text{mm}$]



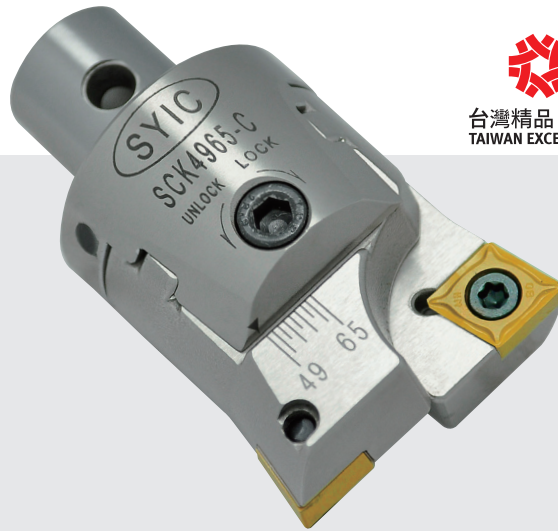
SAU

- ▶ Middle Machining
[Suggested $A_p \leq 4\text{mm}$]

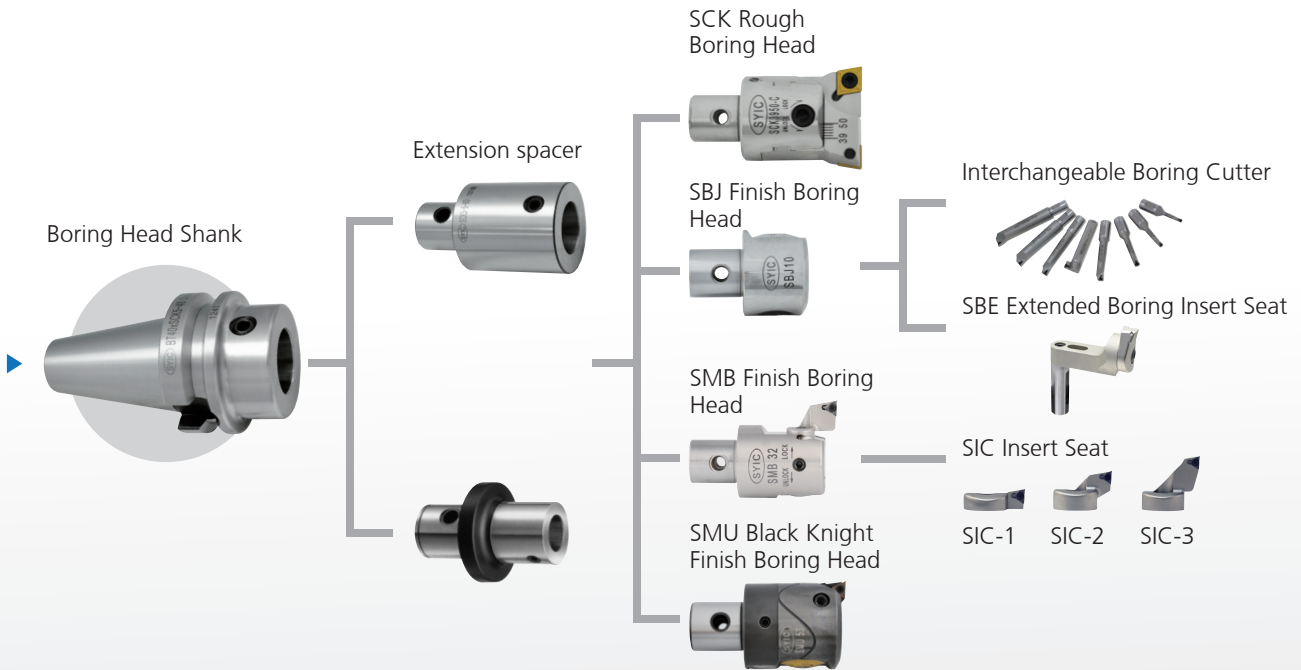


TYPE	INTERFACE	OUTPUT	MAX REVOLUTION	DIRECTION OF ROTATION	COOLANT OUTLET	MAX TORQUE	WEIGHT (KGS)
▶ SAD	SBT30.40 HSK63A	EBL8. SKS10 (Not Interchangeable)	6000rpm	Opposite to machine spindle	N/A	10 N-m	2.6 ~ 3.8
▶ SAG	BT/SBT 40	ER11. SKS6 (Not Interchangeable)	6000rpm	Opposite to machine spindle	Coolant holes	15 N-m	5.5
▶ SAU	BT/SBT 50 CAT/SCAT 50	ER32	4000rpm	Opposite to machine spindle	N/A	40 N-m	21

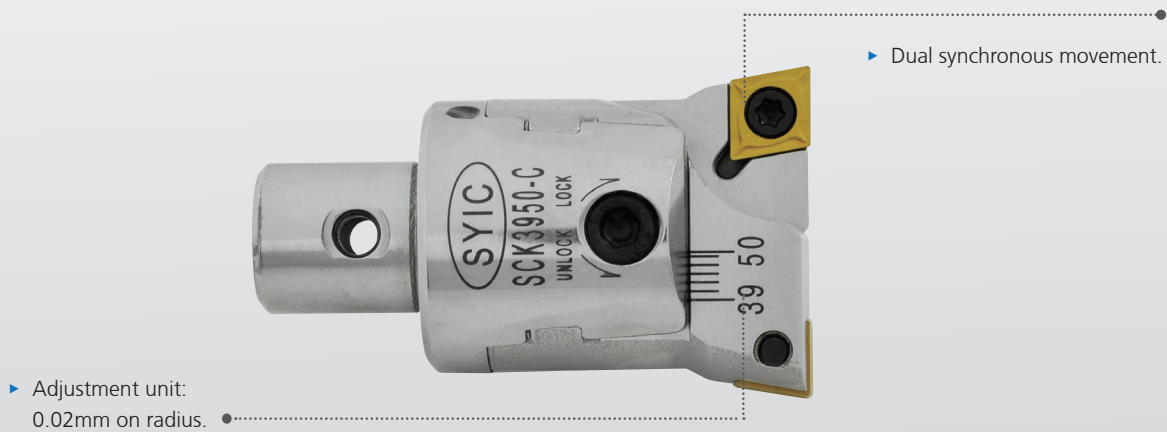
- MODULAR SCK SYSTEM
- HIGH RIGIDITY
- HIGH PRECISION



ROUGH BORING



ROUGHING TWIN ADJUSTMENT BORING HEAD



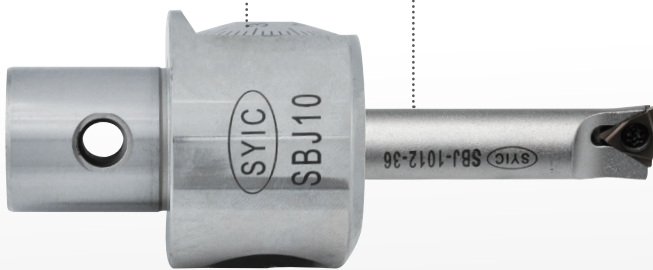


FINISH BORING

SBJ BORING HEAD FOR FINISHING

▶ Adjustment unit:
0.005mm on radius.

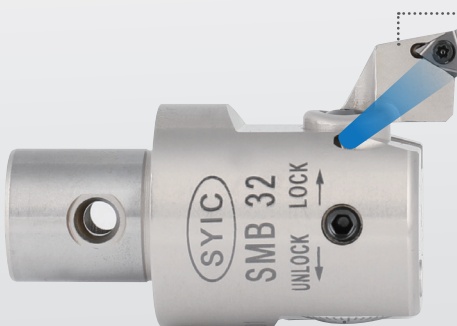
▶ Not only work with boring bars,
but also work with SBE extended
boring insert seats for large
diameters.



SUPER MICRON EXCHANGEABLE FINISH BORING HEAD

▶ Adjustment unit:
0.005mm on radius.

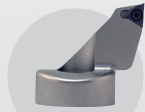
▶ Exchangeable insert seats offer
various boring ranges.



SIC-1



SIC-2



SIC-3

- ADJUSTABLE BALANCE
- COOLANT THROUGH
- 1 μ m

SMU BLACK KNIGHT FINISH BORING HEAD

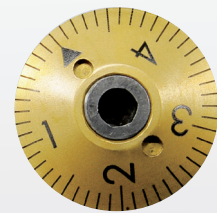


▶ The design of groove helps drain coolant fluid away and absorb vibrations.

▶ Coolant hole design can effectively remove the metal chips and durable for coolant pressure 1300PSI.



▶ Move the insert seat to the specific interval and then do micro-adjustment.



▶ Precision adjustment.

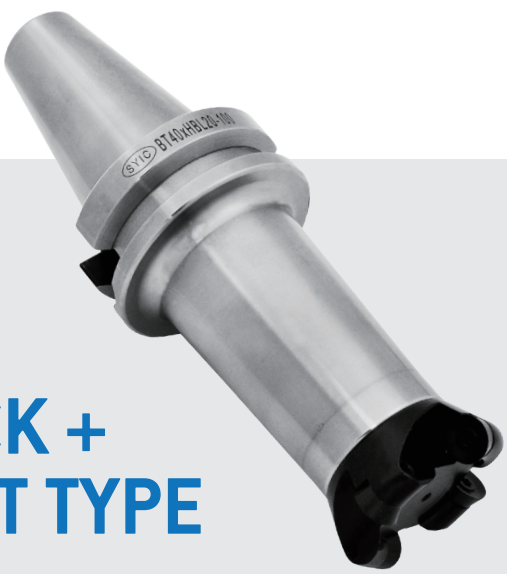
▶ Balance adjustment according to the boring diameter can be done; max. speed of revolution: 1,200rpm.



MODEL NO.	TYPE	BORING RANGE	SCK NO.
▶ 19590	SMU32	32~42	SCK3
▶ 19591	SMU41	41~54	SCK4
▶ 19592	SMU53	53~70	SCK5
▶ 19593	SMU68	68~100	SCK6

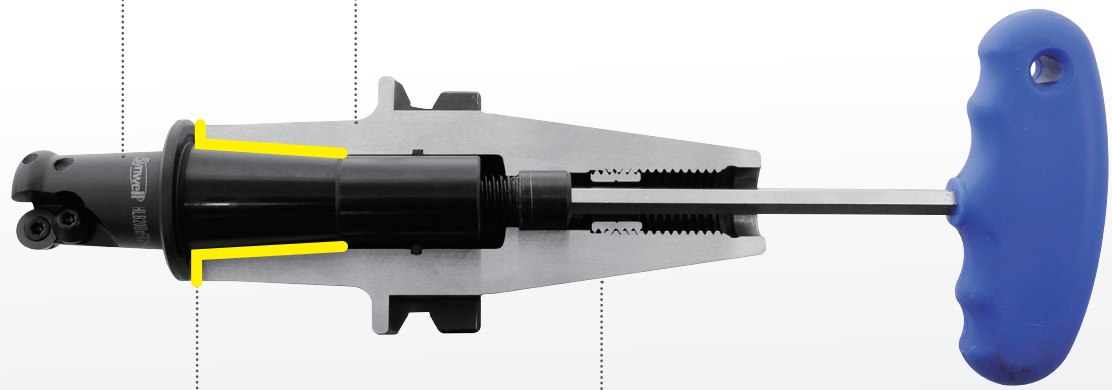
- MODULAR SYSTEM
- TWO FACE CONTACT
- DRAWBAR CLAMPING DESIGN

HBL COLLET CHUCK + HLB FACE CONTACT TYPE CUTTING TOOLS



▶ Modular design reduces the purchase cost of tool holder. Applicable for various kinds of processing.

▶ HLB CUTTING TOOL-ONE PIECE DESIGN WITH SLC COLLET TAPER
Eliminate the gap between HLB cutter and HBL tool holder.
The taper of HLB cutter remains 4° slanted design, which improves holding power, concentricity and rigidity.



▶ Two-face contact between collet taper, collet flange and the end of HBL tool holder, increases the rigidity of machining.

▶ HLB drawbar clamping design strengthens the axial clamping force.

HBL & HLB SYSTEM

- HLB / R
- HLB / GR
- HLB / IAP
HLB / CIAP
- HLB / PMB
- HLB / PCK
- HLB / MCK
- HLB / SFC
- HLB / BFC
- SLC Collet
- SMB
Finish Boring Head
- SCK
Roughing Boring Head

- OVERALL WELL-COVERED
- HIGH STABILITY
- HIGH CLAMPING POWER



UT COLLET CHUCK SYSTEM

- The design with O-ring on the front of holders prevents chips and coolant from entering holders.



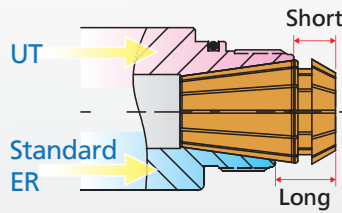
- Use with standard ER collet for specific diameter.



- The design of UT nuts without slots reduces the wind shear during high speed machining and avoids vibration, which need to use with roller bearing wrenches.



- The deeper gauge lines accommodate standard ER collet in holders more, achieve better coverage, and increase stability.



- ▶ Cutting Data
 - Tool Holder BT40 x UT20 - 100
 - Collet ER20-8mm
 - 8mm End Mill Cutter
 - Material SKD61
 - S: 3100rpm
 - F: 600mm/min
 - Ap: 15mm



UT

- ▶ Surface Roughness
Ra: 0.654µm

Better



Standard ER

- ▶ Surface Roughness
Ra: 1.039µm



- HEAVY DUTY MACHINING
- HIGH STABILITY
- 5 μ m

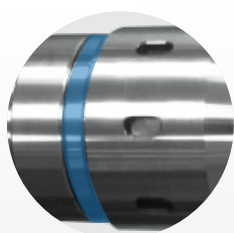


MLD MULTI-LOCK MILLING CHUCK SERIES

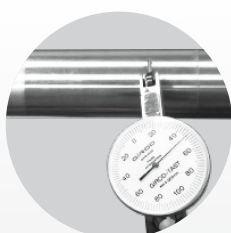
HIGH RIGIDITY AND DUST PROOF

- ▶ After clamping tools (the requirement of shank tolerance is less than h6), the nut and the flange contact firmly to prevent the needle bearing cage from deforming, rigidity is increased and achieves the function of dust proof.
- ▶ Featured with high precision and easy-to-fasten, vibrations do not occur in high speed machining or heavy duty machining.

CONCENTRICITY WITHIN 5 μ m



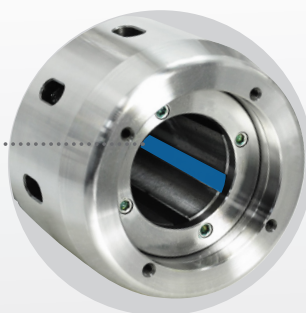
- ▶ When the nut is fastened, 100% contact is achieved.



- ▶ Runout accuracy within 5 μ m at 4D length.

NEEDLE BEARING CAGE

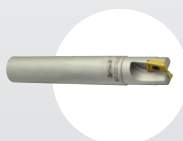
- ▶ Special slotted design of internal hole increases the clamping force and decreases vibration.



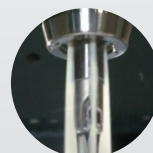
MLD SYSTEM



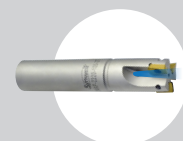
COLLET



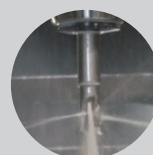
GENERAL TOOL



COLLET



COOLANT THROUGH TOOL



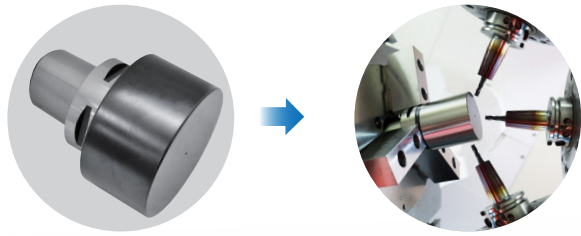
- DIFFERENT HARDNESS
- CUSTOM MADE

BLANK SERIES

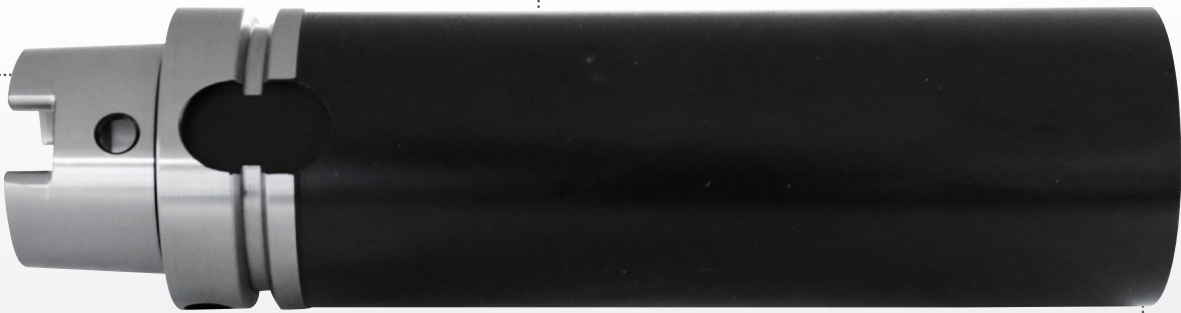


MAKE YOUR OWN TOOL

- Blanks allow users to process the shapes they want.



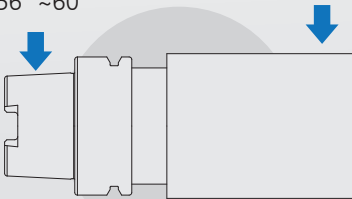
- Available Taper:
BT, CAT, DAT, SBT, SCAT, SDAT,
HSK, PSC



DIFFERENT HARDNESS POSSIBLE

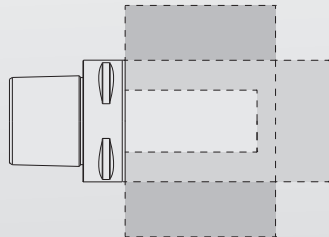
Hardness of Taper:
HRC 56° ~60°

Hardness of Blank:
HRC 25° ~30°



CUSTOM MADE ACCEPTED

- Different sizes can be custom made on request.
- Take PSC63 for example:



- HIGH SPEED
- WITHOUT KEY-WAY
- HIGH PRECISION

SMALL TOOL HOLDER



FEATURES

- ▶ 7:24: ISO 15, 20, 25, 30, 40 BT 30, 40 DAT 30, 40
- ▶ HSK: HSK 25, 32, 40
- ▶ Without key-ways.
- ▶ Light cutting.
- ▶ While tool change, spindle needn't be positioned.

ER COLLET CHUCK (M TYPE)



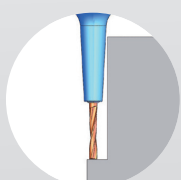
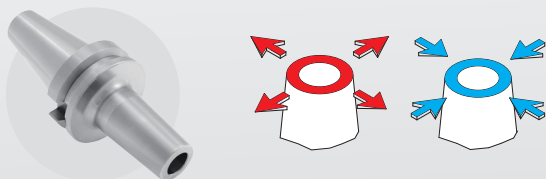
Clamping power improved by 60%!

SBL SLIM-FIT COLLET CHUCK

- ▶ Collet chuck designed w/o nut and with inner-holding collet.
- ▶ Strong rigidity & high stability!

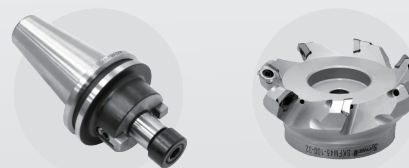


SFC SHRINK FIT CHUCK

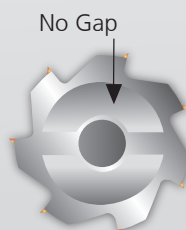


- ▶ Slim design avoids interference.

FACE MILL ARBOR & FACE MILLING CUTTER



- ▶ Shrink Fit Face Milling Cutter



Reduced vibration & faster feed, speed & productivity. Longer tool & insert life!

- GOOD DUST REMOVAL
- FOR WOOD WORKING
- 25,000 rpm

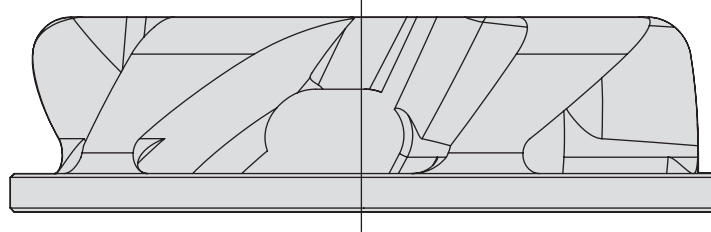


FNER FAN NUT



台灣精品 2015
TAIWAN EXCELLENCE

FEATURES

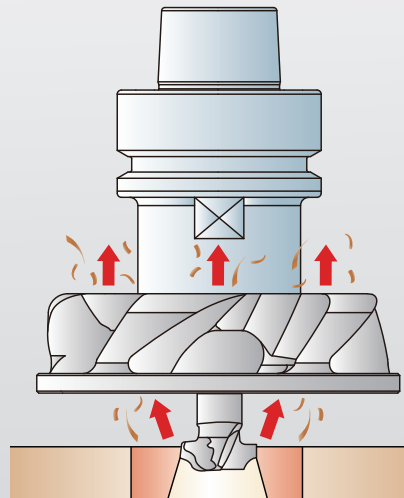


- ▶ Special design of fan blade shape facilitates dust removal to 99.8%.
- ▶ Improve the evacuation of wooden dust, extend tool life and increase efficiency.
- ▶ Can be used for standard ER collet chucks, easy to operate.
- ▶ The special surface treatment of POWER GOOD nut enhances the clamping force.
- ▶ Decrease the wooden particle in the air to maintain a healthy working environment.
- ▶ Balanced to 25,000RPM at G2.5.

ILLUSTRATION

- ▶ The wood dust was lifted up through the blades.

TYPE
FN-ER32-B
FN-ER40-B
FN-EOC25



MEMO

[Redacted content]

MEMO

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