

brother



NIKKEN

For Brother SPEEDIO series,

Dramatically Reduce Tool Change Time
100 Tools can be stored

S700Xd2-100T

U500Xd2-100T



Newly Developed 100-Tool Magazine



Universal Compact Machining Center
with Simultaneous 5-Axis Control
SPEEDIO U500Xd2-100T

Compact Machining Center
for Large Components
SPEEDIO S700Xd2-100T

- Equipped with newly developed 100-tool magazine
- Achieve space efficiency and high productivity
- Improve the efficiency of high-mix small-lot production and achieve manpower saving

With the growing demand of multiple work pieces and shapes to meet small part production, the number of tool changes and tool assemblies necessary is also fundamentally increased to meet this requirement.

The newly developed 100-tool magazine for Brother SPEEDIO can store a hugely increased number of tools which, in combination with NIKKEN ECO BLACK TOOLING, can remain within the turret magazine and tool 'stockers' without any concerns. They are resistant to rust and subsequently require less time spent on maintenance to provide "Zero interruption to work". This therefore dramatically improves your process reliability and productivity.

NIKKEN's ECO BLACK TOOLING

Setting a new standard for tool holder reliability and longevity for high productivity machines with multi-tool magazines.

ECO BLACK TOOLING

ECO Tooling to negate rust-proof maintenance and associated costs whilst also protecting the spindle connection



Machining ECO

ECO Black Tooling

- ECO BLACK penetrates the tool surface for long term protection with no effect on the hardness or accuracy.
- Protects the machine spindle by preventing the wear associated with damaged tooling
- The optimum solution for rust-proof protection to overcome 'red rust' and pitting corrosion that can cause permanent damage

- **ECO BLACK** : "The black rust prevents the red rust from forming." It is not a plating process.
- It creates a fine film and penetrates into the tooling material a few microns deep.
- It does not have a significant effect on the hardness or the mechanical properties of the base material.
- It protects the spindle accuracy by preventing the wear which can often be caused by rust or pitting corrosion of the tool holder.
- It prevents rust on all metal surfaces, not only on the outside, but also on the inside of the holder.

ECO BLACK TOOLING is a product that has been treated with excellent anti-rust and anti-corrosion treatment.

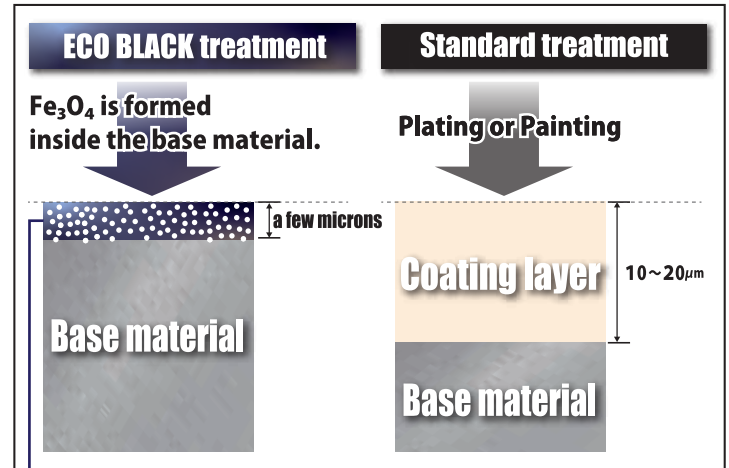
It forms a fine film of the contents (Fe_2O_4), and penetrates into the tooling material and exhibits a powerful anti-rust and anti-corrosion effect. In the United States, it is specified by the MIL standard (MIL-C-13924), and has established a high reputation and track record as an anti-rust and anti-corrosion coating treatment.



Standard Tooling 8 years used



ECO BLACK Tooling 18 years used



The surface part that has become a porous structure by the black rust is treated with a water displacer by plant-based rust preventive oil, which replaces the moisture and oil in the pores. As a result, a more advanced rust prevention treatment is achieved.

Main Product lines

THE ORIGIN MILLING CHUCK

'The original' Milling Chuck which combines a powerful gripping force, by Multi-Lock roller system, and a compact nose ring that excels in high-speed rotation.

NBT30 Line-up

C12	Clamping Range : $\phi 12$ Length from the gageline : 55	C25	Clamping Range : $\phi 25$ Length from the gageline : 80
C16	Clamping Range : $\phi 16$ Length from the gageline : 55	C32	Clamping Range : $\phi 32$ Length from the gageline : 90/100
C20	Clamping Range : $\phi 20$ Length from the gageline : 75		

★ The diameters above are the clamping ranges to clamp tools directly without collets.



VERSATILE SLIM CHUCK

The versatile holder that is the proven 'work horse' for manufacturing and can demonstrate its power across various applications such as end milling, drilling, tapping and reaming.

NBT30 Line-up

SK6	Clamping Range : $\phi 0.7-6$ Length from the gageline : 60/90/120/150	SK16	Clamping Range : $\phi 2.75-16$ Length from the gageline : 60/75/90/120
SK10	Clamping Range : $\phi 1.75-10$ Length from the gageline : 45/60/75/90/120/150	SK20	Clamping Range : $\phi 3.5-20$ Length from the gageline : 60/75/90/120
SK13	Clamping Range : $\phi 2.75-13$ Length from the gageline : 60/75/90/120	SK25	Clamping Range : $\phi 7.5-25.4$ Length from the gageline : 75/90/120



HIGH SPEED MINI-MINI CHUCK ADVANCED α

A professional of small-diameter machining that achieves excellent nose clamping, high runout accuracy, and high-speed specification of MAX. 30,000 rpm.

NBT30 Line-up

MMC4C	Clamping Range : $\phi 1-4$ Length from the gageline : 105/135
MMC8C	Clamping Range : $\phi 2-8$ Length from the gageline : 105
MMC12C	Clamping Range : $\phi 4-12$ Length from the gageline : 105



ANTI-VIBRATION MAJOR DREAM HOLDER

Features an innovative vibration dampening mechanism for comfortable cutting without chatter and the suppression of cutting noise. This results in extended tool life, increased productivity, lower consumable cost and improved surface finish!

NBT30 Line-up

MDSK6	Clamping Range : $\phi 3.0-6$ Length from the gageline : 50/60/75/90	MDSK16	Clamping Range : $\phi 3.0-16$ Length from the gageline : 75/90
MDSK10	Clamping Range : $\phi 3.0-10$ Length from the gageline : 50/60/75/90		
MDSK13	Clamping Range : $\phi 3.0-13$ Length from the gageline : 60/75/90		



In addition to the above, we have a variety of tooling options to suit your machining needs. For more information, please contact our sales staff.



- If the detection of tool existing at tool magazine by optical method on your M/C, the tool with RP treatment may be judged "no tool existing". Please check your M/C specification.
- Tools that have treated RP will not conduct electricity. RP treatment cannot be performed on measuring tools that detect workpiece contact through electrical conduction.
- Even if you hold an electrically conductive type straight shank measuring tool with a tool treated RP, workpiece contact will not be detected. Please use an internal contact type straight shank micro touch (UMTX).
- The taper connection of the tool shank with RP treatment is more stuck than the taper connection of the tool shank without RP treatment. Then, the unclamping force for the tool with RPT is required 20% stronger than the unclamping force for the tool without RPT. Please be careful to check the unclamping force of your M/C, when the tool with RPT treatment is chosen.
- Therefore, the taper cone of tool and NC5 tool is changed to without RP treatment as standard. And the special anti-rust treatment is applied to the taper cone.

★ Products with 'RP' at the end of the code number are "ECO BLACK TOOLING".

Flange contact NBT30 × 100 tools (with centre through coolant)

Examples of Recommended Tooling Packages

No.	Product name	Code No.	Qty.	Remarks
1	Slim Chuck	NBT30-SK6C-90-RP	10	Clamping Range : 0.7~6.0, The versatile Holder
2		NBT30-SK6C-120-RP	10	Clamping Range : 0.7~6.0, Universal Holder
3		NBT30-SK10C-75-RP	12	Clamping Range : 1.75~10.0, Universal Holder
4		NBT30-SK10C-120-RP	12	Clamping Range : 1.75~10.0, Universal Holder
5		NBT30-SK13C-75-RP	12	Clamping Range : 2.75~13.0, Universal Holder
6		NBT30-SK13C-120-RP	12	Clamping Range : 2.75~13.0, Universal Holder
7	Slim Chuck Collet Set	S.SK6F	2	Full Set for SK6 (SK6-1/1.25/1.5/1.75/2/2.25/2.5/2.75/3/3.5/4/4.5/5/5.5/6)
8		S.SK10F	2	Full Set for SK10 (SK10-2/2.25/2.5/2.75/3/3.5/4/4.5/5/5.5/6/6.5/7/7.5/8/8.5/9/9.5/10)
9		S.SK13F	2	Full Set for SK13 (SK13-3/3.5/4/4.5/5/5.5/6/6.5/7/7.5/8/8.5/9/9.5/10/10.5/11/11.5/12/12.5/13)
10	Spanner	SKL-6W	1	Spanner
11		SKL-10	1	Spanner
12		9HC12A	1	Spanner
13	Mini-Mini Chuck	NBT30-MMC8C-105-AA-RP	6	Clamping Range : 2.0~8.0, Holder for Small-diameter Tool
14	Mini-Mini Collet	VMK8-4J	3	Clamping Range : 4.0 / for Jet Coolant
15		VMK8-6J	3	Clamping Range : 6.0 / for Jet Coolant
16		VMK8-8J	3	Clamping Range : 8.0 / for Jet Coolant
17	Milling Chuck	NBT30-C20-75-RP	8	Clamping Range : 20, The Original Multi Lock Milling Chuck
18	Straight Collet	KM20-12	3	Clamping Range : 12
19		KM20-16	3	Clamping Range : 16
20	Milling Chuck	NBT30-C32-100-RP	6	Clamping Range : 32, The Original Multi Lock Milling Chuck
21	Straight Collet	KM32-25	3	Clamping Range : 25
22	Spanner	9HC22	1	Spanner
23		9HC25	1	Spanner
24	Major Dream Holder	NBT30-MDSK13-75-RP	6	Clamping Range : 3.0~13.0, Dampening Holder
25	A type SK collet	SK13-8A	3	Clamping Range : 8.0, High-rigidity Type A for End Mills
26		SK13-10A	3	Clamping Range : 10.0, High-rigidity Type A for End Mills
27		SK13-12A	3	Clamping Range : 12.0, High-rigidity Type A for End Mills
28	GH Handle	GH12	1	GH Handle
29	NPU Drill Chuck	NBT30-NPU13-95-RP	1	Clamping Range : 1.0~13.0
30	Wrench	NPUL-13	1	Wrench
31	Face Mill Arbor	NBT30-FMH22-47-45-RP	4	
32	Universal Micro Touch	BT30-UMT150	1	Compact Type for BT 30 Machines
33	Height Presetter	HP-50N	1	Electronic Detection Type
34	Tool Clamper	TACL-B40H63A	1	Three-Angle Clamper for BT 40 / HSK63
35		9TACL63D-B30N46	1	Adapter for BT 30
36	Pull Stud	PS-130E-RP	100	With Hole Type

The master of rust prevention **ECO BLACK TOOLING**



Protect the spindle and maintain its accuracy

Prevent wear caused by damaged, pitted, and corroded tooling.

Increased reliability with no effect on the hardness or the accuracy



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