

CUTTING EDGE INNOVATIONS

NEWS 2024

SWISS TOOLING IN MULTI-SPINDLES ONE-HAND-CHANGE TOOLSYSTEM GREENER PARTING OFF INSERT



¢

1/8NP





NEWS 2024

SWISS TOOLING FOR MULTI-SPINDLE MACHINES EXTENDED RANGE

SQUARE SHANK HOLDERS

WhizCut has extended its range of square 16x16 mm holders to suite multi-spindle and turret lathes. Coolant is easily con-nected by either one of the two 1/8" NPT ports or underneth the holder.

STANDARD

SQUARE SHANK HOLDERS

SHANK HOLDER	н	В	L	INSERTS
TSH13ER 1616F-OC	16	16	85	H13
WSJ15ER 1616F-8C	16	16	85	J15ER
WSK15ER 1616F-2C	16	16	85	K15ER

SPECIAL TOOL HOLDERS FOR MULTI-SPINDLES

Let us solve your machining problems with Swiss tooling!



NUMEROUS BENEFITS SWISS TOOLING VS. STANDARD ISO-INSERTS IN MULTI-SPINDLE MACHINES

Lower cutting forces thanks to sharp cutting edges.

Ground inserts provide better surface finish and better chip control.

The WhizCut customized carbide provides a stronger tool and longer tool life.

Swiss tooling from WhizCut works excellent in tough, hard and difficult to machine materials.





MULTI-SPINDLE TOOL HOLDERS

Swiss tooling in multi-spindle machines! Benefit from the advantages of ultra-sharp and wear resistant WhizCut tools with excellent chip control. We are continuously expanding our range with perfectly matched coolant-through tool holders for your multis.

WHIZFIX 2.0

WhizFix 2.0 modular tool system, redefines efficiency with seamless operations, unique speed-stable interfaces, and one-hand-change. Improve your machining with WhizCut precision, speed, reliability, user friendly.



WHIZTWIN 20

Designed for efficiency, the WhizTwin 20 parting off insert reduces production costs and environmental impact. Its size and technical features prioritize resource conservation, making it an essential tool for sustainable machining.





Example of a multi-spindle holder developed by WhizCut after specific requests by customer.

MULTI-SPINDLE + SWISS TOOLING

CUTTING EDGE INNOVATIONS — from WhizCut is now also available for multi-spindle machines.

WhizCut is breaking new ground, developing tooling solutions for multi-spindle machines. Diving into the exciting multi-spindle world we have benefited from our extensive experience and extensive knowledge of inventing and manufacturing precision tools for Swiss lathes. Our previous experience together with valuable feedback from customers results in revolutionary solutions for mass production in multi-spindle machines.

IMPROVE MACHINE AND WORKFORCE PRODUCTIVITY WITH WHIZFIX 2.0

From pin to modular. WhizCut was founded, 27 years ago, around the first quick change system WhizFix. Since then, easy indexability and increasing productivity has been the backbone of WhizCut.

The new tool holder system is designed to allow machine operators to index inserts in swiss lathes without losing valuable time. With the unique click-in/click-out interface between the holder and the insert head, changes can be made quickly — with one hand. Stability and reliability have been guiding principles for WhizCut throughout the development process of this new modular system, which is an upgrade from its predecessor, WhizFix. The original pin holder system has been updated based on customer feedback, focusing on the combination of user-friendliness, reliability, and productivity.

MACHINE 2.0

- CLICK-IN/CLICK-OUT COUPLING: The perfectly fitted dovetail interface makes the change of insert heads extremely smooth and quick.
- ENHANCED PRECISION: The modular tool system offers the same precision as a solid holder, ensuring that the insert head returns to the exact same position every time.
- **STABILITY:** The unique dovetail interface between the holder and the insert head is exceptionally sturdy, providing the same stability as a solid holder.
- COOLANT SYSTEM: Featuring a system prepared for both through-coolant and one system without high pressure coolant, with reduced costs.
- SLIM DESIGN: It fits. WhizFix 2.0 is not bigger than any solid holder.

MANPOWER 2.0

- USER FRIENDLY: Easy access and by only 1,5 revolution needed to clamp and unclamp the "click in and out" system of WhizFix 2,0.
- ONE-HAND-CHANGE: The head is hinged in the shank even when it is released so there is no risk of it falling out when the head is loosened. With the clamping screw only released 1,5 revolution there are no loose screws and no risk of them falling into the chip conveyor.
- TORQUE TIGHTENING: The low, but enough, 2,0Nm torque needed is extremely easy to tighten.



MODULAR BRILLIANCE

WhizFix 2.0 is a leap forward in machining technology. Built on customer feedback, we've refined the original pin holder system to prioritize user-friendliness, reliability, and flexibility. The result is a cutting-edge modular tool holder system that enhances operational efficiency.

PRECISION, SPEED, AND RELIABILITY!



WHIZFIX 2.0

MODULAR QUICK-CHANGE TOOL HOLDER SYSTEM

MINIMALISTIC DESIGN

WhizFix 2.0 is slim and not larger than a solid holder, making it easier to secure firmly resulting in finer details and a longer tool life.

QUICK!

ONE-HAND-CHANGE

Thanks to the dovetail, the risk of the toolhead falling into the machine is prevented. In fact, one-handed head change is possible and facilitates head change in tight spaces.

5

WHIZFIX 2.0/TECHNICAL



ONE-HAND-CHANGE

...and nothing falling out. The head is hinged in the shank even when it is released. Therefore, there is no risk of it falling out when the head is loosened. Making it possible to release all heads before removal from the machine.

STRONG

WhizFix 2.0 is no larger than a solid holder, making it easier to secure firmly with the insert tip close to the tool holder plate, resulting in finer details and longer tool lifespan.



POWERFUL CLAMPING

The dovetail maximizes contact between the two bodies giving a rigid tool holder. There are four surface contact areas between shank and head. Resulting in the same stability as a solid tool holder.



TORQUE WRENCH

By utilizing a torque wrench, to the set torque, the optimal pressure is put on the holder which safeguards rigidity, position and tool life of both insert and holder. The set torque is marked on each holder, where most holders have a recommended torque of 2Nm.

EASY INDEXING

Now it is easy to change inserts. You don't have to purchase an extra tool holder for gripping when indexing.

WhizCut offers an uncomplicated 3D printed indexing handle for easy gripping. You can now index the insert without any problems.

WhizCut also offers an indexing station with room for 8 heads, screws, inserts, flag keys and bits (see page 9). Contact your WhizCut representative to explore all options, making indexing and changing heads as easy as possible!





Product tables WHIZFIX 2.0/MODULAR HEADS



Product tables WHIZFIX 2.0/MODULAR SHANKS



WHIZFIX 2.0 | SHANKS

REGULAR SHANK	WHIZHIP SHANK	н	В	Т	SCREW	KEY	TORQUE	PLUG*2	STOCK*
WB3 1010-80	WB3 1010-80C	10	10	80	M3X5-WB	T15	2Nm	M8X1	3
WB4 1212-80	WB41212-80C	12	12	80	M4X10-WB	T15	2 Nm	1/8" NPT	1
WB4 0500-80	WB4 0500-80C	1/2"	1/2"	80	M4X10-WB	T15	2 Nm	1/8" NPT	1
	WB51616-60C	16	16	60	M4X10-WB	T15	2 Nm	1/8" NPT	2
WB5 1616-100	WB51616-100C	16	16	100	M4X10-WB	T15	2 Nm	1/8" NPT	2

* 1. In stock. 2. Stock standard from May 1st. 3. Stock standard from June 1st.

Indexing handle



WHIZFIX 2.0 | INDEXING HANDLE

DESCRIPTION	PART NAME
EASY-TORQUE 2,0 NM	H36235
EASY-TORQUE BLADE T15	H26068
WHIZFIX 2,0 NM TORQUE BIT HOLDER+BIT	BIT-TORQUE 2,0

*Becomes 1/2" togehter with WB4 0500-80 and WB4 0500-80C

** 1. In stock. 2. Stock standard from May 1st. 3. Stock standard from June 1st



WHIZFIX 2.0 | ACCESSORIES

ITEM TYPE	PART NAME
CLAMPING SCREW WB3	M3X5-WB
CLAMPING SCREW WB4 & WB5	M4X10-WB
INDEXING HANDLE	WB INDEXING HANDLE
SETUP STATION+HANDLE	WB SETUP STATION

REVOLUTIONIZING PARTING OFF INSERT WITH A GREENER APPROACH

Cutting edge innovation meets production cost reductions and environmental responsibility in the all-new WhizTwin 20 parting off insert.

Designed with precision and sustainability in mind, the WhizTwin 20 is a larger-sized (compared to its predecessors) parting off insert that aims to redefine efficiency while contributing to the reduction of environmental impact. At WhizCut, we understand the dual importance of reducing production costs and enhancing productivity. The WhizTwin 20 is designed to achieve both. It's features and larger size allow for more efficient parting off, optimizing machining processes and ultimately leading to substantial cost reductions without compromising precision. With a strong emphasis on conserving resources and minimizing waste, this insert is engineered to contribute to the reduction of your carbon footprint.



WHIZTWIN 20

- MATERIAL OPTIMIZATION: The WhizTwin 20 is crafted to maximize material utilization of the insert, maximizing stability. Its dual-edged design allows for more efficient cutting and parting, reducing waste material significantly compared to traditional inserts.
- ENHANCED DURABILITY: With WhizTwin 20 WhizCut introduces a new 10-series carbide grade, suitable for parting off 20 mm. The 10-series grade suits perfectly with honed cutting edges.
- REDUCED ENERGY CONSUMPTION: The enhanced efficiency of the WhizTwin 20 means that machining processes require less time and energy, contributing to overall energy conservation and reducing the carbon footprint of manufacturing operations.



LARGER, LEANER, GREENER

It's not just about cutting; it's about cutting-edge sustainability. Make the WhizTwin 20 an integral part of your machining arsenal, where technical excellence meets a commitment to a greener future.

SAVE EVEN MORE MATERIAL!

"WhizTwin is a versatile solution that finds its application among major producers engaged in repetitive manufacturing. Here, the advantages lie in heightened productivity through reduced material wastage and enhanced process reliability.

WhizTwin is equally effective in enhancing efficiency for manufacturers operating shorter production runs. By maintaining the same cutting width as conventional tools, manufacturers can increase feed rates and cutting speeds."

Zeb Allansson, Cutting tool engineer at WhizCut

WHIZTWIN 20

TWIN EDGED PARTING OFF LARGER SIZE







ENVIRONMENTAL IMPACT

- Reduction of cutting width from:

2,5 mm to 1,5 mm

1 000 000 pieces

stainless steel

20 mm

2450 kg

12 000 kg

58 000 kwh

- Detail quantity:
- Bar diameter:
- Material:

RESULTS

- Reduced material consumption: Reduced CO2-emissions:
- Reduced global energy consumption:



MAKE IT STABLE C, **Clamp** the toolholder so the cutting edge is as close to the tool plate as your setup will allow

> **Choose** as small MAX Ø on your insert as possible.

Use the toolholder as probing/bar stop instead of the insert.



WHIZGUIDE



CUTTING RAKE OPTIONS

2° For short-chipping materials, and very small parts.

7° For steel and other tough materials when an aggressive chip breaker is needed.

12° The best overall choice. For long-chipping materials, and strong enough for tough materials.

18° For sticky long-chipping materials and materials where there is a risk of a built-up edge.



NOMENCLATURE

U3NR Z2,0M-12R F10 U3 = Insert size N = Neutral, \mathbf{NR} = Neutral insert right hand geometry $P = 0^{\circ}$ Front angle $Z = 15^{\circ}$ Front angle **2,0** = Cutting width Max part off B=4, C=6,4, E=8, G=10, J=13, K=16, **M**=20 Cutting rake = 0, 7, **-12**, 18 **R** = Radius F10 = Grade

Product tables WHIZTWIN 20/PARTING OFF INSERTS



STYLE P | STRAIGHT GROOVING AND PARTING OFF

INSERT	В	C.RAKE	R	MAXØ	t	10M	F10	B10	T10	ND10	PG
U3N P1,0K-2	1	2°	0	16	0,8	•	-	•	•	-	A6
U3N P1,0K-12R	1	12°	0,05	16	0,8	0	•	•	-	•	A7
U3N P1,5K-12	1.5	12°	0	16	0,55	0	•	•	-	•	A6
U3N P1,5K-12R	1.5	12°	0.05	16	0,55	0	•	•	-	•	A6
U3N P1,5M-2	1.5	2°	0	20	0,55	•	-	•	•	-	A6
U3N P1,5M-12R	1.5	12°	0,05	20	0,55	0	•	-	-	•	A7
U3N P1,5M-18R	1.5	18°	0,05	20	0,55	0	•	•	-	-	A7
U3N P2,0M-2	2	2°	0	20	0,3	•	-	•	•	-	A5
U3N P2,0M-12R	2	12°	0,05	20	0,3	0	•	-	0	•	A6
U3N P2,0M-7R	2	7°	0,05	20	0,3	o	-	-	-	•	A6
U3N P2,5M-7R	2.5	7°	0,05	20	0,05	0	-	-	-	•	A6

• In stock • On request - Not available



STYLE Z | 15° PARTING OFF

INSERT	В	C.RAKE	R	MAXØ	t	10M	F10	B10	T10	ND10	PG
U3NR Z1,5K-7R	1.5	7°	0,05	16	0,55	0	-	•	-	•	A7
U3NR Z1,5M-12R	1.5	12°	0,05	20	0,55	0	•	-	-	•	A7
U3NR Z1,5M-18R	1.5	18°	0,05	20	0,55	0	•	•	0	-	A7
U3NR Z2,0M-7R	2	7°	0,05	20	0,3	0	-	-	-	•	A6
U3NR Z2,0M-12	2	12°	0	20	0,3	0	•	-	-	•	A5
U3NR Z2,0M-18R	2	18°	0,05	20	0,3	0	•	•	-	-	A6
U3NR Z2,5M-7R	2.5	7°	0,05	20	0,05	0	-	-	-	0	A6

• In stock • On request - Not available

Product tables

WHIZTWIN 20/TOOL HOLDERS FOR PARTING OFF



STYLE B | RIGHT HAND - NARROW FRONT

TOOL HOLDER	н	В	L	f	INSERT	SCREW	KEY	STOCK	PRICE
PSU3NR 1212K-OB	12	12	125	6	U3N	M5X8-RU	T15	•	A63
PSU3NR 0500K-0B	1/2''	1/2''	125	5,3	U3N	M5X8-RU	T15	•	A63
PSU3NR 1616K-OB	16	16	125	2	U3N	M5X8-RU	T15	•	A64
PSU3NR 2020M-0B	20	20	150	-	U3N	M5X8-RU	T15	•	A64

• In stock • On request - Not available

STYLE L | LEFT HAND

TOOL HOLDER	н	В	L	INSERT	SCREW	KEY	STOCK	PRICE
PSU3NL1212K-0	12	12	125	U3N	M5X8-RU	T15	•	A63
PSU3NL 0500K-0	1/2''	1/2''	125	U3N	M5X8-RU	T15	•	A63
PSU3NL1616K-0	16	16	125	U3N	M5X8-RU	T15	•	A64
PSU3NL 2020M-0	20	20	150	U3N	M5X8-RU	T15	•	A64
PSU3NL 1616K-0 PSU3NL 2020M-0	20	20	125	U3N U3N	M5X8-RU M5X8-RU	T15	•	A64 A64

• In stock • On request - Not available

STYLE C | RIGHT & LEFT HAND - COOLANT THROUGH

TOOL HOLDER	н	В	L	$H_{_2}$	INSERT	2X PLUGG	SCREW	KEY	STOCK	PRICE
PSU3NR/L1212H-OC	12	12	100	6	U3N	1/8 NPT	M5X8-RU	T15	•	A82
PSU3NR/L 0500H-OC	1/2''	1/2''	100	5,3	U3N	1/8 NPT	M5X8-RU	T15	•	A82
PSU3NR/L 1616K-OC	16	16	125	2	U3N	1/8 NPT	M5X8-RU	T15	•	A82
PSU3NR/L 0750M-0C	3/4"	3/4"	150	-	U3N	1/8 NPT	M5X8-RU	T15	•	A82
PSU3NR/L 2020M-0C	20	20	150	-	U3N	1/8 NPT	M5X8-RU	T15	•	A83

• In stock • On request - Not available

Y-axis holder available on request. Don't hesitate to contact us. We are happy to help.





CUTTING EDGE INNOVATIONS

WhizCut is a renowned company in the metalworking industry, committed to providing innovative solutions and cutting edge innovations that elevate precision and efficiency in machining operations. With a rich history of pushing the boundaries of what's possible, WhizCut remains at the forefront of shaping the future of precision machining through our innovative products.

At WhizCut, we understand the pulse of industry demands. We've crafted a dynamic synergy between our expertise and your tooling needs. Our tagline, "Cutting edge innovations," is not just a statement — it's a commitment to providing you with tools that go beyond the norm, setting new standards in precision and performance.

WhizCut

Rundgången 12 254 52 Helsingborg Sweden

sales@whizcut.com +46 - 42 32 25 00



CUTTING EDGE INNOVATIONS