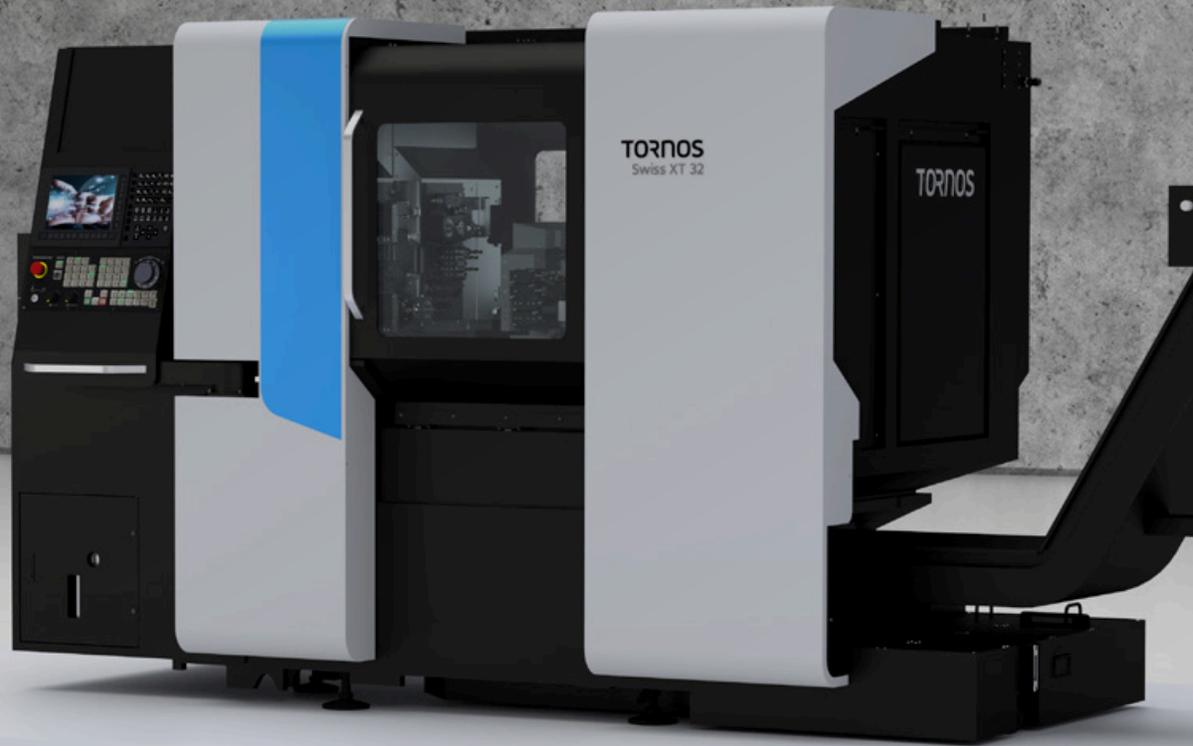


# TORNOS



*Precision  
meets possibility*

Swiss XT range

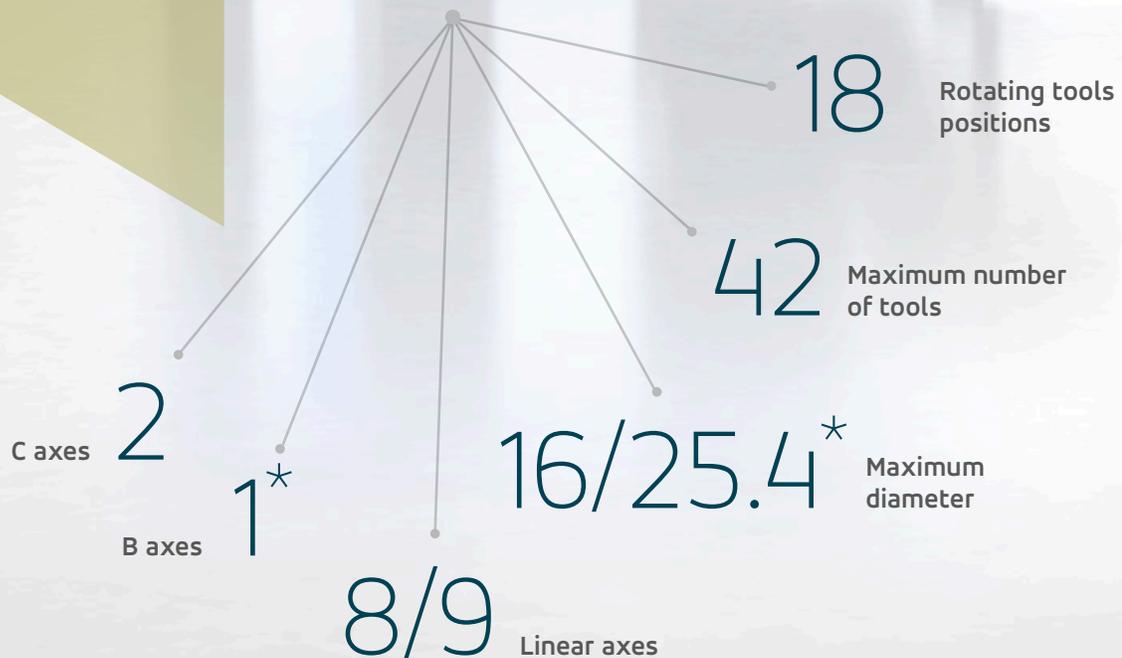
## Swiss XT

*Introducing the Swiss XT range: the ultimate fusion of compact design, versatility, and high-performance machining.*

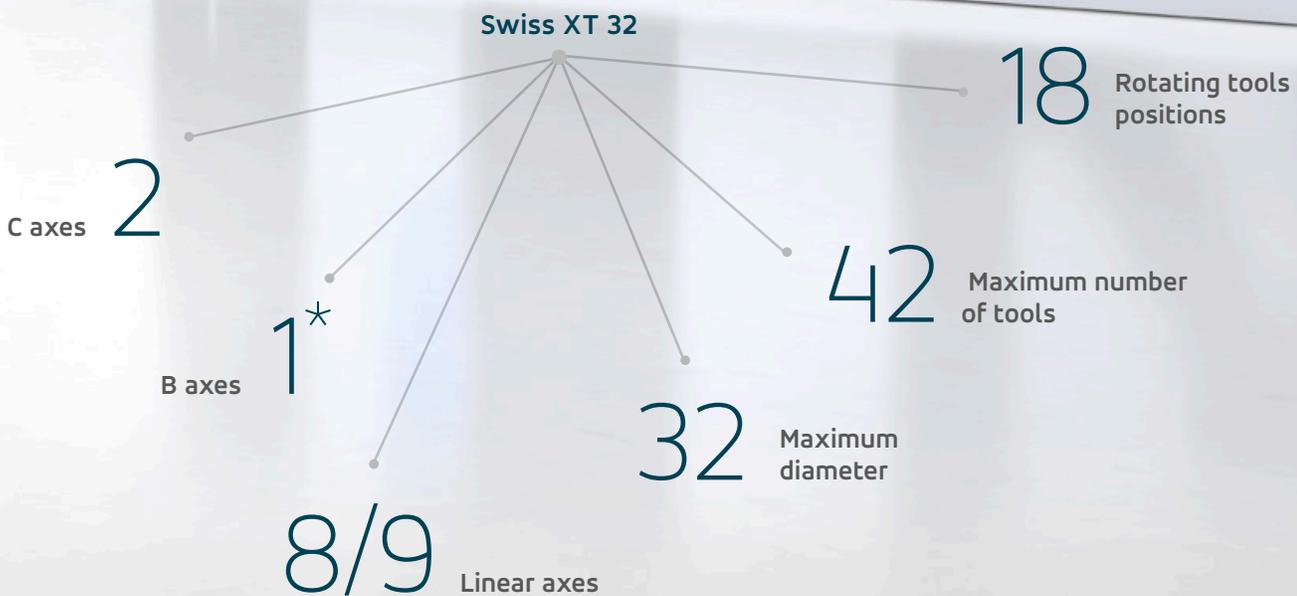
*With dimensions of just 3056 x 1440 x 2242 mm, this ergonomic powerhouse offers three independent tool systems and customizable axis options to meet all your precision needs. Experience an accessible machining area and the market's best price-performance ratio.*



### Swiss XT 16



# Swiss XT: Engineering excellence



\* Option

# Precision meets possibility



## Spindle excellence: power & profit

Elevate your production with our robust and powerful main and counter spindles, equipped with ceramic bearings for extended life. Maximize material throughput for more parts and increased profitability. They're not just spindles; they're the backbone of your success.

*The Swiss XT series takes versatility to new heights by offering two distinct models—each with customizable axis configurations:*

### Swiss XT 16: For precision and speed

- *Bar capacity: Optimized for bars up to 16 mm in diameter.*
- *Spindle speed: Achieve an incredible maximum rotation speed of 12,000 rpm.*
- *Extended capability: Optionally accommodates bars up to 25.4 mm, with a reduced spindle speed of 10,000 rpm for this configuration.*

### Swiss XT 32: For robustness and flexibility

- *Bar capacity: Built to handle bars up to 32 mm in diameter.*
- *Guide bush-free operation: Remarkably works on bars of 38 mm without the need for a guide bush, offering greater material flexibility.*



# 15-minute guide-bush conversion



## Plug-and-play B-axis: zero backlash

Whether it's straight from the factory or after delivery, seamlessly add up to 4 extra tools in main operations. Experience the precision of a backlash-free design.

## Counter-operations: efficiency & complexity simplified

With 14 dedicated tools for counter-operations, tackle even the most complex parts effortlessly. Not only can you achieve intricate designs, but you'll also slash part cycle-times. It's complexity made simple.

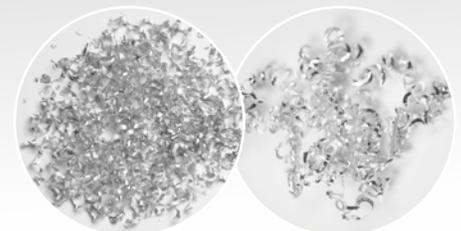


## Improve and ensure self-sufficiency with Tornos' Active Chip Breaker Plus (ACB Plus) software

Improve and secure the autonomy of your process (option).

### Configurable axis options for both models

- 8-axis configuration: Ideal for standard operations requiring high precision.
- 9-axis configuration: Includes a Z2 axis on the second gang, perfect for specialized tasks like deep drilling and balanced turning.

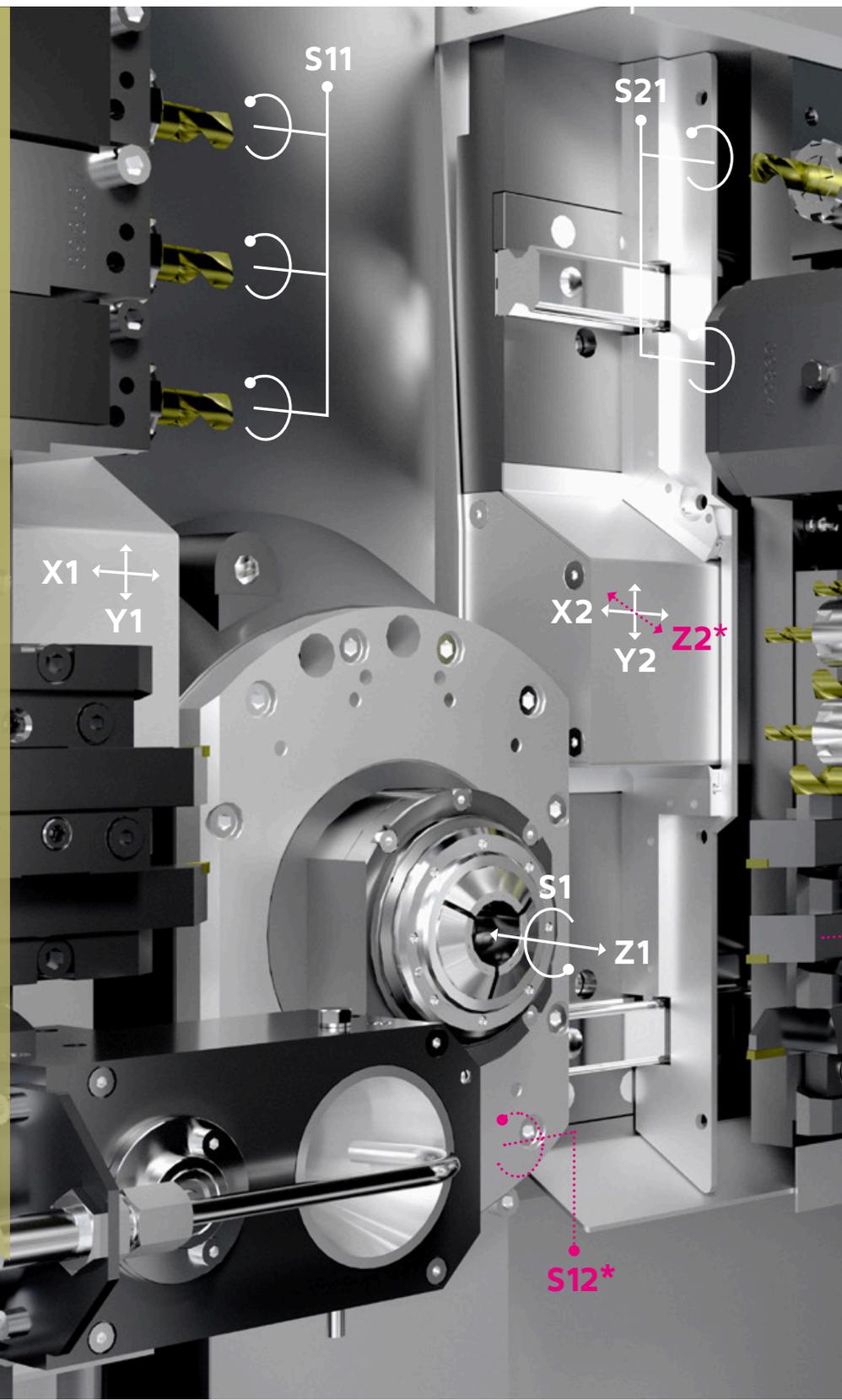


Chips with  
ACB Plus

Chips without  
ACB Plus

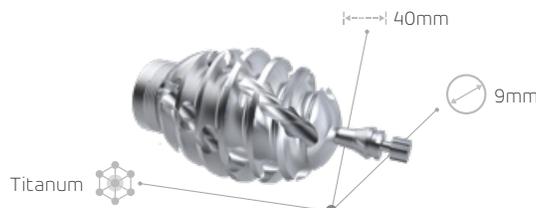
## Swiss XT

Welcome to the Swiss XT's cutting-edge machining area, where precision meets versatility. With options for 8 or 9 linear axes, up to 40 tools, and three independent tool systems, this is the command center for your most demanding projects. From intricate 5-axis tasks to high-throughput operations, this workspace is engineered to adapt to your every need. It's not just a machining area—it's the nucleus of unparalleled productivity.

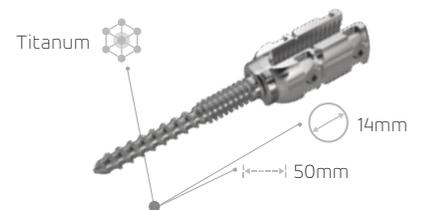


\* Option

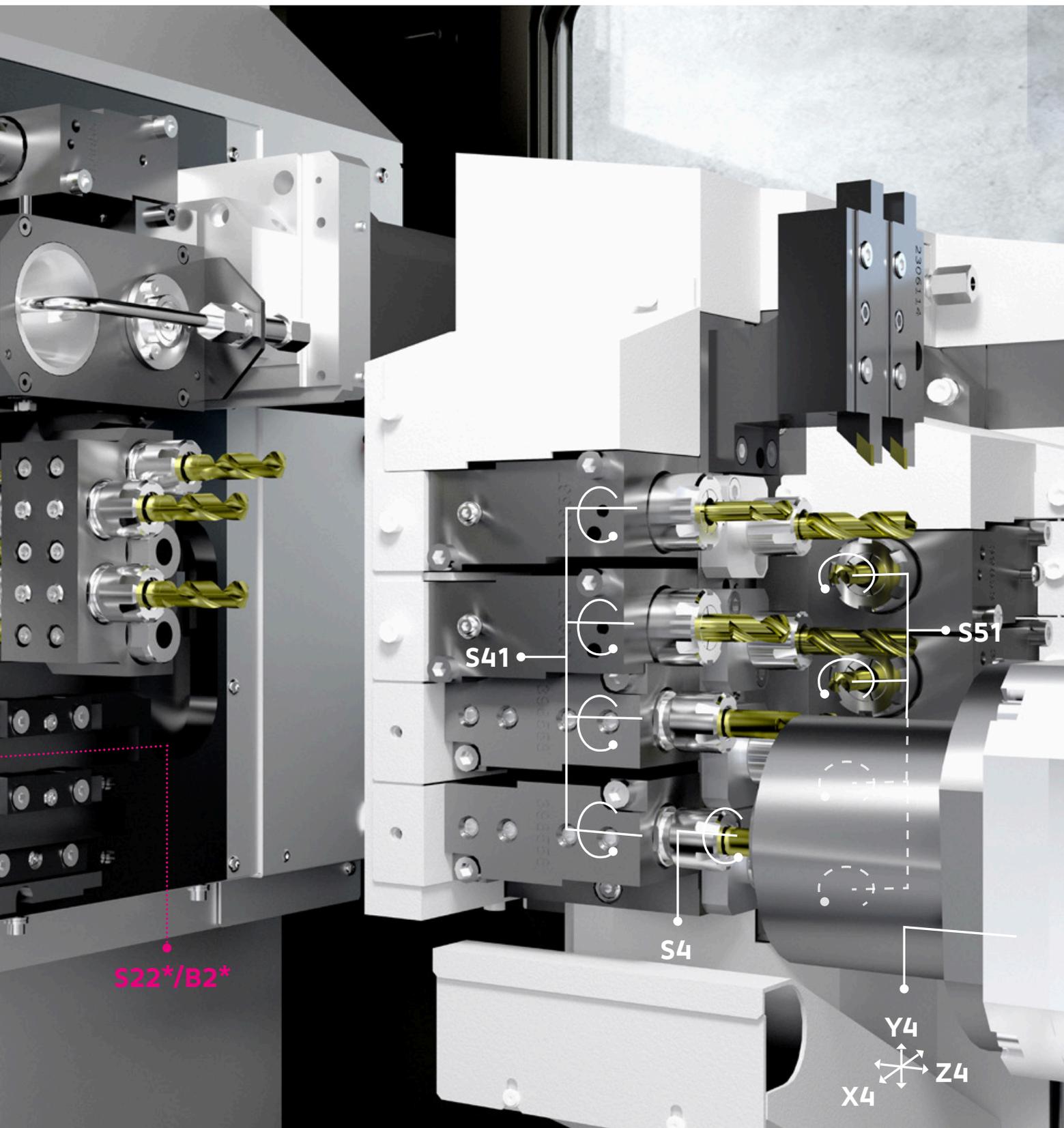
Masterpieces  
of Swiss XT  
precision



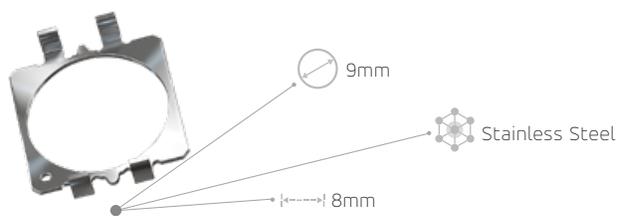
Medical & dental



Medical & dental



**Automotive**



**Electronic**

# Discover unparalleled flexibility and performance with Swiss XT's comprehensive features

## Your benefits :

### Maximize your profitability with unmatched speed and power

Outpace your competitors with the Swiss XT's high-powered spindles. Designed for versatility, these spindles offer:

- Equipped with ceramic bearings: For long-lasting durability and minimal friction.
- Uniform power output: Both spindles deliver an impressive 10.5 kW of power.
- Rapid acceleration: Achieve speeds of up to 10,000 rpm in just 0.3 seconds.
- High torque: Experience an extraordinary 26 Nm (19.177 ft./lb.) of torque.
- Liquid-cooled: Ensuring consistent performance and an extended lifespan

### Quick guide bush conversion for ultimate flexibility

Transition seamlessly between guide bush and non-guide bush operations in as little as 15 minutes, all without disconnecting any cables. With Tornos TMI automating the process, it's as simple as unscrewing the guide bush and placing it in its parking spot. Your Swiss XT is then ready for the next operation. Plus, the Swiss XT 32 model effortlessly handles bars of up to 38 mm in diameter when operating in non-guide bush mode.

### Simplified programming with TISIS

Eliminate the complexities of programming a 3-independent-tool-system machine. Our TISIS software makes it easy, ensuring smooth operations and efficient task management.

### Optional plug-and-play B-axis for unmatched versatility

Upgrade at any time with our optional B-axis, expanding your machining possibilities and elevating your productivity.

### Streamlined efficiency with double gang tool configuration

Optimize task division and maximize productivity with our "double gang tool" setup, reducing cycle times and enhancing efficiency.

### Affordable ACB Plus for superior chip management (Option)

Secure and improve your process autonomy with our optional ACB Plus software. Utilizing Active Chip Breaker technology, this feature ensures best-in-class chip management.

### **Interchangeable tooling for cost-effective transitions**

*Experience seamless integration and cost savings with tooling compatibility across the Swiss DT and Swiss GT series.*

### **Precision meets sustainability**

*The Swiss XT is more than just a precision machining marvel; it's an eco-conscious choice. Featuring Tornos' Eco Mode and a suite of sustainability options, it reduces energy consumption by up to 75%. Our preheating option ensures faster production and greater energy savings, while Eco Mode automatically conserves power during standby, reducing your carbon footprint without compromising performance. Choose the Swiss XT for precision and a commitment to a greener future.*

### **Multi-tool operations for maximized productivity**

*Efficiently manage multi-tool tasks with two spindles, four tool posts, and the additional Z2 axis.*

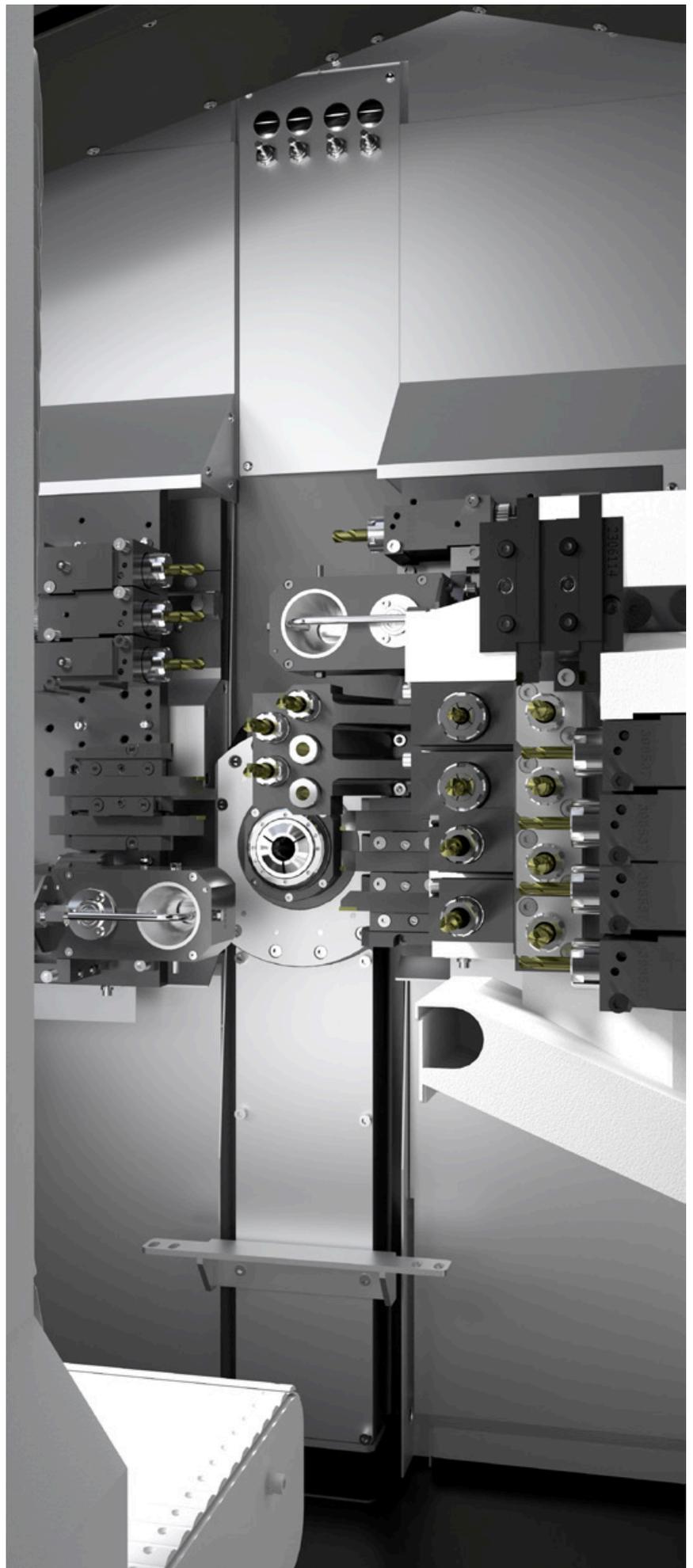
### **Extended workpiece length with long Z1-axis mode**

*Maximize your workpiece length, achieve deep drilling, and utilize multiple tools simultaneously for optimized productivity.*

### **Advanced motor configurations for rotating tools**

*Standard setup: Comes with four motors for rotating tools—two for main operations and two for counter operations.*

*Optional add-ons: Enhance torque with optional additional motors, ideal for "massive" usage of rotating tools, or accommodate the B-Axis (B2) for even more versatility.*



# Specifications

		<b>Swiss XT 16/8</b>
		<b>8 linear axes + 2 C axes</b>
		<b>3 independent tool systems</b>
<b>Main spindle</b>		
Max bar diameter	mm	16 (option 25.4)
Standard workpiece length with guide bush / bushless	mm	250 (330 option) / 50
Spindle rotation speed	rpm	12,000 (10,000 with option 25.4 mm)
Spindle power (S1 / S6)	kW	8.0 / 10.5
Max spindle torque	Nm	26
<b>Main-operation</b>		
Number of tool positions		23
Turning tool sections	mm	12 x 12 / 16 x 16
Max number of tools		28
Number of turning tools		8
Number of frontal tools (main-operation / counter-operation)		5 / 5
Max front drilling diameter	mm	Ø10
Max front tapping diameter	mm	M10 x 1.5
Positions for rotating tools S11 and S21		4 + 4
Positions for rotating tools S12 (option) and S22/B2 (option)		4 + 4
Max rotating tool speed	rpm	8,000
Rotating tool power S11 and S21	kW	1.0 / 3.1
Rotating tool power S12 (option) and S22 (option)	kW	1.0 / 3.1
Max drilling diameter rotating tools	mm	Ø10
Max tapping diameter rotating tools		M10 x 1.5
Stroke Z2 axis	mm	-
<b>Plug and play B-axis (B2)</b>		
Positions for rotating tools (main operation)		3/4 (option)
High-frequency spindle		1 (option)
Rotating tool speed of rotation	rpm	8,000
Rotating tool power	kW	1.0 / 1.33
Max drilling diameter	mm	Ø5.2
Max tapping diameter	mm	M10 x 1.5
<b>Counter spindle</b>		
Max bar diameter	mm	16 mm (Option 25.4 mm)
Max insertion length of workpiece into counter spindle	mm	90
Standard workpiece length	mm	120
Max spindle speed	rpm	12,000 (10,000 with option 25.4 mm)
Spindle power (S1 / S6)	kW	8.0 / 10.5
Max spindle torque	Nm	26
Max drilling diameter	mm	Ø10
Max tapping diameter	mm	M8 x 1.25
<b>Counter-operation</b>		
Max number of tool positions		14
Positions for rotating tools		8
Max drilling diameter rotating tools	mm	Ø6
Max tapping diameter for rotating tools	mm	M5 x P0.8
Max rotating tool speed	rpm	6,000
Rotating tool power (S41 and S51)	kW	1.0 / 3.1
<b>Total number of tools</b>		<b>42</b>
<b>Max. rapid feed rate</b>		<b>m/min 30</b>
<b>Numerical control</b>		<b>Fanuc 31i-MB+</b>
<b>General specifications</b>		
Max length x width x height	mm	3,056 x 1,440 x 2,242
Weight	kg	3,880
Cutting oil tank capacity	l	250
Installed power	kVA	29

Swiss XT 32/8 8 linear axes + 2 C axes 3 independent tool systems	Swiss XT 16/9 9 linear axes + 2 C axes 3 independent tool systems	Swiss XT 32/9 9 linear axes + 2 C axes 3 independent tool systems
32 (38 without guidebush)	16 (option 25.4)	32 (38 without guidebush)
250 (330 option) / 50	250 (330 option) / 50	250 (330 option) / 50
8,000	12,000 (10,000 with option 25.4 mm)	8,000
8.0 / 10.5	8.0 / 10.5	8.0 / 10.5
26	26	26
23	23	23
16 x 16	12 x 12 / 16 x 16	16 x 16
28	28	28
8	8	8
5 / 5	5 / 5	5 / 5
Ø10	Ø10	Ø10
M10 × 1.5	M10 × 1.5	M10 × 1.5
4 + 4	4 + 4	4 + 4
4 + 4	4 + 4	4 + 4
8,000	8,000	8,000
1.0 / 3.1	1.0 / 3.1	1.0 / 3.1
1.0 / 3.1	1.0 / 3.1	1.0 / 3.1
Ø10	Ø10	Ø10
M10 × 1.5	M10 × 1.5	M10 × 1.5
-	50	50
3/4 (option)	3/4 (option)	3/4 (option)
1 (option)	1 (option)	1 (option)
8,000	8,000	8,000
1.0 / 1.33	1.0 / 1.33	1.0 / 1.33
Ø5.2	Ø5.2	Ø5.2
M10 × 1.5	M10 × 1.5	M10 × 1.5
32	16 mm (Option 25.4 mm)	32
90	90	90
120	120	120
8,000	12,000 (10,000 with option 25.4 mm)	8,000
8.0 / 10.5	8.0 / 10.5	8.0 / 10.5
26	26	26
Ø10	Ø10	Ø10
M8 × 1.25	M8 × 1.25	M8 × 1.25
14	14	14
8	8	8
Ø6	Ø6	Ø6
M5 × P0.8	M5 × P0.8	M5 × P0.8
6,000	6,000	6,000
1.0 / 3.1	1.0 / 3.1	1.0 / 3.1
<b>42</b>	<b>42</b>	<b>42</b>
<b>30</b>	<b>30</b>	<b>30</b>
<b>Fanuc 31i-MB+</b>	<b>Fanuc 31i-MB+</b>	<b>Fanuc 31i-MB+</b>
3,056 x 1,440 x 2,242	3,056 x 1,440 x 2,242	3,056 x 1,440 x 2,242
3,880	3,880	3,880
250	250	250
29	29	29

We keep you turning



tornos.com

TORNOS LTD

Rue Industrielle 111  
P.O. Box 960  
2740 Moutier / Switzerland  
**T** +41 (0)32 494 44 44  
contact@tornos.com

Tornos  
throughout  
the world



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