PRODUCTION SOLUTION **SWEDTURN X**

ST300 / ST500 / ST700 / ST1200

TURNING MACHINES
HEAVY DUTY NON-STOP
PRODUCTION

SMT SWEDISH MACHINE TOOL COMPANY AB

smtcompany.se

SWEDTURN X

A RELIABLE SOLUTION FOR ADVANCED MACHINING – DEVELOPED TOGETHER WITH THE INDUSTRY

SwedTurn X was developed in close collaboration with our long-term customers in the defense and automotive industries. The machine retains the core features they found hard to find elsewhere — including or solid machine bed, outstanding reliability in continuous operation, and exceptional repeatability for high-volume production.

A LEGACY OF INNOVATION

SMT originated from Köpings Mekaniska Verkstad, founded in 1856, and has long specialized in lathes and chip-removal machining. Initially serving Swedish and Nordic industries, SMT's technology is now trusted across Europe and beyond.

Sweden's strong industrial base and early adoption of automation helped drive innovation in robotics and numerical control—areas where SMT has played a key role.

Since the 1970s, SMT has developed modular turning machines under the Swedturn name, with over 3,500 machines delivered, backed by extensive engineering expertise.

TRUSTED BY HEAVY INDUSTRY

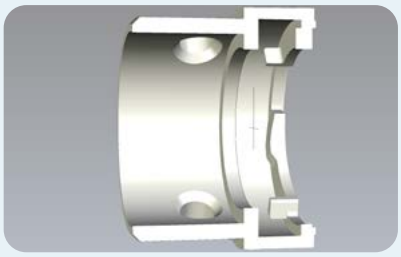
SMT's technology is trusted across a wide range of demanding industrial sectors from automotive and bearing production to steel manufacturing, shipbuilding, and electrical engineering. Our machines also play a critical role in aerospace, oil and gas extraction, as well as turbine and pump manufacturing, industries where precision and durability are paramount.

Designed to meet the highest standards of performance and reliability, SMT's machining solutions form a technical backbone for production environments that demand accuracy, dependability, and long-term efficiency.

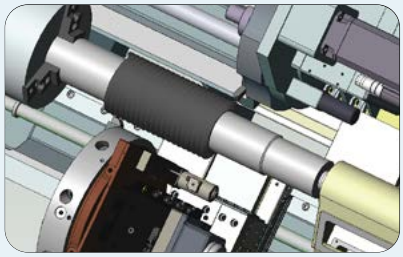
MACHINING POSSIBILITIES TECHNOLOGY DIVERSITY

SPECIALIZED MACHINING TECHNIQUES FROM SMT
We have engineered a diverse range of specialized machining cycles designed to enhance efficiency and ensure precise, high-performance chip-removal processes.

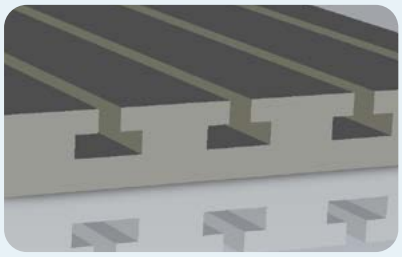
TURNING+MILLING ORTOGONAL&ECCENTRIC



I.D. TURNING, THREADING, GROOVING

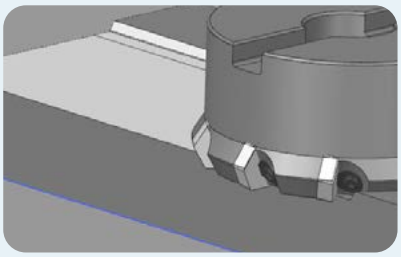


PARALLEL SHAFT TURNING

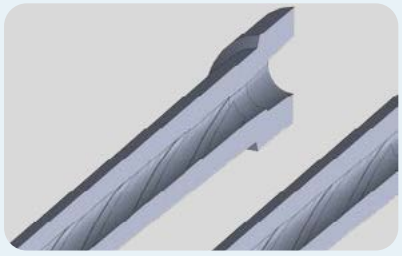


SLOTTING

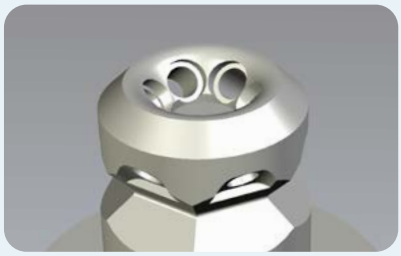
O.D. TURNING, THREADING, GROOVING



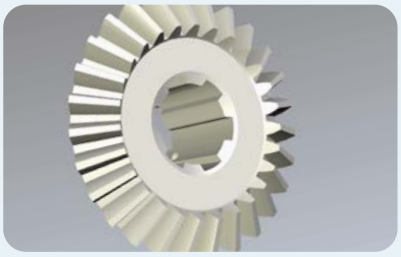
FACE MILLING & GROOVING



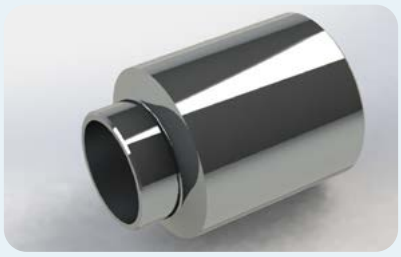
DEEP HOLE DRILLING



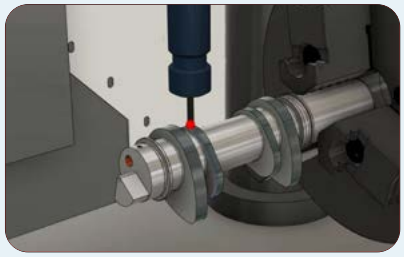
ANGULAR DRILLING



GEAR HOBBING AND TOOTH MILLING

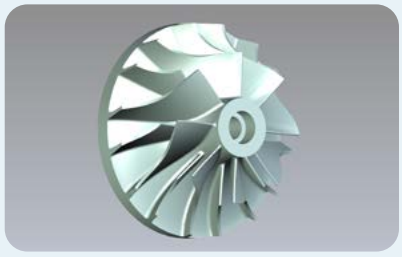


HARD TURNING

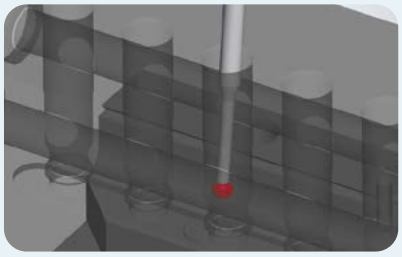


IN-PROCESS MEASURING WORKPIECE AND TOOL

B-AXIS TURNING*



5-AXIS MACHINING*



DEBURRING

* MACHINING IN ST1200

PRECISION CONCEPT

THE FOUNDATION FOR PRECISION WITH THE TECHNOLOGY FOR THE FUTURE.

Our SWEDTURN-machines are developed with a deep understanding of machining fundamentals and a clear vision for modern production demands. Combining decades of experience with state-of-the-art technology, we deliver reliable, high-performance solutions for complex and heavy-duty machining. From robust construction to intelligent chip management, every detail is designed to ensure long-term precision, efficiency, and adaptability in a rapidly evolving industry.

> THE FOUNDATION: OUR RELIABLE, STEADY MACHINE BED

Our well-proven, stable machine construction with high-quality steel castings provides the foundation for heavy-duty, high-precision machining. The robust design ensures durability, dimensional stability, and consistent performance even under extreme cutting forces and long machining cycles, with an exceptionally long service life before major mechanical overhauls are required.

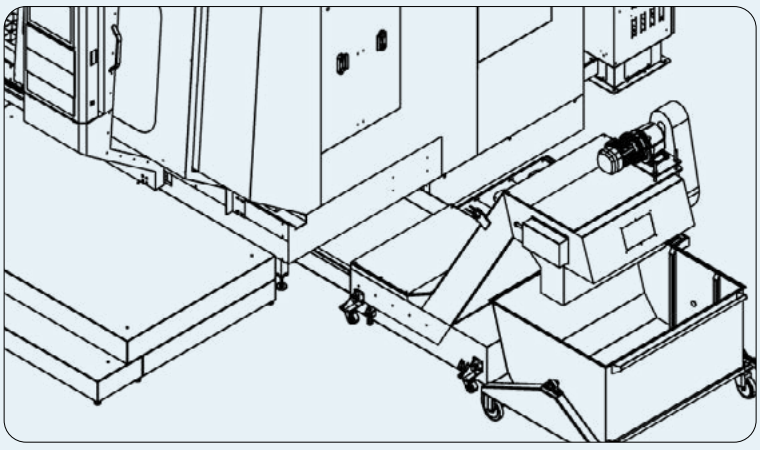
The sturdy gray cast-iron inclined bed, engineered with a 45° or 55° slant, offers outstanding structural rigidity. Its innovative axis geometry allows for exceptionally wide guideway spacing and minimizes the distance between the machining area and the guideways. This optimised layout not only improves stability and vibration damping but also enhances the overall machining accuracy, especially during heavy or interrupted cuts.

All linear axes in both the upper and lower slide systems are fitted with generously dimensioned anti-friction guideways, delivering maximum load-bearing capacity and ensuring smooth, wear-resistant motion. These components are designed to maintain long-term precision and reliability, even in demanding production environments. Combined with an efficient chip evacuation system and a compact slide design, the machine supports both productivity and ease of maintenance.

> SOLID ENGINEERING

The engineering of our SWEDTURN series is the result of decades of machine design expertise combined with the latest technological advancements. With deep-rooted knowledge in chip removal, we focus on precision, efficiency, and reliability. This combination defines the core strengths of our machines and ensures consistent high performance in demanding production environments.

> CLEAN MACHINE FOR EFFICIENT MACHINING



A clean machine is key to maintaining productivity and precision essential for uninterrupted machining. Our chip conveyor system is designed for high efficiency and can be tailored to handle the predominant chip type—whether from milling or turning operations. It features integrated separation of chips and cutting fluids, promoting both machine cleanliness and environmentally responsible waste handling.

> RELIABLE MACHINING THROUGH CHANGE

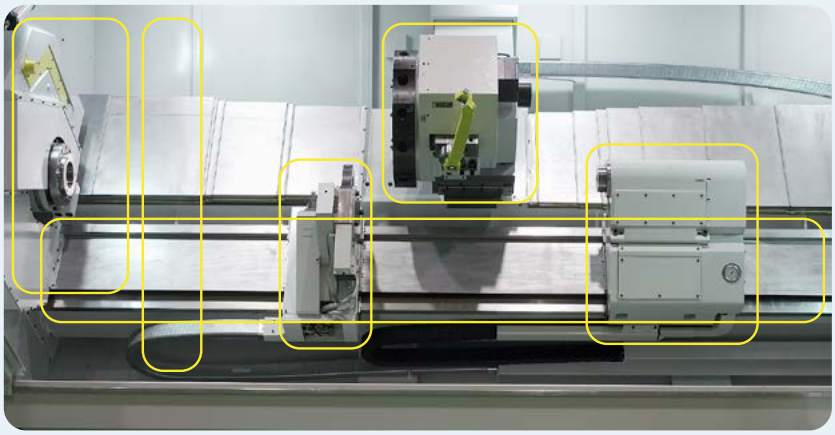
Some things haven't changed in the last 200 years—chips still need to be removed—but the ways in which tooling engages with the workpiece, how systems move, and how automation is applied have evolved dramatically. This is a reliable machine designed for machining complex and heavy workpieces, offering production solutions that remain robust through technological shifts and changing market demands.

MODULAR CONCEPT

THE SWEDTURN MODULAR SYSTEM IS MORE THAN FLEXIBILITY - IT'S A LONG TERM STRATEGY

The system is built on a modular architecture designed to adapt to the changing demands of manufacturing. As production volumes shift, product designs evolve, or new technologies emerge, Swedturn machines can be reconfigured, upgraded, or expanded without the need for complete replacement.

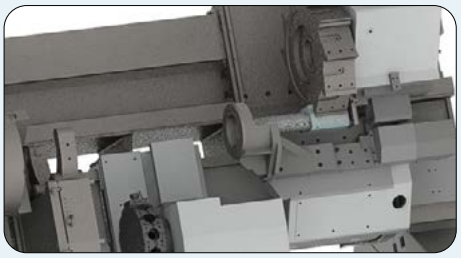
Each machine is tailored to the customer's specific production requirements whether it's a fully integrated turning cell or a standalone CNC lathe.



This ensures that your investment remains relevant and productive - year after year.

A PRODUCTION SOLUTION THAT ENDURES

SMT's modular approach supports your operations through growth and change. Whether scaling up or optimizing for efficiency, Swedturn provides the flexibility to adapt. With decades of experience and thousands of machines delivered, SMT ensures reliable, precise, and future-ready performance.



CUSTOMIZED SOLUTIONS

We have a library of earlier projects with 100's of different prodution solutions and if its not been done before, we find a way to adjust the machine to perfectly suit your demands.

CPC – HANDLING ROBOT FOR 70–200 KG

SMT's system robot for workpiece exchange is available in two base models: CPC50 and CPC100. The CPC can also operate various peripheral equipment, such as measuring stations. It is compatible with all SMT CNC lathes.

TOOL CARRIER – FRONT SLIDE (4-AXIS MACHINE)

Adding a front slide reduces machining time and increases flexibility. The front turret can be equipped with both standard and driven tools. SMT's solutions also allow for mounting a support spindle on the front turret.

TAILSTOCK / SUB-SPINDLE

The base machine includes a programmable tailstock, which can be enhanced with features such as X-axis movement to avoid collision risks with complex parts, extended quill tubes, and adjustable clamping forces.

The sub-spindle is a modular option for customers who want to complete machining without flipping the part. It is available in various power and speed ranges.

C-AXIS AND SPINDLE BRAKE

All SMT machines come with spindle positioning ±5°. For processes requiring higher precision, a C-axis module is added. It includes an AC motor and a hydraulic mechanism that engages automatically when needed, offering positioning accuracy of ±0.03°. C-axis motor power ranges from 2.1 to 5.1 kW.

PART AND TOOL MEASUREMENT

Hydraulically operated measuring arms ensure machine precision. The probe communicates with the control system, automatically compensating for tool wear. Early detection of dimensional deviations during part measurement helps prevent quality issues.

ATC – TOOL ROBOT WITH MAGAZINE

SMT's ATC tool robot is a high-performance solution ideal for large chuck parts requiring multiple internal tools. Traditional turret machines risk collisions, but the ATC's long clamping length and strong force ensure stability and ±5 µm repeatability with a 200 mm tool arm.

ATC-equipped machines can be delivered with 5 axes, including Y-axis and front turret. The modular magazine holds 37 tools per unit, expandable to 74, 111 or more, while a dedicated magazine supports up to four oversized boring tools over 2000 mm. Capable of handling large, heavy, stationary and rotary tools, the ATC system is built for demanding milling operations within the turning machine.

FRONT TURRET

Front standard turret with a disc turret for rotating tools

According to DIN 69880, diam. 60 mm. Sauter type 0.5.473.532 with the same technical data.

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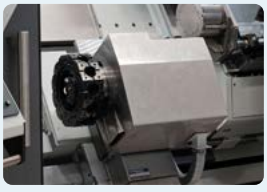
Tool positions for 6 stationary and 6 driven tools

Max power	12.7 kW.
Max torque	100 Nm
Max spindle speed	2250 rpm



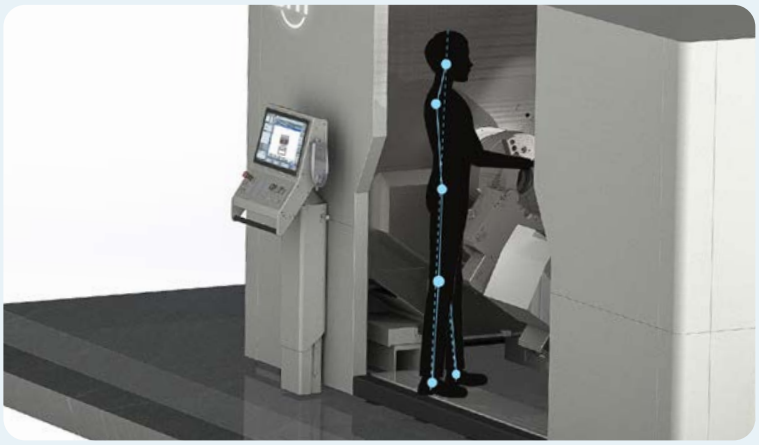
ERGONOMIC CONCEPT

SEAMLESS COLLABORATION BETWEEN ROBOT LOADING AND HUMAN OPERATORS

Our machine design emphasizes the synergy between automation and human interaction.

By combining efficient robot loading systems with operator-friendly access, we ensure smooth workflows, increased productivity, and safe handling throughout the machining process.

> ERGONOMIC WORKING POSITIONS



The wide step and vertically opening doors provide the operator with easy, intuitive access to the machine. This enhances ergonomics by enabling comfortable standing positions and unrestricted entry.

Manual tasks such as loading workpieces, checking measurements, or handling tools, whether from the top or side are now more accessible and less physically demanding.

> CLEAR VISUAL MONITORING

While nearly every aspect of machining can be digitally monitored, direct visual access to the process remains invaluable.

Generously sized windows provide the operator with a clear, unobstructed view of the entire production area, enhancing control and situational awareness.

Integrated LED lighting ensures excellent visibility of the workpiece during operation.

> EASY IMPLEMENT IN PRODUCTION CELLS

Developed in close cooperation with SMT's long-term robotics partner, the improved integration concept enables flexible implementation in automated production cells.

Multiple interface options and adaptable configurations are available to meet specific customer requirements. Making the transition to automated or hybrid workflows simpler and more efficient.

> SAFE MACHINING OPERATIONS

For safety reasons, the chuck is limited to low-speed movement along the X-axis when the door is open. Full-speed machining and all active operations are only permitted when the doors are securely closed, ensuring operator safety at all times.

CONTROL SYSTEMS

YOUR CHOICE OF CONTROL SYSTEM, TAILORED TO YOUR PREFERENCES – FROM SIMULATION TO REALITY.

> SIEMENS SINUMERIK ONE

> ”Top speed + top surface” deliver high quality contours at faster speeds on complex surfaces. The SIMATIC S7-1500F PLC speeds up cycle times and delivers faster hardware responses, Cutting tool changes and other PLC-related tasks is executed with greater efficiency.

> Supports turning, milling, multitasking, and other manufacturing processes in one system.

> High resolution multi-touch panels, powerride override controls for faster and better run-in. mobile control via the portable HT 10 terminal.

> OPC UA 3.0 enables fast and secure data exchange in industrial environments.

> FANUC 31II-B5 PLUS

> Complex multi-axis operations with Full interpolation between all axes and 6-axis transformation. The FANUC 31II-B5 PLUS ensure high precision, surface quality, and short cycle times, with fast block lookahead and built in kinematic measurement for easy setup.

> Smart and simple interface for user friendly operation, custom iHMI screens simplify advanced machine setup.

> Machine status monitoring, program transfer tool, smart servo control, fine surface technology are some of the functions creating efficient all-in-one machining.

> FAGOR CNC 8065 ELITE M

> Supports 8-axis machinig, 5-axis RTCP, and multi-spindle and -magazine setups.

> Advanced control with modern algorithms enable complex, high-precision machining.

> Control loops with Sercos III and real-time protocols allow nanometer-level accuracy.

> The design is space-efficient and user friendly with versatile monitor and keyboard options.

> The Web-Based HMIelite enables easy programming and cross-platform compatibility

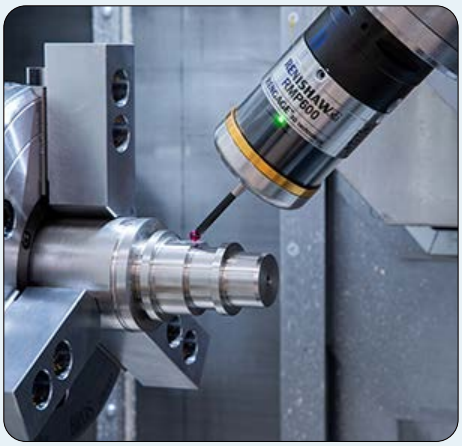
> SIEMENS DIGITAL TWIN

> Set up CNC job planning without the need for an immediate investment in a CAD/CAM system or specialized expertise.

> Assign machine operators flexibly, allowing them to contribute directly to job planning.

> Benefit from seamless CNC programming that connects the shop-floor machine with its digital twin in planning.

> ADVANCED MEASURING TECHNOLOGY



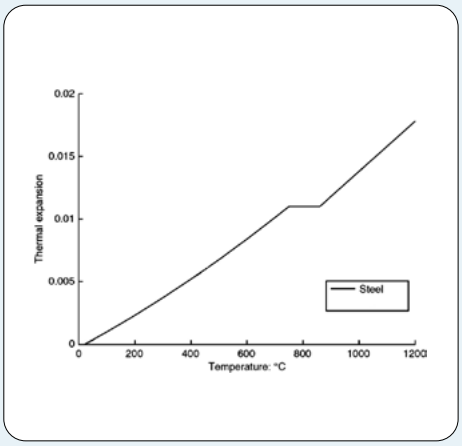
Renishaw RPM600

The SWEDTURN X can be equipped with high-precision measuring probes. In combination with the linear direct measuring systems, and backlash free anti-friction guideways, the probes effectively transforming it into a fully capable 3D measuring machine.

> Leverage modular measuring software
Use the comprehensive modular measuring software provided to design intelligent measurement strategies that minimize error-causing factors from the beginning.

> Customize complex measuring processes, and safeguard geometric quality of workpieces in your machine. Take advantage of software solutions tailored for complex, user-specific measurement tasks, ensuring both accuracy and flexibility.

> AUTOMATIC COMPENSATION



> Automatic compensate for tool wear:
The system records and compensates for tool wear automatically, maintaining precision throughout production. (you need the probing system above)

> Apply temperature compensation
Use software-controlled temperature compensation to counteract machining errors caused by thermal expansion of the machine and workpieces.

ST300 - COMPACT & CAPABLE

ST300 is available in one bed length with two headstock options and can be configured with one or two turrets, supporting both 2- and 4-axis machining. Standard setup includes a 150 mm headstock or quill with 150 mm stroke and a 12-position Sauter turret (DIN 3425, Ø50 mm).

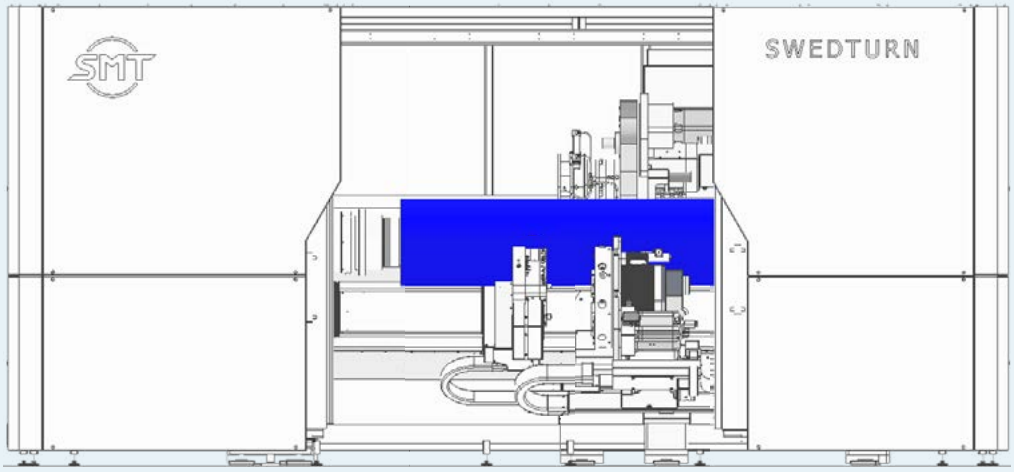
The machine supports a wide range of options: programmable tailstock, driven tools, C-axis, sub spindle, Y-axis, measuring probes, gantry loader, and part conveyor. Sub spindle and Y-axis enable complete part machining without operator intervention.

Its 45° slant bed design ensures efficient chip flow and ergonomic access.

WORKING RANGE AND SLIDE MOVEMENTS ST300			
Distance spindle nose - tail stock ref.plane		mm	1530
		mm	1295
Max. swing diameter	over bed	mm	580
	over rear slide	mm	310
	over front slide	mm	310
Max. turning diameter	rear slide	mm	500
	front slide	mm	370
Carriage travel	rear slide (1Z)	mm	1400
	front slide (2Z)	mm	1090
Cross-slide travel	rear slide (1X)	mm	380
	front slide (2X)	mm	210
Max path velocity	1Z / 1X	m/min	30/30
	2Z / 2X	m/min	15/7,5
TAILSTOCK			
Longitudinal travel	2-axis machine	mm	970
	4-axis machine	mm	970
Tail shank diameter			MK5
Tail pressure		daN	1500
SPACE AND WEIGHT			
Length		m	6,2
Depth		m	3,8
Total height		m	2,4
Approx. machine weight		kg	8500
HEADSTOCK			DIN 55026
Spindle nose		Size	A11
Spindle diameter in front bearing		mm	150
Spindle bore		mm	93

TECHNICAL DATA FOR STANDARD MODELS.

SWEDTURN X ST300 TECHNICAL DETAILS



CAPACITY ST300 2-AXIS

SPINDLE DRIVE				
AC output main motor 100%/60%		kW	44/65	
Max torque main motor 100%/60%		Nm	4000/5000	
Speed range of full power		rpm	150-2000	
C-AXIS (OPTION)				
Power of separate drive motor		kW	5,1	
Max torque cont/max		Nm	500/1500	
Max feedrate		rpm	25	
Pos. accuracy		degree	± 0,03	
Rep. accuracy		degree	± 0,01	
Tool carrier rear slide			Turret	Turret BMT
Number of tool positions			12	12
Max driven tools (option)			6	12
Tool clamping	DIN 69880	mm	50	65
Power of motor for driven tools		kW	10,6	12,5
Max speed driven tools		v/min	2500	6000
Tool Changing time appr.		s	0,56-2,3	0,6
Tool carrier front slide			Turret	
Number of tool positions			6	
Tool clamping	DIN 69880	mm	50	

TECHNICAL DATA FOR STANDARD MODELS.

ST500 – RESOURCEFUL & ROBUST

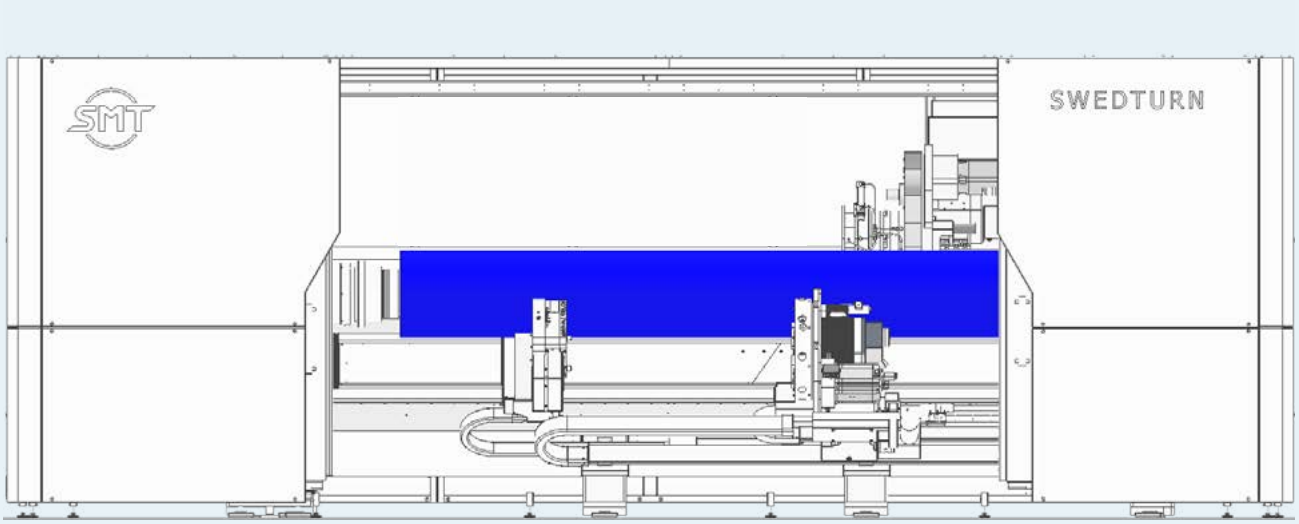
ST500 is available in four lengths and two headstock types. It supports one or two turrets, 2- or 4-axis, and comes standard with a 170 mm headstock (2000 rpm) and a 12-position Sauter turret (DIN 69880, Ø60 mm).

The machine offers extensive options: programmable tailstock, driven tools, C-axis, measuring probes, ATC, gantry loader (CPC), part conveyor, and milling spindle with B-/Y-axis. Its 55° slant bed ensures efficient chip flow. Headstocks feature integrated 2-step gearboxes and Polyflex belt transmission. A BigBore version with 370 or 420 mm through-hole and air-powered chucks is available for oil and gas pipe machining.

WORKING RANGE AND SLIDE MOVEMENTS ST500			**1300**	**1800**	**2800**	**4000**
Distance spindle nose - tail stock	2-axis	mm	1300	1800	2800	4000
	4-axis	mm	1030	1530	2530	
Max. swing diameter	over bed	mm		650		
(Option 2-axis machine)	over bed	mm		-800		
	over rear slide	mm		650		
	over front slide	mm		435		
Max. turning diameter	rear slide	mm		570		
	front slide	mm		470		
Carriage travel	rear slide (1Z)	mm	1295	1795	2795	3995
	front slide (2Z)	mm	900	1400	2400	
Cross-slide travel	rear slide (1X)	mm		380		
	front slide (2X)	mm		260		
Max path velocity	1Z / 1X	m/min		20/20		15/15
	2Z / 2X	m/min		15/7,5		
TAILSTOCK						
Longitudinal travel	2-axis machine	mm	1100	1600	2600	3800
	4-axis machine	mm	950	1450	2450	
Tail shank diameter				MK5		
Tail pressure		daN		3000		
SPACE AND WEIGHT						
Length		m	5,7	6,2	7,2	8,4
Depth		m	3,6	3,6	3,6	3,6
Total height		m	2,6	2,6	2,6	2,6
Approx. machine weight		kg	9000	10000	12000	15000
HEADSTOCK			DIN 55026			
Spindle nose		Size	A11	A15		
Spindle diameter in front bearing		mm	170	260		
Spindle bore		mm	110	180		

TECHNICAL DATA FOR STANDARD MODELS.

SWEDTURN X ST500 TECHNICAL DETAILS



CAPACITY ST500 MODEL 4000MM

SPINDLE DRIVE					
AC output main motor 100%/60%		kW	40/50		
Max torque main motor 100%/60%		Nm	1900/2350	2900/3600	3800/4700
Speed range of full power		rpm	200-3000	150-2000	100-1500
C-AXIS (OPTION)					
Power of separate drive motor		kW	5,1		
Max torque		Nm	2500		
Tool carrier rear slide			Turret		ATC
Number of tool positions			12		37/magazine
Max driven tools (option)			12		0-36
Tool clamping	DIN 69880		Diam. 60 mm/BMT75		SMT 200 mm
Power of motor for driven tools		kW	12,5		10,6
Max speed driven tools		v/min	6000		3000
Tool Changing time appr.		s	0,2 - 1,5		10
Max tool Weight		kg			50
Max tool Length		mm			800
Tool carrier front slide			Turret		
Number of tool positions			6/8		
Tool clamping	DIN 69880	mm	60		

TECHNICAL DATA FOR STANDARD MODELS.

ST700 - POWERFUL & VERSATILE

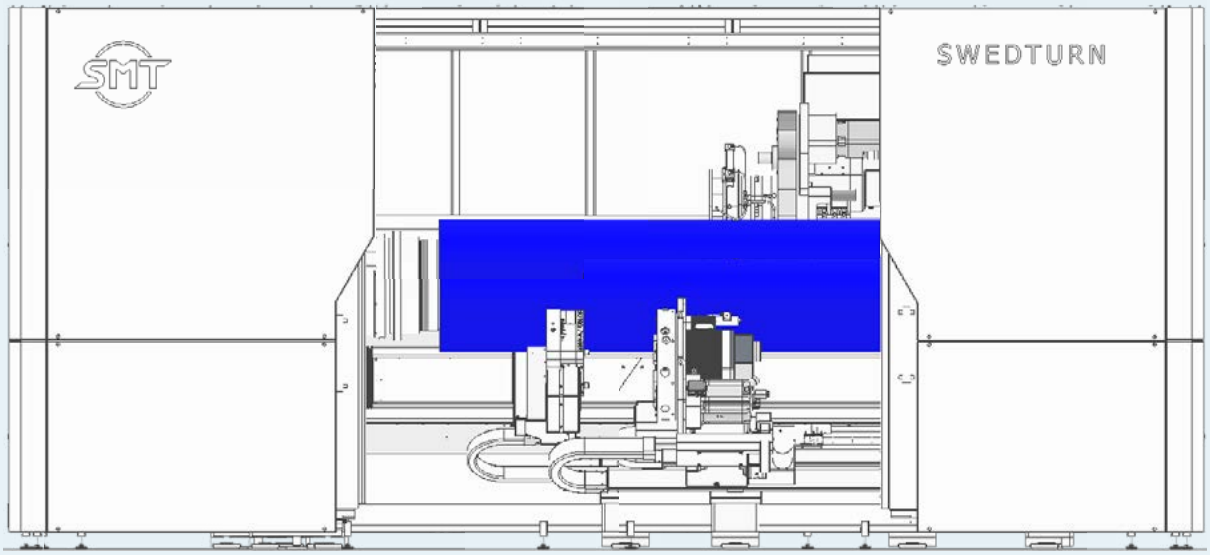
ST700 is available in four lengths with two headstock options and supports 2- or 4-axis machining with one or two turrets. Standard setup includes a 170 mm headstock and a 12-position Sauter turret (DIN 69880, Ø60 mm).

The 55° slant bed ensures efficient chip flow. Headstocks feature integrated 2-step gearboxes and Polyflex belt transmission. All sliding surfaces are centrally lubricated for durability and smooth operation.

WORKING RANGE AND SLIDE MOVEMENTS 700			**1300**	**1800**	**2800**	**4000**
Distance spindle nose-tail stock	2-axis	mm	1300	1800	2800	4000
	4-axis	mm	1030	1530	2530	
Max. swing diameter	over bed	mm		760		
(Option 2-axis machine)	over bed	mm		-800		
	over rear slide	mm		760		
	over front slide	mm		545		
Max. turning diameter	rear slide	mm		650		
	front slide	mm		470		
Carriage travel	rear slide (1Z)	mm	1295	1795	2795	3995
	front slide (2Z)	mm	900	1400	2400	
Cross-slide travel	rear slide (1X)	mm		490		
	front slide (2X)	mm		260		
Max path velocity	1Z / 1X	m/min		15/15		15/15
	2Z / 2X	m/min		15/7,5		
TAILSTOCK						
Longitudinal travel	2-axis machine	mm	1100	1600	2600	3800
	4-axis machine	mm	950	1450	2450	
Tail shank diameter				MK5		
Tail pressure		daN		3000		
SPACE AND WEIGHT						
Length		m	5,7	6,2	7,2	8,4
Depth		m	3,6	3,6	3,6	3,6
Total height		m	2,6	2,6	2,6	2,6
Approx. machine weight		kg	9000	10000	12000	15000
HEADSTOCK			DIN 55026			
Spindle nose		Size	A11	A15		
Spindle diameter in front bearing		mm	170	260		
Spindle bore		mm	110	180		

TECHNICAL DATA FOR STANDARD MODELS.

SWEDTURN X ST700 TECHNICAL DETAILS



CAPACITY ST700 MODEL 4000MM

SPINDLE DRIVE				
AC output main motor 100%/60%		kW	55/88	
Max torque main motor 100%/60%		Nm	4400/5200	5700/6800
Speed range of full power		rpm	150-2000	100-1500
C-AXIS (OPTION)				
Power of separate drive motor		kW	5,1	
Max torque		Nm	2500	
Tool carrier rear slide		Turret		ATC
Number of tool positions		12		37/magazine
Max driven tools (option)		6		0-36
Tool clamping		DIN 69880 Diam. 60 mm/Capto		SMT 200 mm
Option Y-axis	mm			+/- 75
Power of motor for driven tools	kW	10,6		12,7
Max speed driven tools	v/min	2250		3000
Tool Changing time appr.	s	0,2 - 1,5		10
Max tool Weight	kg			20
Max tool Length	mm			400
Tool carrier front slide			Turret	
Number of tool positions			8 / 6	
Tool clamping	DIN 69880	mm	60	

TECHNICAL DATA FOR STANDARD MODELS.

UNIQUE CNC LATHE WITH MANY ADVANTAGES.

The Swedturn ST 1200 builds on the innovative design originally developed for the SwedTurn 20, featuring a spindle head that moves along a separate X-bed, perpendicular to the machine's longitudinal Z-axis.

This configuration offers several ergonomic advantages for the operator. When changing the workpiece, the chuck moves outward, allowing the operator to handle it comfortably. Manual measurement is easier thanks to improved access, and the operator can step inside the machine for tool inspection or replacement, enhancing both safety and ergonomics.

UNIQUE BED CONSTRUCTION

The ST1200 features separate X and Z sliders, each on its own generously dimensioned bed for high rigidity. This design ensures excellent stability for heavy machining, efficient chip removal, and protects both linear guideways and measurement scales.

OPERATOR ERGONOMICS

To reduce strain during loading and unloading, the ST1200 allows the operator to stand close to the workpiece without bending. The open guard design ensures easy access for manual or robotic handling.

TOOL SYSTEM

For demanding materials and complex parts, SMT offers a tool system based on Capto C6 or HSK 63. A chain magazine with 50 or 100 tool positions and dual-arm changers is housed in a separate, accessible cabinet, allowing tool service during production.

TOOL CARRIER

Equipped with a 37 kW milling spindle and B-axis, the machine handles heavy machining with precision. The spindle is indexable and servo-driven for lighter tasks. Standard configuration includes Z, B, and C2 axes, with optional Y-axis and turret for simpler operations.

HEADSTOCK & SPINDLE DRIVE

Mounted on the X-slide, the standard spindle drive is 40 kW with a 170 mm bearing. For heavier tasks, a 60 kW drive and 260 mm bearing are recommended. RPM ranges from 750 to 3000 depending on configuration. C-axis is available.

THERMAL STABILITY

Built-in linear scales compensate for thermal variation, maintaining tight tolerances even during warm-up.

SWEDTURN X ST1200 TECHNICAL DETAILS

WORKING RANGE AND SLIDE MOVEMENTS ST 1200					
Max workpiece length		mm	800		
Max. swing diameter		mm	1200		
Max. turning diameter		mm	1200		
Carriage travel	Z slide	mm	1500		
Cross-slide travel	X slide	mm	800		
Max path velocity	Z / X	m/min	20/20		
Max feedforce	Z	kN	22		
Max feedforce	X	kN	22		
SPACE AND WEIGHT					
Length x Depth x Total Height		m	5,5 x 5,9 x 2,4		
Approx. machine weight		kg	16500	17500	
HEADSTOCK			DIN 55026	DIN 55026	
Spindle nose		Size	A15	A20	
Spindle diameter in front bearing		mm	260	370	
Spindle bore		mm	180	265	
SPINDLE DRIVE					
AC output main motor 100%/60%		kW	44/58	58/88	
Max torque main motor 100%/60%		Nm	1900/2350	4400/5200	5700/6800
Speed range of full power		rpm	200-3000	150-2000	100-1500
C-AXIS					
Power of separate drive motor		kW	51		
Max torque		Nm	2500		
TOOL CARRIER WITH B-AXIS			Milling spindle Sauter	Milling Spindle-Sauter	
Number of tool positions			1	1	
Tool clamping		mm	Capto C6	Capto C8 (HSK)	
Power of motor for driven tools		kW	37/47	37/47	
Max speed driven tools		v/min	7000	9000	
TOOL MAGAZINE					
Max toolweight		kg	12	16	
Max tooldiameter		mm	80	120	
Max toollenght		mm	300	400	
Number of tools in chain		st	46	46	

TECHNICAL DATA FOR STANDARD MODELS.

SWEDTURN X OPTIONS TECHNICAL DETAILS

OPTIONS	ST300	ST500	ST700	ST1200
Standard programmable Tailstock Hydraulic	X	X	X	
Tailstock - 2axis, MK5	X	X	X	
Tailstock - 4axis, MK5	X	X	X	
Customized on request**	X	X	X	X
Headstock	X	X	X	X
Headstocks Oil Country Lathe		X	X	X
Headstocks Oil Country Lathe		X	X	X
Spindle drive		X	X	X
C-axis spindle motor	X	X	X	X
C-axis additional servo motor	X	X	X	X
Spindle Brake	X	X	X	X
Motor Spindle as Subspindle Weiss 180162A – A8	X	X	X	
Motor Spindle as Subspindle Weiss 180163A – A11	X	X	X	
Tool Carriers:	X	X	X	X
Turret for live tools type VDI 60	X	X	X	X
(Rear Turret)	X	X	X	X
Direct Drive Turret for live tools type BMT 65	X	X	X	X
(Rear Turret)	X	X	X	X
Direct Drive Turret for live tools type BMT 75	X	X	X	X
With Y-Axis	X	X	X	X
(Rear Turret)	X	X	X	X
Turret for live tools type VDI 60	X	X	X	
(Front Turret)	X	X	X	
Direct Drive Turret for live tools type BMT 55	X	X	X	
(Front Turret)	X	X	X	
Tool cassettes for rear turret type VDI 60	X	X	X	X
Tool cassettes for front turret type VDI 60	X	X	X	X
Live tool spindle units for VDI 50	X	X	X	X
Automatic opening of chip guard	X	X	X	X
Automatic opening of chip guard for basic machines incl light curtain	X	X	X	X
Automatic opening of chip guard roof in combination with opening of chip guard for basic machines with CPC or ATC	X	X	X	X
Exhaust	X	X	X	X
Pipe flange for central exhaust Ø 200 mm	X	X	X	X
Oilmist separator	X	X	X	X
Absolent ODF 2000	X	X	X	X
Absolent ODF 4000	X	X	X	X
Filtering units for coolant	X	X	X	X
Metal Gennari 2500L	X	X	X	X
Tool tip measuring	X	X	X	X
Tool tip measuring for 2-axis machine	X	X	X	X
Tool tip measuring for 4-axis machine	X	X	X	X
ARTIS Cuttingforcemonitoring type CTM V2	X	X	X	X
Training for Artis will be done by local ARTIS company	X	X	X	X
Visirport , electrical driven	X	X	X	X

SWEDTURN X OPTIONS TECHNICAL DETAILS

OPTIONS	ST300	ST500	ST700	ST1200
Main Spindle Chucking tools SMW Autoblok	X	X	X	X
Hydraulic operated 3-jaw chuck type SMW IND 500/11” with hydraulic cylinder SIN-S175 without hole incl. one set of hardened and ground top jaws.	X	X	X	X
Hydraulic operated 3-jaw chuck type SMW BHD 500/11” with hole and with hydraulic cylinder SIN-S150 without hole incl. one set of hardened and ground top jaws	X	X	X	X
Hydraulic operated 3-jaw chuck type SMW BHD 500/11” with hole and with hydraulic cylinder VNK-225-95 with hole incl. one set of hardened and ground top jaws	X	X	X	X
Sub Spindle Chucking tools SMW Autoblok	X	X	X	
Double Chuck pressure	X	X	X	X
Double Chuck pressure with rechucking.	X	X	X	X
Double Chuck pressure without rechucking.	X	X	X	X
Steady rest, fixed, 2-axis machine	X	X	X	X
Hydraulic steady rest. Clamping diam. 35-245 mm	X	X	X	X
Hydraulic steady rest. Clamping diam. 50-310 mm	X	X	X	X
Steady rest positional in Z for 2-axis machines	X	X	X	X
Hydraulic steady rest positional in Z clamping diam 35-245 mm	X	X	X	X
Hydraulic steady rest positional in Z, clamping diam 50-310 mm	X	X	X	X
Steady rest on the front turret disc on a 4-axis machines	X	X	X	X
Hydraulic steady mounted on front disc, clamping diam 20-170 mm	X	X	X	X
Complete with hydraulic and central lubrication	X	X	X	X
Chip conveyor	X	X	X	X
SoftWare-Options	X	X	X	X
Optionspackage ”SHOPTURN-Programming and SIMULATION”	X	X	X	X
Optionspackage ”4-axis-Machining” for OPERATE	X	X	X	X
CPC 50 - Automatic Part Changer	X	X	X	X
CPC 2 - Automatic Part Changer	X	X	X	X
ATC Versions		X	X	X
ATC 50, Automatic Tool Changer		X	X	X
Extra magazine		X	X	X
Tool cassettes ATC		X	X	X
Driving unit for ATC-tools		X	X	X
Spindle units for live tools in ATC		X	X	X
Y-axis for ATC		X	X	X
Coolant through ATC-tools		X	X	X
Extra Tool Position (ATC)		X	X	X

X = AVAILABLE
- = NOT AVAILABLE

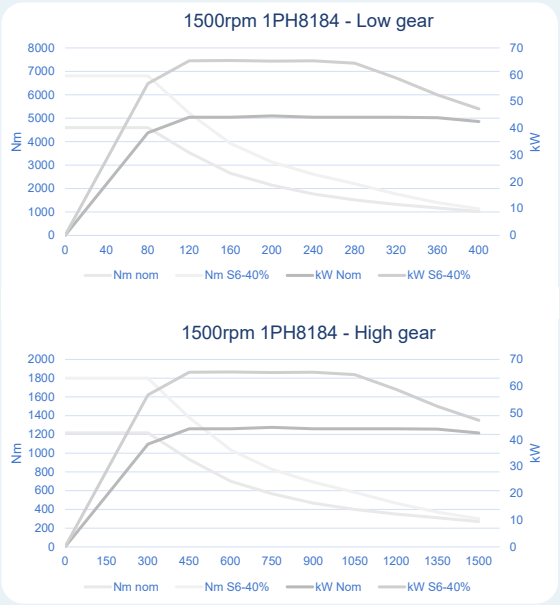
SWEDTURN X MAIN SPINDEL DRIVE

MAIN SPINDLE A11 170 MM WITH MAX 1500 RPM 1PH8-184

Headstock with integrated gearbox

Power: 44 kW continuous drive
65 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 3,34:1
Low gear 12,55:1

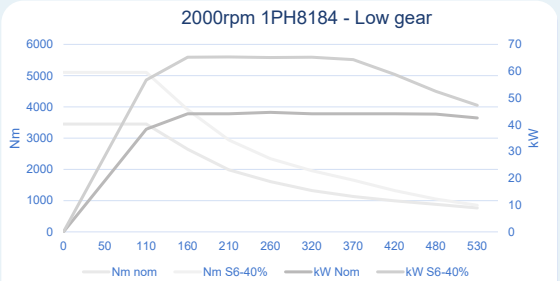


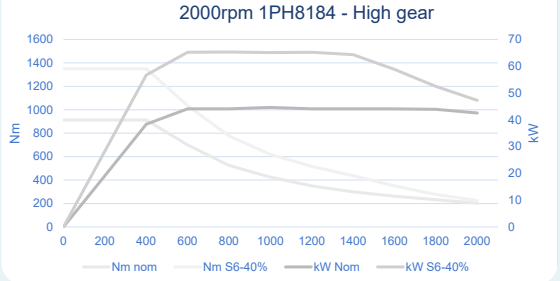
MAIN SPINDLE A11 170 MM WITH MAX 2000 RPM 1PH8-184

Headstock with integrated gearbox

Power: 44 kW continuous drive
65 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 2,50:1
Low gear 9,43:1



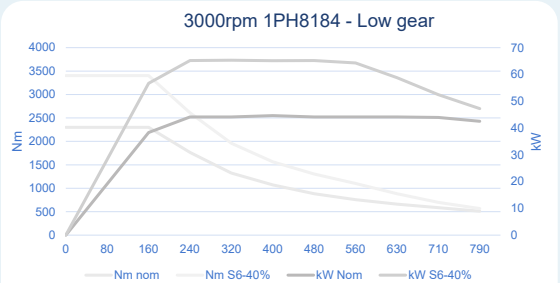


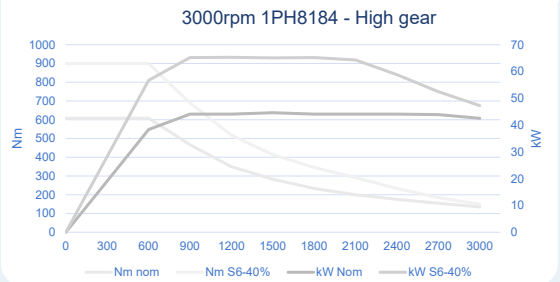
MAIN SPINDLE A11 170 MM WITH MAX 3000 RPM 1PH8-184

Headstock with integrated gearbox

Power: 44 kW continuous drive
65 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 1,68:1
Low gear 6,27:1





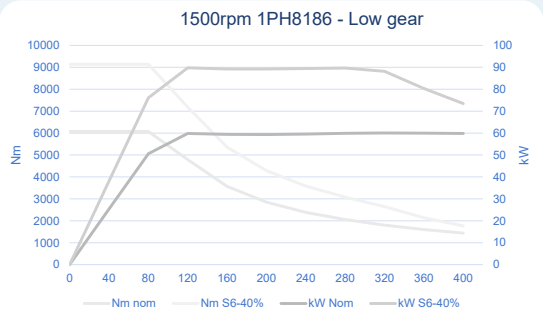
SWEDTURN X MAIN SPINDEL DRIVE

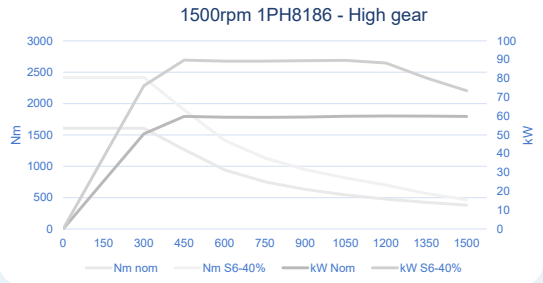
MAIN SPINDLE A11 170 MM WITH MAX 1500 RPM 1PH8-186

Headstock with integrated gearbox

Power: 58 kW continuous drive
88 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 3,34:1
Low gear 12,55:1



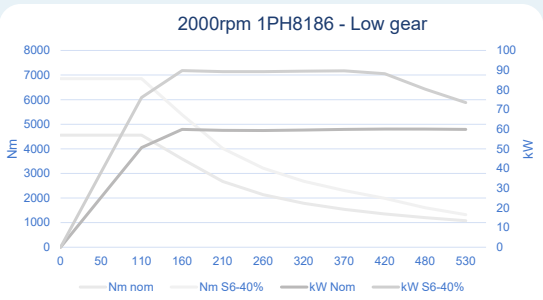


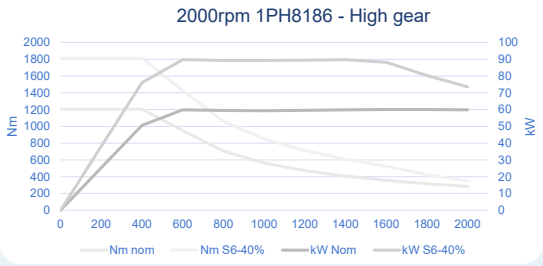
MAIN SPINDLE A11 170 MM WITH MAX 2000 RPM 1PH8-186

Headstock with integrated gearbox

Power: 58 kW continuous drive
88 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 2,50:1
Low gear 9,43:1



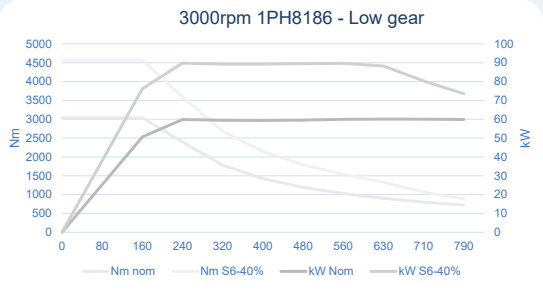


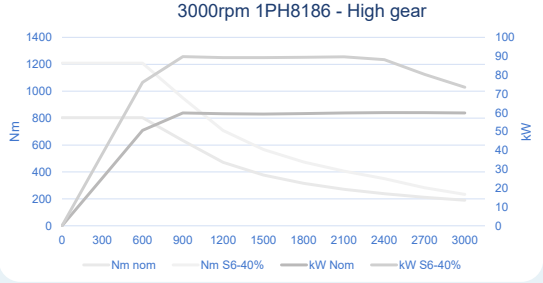
MAIN SPINDLE A11 170 MM WITH MAX 3000 RPM 1PH8-186

Headstock with integrated gearbox

Power: 58 kW continuous drive
88 kW 40 % intermittent drive

Ratio between motor-spindle
High gear 1,68:1
Low gear 6,27:1





PRODUCTION SOLUTIONS THAT LAST,
OVER TIME AND THROUGH CHANGE

SMT MACHINE PROGRAMS

ALL MEASUREMENTS = MM

SWEDTURN X

Heavy duty CNC-lathes for non-stop production with high demands on precision

	MAX TURNING Ø	MAX WORKPIECE LENGHT
ST300	500	1300
ST500	500	900-3850
ST700	700	900-3850
ST1200	1200	800

TURN X MILL

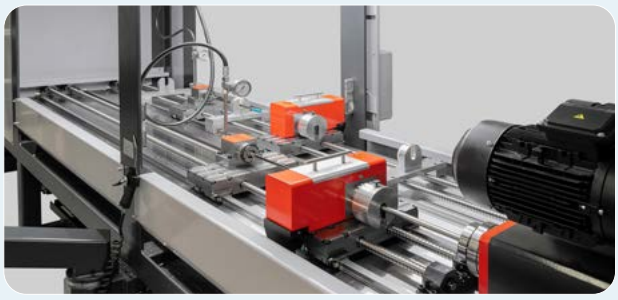
Heavy duty multifunction center for completing complex parts in one pace with Milling head and B-Axis

	MAX TURNING Ø	MAX WORKPIECE/MACHINE LENGHT
TXM 500 *S	650	1350/1500 - 5350/5500
TXM 800 *S	750	1350/1500 - 5350/5500

SWEDMILL

Vertical/horisontal milling machines for prototype and low volume production.

	WORKPIECE AREA	X	Y	Z
VHF 330 M		600	500	450
VHF 330 TI		600	500	450
VHF 360 TI		650	500	475
VHF 380 TI		800	500	475



SWEDDRILL

Deep hole drilling machines built on customer specification with max workpiece lenght up to 14 000mm.

	MAX TURNING Ø	FULL BORE
DHB 150	300	100
DHB 180	345	125
DHB 230	430	125

CONTACT

HEADQUARTER & PRODUCTION SITE

SMT Swedish Machine Tool Company AB
Främmestadvägen 29
465 97 Främmestad
Sweden

Phone +46 (0)21 - 80 51 00
Sales sales@smtcompany.se
Service service@smtcompany.se