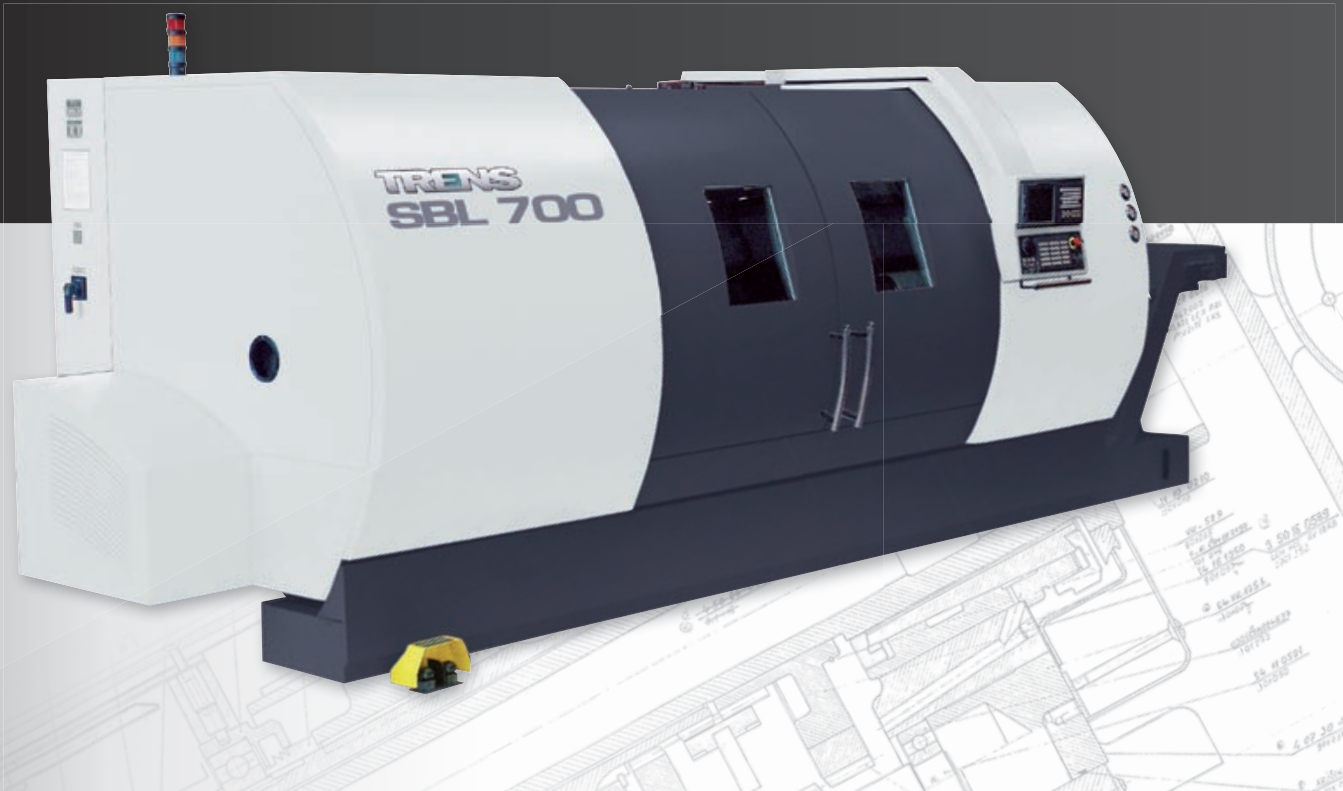


Turning Centers

SBL 700



➤ Top representative of SBL range turning centers is designed for medium to large series production for demanding machining of large-dimensions workpieces of complex geometrical shapes. It is suitable for technological workshops focusing on large dimensions flange and shaft production in engineering where precision, quality and high production efficiency plays crucial role.



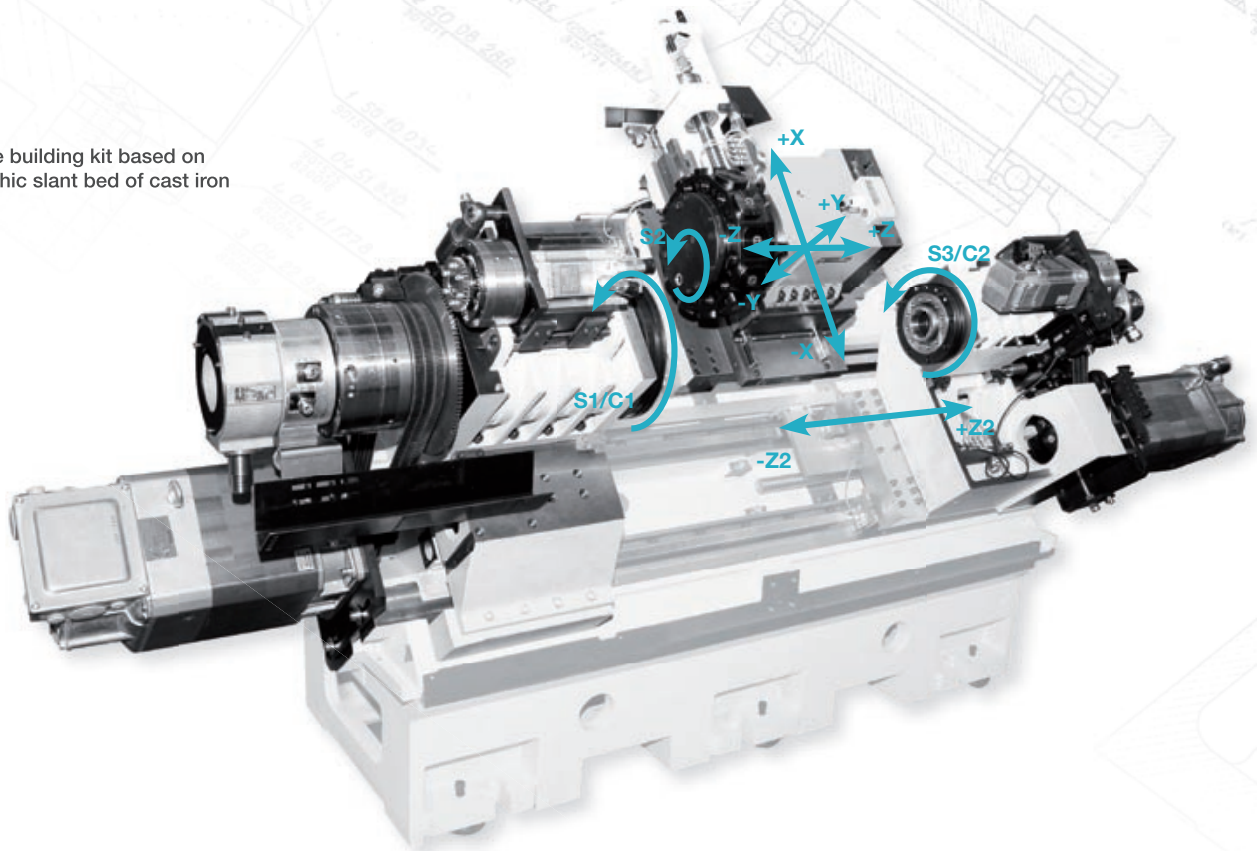
➤ MAIN ADVANTAGES

- High precision and productive machining of simple as well as complex shape workpieces
- **Stable cutting process with high repeatable accuracy of machining**
- Remote diagnostics and data management
- **Modular concept of the machine allows configuration tailored to the customer's individual requirements**
- Variety of turrets with VDI couplings with or without live tools
- **Wide scope of executions and accessories – clamping devices, tool probes**
- The newest technologies in the field of drives bring savings of electrical energy



▲ Tailstock with hydraulic sleeve

> Variable building kit based on monolithic slant bed of cast iron



** illustration photo

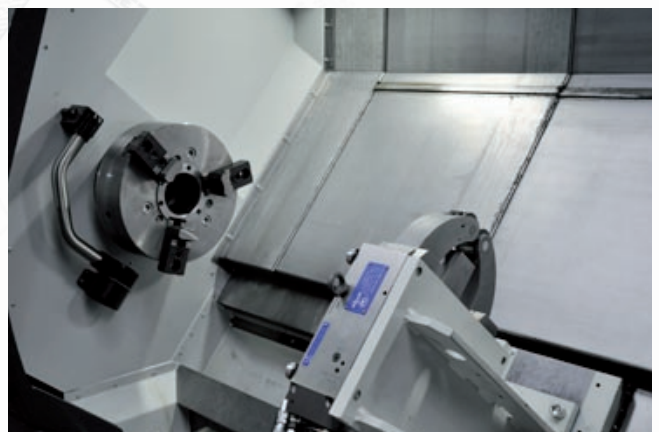
> STANDARD

- Control system SIEMENS 840D, software ShopTurn
- **Drives Simodrive with energy recovery**
- Vector controlled asynchronous motor for main spindle drive 37 kW
- **Direct angle and rotation measuring through magnetic disc sensor integrated in spindle**
- C-axis of the main spindle positioned through the motor of the main spindle
- **Spindle bore 127 mm**
- Hydraulic 3-jaw chuck, \varnothing 400 mm with inner passaging hole 108 mm, max. 2000 RPM
- **Electronic check of hydraulic clamping limit positions**
- Security locking system for hydraulic clamping systems and tailstock sleeve
- **Double foot switch to open/close main spindle jaw chuck**
- Spindle brake
- **Turning length between chuck and tailstock 2000 mm**
- Hydraulic tailstock
- **Linear rolling guideways**
- Direct X axis measurement by linear scale
- **Automatic lubrication with controlled distribution of lubricant**
- 12-position axial turret SAUTER, VDI 50 without live tools
- **Chip conveyor on the right**
- Complete cooling aggregate, pressure 0,3 MPa
- **Manual door opening**
- Positionable control panel
- **Entering input and output parameters in metric/imperial units**
- Input power 3x400 V/50 Hz
- **Transport device**
- Operating manual
- **CE execution**

> OPTIONAL EXECUTIONS

- Control system SIEMENS Sinumeric 840D SolutionLine, software Operate 4.5, TCU
- **Drive SIEMENS Sinamics S120 with energy recovery**
- Control system FANUC Oi-TD, software Manual Guide i
- **C-axis of the main spindle positioned through servomotor connected through bearing reducer**
- Hydraulic 3-jaw chuck, \varnothing 500 mm with inner passaging hole 108 mm, max. 2000 RPM
- **Spindle brake**
- Hydraulic steady rest, clamping range 35–240 mm
- **Hydraulic steady rest, clamping range 50–300 mm**
- Axial turret with live tools, VDI 50 with spindle brake
- **Higher pressure cooling system, 0,7 MPa**
- Tool probe
- **Autotransformer for 220 V or 575 V**
- 3-color warning light (operation signalization)

v Hydraulic chuck with hard jaws



Machine type	Unit	SBL 700
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Working range

Max. swing over bed	mm	750
Max. turning diameter	mm	500
Max. turning length	mm	2000
Max. bar diameter	mm	107
Max bar diameter with bar feeder reduction bushing	mm	97

Main spindle

Spindle nose (DIN 55026)		A2-11
Spindle bore	mm	127
Spindle diameter in front bearing	mm	180
Max. spindle speed	min ⁻¹	2500
Max. spindle speed with reductor 1:4	min ⁻¹	700
Chuck diameters	mm	315/400*

Spindle drive

Main motor output S1	kW	37
Main motor output S6	kW	56
Torque (as per version) S1	Nm	484
Torque – 2nd gear S1	Nm	1935

Carriages and drives

X-0S

Cross slide feed range	mm.min ⁻¹	1 ÷ 10000
Cross-slide rapid traverse	mm.min ⁻¹	16000
Working travel	mm	420

Z-0S

Longitudinal slide feed range	mm.min ⁻¹	1 ÷ 10000
Longitudinal slide rapid traverse	mm.min ⁻¹	20000
Working travel	mm	2170

Turrets (VDI 50)

12-positional axial turret SAUTER

No. of tool positions		12
Tool shank diameter (according to DIN 69880)	mm	50
Max. tool cross-section	mm	32×25

12-positional axial turret SAUTER with live tools*

No. of tool positions		12
No. of driven tool positions		6
Tool shank diameter (according to DIN 69880)	mm	50
Coupling		B 20×17, DIN 5482
Max. tool cross-section	mm	32×32
Driven tools motor output	kW	7,8
Max. torque	Nm	27
Max. RPM	min ⁻¹	2750

Tailstock

Tailstock sleeve internal taper		MORSE 6
Tailstock sleeve travel	mm	150
Clamping force range	mm	250–2400
Tailstock control	daN	manual/ tailstock tow

Machine dimensions

Height	mm	2490
Width		2255
Length with chip pan/with chip conveyor to the right side*	mm	6800*

Weight

Weight – version with tailstock	kg	cca 11000*
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Control systems

SIEMENS 840D SolutionLine + ShopTurn		yes
FANUC 0iTD + Manual Guide i		no

* optional execution