### TECHNICAL PARAMETERS

<table>
<thead>
<tr>
<th>Machine type</th>
<th>Unit</th>
<th>SBL 700</th>
</tr>
</thead>
</table>

#### 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
- Max. spindle speed (min⁻¹): 2500
- Max. spindle speed with reducer 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
- Coupling B20 × 17, DIN 5482

#### Carriages and drives
**X-os**
- Cross slide feed range (mm/min): 1–10000
- Cross slide rapid traverse (mm/min): 16000
- Working travel (mm): 740

**Z-os**
- Longitudinal slide feed range (mm/min): 1–10000
- Longitudinal slide rapid traverse (mm/min): 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 B20 × 17, DIN 5482
  - Max. tool cross-section (mm): 32×32
  - Driven tools motor output (kW): 7.8
  - Max. RPM: 2750

#### Tailstock
- Tailstock sleeve internal taper: MORSE 6
- Tailstock sleeve travel (mm): 130
- Clamping force range (mm): 250–2000
- Tailstock centering (mm): Manual tailstock bar

#### Machine dimensions
- Height (mm): 2490
- Width: 2255
- Length with chip pan/chip conveyor to the right side*: 6800*

#### Weight
- Weight (kg): cca 11000*
- Weight – version with tailstock (kg): cca 15000*

#### Control systems
- SIEMENS 840D SolutionLine + ShopTurn
- FANUC 0iTD + Manual Guide i

* optional execution

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**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

Standard

- Control system SIEMENS Sinumeric 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, Ø 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 3×400 V/50 Hz
- Transport device
- Operating manual
- CE execution

Optional Executions

- Control system SIEMENS Sinumeric 840D SolutionLine, software Operate 4.5, TOU
- Drive SIEMENS Sinamics S120 with energy recovery
- Control system FANUC 0i-TD, software Manual Guide i
- C-axis of the main spindle positioned through servomotor connected through bearing reducer
- Hydraulic 3-jaw chuck, Ø 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)
### 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

### STANDARD

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- Vector controlled asynchronous motor for main spindle drive 37 kW
- Direct angle and rotation measuring through magnetic disc sensor integrated in spindle
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- 3-color warning light (operation signalization)
**TECHNICAL PARAMETERS**

**Machine type**

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<td></td>
</tr>
<tr>
<td>Max. swing over bed mm</td>
<td>750</td>
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<tr>
<td>Max. turning diameter mm</td>
<td>500</td>
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<tr>
<td>Max. turning length mm</td>
<td>2000</td>
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<tr>
<td>Max. bar diameter mm</td>
<td>107</td>
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<td>Max. bar diameter with bar feeder reduction bushing mm</td>
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<tr>
<td><strong>Main spindle</strong></td>
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<tr>
<td>Spindle nose (DIN 55026)</td>
<td>A2-11</td>
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<tr>
<td>Spindle bore mm</td>
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<td>Spindle diameter in front bearing mm</td>
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<tr>
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<td>37</td>
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<td>Cross slide feed range mm.min⁻¹</td>
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<td>Longitudinal slide feed range mm.min⁻¹</td>
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<td>No of tool positions</td>
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<td>No of driven tool positions</td>
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<td>Tool shank diameter (according to DIN 69880) mm</td>
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<tr>
<td>Coupling B 20×17, DIN 5482</td>
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<td>Driven tools motor output kW</td>
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<td>Max RPM</td>
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<td><strong>Tailstock</strong></td>
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<td>Height mm</td>
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