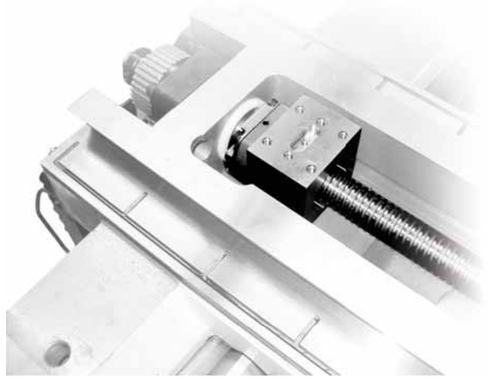
TECHNICAL PARAMETERS

Machine type	Unit	SE 520 SL
Working range		
Max. swing over bed	mm	520
Max. swing over cross slide	mm	290
Distance between centres	mm	2000
Height of centres over bed	mm	250
Max. bar diametert	mm	75/103*
Main spindle		
Spindle nose BAYONET (ISO702-III)		B8/B11*
Spindle nose CAMLOCK (ISO702-II)		D8*/D11*
Spindle bore	mm	77/105*
Spindle diameter in front bearing	mm	120/150*
Max. spindle speed – 1st gear	min^{-1}	650
Max. spindle speed – 2nd gear	min^{-1}	2600/2200*
Manual clamping	mm	250/315*
Hydraulic clamping*	mm	210
Spindle drive	SIEMENS, HEIDENHAIN/FANUC	
Main motor output S1	kW	11
Main motor output S6	kW	15
Torque – 1st gear S1	Nm	525
Torque – 1st gear S6	Nm	715
Torque – 2nd gear S1	Nm	132
Torque – 2nd gear S6	Nm	180
Carriages and drives		
X-axis		
Cross slide feed	$mm.min^{-1}$	1÷3000
Cross slide rapid traverse	$mm.min^{-1}$	3000
Working travel	mm	270
Z-axis		
Longitudinal slide feed range	$mm.min^{-1}$	1÷5000
Longidudinal slide rapid traverse	$mm.min^{-1}$	10000
Working travel	mm	2110
Toolposts		
Quick change tool post		MultiSuisse B*
Max. tool size	mm	25×25*
Quick change tool post		MultiSuisse C
Max. tool size	mm	32×32
Manual tool post systems*		
Quick change tool post		Parat RD 2*
Max.tool size	mm	25×25
Quick change tool post		Parat RD 3*
Max.tool size	mm	32×32
Quick change tool post		Algra TGA-R-250*
Max.tool size	mm	25×25
Quick change tool post		Algra TGA-R-300*
Max.tool size	mm	32×32
Quick change rotating tool holder Coromant Capto		Capto C4/Multifix C*
Max.tool size	mm	32×32
Quick change rotating tool holder Coromant Capto		Capto C5/Multifix C*
Max.tool size	mm	32×32
Automatic turrets*		
Axial turret without live tools*		SAUTER*
No. of tool positions		8*
Tool shank diameter (according DIN 69880)		30*
Max.tool cross section	mm	20×16*

TECNICAL PARAMETERS

Machine type	Unit	SE 520 SL
Axial turret with live tools*		SAUTER*
No. of tool positions		8*
No. of live tools positions		8*
Tool shank diameter (according DIN 69880)	mm	30*
Coupling		B 15x12, DIN 5482*
Max. tool cross section	mm	20×16*
Driven tools motor output	kW	4,5*
Max. torque	Nm	20*
Max. rotations	min^{-1}	4000*
Tailstock		
Tailstock sleeve internal taper		MORSE 5
Tailstock diameter	mm	80
Tailstock sleeve travel	mm	160
Tailstock control		ručné
Clamping force range* (optional hydraulic tailstock sleeve travel) daN	daN	80-800*
Machine dimensions		
Height	mm	1800
Width	mm	1850
Lenght with chip pan	mm	3930
Lenght with chip conveyor on right side*	mm	5450*
Weight		
Weight (without optional accessories)	kg	cca 3800
Control systems		
SIEMENS 840D SolutionLine + ShopTurn		Yes
FANUC 0iTF + Manual Guide i		Yes
HEIDENHAIN MANUAL Plus 620		Yes

* optional execution



> Preloaded ground ball screws - high dimensional accuracy of workpieces

CNC universal center lathe

SE 520 SL

CNC universal center lathe is designed on the basis of SE 520 Numeric. Thanks to the new bed, the distance between centers was enlarged to 2000 mm. The fully covered working space allows to increase technological possibilities of long work-piece machining. The machine can turn simple, as well as complex shapes work-pieces. The machine can be customized in various optional executions and it can be equipped with various optional accessories. SE 520 SL works as a universal lathe in a manual mode, being controlled by the hand wheels or in the full CNC control to perform demanding technological operations. This enables new machining possibilities for piece production and increase the productivity of small series production.

MAIN FEATURES

- Ideal machine for a user switching from universal lathe to CNC controlled machine
- **Easy and comfortable control through large touch screen**
- Long lifetime with focus on keeping high machining accuracy
- **Spindle drive through belts - minimization of vibrations during machining**
- Automatic gear shifting during the working cycle
- **Bearings with lifetime grease filling – low operating costs**
- Fully covered working space – high stage of operator's safety, the prevention of flying chips and coolant leaking, allows increased coolant pressure and cutting speed - increase in machining productivity
- **Wide scope of executions and accessories – hydraulic clamping, hydraulic tailstock control, hydraulic and manual controlled self-centering rests in various executions, boring bar holder, live tools, wide scope of face plates.**
- Intuitive and user friendly software machine control

v **Fully covered working space with safety antidisruptive glass** - effectively protects the operator against flying chips and splashing coolant

STANDARD

		SE 520 SL
Control system		SIEMENS 840D SolutionLine SINUMERIC Operate
Spindle nose Bayonet B8 for spindle bore dia	mm	77
Quick change tool post Multi Suisse C with tool holder		C; CD32/170

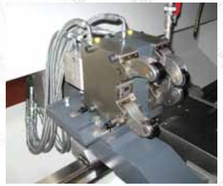
- Fully covered working space with safety antidisruptive glass effectively protects the operator against flying chips and splashing coolant
- **Automatic locking of all the doors of working space**
- Working space lighting by intensive LED lights
- **Moveable control panel with large 15 inch industry touch screen Siemens, resistible execution for difficult work shop conditions**
- Digital drives with energy recovery
- **Tailstock with manual controlled sleeve**
- Complete cooling of cutting tools
- **Automatic lubrication**
- Chip pan
- **Operator kit**
- Operating manual

OPTIONAL EXECUTIONS

		SE 520 SL
Control system		FANUC 0iTF Manual Guide i
Control system		HEIDENHAIN MANUAL Plus 620
Spindle nose Camlock D8 for spindle bore dia	mm	77
Spindle nose Bayonet B11 for spindle bore dia	mm	105

- 4 position manual rotating toolpost PARAT 2, 3
- **4 position manual rotating toolpost ALGRA 250, 300**
- Quick change rotating system Coromant Capto with tool holder Capto C4(C5)/Multifix C
- **8 position turret Sauter with live tools and spindle brake**
- 8 position turret Sauter without live tools
- **Spindle brake**
- Oriented spindle stop for precision boring of holes
- **Hydraulic 3 jaw chuck dia. 210 mm with non-passing hole for spindle bore 77mm**
- Hydraulic collet clamping for bars up to 40 mm for spindle bore 77m
- **Tailstock with hydraulic controlled sleeve**
- Chip conveyor
- **Electro-cabinet air conditioner**
- Hydraulic self-centering follow rest
- **Hydraulic self-centering follow dual rests – automatic tandem work**
- Hydraulic self-centering steady rest

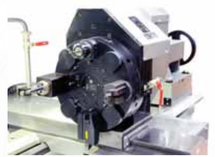
^ **Spindle nose CAMLOCK**



^ **Hydraulic self-centering follow dual rests – automatic tandem working**

^ **Tailstock with hydraulic controlled sleeve**

^ **4 way quick change turret PARAT**



^ **8 position turret SAUTER with live tools**

^ **Direct drive of the ballscrew**

OPTIONAL ACCESSORIES

CLAMPING DEVICES

^ **3 jaw chuck**

^ **4 jaw face-plate**

^ **Soft jaw**

^ **Hard jaw**

^ **Face driving centers for clamping of shaft work pieces**

STEADY RESTS AND ROLLING CONTACT BEARINGS

^ **Steady rest**

^ **Follow rest**

^ **Large steady rest**

^ **Hydraulic self-centering follow rest**

		SE 520 SL
Steady rest ø	mm	10-115
Steady rest ø	mm	10-115
Large steady rest ø	mm	100-205
Large steady rest II. ø	mm	200-315
3 jaw manual passing chuck ø	mm	250/315
4 jaw manual passing chuck ø	mm	250/315
4 jaw face plate with independent jaws ø	mm	250/315/400

- Spare jaws and flanges for chucks
- **Face driving centers for clamping of shaft work pieces**
- Oil mist collector
- **Spindle reduction sleeves**
- Dead center
- **Live center**
- Anchoring screws and pads
- **Lifting device**
- Operating manual
- **Free contour programming**
- Rest material identification
- **Different languages**
- Programming manual
- **Autotransformer for different voltages**
- Color warning light
- **Remote diagnostics**