



L SERIES

Lathe Machines

WWW.SYIL.COM



SYIL Technical Specifications

Specification	L2	L3	L4
Processing Capacity			
Chuck Size (")	8	8	10
Max. Swing Diameter over Bed (mm)	ø510	ø550	ø630
Max. Swing Diameter over Carriage (mm)	ø260	ø290 / ø200	ø330
Max. Workpiece Length (mm)	300	500 / 530 / 450	800 / 1100 / 1500
Max. Workpiece Diameter (mm)	ø380	ø380	ø520
Spindle			
Maximum Speed (rpm)	4000	4000	3500
Spindle Nose	A2-6	A2-6	A2-8
Spindle Bore Diameter (mm)	ø66	ø63	ø91
Through Spindle Bore Diameter (mm)	ø52	ø52	ø75
Spindle Power (kW)	11	11	15
Minimum C-Axis Indexing (°)	–	0.001	–
Counter Spindle			
Chuck Size (")	–	6	–
Rate Speed / Max Speed (rpm)	–	1750 / 6000	–
Spindle Nose	–	A2-5	–
Spindle Bore Diameter (mm)	–	ø56	–

Specification	L2	L3	L4
Through Spindle Bore Diameter (mm)	–	ø45	–
Spindle Power (kW)	–	11	–
Travels (mm)	–	530	–
Rapid Traverse (m/min)	–	30	–
Travels			
X Rapid Traverse (m/min)	30	30	30
Z Rapid Traverse (m/min)	30	30	30
Y Rapid Traverse (m/min)	–	15	–
X Travels (mm)	200	190 + 10	260 + 10
Z Travels (mm)	360	550 (490 ± 50)	850 / 1150 / 1550
Tool Holder			
Type	Servo Turret	Power Turret	Servo Turret
Tools	8 / 12	12	12
Tool Shank Size (mm)	25 x 25	25 x 25	25 x 25
Tool Shank Diameter (mm)	ø40	ø40	ø40
Minimum Tool-to-Tool (s)	0.28	0.2	0.2
Maximum Tool-to-Tool (s)	0.4	0.5	0.5
Maximum Live Tooling Speed (rpm)	–	5000	5000
Live Tooling Model	–	BMT55	BMT55
Tail Stock			
Travels from Tailstock to Chuck (mm)	–	465 / 500	–

Specification	L2	L3	L4
Tailstock Rapid Traverse (m/min)	–	30	10
Sleeve Taper	–	MT4	MT5
Accuracy			
Cylindrical Accuracy	IT6	IT6	IT6
Surface Finish	Ra 0.4 – 1.6	Ra 0.4 – 1.6	Ra 0.4 – 1.6
Roundness (mm)	≤0.003	≤0.003	≤0.003
Position Accuracy X (mm)	0.005	0.005	0.005
Position Accuracy Z (mm)	0.008	0.008	0.008
Repeat Accuracy X (mm)	0.002	0.002	0.002
Repeat Accuracy Z (mm)	0.004	0.004	0.004
Other Data			
Machine Weight (kg)	3050	4000	6200 / 6800 / 7220
Dimensions (L x W x H, mm)	1775 x 1600 x 1690	2500 x 1720 x 1740	(3522 / 3872 / 3992) x 1982 x 1772
With Y Axis (mm)	–	2680 x 1750 x 1850	–
With Counter Spindle (mm)	–	2680 x 1750 x 1850	–
Specification	L2	L3	L4



| Space- and Money-Saving

The SYIL L2 CNC lathes are designed to provide unmatched performance in small-scale production.

Specification	Description
8-Station Servo Turret	—
8-Inch Hollow Hydraulic Three-Jaw Chuck	—
A2-6 Spindle	—
Boring Tool Holder	—
End Cutter Holder	—



Recommended Controller

Siemens SINUMERIK 828D
15.6" touch panel

Alternatives:
SYNTEC 22TA



Option	Description
Hydraulic Tail Stock	—
Chip Conveyor	—
Tool Setter (Renishaw)	—
Parts Catcher	—
12 Tools Turret	—
Oil Mist Collector	—
20/70 KG High Pressure Water Pump	—
Bar Feeder (EL 65)	—

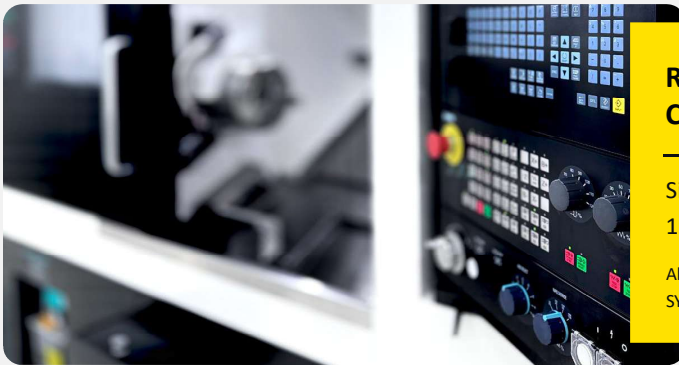




The High Productivity Lathe

The SYIL L3 turning center with live tooling for high performance CNC machining of small and medium-sized workpieces.

Specification	Description
12-Station BMT55 Power Turret	—
8-Inch Hollow Hydraulic Three-Jaw Chuck	—
A2-6 Spindle	—
Boring Tool Holder (Out of Water)	—
External Cutter Holder	—
End Tool Holder	—



Recommended Controller

Siemens SINUMERIK 828D
15.6" touch panel

Alternatives:
SYNTEC 22TA



Option	Description
Y Axis	—
Sub-Spindle	—
Hydraulic Tail Stock	—
Servo Tail Stock	—
Chip Conveyor	—
Tool Setter (Renishaw)	—
Chuck Option (8-Inch Four-Jaw Chucks)	—
Splicing Device	—
Sub-Spindle Actuator	—
Front Door Safety Lock	—
Oil Mist Collector	—
20/70 KG High Pressure Water Pump	—
Bar Feeder (EL 65)	—
Tailstock Live Center (PC-MT4)	—
Power Head (Out of Water) – Set (0°/90°)	—
Parts Catcher	—





| Lathe for Large-sized Parts

The SYIL L4 turning center for high performance cutting of large workpieces.

Specification	Description
12-Station Servo Turret	Includes 4 boring tool holders, 2 end face tool holders, 8 pairs of pressure tool
10-Inch Hollow Hydraulic Three-Jaw Chuck	—
A2-8 Spindle	—
Hydraulic Tailstock	—
Maximum Processing Length	800 mm



Recommended Controller

Siemens SINUMERIK 828D
15.6" touch panel

Alternatives:
SYNTEC 22TA



Option	Description
Power Turret (BMT65)	—
Y Axis	—
Sub-Spindle	—
Processing Length Extension	1.1 m
Processing Length Extension	1.5 m
Chain-Type Automatic Chip Conveyor	—
Center Column	—

