



SYIL L LATHES

Turning Centers of Unsurpassed Quality at the Best Price

BEST VALUE FOR MONEY

CNC machines since 2001

At SYIL, we develop and manufacture CNC machining centers for every need. As a manufacturer with over 20 years of experience in the CNC industry, we understand your unique production and manufacturing requirements. In 2022 we expanded our range with turning centers.

We have earned our trust by sourcing components from first-class brands and suppliers.

Affordable quality

The SYIL brand is an up-and-coming manufacturer of high-performance CNC machining centers. Our first-class machines have been used in machine shops, the automotive industry and computer technology for more than two decades.

The combination of machine quality and price is unbeatable with SYIL.



TECHNICAL SPECIFICATIONS

	L2	L3
Processing capacity		
Chuck size (")	8	8
Max. swing diameter over bed (mm)	ø510	ø550
Max. swing diameter over carriage (mm)	ø260	ø290 (with Y axis: 200)
Max. workpiece length (mm)	300	500 (with Y axis: 530, with Counter Spindle: 450)
Max. work piece diameter (mm)	ø380	ø380
Spindle		
Maximum speed (rpm)	4,000	4,000
Spindle nose	A2-6	A2-6
Spindle bore diameter (mm)	ø66	ø63
Through spindle bore diameter (mm)	ø52	ø52
Spindle power (kW)	11/15	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
Through spindle bore diameter (mm)		ø45
Spindle power (kW)		11
Travels (m)		530
Rapid traverse (m/min)		30
Tool holder		
Type	Servo turret	Power Turret
Tools	8/12	12
Tool shank size (mm)	25x25/20x20	25x25
Tool shank diameter (mm)	ø40/ø32	ø40
Minimum Tool to Tool (s)		0.2
Maximum Tool to Tool (s)		0.5
Maximum Live Tooling Speed (rpm)		5000
Live Tooling Model		BMT55
Travels		
X Rapid traverse (m/min)	30	30
Z Rapid traverse (m/min)	30	30
Y Rapid traverse (m/min)		15
X Travels (mm)	200	190+10
Z Travels (mm)	360	550 (with Y axis: 490+ -50)

Tail stock		
Travels from Tail Stock to Chunk (mm)	465 (with Y axis: 500)	
Tail Stock Rapid Traverse (m/min)	30	
Sleeve taper	MT4	
Accuracy		
Finish turning cylindrical accuracy	IT6	IT6
Finish turning parts surface	Ra 0.4-1.6	Ra 0.4-1.6
Finished turning parts roundness (mm)	≤0.003	≤0.003
Position accuracy X (mm)	0.005	0.005
Position accuracy Z (mm)	0.008	0.008
Repeat accuracy X (mm)	0.002	0.002
Repeat accuracy Z (mm)	0.004	0.004
Other data		
Machine weight (kg)	3050	4000
Machine dimensions L x W x H (mm)	1775x1600x1690	2500x1720x1740
with Y axis (mm)	2680x1750x1850	
with Counter Spindle (mm)	2680x1750x1850	

Controller

Available controller	L2	L3
Syntec 22MA	✓	✓
Siemens 808DA	✓	✓
FANUC 0iMF Plus	✓	

SYIL L2

Space- And Money-Saving Lathe



Standard:

Ball screw and linear guide by THK/HIWIN
4,000 rpm spindle
8 tools turret

L2 Syntec

Syntec 22MA CNC controller
with 3/4 axis servo motor

L2 FANUC

FANUC 0iMF Plus CNC Controller
with 3/4 axis servo motor

L2 Siemens

SINUMERIK 808DA 15" screen CNC controller
with 3/4 axis servo motor

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

OPTIONS

12 Tools Turret

Tail Stock Unit

Tool Setter | Renishaw

Chip Conveyor

Bar Feeder



SYIL L3

The High Productivity Lathe



Standard:

Ballscrew and linear guide by THK/HIWIN
4,500 rpm Spindle
5,000 rpm Live Tooling with 12-station BMT55 Turret

L3 Syntec

Syntec 22MA CNC controller
with 3/4 axis servo motor

L3 FANUC

FANUC 0iMF Plus CNC Controller
with 3/4 axis servo motor

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

OPTIONS

Y Axis

Dual Spindle

5,000 rpm Live Tooling by SAUTER 12-station BMT55

BMT55 0° Driven Tool Holder by SAUTER

BMT55 90° Driven Tool Holder by SAUTER 12 Tools Turret

Tail Stock Unit

Tool Setter | Renishaw

Chip Conveyor

Bar Feeder



CONTROLLERS

Choose Your Preferred Controller

We offer multiple controller options for each L series machine.

Undoubtedly, the CNC controller is one of the most important parts of the machine. A suitable controller will provide you with a lot of convenience in using the lathe. However, what is suitable may be different for each buyer. That is why we at SYIL strive to offer you a choice including:

[SYNTEC 22MA](#)

[Siemens 808DA](#)

[FANUC 0IMF-Plus](#)

SYNTEC 22MA

- Mechatrolink 3 and EtherCAT serial communication support
- Supports HSHP, HPCC, SPA, ZPEC functions
- 2000 lines look-ahead
- Bell-shaped acceleration/deceleration provides both speed and stability
- Multi-spindle solution: productive, support multi-spindle tapping
- 10.4"/15" screen options
- Maximum 6 axis



Siemens 828D

- Panel-based compact CNC
- Up to 10 axes/spindles and 2 auxiliary axes
- Up to 2 machining channels T, M, G
- 15.6" touch display
- SIMATIC S7-200-based PLC



FANUC 0IMF-Plus

- up to 12 axes, 6 spindle axes and 2 paths
- up to 2 additional loader paths
- 4-axis simultaneous and 3+2 axis machining
- ready to use with integrated software package
- integrated FANUC Dual Check Safety function
- shop-floor programming via MANUAL GUIDE i or TURN MATE i
- additional functions for simple customization
- integrated high-speed PMC
- high speed and high quality machining package
- maximum look-ahead blocks 400
- common operability, maintainability, network and PMC function with CNC Series 30i-MODEL B



OPTIONS

Functions with Added Value

You can equip our machining centers individually and flexibly with a wide range of machine options – for tailored support in your production scenarios.

12 Tools Turret

Y Axis

Dual Spindle

5,000 rpm Live Tooling by SAUTER 12-station BMT55

BMT55 0° Driven Tool Holder by SAUTER

BMT55 90° Driven Tool Holder by SAUTER

Tail Stock Unit

Tool Setter | Renishaw

Chip Conveyor

Bar Feeder