

# 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**

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: 530, with Counter Spindle: 450)           Max. workpiece length (mm)         300         500 (with Y axis: 530, with Counter Spindle: 450)           Max. work piece diameter (mm)         ø380         ø380           Spindle         4,000         4,000           Spindle nose         A2-6         A2-6           Spindle bore diameter (mm)         ø52         ø52           Spindle power (kW)         11/15         11/15           Minimum C-axis indexing (*)         0.001         0.001           Chuck size (*)         -         6           Rate speed / Max speed (rpm)         -         42-5           Spindle power (kW)         11/15         11/15           Through spindle bore diameter (mm)         -         42-5           Spindle power (kW)         -         11           Travels (m)         -         856           Through spindle bore diameter (mm)         -         530           Rapided traverse (m/min)         -         530           Rapid traverse (m/min)         <		L2	L3		
Chuck size (")         8         8           Max. swing diameter over bed (mm)         ø510         ø550           Max. swing diameter over carriage (mm)         ø260         ø290 (with Y axis: 530, with Counter Spindle: 450)           Max. work piece 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 bore diameter (mm)         ø52         ø52           Spindle bore diameter (mm)         ø52         ø52           Spindle power (kW)         11/15         11/15           Minimum C-axis indexing (")         0.001         0.001           Chuck size (")         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle bore diameter (mm)         -         ø455           Spindle bore diameter (mm)         -         830           Spindle bore diameter (mm)         -         845           Spindle bore diameter (mm)         -         845           Spindle bore diameter (mm)         -         830           Rapid traverse (m/min)         -         530 </th <th></th> <th></th> <th></th>					
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         S00 (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)         ø52         ø52           Spindle power (kW)         11/15         11/15           Minimum C-axis indexing (°)         0.001            Counter spindle         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle power (kW)         -         11           Travels (m)         -         ø56           Through spindle bore diameter (mm)         -         ø530           Spindle power (kW)         -         11           Travels (m)         -         30           Spindle power (kW)         -         11           Travels (m)         -         30           Spindle power (kW)         -         12					
Max. swing diameter over carriage (mm)         ø260         ø290 (with Y axis: 230)           Max. work piece 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 nose         -         6           Chuck size (")         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle nose         -         A2-5           Spindle nose         -         A2-5           Spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         845           Spindle nose         -         A2-5           Spindle power (kW)         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         30           Tool holder         -         -	Chuck size (")	8	8		
Max. workpiece length (mm)         300         500 (with Y axis: 530, with Counter Spindle: 450)           Max. work piece diameter (mm)         ø380         ø380           Spindle         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 bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         830           Spindle power (kW)         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         530           Tool holder         -         -           Type         Servo turret         Power Turret           Tool	Max. swing diameter over bed (mm)	ø510	ø550		
Max. work piece length (mm)         300         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         0.001           Councer spindle           Chuck size (°)         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         ø45           Spindle power (kW)         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         30            g40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Type         Servo turret         Power Turret           Tools hank size	Max. swing diameter over carriage (mm)	ø260	ø290 (with Y axis: 200)		
Spindle         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           C         Counter spindle           Chuck size (°)         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         ø45           Spindle power (kW)         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         30            25x25/20x20         25x25           Tool shank size (mm)         25x25/20x20         25x25           Tool shank diameter (mm)         ø40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         <	Max. workpiece length (mm)	300	•		
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)         -         ø56           Through spindle bore diameter (mm)         -         ø45           Spindle nose         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         530           Rapid traverse (m/min)         25x25/20x20         25x25           Tool holder         12         7           Type         Servo turret         Power Turret           Tools         8/12         12           Tool shank size (mm)         25x25/20x20         25x25 <td>Max. work piece diameter (mm)</td> <td>ø380</td> <td>ø380</td>	Max. work piece diameter (mm)	ø380	ø380		
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)         -         ø56           Through spindle bore diameter (mm)         -         ø45           Spindle nose         -         11           Travels (m)         -         530           Rapid traverse (m/min)         -         530           Rapid traverse (m/min)         25x25/20x20         25x25           Tool holder         12         7           Type         Servo turret         Power Turret           Tools         8/12         12           Tool shank size (mm)         25x25/20x20         25x25 <td></td> <td></td> <td></td>					
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)         -         ø56           Through spindle bore diameter (mm)         -         30           Spindle power (kW)         -         11           Travels (m)         -         30           Rapid traverse (m/min)           -           Tool holder           Tool shank size (mm)         25x25/20x20         25x25           Tool shank diameter (mm)         ø40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -	Spindle				
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 kiameter (mm)         Ø40/ø32         Ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           <	Maximum speed (rpm)	4,000	4,000		
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         -         42-5           Spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         845           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 kiameter (mm)         ø40/ø32         ø40           Maimum Tool to Tool (s)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels           X Rapid traverse (m/min)         30 <td>Spindle nose</td> <td>A2-6</td> <td>A2-6</td>	Spindle nose	A2-6	A2-6		
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)         -         876           Through spindle bore diameter (mm)         -         11           Tavels (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)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels         -         Rapid traverse (m/min)         30           Z         Apid traverse (m/min)         30 <td< td=""><td>Spindle bore diameter (mm)</td><td>ø66</td><td colspan="2">ø63</td></td<>	Spindle bore diameter (mm)	ø66	ø63		
Minimum C-axis indexing (*)         0.001           Counter spindle         -         6           Rate speed / Max speed (rpm)         -         1750/6000           Spindle nose         -         A2-5           Spindle bore diameter (mm)         -         ø56           Through spindle bore diameter (mm)         -         956           Through spindle bore diameter (mm)         -         11           Travels (m)         -         130           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)         0.28         0.2           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           X Rapid traverse (m/min)         200         190+10	Through spindle bore diameter (mm)	ø52	ø52		
Counter spindle         -         6           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           Tool shank size (mm)         25x25/20x20         25x25           Tool shank diameter (mm)         ø40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Tool to Tool (s)         0.4         0.5           Maximum Live Tooling Speed (rpm)         -         BMT55           Travels         -         -         BMT55           Z         X Rapid traverse (m/min)         30         30           Z         X Rapid traverse (m/min)         15         X Tavels (mm)	Spindle power (kW)	11/15	11/15		
Counter spindle         -         6           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           Tool shank size (mm)         25x25/20x20         25x25           Tool shank diameter (mm)         ø40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Tool to Tool (s)         0.4         0.5           Maximum Live Tooling Speed (rpm)         -         BMT55           Travels         -         -         BMT55           Z         X Rapid traverse (m/min)         30         30           Z         X Rapid traverse (m/min)         15         X Tavels (mm)			0.001		
Chuck size (")       -       6         Rate speed / Max speed (rpm)       -       1750/6000         Spindle nose       -       A2-5         Spindle bore diameter (mm)       -       ø45         Through spindle bore diameter (mm)       -       ø45         Spindle power (kW)       -       11         Travels (m)       -       530         Rapid traverse (m/min)       -       30         Tool holder         Type       Servo turret         Tool shark size (mm)       25x25/20x20       25x25         Tool shank diameter (mm)       ø40/ø32       ø40         Minimum Tool to Tool (s)       0.28       0.2         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					
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)       0.28       0.2         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         X rayels (mm)       200       190+10	Counter spindle				
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)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels           X Rapid traverse (m/min)         30         30           J Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         200         190+10	Chuck size (")	-	6		
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)         0.28         0.2           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels           X Rapid traverse (m/min)         30         30           J Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         200         190+10	Rate speed / Max speed (rpm)	-	1750/6000		
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)       0.28       0.2         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         X Rapid traverse (m/min)       200       190+10	Spindle nose	-	A2-5		
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)       0.28       0.2         Maximum Live Tooling Speed (rpm)       -       5000         Live Tooling Model       -       BMT55          30       30         Z Rapid traverse (m/min)       30       30         Z Rapid traverse (m/min)       200       190+10	Spindle bore diameter (mm)	-	ø56		
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)       0.28       0.2         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       30         Y Rapid traverse (m/min)       200       190+10       -	Through spindle bore diameter (mm)	-	ø45		
Rapid traverse (m/min)       -       30         Tool holder       -       30         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)       0.28       0.2         Maximum Tool to Tool (s)       0.4       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)       15       X Travels (mm)         X Travels (mm)       200       190+10	Spindle power (kW)	-	11		
Tool holderTypeServo turretPower TurretTools8/1212Tool shank size (mm)25x25/20x2025x25Tool shank diameter (mm)Ø40/Ø32Ø40Minimum Tool to Tool (s)0.280.2Maximum Tool to Tool (s)0.40.5Maximum Live Tooling Speed (rpm)-5000Live Tooling Model-BMT55TravelsX Rapid traverse (m/min)3030Y Rapid traverse (m/min)1515X Travels (mm)200190+10	Travels (m)	-	530		
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)         0.28         0.2           Maximum Tool to Tool (s)         0.4         0.5           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels         -         200           X Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         200         190+10	Rapid traverse (m/min)	-	30		
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)         0.28         0.2           Maximum Tool to Tool (s)         0.4         0.5           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels         -         200           X Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         200         190+10					
Tools       8/12       12         Tool shank size (mm)       25x25/20x20       25x25         Tool shank diameter (mm)       Ø40/ø32       Ø40         Minimum Tool to Tool (s)       0.28       0.2         Maximum Tool to Tool (s)       0.4       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)       200       190+10		Com vo tu umot	Dower Twreet		
Tool shank size (mm)         25x25/20x20         25x25           Tool shank diameter (mm)         ø40/ø32         ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Tool to Tool (s)         0.4         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)					
Tool shank diameter (mm)         Ø40/ø32         Ø40           Minimum Tool to Tool (s)         0.28         0.2           Maximum Tool to Tool (s)         0.4         0.5           Maximum Live Tooling Speed (rpm)         -         5000           Live Tooling Model         -         BMT55           Travels         -         200           X Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         30         30           Y Rapid traverse (m/min)         200         190+10					
Minimum Tool to Tool (s)         0.28         0.2           Maximum Tool to Tool (s)         0.4         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         15           X Travels (mm)         200         190+10					
Maximum Tool to Tool (s)0.40.5Maximum Live Tooling Speed (rpm)-5000Live Tooling Model-BMT55TravelsX Rapid traverse (m/min)30Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200190+10	· · ·				
Maximum Live Tooling Speed (rpm)-5000Live Tooling Model-BMT55TravelsX Rapid traverse (m/min)30Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200190+10					
Live Tooling Model-BMT55Travels3030Z Rapid traverse (m/min)3030Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200190+10					
TravelsX Rapid traverse (m/min)3030Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200190+10					
X Rapid traverse (m/min)3030Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200190+10					
Z Rapid traverse (m/min)3030Y Rapid traverse (m/min)15X Travels (mm)200	Travels				
Y Rapid traverse (m/min)15X Travels (mm)200	X Rapid traverse (m/min)	30	30		
X Travels (mm) 200 190+10	Z Rapid traverse (m/min)	30	30		
	Y Rapid traverse (m/min)		15		
Z Travels (mm) 360 550 (with Y axis: 490+-50)	X Travels (mm)	200	190+10		
	Z Travels (mm)	360	550 (with Y axis: <mark>490+-50)</mark>		



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	1775x1600x1690	2500x1720x1740	
L x W x H (mm)	1775X1000X1090	2300x1720x1740	
with Y axis (mm)	-	2680x1750x1850	
with Counter Spindle (mm)	- 2680x1750x1850		

### Controller

Available controller	L2	L3
Siemens SINUMERIK 828D	$\checkmark$	√
FANUC 0iMF Plus	$\checkmark$	✓
Syntec 22TA	$\checkmark$	✓



# SYIL L2 Space- And Money-Saving Lathe Standard:



8-station servo turret ((3 boring tool holders, 1 end face tool holder, 4 tool presser blocks) 8-inch hollow hydraulic three-jaw chuck A2-6 spindle **Boring Tool Holder** End Cutter Holder

L2 Siemens SINUMERIK 828D 15" screen CNC controller

L2 FANUC FANUC 0iTF CNC Controller

L2 Syntec Syntec 22TA CNC controller

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

### **OPTIONS**

12 Tools Turret Tail Stock Tool Setter | Renishaw Chip Conveyor Bar Feeder Parts Catcher



# **SYIL L3**The High Productivity Lathe



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 SAUTER12 Tools Turret Tail Stock Unit Tool Setter | Renishaw Chip Conveyor Bar Feeder

### Standard:

12-station BMT55 power turret ((including a 0-degree power head, a 90-degree power head, 5 boring tool holders, 4 cylindrical tool holders, 1 end face tool holder)
8-inch hollow hydraulic three-jaw chuck
A2-6 spindle
Boring Tool Holder (Out of Water)
External Cutter Holder
End Tool Holder

L3 Siemens SINUMERIK 828D 15" screen CNC controller

L3 FANUC FANUC 0iTF CNC Controller

L3 Syntec Syntec 22TA CNC controller



# **CONTROLLERS**SYIL recommends Siemens SINUMERIK 828D

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 CNC machine. At SYIL we recommend Siemens SINUMERIK 828D, the powerhouse in the compact CNC class. Should you prefer another controller, we have got you covered. We offer:

Siemens SINUMERIK 828D

FANUC 0IMF-Plus

SYNTEC 22MA



## **Siemens SINUMERIK OIMF-Plus** 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

- 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





## 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





# **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.

**Y** Axis Sub-Spindle Hydraulic Tail Stock Servo Tail Stock Chip Conveyor (incl. chip pickup trolley) Tool Setter | Renishaw Chuck option 8 inch four-jaw chucks Splicing device Sub-spindle actuator Front door safety lock **Oil Mist Collector** 20KG High Pressure Water Pump 70KG High Pressure Water Pump Bar Feeder (EL 65) power head (out of water) a set (including a 0 degree and a 90 degree) Tailstock Live Center (PC-MT4)



