



SL Series

Swiss-type CNC turning centers

Precision machining for long, slender and intricate bar-stock components.

MODEL RANGE

CSL1203II

Ø12 mm bar

SL203

Ø20 mm bar

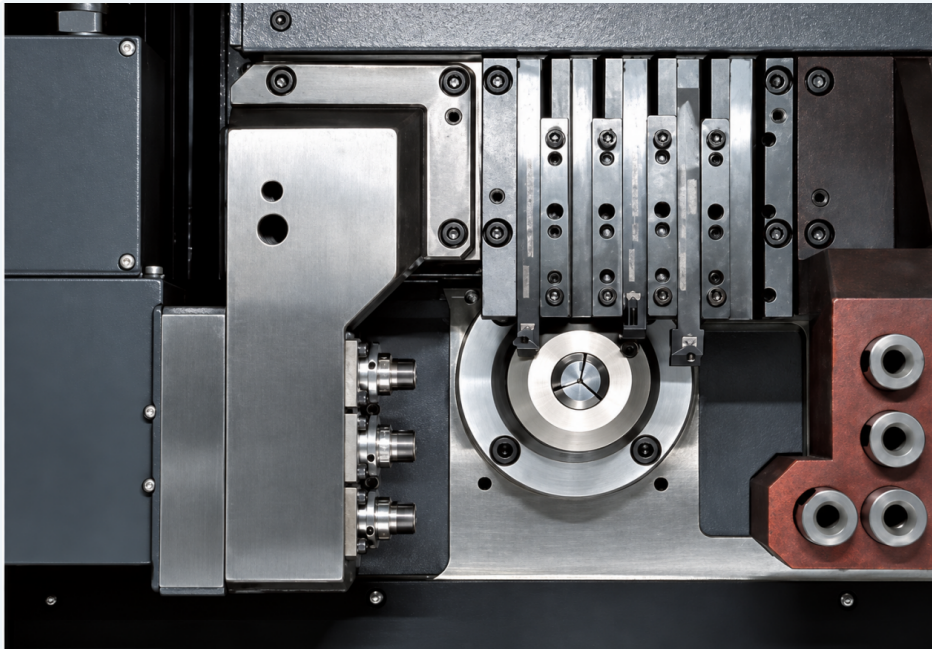
SL263

Ø26 mm bar

STANDARD CNC

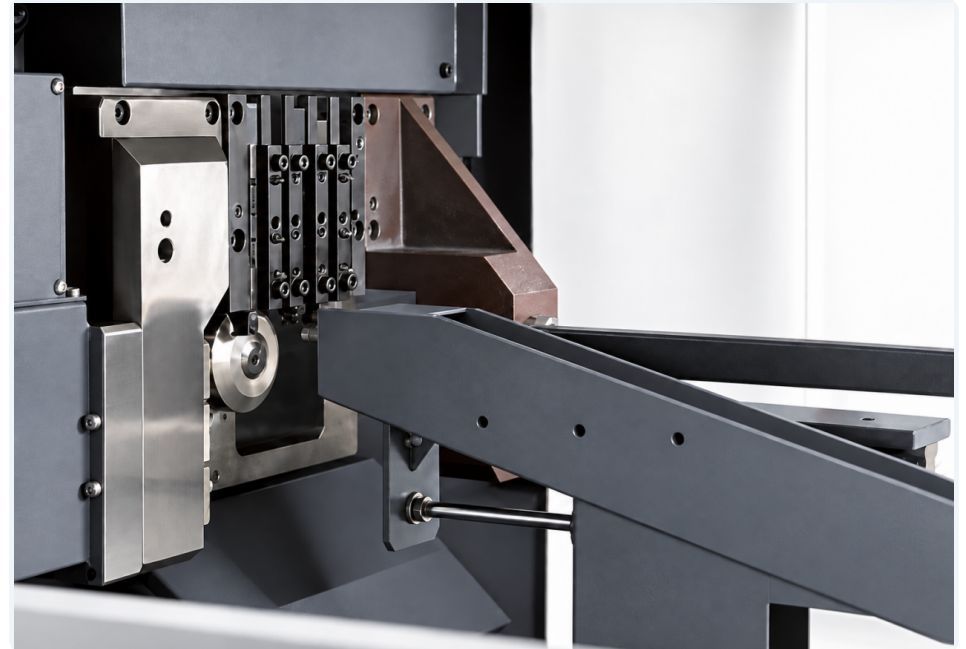
Syntec (Taiwan)

3-axis control; other systems available on request.



TOOLING LAYOUT

Linear tool arrangement and radial live tooling support access to turning, milling and drilling operations.



BAR FEEDING

Integration with an automatic bar feeder supports continuous production and reduced manual intervention.

Engineering highlights

SPINDLE AND FEED

High-precision angular-contact bearings. Servo-driven axes use precision ball screws, linear guides and imported support bearings.

GUIDE-BUSHING OPTIONS

Switch between guide-bushing and non-guide-bushing configurations to suit the part and process.

RIGID STRUCTURE

One-piece bed and slides made from high-grade Meehanite cast iron for structural rigidity and stable machining.

PRECISION AND CONTROL

Syntec CNC, 3-axis control and 3-axis interpolation. Manufacturer states spindle runout $\leq 2 \mu\text{m}$ and axis repeatability $\leq 3 \mu\text{m}$.

Example precision-turned components

WORKPIECE PHOTO



Small, long and intricate bar-stock parts

The SL series is intended for precision machining of complex slender components. Final feasibility depends on the part drawing, material, tolerances, tooling and selected machine configuration.

TYPICAL INDUSTRIES

Communications · electronics · automotive · pneumatic and hydraulic components · medical devices · instrumentation · aerospace

Technical specifications

CSL1203II · SL203 · SL263

SPECIFICATION	CSL1203II	SL203	SL263
Maximum bar capacity	Ø12 mm	Ø20 mm	Ø26 mm
Main spindle through-hole	Ø15 mm	Ø25 mm	Ø30 mm
Max. machining length - no guide bushing	—	2.5D (max. 50 mm)	2.5D (max. 50 mm)
Max. machining length - fixed guide bushing	140 mm	220 mm	220 mm
Max. machining length - rotating guide bushing	135 mm (optional)	180 mm (optional)	180 mm (optional)
Main spindle max. drilling diameter	Ø7 mm	Ø10 mm	Ø10 mm
Main spindle max. tapping size	M6	M10	M10
Radial live-tool max. drilling diameter	Ø6 mm (optional)	Ø8 mm	Ø8 mm
Radial live-tool max. tapping size	M5 (optional)	M6	M6
Main spindle speed	8,000 rpm (6,000 with rotating guide bushing)	10,000 rpm (8,000 with rotating guide bushing)	10,000 rpm (8,000 with rotating guide bushing)
Radial live-tool speed	5,000 rpm (optional)	6,000 rpm	6,000 rpm
Rapid traverse	20 m/min	X: 20; Y/Z: 24 m/min	X: 20; Y/Z: 24 m/min
Spindle runout (model applicability not stated)	≤0.002 mm and ≤0.003 mm; model mapping is not stated in the source		
External tool positions	Not specified	1 × Ø16 mm + 5 × Ø12 mm	1 × Ø16 mm + 5 × Ø12 mm
End-machining tools	5 × ER16	4 × ER16	4 × ER16
Radial live tools	3 × ER11 (optional)	2 × ER11 + 2 × ER16	2 × ER11 + 2 × ER16
Main spindle motor	3.7 kW	4.2 kW	4.2 kW
Direct-drive spindle motor	0.75 kW	1 kW	1 kW
Radial live-tool motor	0.75 kW (optional)	1 kW	1 kW
Coolant pump	0.18 kW	0.22 kW	0.22 kW
Machine weight	1,350 kg	1,800 kg	1,800 kg
Overall dimensions (L × W × H)	1,560 × 900 × 1,680 mm	1,700 × 1,300 × 1,800 mm	1,700 × 1,300 × 1,800 mm

Source note: The supplied specification image lists spindle runout as ≤0.002 mm and ≤0.003 mm but does not identify the applicable model(s).

Dimensions are L × W × H. Optional configurations are marked. Specifications are subject to change without notice.