

**BERLIN**  
MACHINE CORPORATION



**SF SERIES**  
HIGH PRECISION



**SF SERIES**



# Machine specification

MODEL	SF300	SF400	SF500	SF600
Table size (mm)	Table Size	Table Size	Table Size	Table Size
Table travel (X*Y) mm	320*400	400*500	500*630	630*800
Max. Z axis travel (mm)	300mm	300mm	300mm	300mm
Control system	LQCUT	LQCUT	LQCUT	LQCUT
U and V axis travel	+30mm, LM guide	+30mm, LM guide	+30mm, LM guide	+30mm, LM guide
Machining taper	±6°80mm	±6°80mm	±6°80mm	±6°80mm
Maximum load capacity	600kg	800kg	1000kg	1200kg
XYZ axis resolution	0.001mm	0.001mm	0.001mm	0.001mm
Repetability	≤0.005mm	≤0.005mm	≤0.005mm	≤0.005mm
Drum runout	≤0.005mm	≤0.005mm	≤0.005mm	≤0.005mm
Wire Diameter (mm)	0.12~0.22mm	0.12~0.22mm	0.12~0.22mm	0.12~0.22mm
Wire feeding speed range	1-12m/s	1-12m/s	1-12m/s	1-12m/s
Maximum processing current	8A	8A	8A	8A
Maximum Speed (Cr12, H=60mm)	≥200 mm2/min	≥200 mm2/min	≥200 mm2/min	≥200 mm2/min
Interface Module	LAN, RS232, USB			
Power Rating	≤3kW			
Multi Cut accuracy (Cr12, H=40mm)	≤±0.004mm	≤±0.004mm	≤±0.004mm	≤±0.004mm
Surface Finish (Straight cutting, H ≤ 40mm)	1 cut Ra≤2.5μm, 2 cut Ra1.6μm, 3 cut Ras1.0μm			
Dimension L*W*H (mm)	1960*1620*1915	2070*1800*1920	2390*2000*2130	2650*2310*2140
Net Weight	2100 Kg	2300 Kg	2800 Kg	3500kg

## Machine Tool Feature

- Machine tool adopts an integrated design and a fully closed structure
- Taiwan Make Linear Guide Rail
- Taiwan Make Ball Screw in XY & UV Axis
- Elastic Coupling
- Deluxe environmental protection enclosure
- Spring tension automatic tightening in threads
- 120L Working fluid tank
- Centralized lubricating oil pump
- High-pressure pump, multi-stage filtration, paper filter element
- HT250 casting cast by resin sand process
- T-shaped slot for work piece adjustment

- Chrome plated wire drum with dynamic balancing in 0.005 micron

## Controller Features

- Industrial computer with Quad-core i3 processor; 64G hard disk; 4G memory; 15-inch LCD
- Cabinet with Integrated servo machine, multiple cutting
- XY with Servo Drive
- 4-Axis linkage control
- Draw or DXF drawing import function
- Closed loop control
- Reverse clearance compensation and pitch compensation
- Automatic shutdown of the water pump and machine after cutting
- Fast programming function of complex multi-hole graphics



- C-type column, T-type bed and "pyramid" type cross slide structure design



- Guide screw: Adopt Taiwan ball screw inward guide rail to ensure the accuracy retention of the machine for more than 10years.



- an integrated design and a fully closed structure



- Taiwan Make Linear Guide Rail and Ball Screw in XY & UV Axis



- Spring tension automatic tightening in threads



- Fast programming function of complex multi-hole graphics Industrial computer with Quad-core i3 processor; 64G hard disk; 4G memory; 15-inch LCD



- Cabinet with Integrated servo machine, multiple cutting XY with Servo Drive





## ***Standard Accessories***



Tool kit



High Pressure coolant tank



Ceramic nozzle



Wire alignment tool



Wireless mouse and keyboard



1 box GEL , 1 Spool Wire

## ***Optional Accessories***



Double filter coolant tank



Attachment For Aluminium &  
Carbide cutting



Hard Disk  
\*Autocut\*