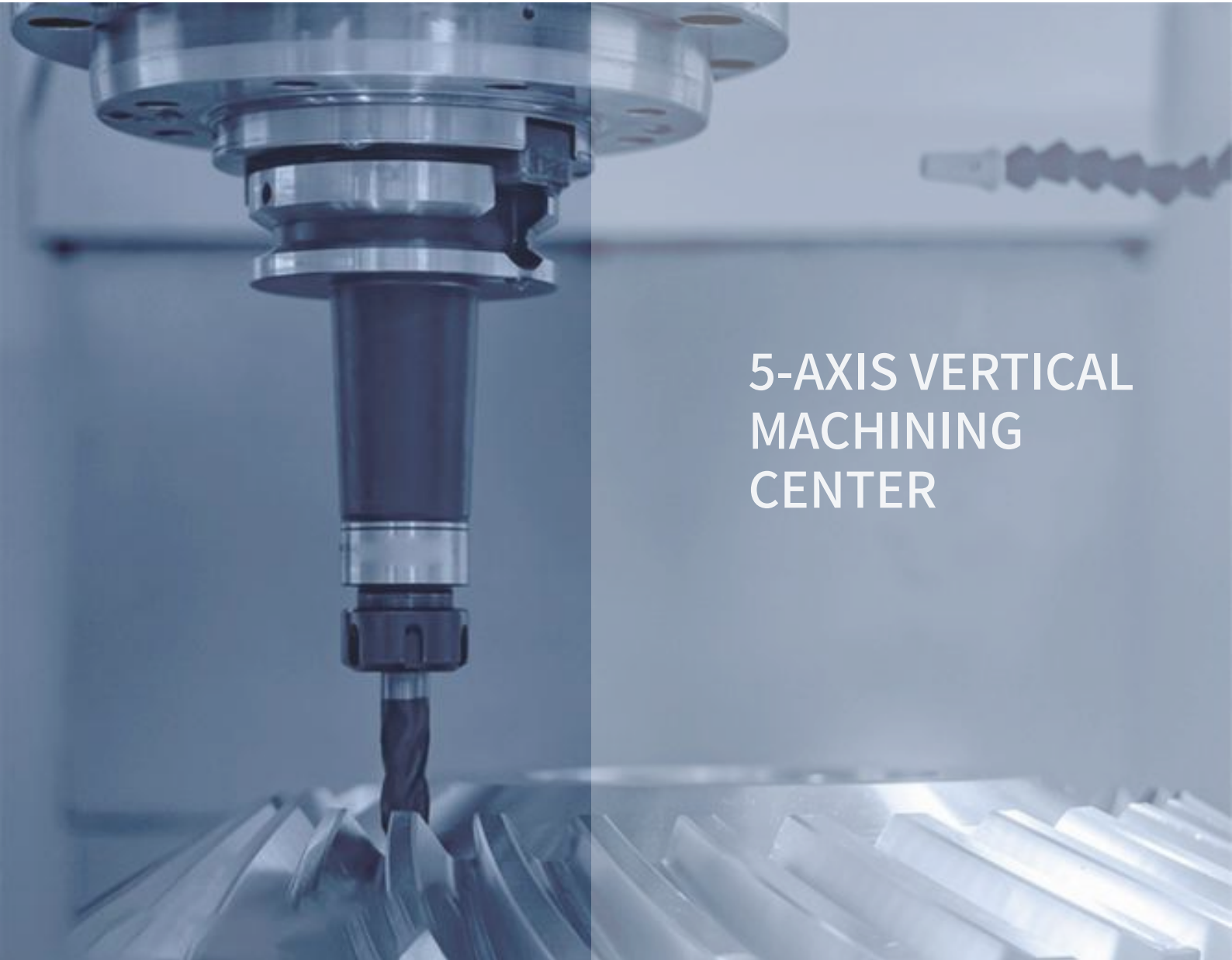


BF Techno

SGM400



5-AXIS VERTICAL
MACHINING
CENTER

SGM 400

5-Axis Vertical Machining Center



SGM400 5-axis vertical machining center is a medium-sized machine with a base and column cast using a mineral casting formula sourced from Germany. After clamping the workpiece, the machine can automatically and continuously perform various machining operations such as milling, drilling, boring, reaming, tapping, countersinking, and threading. It is suitable for the production of complex parts such as small and medium-sized box-type, plate-type, disc-type, valve-type, housing-type, and mold components in small to medium batches. The machine is equipped with high-precision hollow water-cooled linear guides and ball screws, providing superior dynamic response and high-speed performance, enabling high-speed cutting and low-speed operation without crawling. It is widely applied in the precision parts, 5G products, hardware, automotive parts, and medical device industries.



Parameters

SGM400	Item	Unit	Parameter	Remark
Capacity	Table size	mm	Φ400	
	X-axis travel	mm	500	
	Y-axis travel	mm	800	
	Z-axis travel	mm	350	
	A-axis swing angle (A-axis)	°	-120/+120	
	C-axis rotation angle	°	n×360°	
	Spindle nose to table	mm	150-500	
5-axis table	C-axis worktable size	mm	Φ400	With circular grating
	Maximum loading of C axis	Kg	200	
	T-shot (No.-width * distance)	mm	14H7	
	Minimum indexing of A-axis	°	0.001	With circular grating
	A/C axis rapid traverse speed	r/min	50/100	
Spindle	Motor power	kw	20	Optional 30kW motor spindle
	Motor torque	N.m	35	
	Maximum speed	r/min	20000	
	Spindle diameter	mm	150	
	Spindle taper	-	HSK A63	
Axis guide	X axis	mm	35 roller	4 slider
	Y axis	mm	45 roller	4 slider
	Z axis	mm	35 roller	4 slider
screw	XY/Z screw	mm	3212/3212/3212	
Speed	Cutting feed	mm/min	1-12000	
	XY/Z axis rapid feed	m/min	36/36/36	Screw plate
	XY/Z axis rapid feed	m/min	60/60/36	XY linear motor version
Accuracy (closed loop)	Positioning accuracy (XY/Z)	mm	0.005/300	GB/T18400-2-2010
	Positioning repeatability (XY/Z)	mm	0.003/300	
	Positioning accuracy (A/C)	Sec	6	
	Positioning repeatability (A/C)	Sec	4	
	Five-axis RTCP accuracy	mm	0.03	GB/T39953-2021
ATC	Number of tools	set	16/32	
	Max.tool weight	kg	8	
	Max. tool length	mm	300	
	Max. tool diameter(full/adjacent empty)	mm	Φ75/Φ150	
Others	Control system	-	Siemens one / Fagor	
	Air source	Flow	L/min	≥280 (ANR)
		Air pressure	MPa	0.6~0.8
	Equipment capacity	KVA	50	
	Cooling box volume	L	300	
	Machine size (length* width* height)	mm	4700*3050*3790	
Machine weight	Kg	8000		