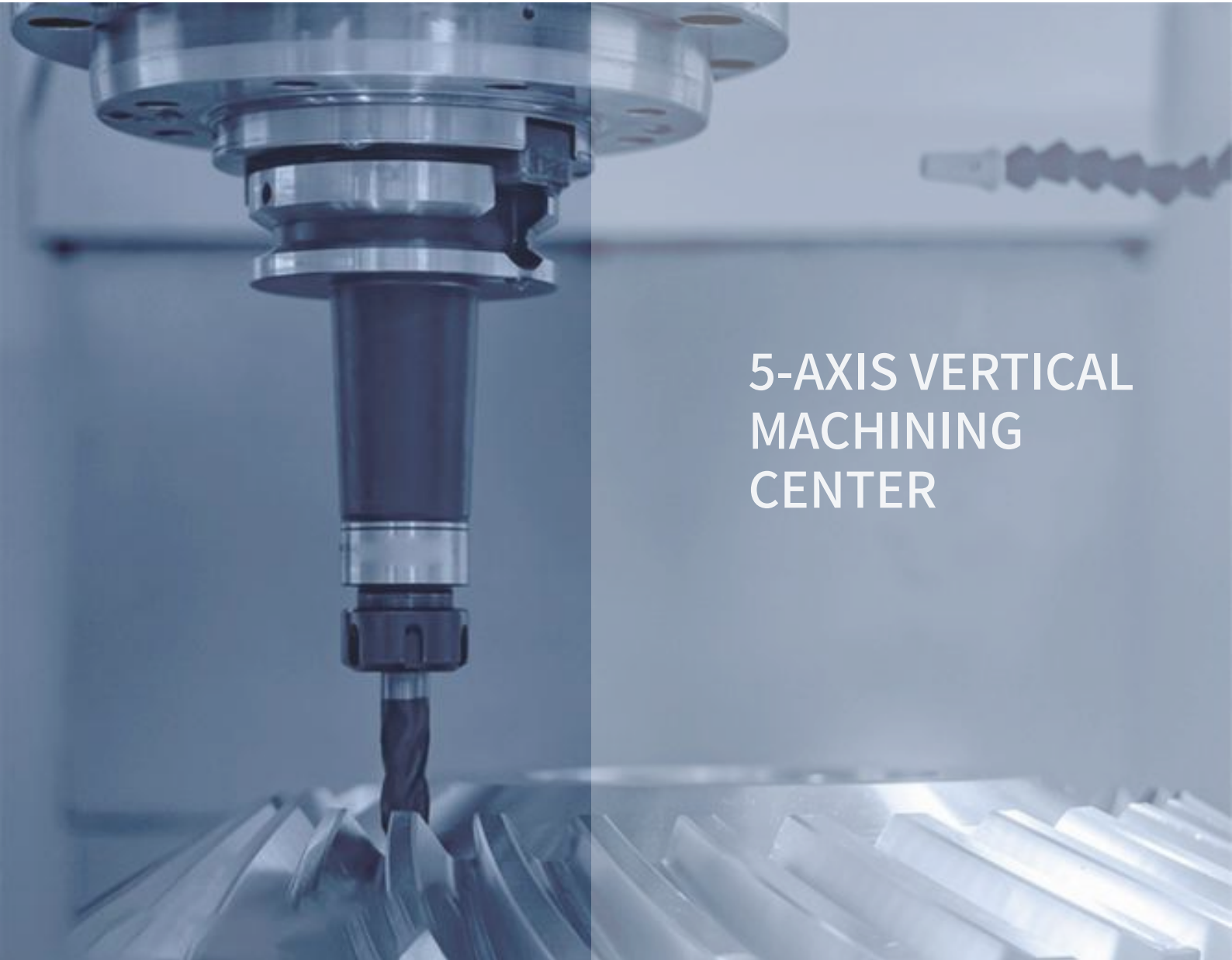


BF Techno

SGM650



5-AXIS VERTICAL
MACHINING
CENTER

SGM 650

5-Axis Vertical Machining Center



SGM650 5-axis vertical machining center features a U-shaped structure, with the base and columns cast using a mineral casting formula sourced from Germany. This eliminates internal stress, eliminating the need for stress relief treatment, thereby ensuring the machine maintains excellent static precision stability. Mineral castings have excellent vibration-damping properties, as the material itself can absorb vibrations generated during machining, thereby ensuring the machine's excellent dynamic performance. The thermal conductivity of the mineral castings used as the main material of the machine is one-fiftieth that of cast iron, ensuring the machine's long-term thermal stability.



Parameters

SGM650	Item	Unit	Parameter	Remark
Capacity	Table size	mm	Φ650X560	
	X-axis travel	mm	850	
	Y-axis travel	mm	800	
	Z-axis travel	mm	600	
	Spindle nose to table	mm	150-750	
5-axis table	A-axis swing angle	°	-120-120°	With circular grating
	C-axis swing angle	°	n*360°	
	A/C axis rapid traverse speed	r/min	30/50	
Spindle	Spindle taper	-	HSK A63	
	Spindle type	-	Motor spindle	
	Spindle rated power	Kw	30	
	Maximum spindle speed	rpm	18000	
	Spindle torque	NM	72	
	Spindle diameter	mm	Φ190	
Axis guide	X axis	mm	55 roller	4 slider
	Y axis	mm	55、45 roller	4 slider+2 slider
	Z axis	mm	55 roller	6 slider
screw	X/Y/Z screw	mm	5016/5016/4016	
Speed	Cutting feed	m/min	1-12000	
	X/Y/Z axis rapid feed	m/min	48/48/48	Screw plate
	X/Y/Z axis rapid feed	m/min	60/60/48	X/Y linear motor version
ATC	Max.tool diameter	mm	Φ75/Φ150	
	Number of tools	set	32/40/60	
	Max.tool length	mm	300	
	Max.tool weight	kg	8	
	Tool change time (T-T)	sec	4	
Accuracy (closed loop)	X\Y\Z positioning accuracy (after compensation)	mm	0.005/300	GB/T18400-2-2010
	X\Y\Z positioning repeatability (after compensation)	mm	0.003/300	
	A/C positioning accuracy (after compensation)	sec	≤6	
	A/C positioning repeatability (after compensation)	sec	≤4	
Others	Control system	-	Siemens one / Fagor	
	Max.table load	kg	800	
	Three-axis Havicek linear optic scale	μm	3	
	Machine weight	kg	10000	