Product and software specification comparison table.

| | | | | Standard Milling Machine | | Functional Milling Machine | | Compound Milling Machine | | | | | | | |
| | | | | 6 Series | | 21 Series | 22 Series | 210 Series | | | | 220 Series | | | |
Category	Items	Units	Remark	6MA-E	6MB-E	21MA-E	22MA	210MA-E	210MA-E5	210MB-E	210MB-E5	220MA	220MA-5	220MB	220MB-5
Product Specification	Max. Controlled Paths	path		2	2	2	2	4	4	4	4	4	4	4	4
	Max. PLC Controlled Paths	path		1	1	1	1	3	3	3	3	3	3	3	3
	Standard Axis	axis		3	4	6	6	8	8	12	12	8	8	12	12
	Max. Axis (Optional)	axis		3	5	6	6	9	9	18	18	9	9	18	18
	Max. Spindle	axis		3	5	4	4	6	6	6	6	6	6	6	6
	Max. Simultaneous Axis Control	axis		3	4	4	4	4	5	4	5	4	5	4	5
	Min. Control -mm			0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	Max. number of program coordinate	Set		100	100	100	100	100	100	100	100	100	100	100	100
	Max. Number of Table Tools	Set		96	96	96	96	96	96	96	96	96	96	96	96
	Multi-Channel Function Group	Set		4	4	4	4	4	4	4	4	4	4	4	4
	Block Processing Time			600	600	2500	3000	3000	4000	3000	4000	3000	4000	3000	4000
Hardware Specification	Storage(DISKA)	MB		4096	4096	4096	4096	4096	4096	4096	4096	4096	4096	4096	4096
	I/O — RIO	Point		—	—	64/64	64/64	64/64	64/64	64/64	64/64	64/64	64/64	64/64	64/64
	I/O — SRI			O	O	O	O	O	O	O	O	O	O	O	O
	I/O — Direct I/O	Point		32/32	32/32	32/32	—	32/32	32/32	32/32	32/32	—	—	—	—
	DA	Set		2	2	2	—	2	2	2	2	—	—	—	—
	Screen — All-in-One Machine	Inch		8"	8"	8"/10.4"/15"	8"/10.4"/15"	10.4"	10.4"	10.4"	10.4"	10.4"/15"	10.4"/15"	10.4"/15"	10.4"/15"
	Screen — Full-Plane All-in-One Machine	Inch		—	—	—	10.4"/15"	—	—	—	—	10.4"/15"	10.4"/15"	10.4"/15"	10.4"/15"
	Screen — Back Half Machine			—	—	O		O	O	O	O				
	CF Card	Set	Front Side	—	—	—	—	—	—	—	—	—	—	—	—
	USB	Set	Front Side	2	2	2	2	2	2	2	2	2	2	2	2
	CF Card	Set	Back Side	—	—	—	—	—	—	—	—	—	—	—	—
	RJ-45	Set	Back Side	1	1	1	2	1	1	1	1	2	2	2	2
	VGA Output	Set	Back Side	—	—	1*	—	1*	1*	1*	1*	—	—	—	—
	RS-485	Set	Back Side	1	1	1	1	1	1	1	1	1	1	1	1
	USB	Set	Back Side	—	—	—	2	—	—	—	—	2	2	2	2
	SRI	Set	Back Side	1	1	1	1	1	1	1	1	1	1	1	1
Servo Control	Mechatrolink III / EtherCat / RTEX			O	O	O	O	O	O	O	O	O	O	O	O

Category	Items	Remark	Software Function	6 Series	21 Series	22 Series	210 Series	220 Series
Compensation	Backlash Compensation			O	O	O	O	O
	Pitch Error Compensation			O	O	O	O	O
	Angular Error Compensation			O	O	O	O	O
	Temperature Error Compensation			O	O	O	O	O
	2D Error Compensation			O	O	O	O	O
Operation	MPG Simulation			O	O	O	O	O
	Dry Run			O	O	O	O	O
	Optional Stop			O	O	O	O	O
	Single Block			O	O	O	O	O
	Virtual MPG			O	O	O	O	O
	Restart at Feedhold			O	O	O	O	O
	Restart at Break Point			O	O	O	O	O
	Tool Return			O	O	O	O	O
	Fixture Offsets			O	O	O	O	O
	MPG Offsets			O	O	O	O	O
Programming	Optional Skip			O	O	O	O	O
	B—stop/Terminator Program			O	O	O	O	O
	Absolute Zero Point Coordinate	G92/G92.1		O	O	O	O	O
	Interrupt Macro	M96/M97		O	O	O	O	O
	M198 call Subroutines			O	O	O	O	O
	Expandable G Code			O	O	O	O	O
HSHP	Constant Jerk Control			O	O	O	O	O
	Multiblocks S-curve motion plan			—	O	O	O	O
	Auto declaration in Corner			O	O	O	O	O
	Speed Limit for Round Radius			O	O	O	O	O
	Multiple Sets of HSHP Parameters			—	O	O	O	O
	Quick Parameter Setup			—	O	O	O	O
	SPA Feature			O	O	O	O	O
	Virtual Radius Funciton			O	O	O	O	O
	HSHP Control Mode I	G05.1Q1		—	O	O	O	O
	HSHP Control Mode II	G05P10000	OP11	—	O	O	O	O
	NURBS Interpolation Ability			—	O	O	O	O

Remark：
*VGA Only in the Back Half
**Only Support Driven Tool Application
○: Standard Function/ Δ: Optional Function/ -: Not Available Function

Category	Items	Remark	Software Function	6MA-E	6MB-E	21MA-E	22MA	210MA-E	210MA-E5	210MB-E	210MB-E5	220MA	220MA-5	220MB	220MB-5
				Standard Milling Machine / 6 Series		Functional Milling Machine / 21 Series · 22 Series		Compound Milling Machine / 210 Series				220 Series			
Tool Management	Auto Tool Measuring			O	O	O	O	O	O	O	O	O	O	O	O
	Auto Tool Management	Works with Renishaw hardware only		O	O	O	O	O	O	O	O	O	O	O	O
	Tool Life Management			O	O	O	O	O	O	O	O	O	O	O	O
Tool Magazine	ROT Servo Turret	PLC Element	OP32	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	ATC Automatic tool change			–	–	O	O	O	O	O	O	O	O	O	O
Spindle	Support Syntec Spindle			–	–	O	O	O	O	O	O	O	O	O	O
Facilitating Functions	Machine Lock (R bit)			O	O	O	O	O	O	O	O	O	O	O	O
	Software Limit			O	O	O	O	O	O	O	O	O	O	O	O
	Spindle Speed Arrival Check			O	O	O	O	O	O	O	O	O	O	O	O
	Axis Synchronize Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Dynamic Axis Synchronize Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Feedback Synchronize Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Rapid Retraction for Rigid Tapping			O	O	O	O	O	O	O	O	O	O	O	O
	Virtual Axis Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Axis Change Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Axial Torque Limit			O	O	O	O	O	O	O	O	O	O	O	O
	Serial Bus Setting Feature(CNC Axis)			O	O	O	O	O	O	O	O	O	O	O	O
	Driver Information Display(CNC Axis)			O	O	O	O	O	O	O	O	O	O	O	O
	Spindle Application Feature(CNC Axis)			O	O	O	O	O	O	O	O	O	O	O	O
	Serial Bus PLC Axis			O	O	O	O	O	O	O	O	O	O	O	O
	Dipole Front and Back System			–	–	O	O	O	O	O	O	O	O	O	O
	Data Backup Recovery	Maker Backup		O	O	O	O	O	O	O	O	O	O	O	O
	Customized Opening Screen	Only eight key system supports		O	O	O	O	O	O	O	O	O	O	O	O
	My Favorites			–	–	O	O	O	O	O	O	O	O	O	O
	Project Protection Feature			O	O	O	O	O	O	O	O	O	O	O	O
	Limit Access Manager			O	O	O	O	O	O	O	O	O	O	O	O
	RemoteAP Monitor			O	O	O	O	O	O	O	O	O	O	O	O
	Right-Angle All In One		OP20	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	3D-Arc Interpolation		OP19	–	–	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
Program Edit	Background Edit			O	O	O	O	O	O	O	O	O	O	O	O
	Edit Protection			O	O	O	O	O	O	O	O	O	O	O	O
	Immediate Grammar Check			O	O	O	O	O	O	O	O	O	O	O	O
PLC	PLC Diagnosis Feature(FORCE I Point)			O	O	O	O	O	O	O	O	O	O	O	O
Data Transfer	NETWORK			O	O	O	O	O	O	O	O	O	O	O	O
	FTP			O	O	O	O	O	O	O	O	O	O	O	O
	RS-485			O	O	O	O	O	O	O	O	O	O	O	O
	DNC(Network)			O	O	O	O	O	O	O	O	O	O	O	O
	DNC(USB)			O	O	O	O	O	O	O	O	O	O	O	O
Information Display	Operation CV Display			O	O	O	O	O	O	O	O	O	O	O	O
	Graphic Simulation			O	O	O	O	O	O	O	O	O	O	O	O
	Partial Graphic Simulation			O	O	O	O	O	O	O	O	O	O	O	O
	Dynamic Multi-Language Switch			O	O	O	O	O	O	O	O	O	O	O	O
5 Axis Feature	Feature Coordinate System(Inclined Plane Processing)	G68.2 · G68.3	OP13	–	–	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	The Second Axis Group supports Feature Coordinate System		OP28	–	–	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	5 Axis RTCP	G43.4 · G43.5	OP12	–	–	–	–	–	Δ	–	Δ	–	Δ	–	Δ
	4 Axis RTCP		OP29	–	–	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	Multiple Mechanism-Chain	G10 L5000 P_ Q _	OP27	–	–	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ
	Five-Axis Mechanism Chain Measurement	RENISHAW · SYNTEC		–	–	–	–	–	Δ	–	Δ	–	Δ	–	Δ
G code command	Spiral/Cone interpolation	G02/G03		–	–	O	O	O	O	O	O	O	O	O	O
	Spatial arc interpolation	G02.4/G03.4	OP19	–	–	O	O	O	O	O	O	O	O	O	O
	High Precision Locus Control Mode	G05 P10000	OP11	–	–	O	O	O	O	O	O	O	O	O	O
	Smoothing Path Mode	G05.1		–	–	O	O	O	O	O	O	O	O	O	O
	NURBS Interpolation	G06.2		–	–	O	O	O	O	O	O	O	O	O	O
	Thread Cutting	G33		O	O	O	O	O	O	O	O	O	O	O	O
	Auto Tool Measurement	G37		O	O	O	O	O	O	O	O	O	O	O	O
	Tool Offsets	G45~G48		O	O	O	O	O	O	O	O	O	O	O	O
	High Speed Peck Drilling Cycle	G73		O	O	O	O	O	O	O	O	O	O	O	O
	Left Handed Tapping	G74		O	O	O	O	O	O	O	O	O	O	O	O
	High Precision Boring Cycle	G76		O	O	O	O	O	O	O	O	O	O	O	O
	Drilling cycling	G81		O	O	O	O	O	O	O	O	O	O	O	O
	Chopping	G81.1	OP44	–	–	O	O	O	O	O	O	O	O	O	O
	Bottom Feed Hold Drilling Cycle	G82		O	O	O	O	O	O	O	O	O	O	O	O
	Peck Drilling Cycle	G83		O	O	O	O	O	O	O	O	O	O	O	O
	Tapping Cycle	G84		O	O	O	O	O	O	O	O	O	O	O	O
	Boring Cycle	G85		O	O	O	O	O	O	O	O	O	O	O	O
	High Speed Boring Cycle	G86		O	O	O	O	O	O	O	O	O	O	O	O
	Back Boring Cycle	G87		O	O	O	O	O	O	O	O	O	O	O	O
	Semi Automatic Finishing Boring Cycle	G88		O	O	O	O	O	O	O	O	O	O	O	O
	Bottom Feed Hold Boring Cycle	G89		O	O	O	O	O	O	O	O	O	O	O	O
	Multi-Group HSHP Parameter	G120.1		O	O	O	O	O	O	O	O	O	O	O	O

Remark：
*VGA Only in the Back Half
**Only Support Driven Tool Application
O: Standard Function/ Δ: Optional Function/ -: Not Available Function