

# RKS-1311/1614

## Gantry Machining Center Series



### MACHINE FEATURES

- ◆ Integrated design of columns and beams, good rigidity, high processing precision and good stability;
- ◆ The three-axis guide rail with roller linear rail, fast dynamic response, high precision and no crawling;
- ◆ The three-axis feed is driven by a motor directly connected to a high-precision ball screw. The fixed pre-stretched structure at both ends of the screw, high transmission accuracy;
- ◆ The spindle is equipped with a belt transmission BT50-6000rpm, and a gear head and electric spindle are optional to meet different processing needs;
- ◆ The Z-axis is equipped with a nitrogen balance device and has good load characteristics;
- ◆ The chip removal of the machine adopts double screw conveyors and a front chain plate chip conveyor, high automation;
- ◆ A timed and quantitative lubrication system, controlled by the electrical system to achieve fully automatic centralized lubrication;

### APPLICATION

It is mainly suitable for high-speed and high-precision processing of parts in auto parts, molds, engineering machinery, valves, rail transit, energy, agricultural machinery, coal mining machinery and other industries;

### STANDARD ACCESSORIES

1 set vise and horse iron, 4 sets tool handle and rivets, 1 pc knife lock holder, 1 set mouth&airsoft

### MACHINE PARAMETERS

Item	Unit	RKS-1311	RKS-1614	RKS-2016	RKS-2518	RKS-3018	RKS-3020
X axis travel	mm	1350	1600	2100	2600	3200	3000
Y axis travel	mm	1200	1500	1650	1800	1800	2020
Z axis travel	mm	600	800	700	700	700	900
Distance from spindle end face to milling table	mm	120-770	150-950	150-850	150-850	150-850	200-1100
Effective door width	mm	1220	1500	1650	1850	1850	2020
Table size	mm	1400×1000	1700×1200	2200×1400	2600×1600	3100×1600	3100×1700
T-slot size/amount /distance	mm/pcs/mm	20×5×180	22×7×170	22×7×192.5	22×7×192.5	22×9×192.5	22×9×192.5
Max load on table	kg	2500	3500	4000	4000	4000	6000
Spindle taper		BT40	BT40/BT50	BT40/BT50	BT40/BT50	BT40/BT50	BT40/BT50
Max spindle rotation speed	rpm	10000	8000/10000	8000/10000	8000/10000	8000/10000	8000/10000
Tool type	Type	Knife arm type					
Tool quantity	pcs	24	24	24	24	24	24
Max. tool diameter	mm	78	78	78	78	78	78
Max. tool diameter (tools slots beside not occupied)	mm	120	120	120	120	120	120
Max. tool length	mm	300	300	300	300	300	300
Max. tool weight	kg	8	8	8	8	8	8
Tool changing time	s	1.7	1.7	1.7	1.7	1.7	1.7
3 Axis Rail Line							
X axis rail line	mm	45	45	45	55	55	55
Y axis rail line	mm	45	45	45	55	55	55
Z axis rail line	mm	45	45	45	55	55	45
3 Axis Lead Screw							
X axis lead screw	mm	50*10	50*10	50*10	50*10	63*12	63*12
Y axis lead screw	mm	40*10	50*10	50*10	50*10	50*10	50*10
Z axis lead screw	mm	40*10	50*10	50*10	50*10	50*10	50*10
Speed							
Fast moving speed (X/Y/Z)	m/min	16/16/16	15/15/15	16/16/16	16/16/16	16/16/16	16/16/16
Cutting speed (X/Y/Z)	m/min	8/8/8	8/8/8	8/8/8	8/8/8	8/8/8	8/8/8
Accuracy							
Positioning accuracy (X/Y/Z)	mm	0.008	0.008	0.008	0.008	0.008	0.008
Repeat position accuracy (X/Y/Z)	mm	0.005	0.005	0.005	0.005	0.005	0.005
Others							
Air source	L/min	280L/min	280L/min	280L/min	280L/min	280L/min	280L/min
Air pressure	bar	6~8bar	6~8bar	6~8bar	6~8bar	6~8bar	6~8bar
Weight	kg	8500	12000	16000	19000	21000	25000