



DY630-5A five-axis vertical machining center adopts stable C-type structure, standard high-speed electric spindle, direct drive CNC rotary table and servo tool magazine, which can realize high-speed and high-precision machining of complex parts. Widely used in the manufacture of new energy automotive motors, gearboxes, engines, molds, robots, medical devices and other products.

1. Electric spindle: BT40/HSKA63 Speed 12000/18000rpm Torque 70N.m
2. BC axis: double direct drive CNC turntable Maximum load 500KG
3. CNC system: Siemens SINUMERIK 840D (five-axis linkage) / 828D (four-axis linkage)
4. BT40/HSKA63 electric spindle, high precision, high power density, high dynamic response, greatly improve processing efficiency and machining accuracy, reduce machine noise and vibration.
5. BC double-axis direct drive CNC rotary table, built-in high torque torque motor, high precision, high dynamic response, greatly improving machine performance and application range.
6. Hydraulic tool change technology realizes coordinated control of servo tool magazine and servo hydraulic station, and the fastest tool change time can reach 1.2s.
7. Equipped with precision high-speed screw and roller guide to ensure the rigidity and precision of the machine.
8. SINUMERIK 840 Dsl's powerful hardware architecture and intelligent control algorithms help to achieve high dynamic performance and precision with excellent drive and motor technology.

The following are optional machine configurations.

1. Work piece inspection
2. Tool inspection
3. Programming workstation
4. HSKA63 spindle
5. Spindle center outlet
6. Magnetic chip conveyor

Total equipment power: 45kW.



Advantages of five-axis machining

- 1. The tool can process the Work piece in any position;
- 2. Can avoid the phenomenon that the cutting speed is zero;
- 3. Can make the machining tool as short as possible;
- 4. Can reduce the number of Work piece clamping times;
- 5. Can process complex parts that were previously only available through casting methods;
- 6. Improve surface processing quality and shorten processing time;
- 7. Can avoid the phenomenon that the cutting speed is zero;
- 8. Can make the machining tool as short as possible;
- 9. Can reduce the number of Work piece clamping times;
- 10. Improve surface processing quality and shorten processing time;
- 11. Reduce the discharge area and reduce the mold polishing;



Item	Name		Unit
Workbench	Table diameter		mm
	Allow maximum horizontal load		kg
Processing range	Allow maximum vertical load		
	T-slot (number of slots × slot width)		mm
	B axis swing angle		°
	X-axis maximum stroke		mm
	Y axis maximum stroke		mm
	Z axis maximum stroke		mm
Spindle	Spindle end to work surface distance	Maximum	mm
		Minimum	mm
	Cone hole (7:24)		
	Rated speed		rpm
	Maximum speed		
	Electric spindle output torque (S1/S3)		N.m
	Electric spindle output power (S1/S3)		kW
Axis	Fast-moving	X axis	m/min
		Y axis	
		Z axis	
	Turntable maximum speed	B axis	rpm
		C axis	
	Feed motor power (X/Y/Z)		kW
Tool magazine	Tool magazine form		
	Tool selection		
	Tool magazine capacity		Amount
	Maximum tool length		mm
	Maximum tool weight		kg
	Maximum cutter diameter	Full knife	mm
		Adjacent empty knife	mm
	Tool change time		s
Tool	Tool holder model		
	Pull nail model		
Precision	Executive standard		
	Positioning accuracy	X axis / Y axis / Z axis	mm
		B axis / C axis	
	Repeatability	X axis / Y axis / Z axis	mm
		B axis / C axis	
Machine weight			kg
Machine tool size		(length × width × height) mm	2400×3500×2850