



Osai | CNC SIEMENS YASKAWA Chiteco 海铁克 Schneider Electric HIWIN NSK SVC AIRTAC

LGZW6512

五轴数控龙门加工中心 5-axis CNC Gantry Machining Center

[性能特点]

- 采用具有五轴五联动功能的数控双摆头，可以完成5面体的铣、镗、钻、攻螺纹和锯切等工序内容的加工。
- 适用于对各类车辆、轨道交通、及各种工业铝材的三维空间五轴联动加工。可以完成各种铝型材上的孔、槽及轮廓形状等工艺内容。
- 采用进口高精度的双摆头，并配有大功率、高转速的电主轴，主轴头内锥孔为HSK63F接口，具备较高的单位时间内的金属切削量。
- 采用意大利Osai高品质数控系统，具有良好的用户操作界面，可以完成复杂的五轴联动加工，可以实现RTCP控制（五轴加工）功能，所有CNC都配有CANOPEN总线通讯方式。
- 工作台采用高强度铸铁件，床身、横梁、溜板、滑枕等关键结构件均采用钢板焊接件，运用有限元分析进行了分析计算，保证最优的质量刚度和优良的静态及动态性能和热态性能。铸铁工作台面设有标准T形槽，可以方便的定位安装各种工装夹具及工件。
- 设有电主轴的水循环冷却系统、进给传动的自动润滑系统及刀具的冷却喷雾系统，确保机床的可靠运转和精度稳定性。
- 配置12工位旋转刀具库，自动换刀。

[Product Features]

- Uses a CNC double pendulum head with 5-axis and 5-linkage function, it can complete milling, boring, drilling, tapping thread, and cutting on 5 surface.
- Suitable for 3-dimensional, 5-axis machining on all kind of industrial aluminum profile for all kinds of vehicles, rail transportation, and etc. it can complete all kinds of hole, slot, and shape on aluminum profile.
- With a high-precision double pendulum head, with a high-power, high-speed spindle, and with the inner conic hole of interface HSK63F, the machine has much higher cutting quantity per unit time.
- With high quality CNC system of Italy Osai, it has a good user interface, it can complete the complex 5-axis machining, and can realize the RTCP control (5-axis machining). All CNC are equipped with bus communication of CANOPEN.
- The worktable adopts high-strength cast iron pieces. The machine bed, the beams, the slide, the ram, and other key parts are made of steel plate welding parts. It is analyzed and calculated by using finite element analysis, which ensure the quality of the optimal stiffness ratio and excellent static and dynamic performance and thermal properties. The working table of the cast iron is provided with a standard T shaped groove, which can facilitate the positioning and installation of various tooling fixtures and workpieces.
- With water circulating cooling system on the electric main shaft, automatic lubricating system on the feed drive, and cooling spray system on cutting tool, it guaranteed the reliable operation and precision stability of the machine tool.
- With rotary tool stock of 12 stations, it can change the tools automatically.

技术参数 Technical Parameters

X/Y/Z轴移动范围	Moving range of axis X/Y/Z	6500/1520/600mm
主轴头端面至工作台面距离	Distance from spindle head to worktable surface	0~600mm
B轴摆动范围	B-axis swing range	±185°
C轴旋转范围	C-axis rotation range	±320°
工作台面积(长×宽)	Worktable size(length * width)	6500 × 1200mm
T型槽	T shaped groove	7 × 22H7
X向: 立/卧	X: Vertical / Horizontal (without tool)	6500/6400mm
Y向: 立/卧	Y: Vertical / Horizontal	1200mm
Z向: 立/卧	Z: Vertical / Horizontal (without tool)	450/600mm
X/Y/Z快速移动速度	X/Y/Z axis move speed	50/30/20m/min
X/Y/Z轴进给电机扭矩	X/Y/Z axis feed motor torque	18.6 × 2/11.5/11.5N.m
B/C轴旋转速度	B/C axis rotating speed	166.7 /191.7 °/s
B/C轴最大连续输出扭矩	B/C axis Max continuous output torque	320/670N.m
主轴锥孔/刀柄规格	Taper hole/handle spec	HSK63F No.
主轴电机功率	Motor power	12kW
主轴最大输出扭矩/转速	Max output torque/ rev	12.3N.m
主轴最高转速	Max rev	18000r/min
刀库容量	Tool magazine capacity	12把(可完成自动换刀)Automatic tool change
气源压力	Air pressure	6~7(kgf/cm ²)
用气量	Air consumption	240L/min
电器总容量	Total electrical capacity	50kVA
机床净重	Net weight	13500kg
NC系统	NC system	意大利Osai数控系统Italy Osai CNC system