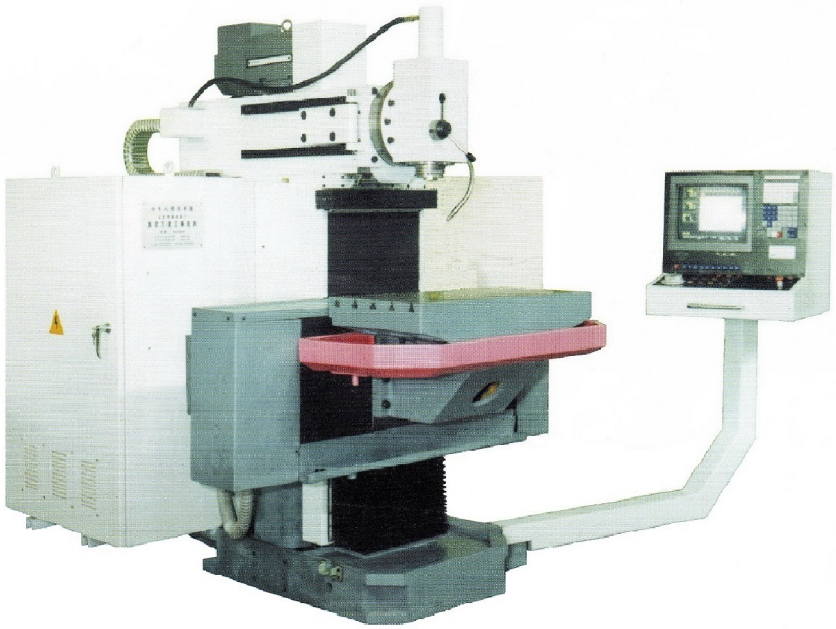
XK8140A

数控万能工具铣床

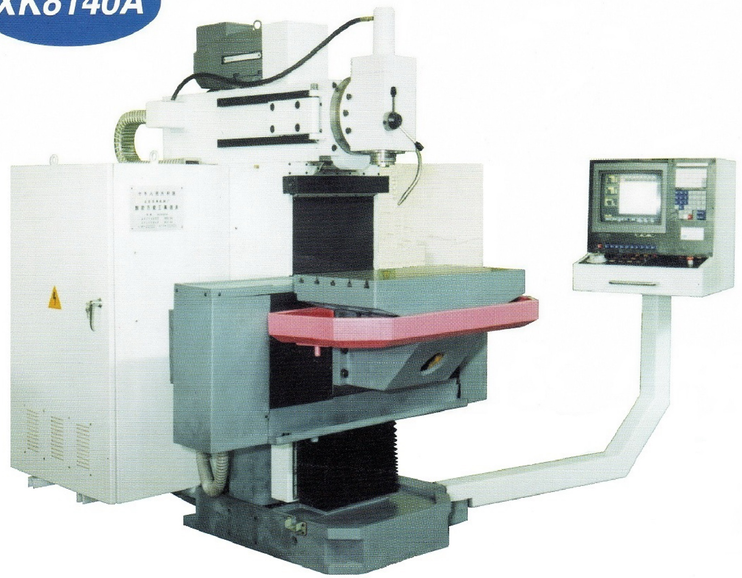
CNC UNIVERSAL TOOL MILLING MACHINE



北 京 仪 表 机 床 厂

BEIJING INSTRUMENT MACHINE TOOL WORKS

XK8140A



主要特点 Features:

① 高刚性 High rigidityi
② 高精度 High accuracy
③ 高速度 High speed
④ 高效率 High efficiency

主要特点：

高刚性：主要零件采用高质量的铸铁箱式结构，合理布置筋板，具备很强的吸震能力；长导轨淬火并磨削，短导轨贴塑，接触刚度强，滚珠丝杠采取双端固定支撑并进行预拉伸，工作切削时刚性大，刚性变化小。

高精度：主传动及进给传动数字式伺服电机控制，圆弧齿同步带传动无键联接；主轴轴承及丝杠轴承选用NSK高精度轴承。

高速度：主轴转速可达3000转每分；进给速度最大可达4米每米钟，快速为6米每分钟，运行平稳，工作可靠。

高效率：此机床采用液压松刀，碟簧夹紧，换刀快速可靠；高刚性主轴及足够的进给刚性可满足机床进行强力切削；可选配数控回转工作台或数控分度头，实现四轴联动。

Features:

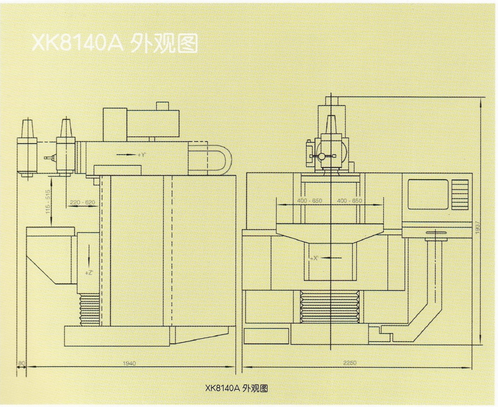
High rigidity: The main parts are of cast case structure, Ribs are reasonably distributed in it to abscrb strong vibration, the long guideway is hardened and grinded, the short guideway is stuck with plastic guideway to ensure strong contact rigidity. The ball screw is supported at the two ends to limit the rigidity variation to minimum.

High accuracy: Main transmission and feed are servo motor control, circular tooth belt and keyless coupling. The bearings for spindle and lead screw ard NSK precision bearings, thushigh machine accuracy is obtained.

High speed: Spindle can be raised up to 3000 RPM, feed speed max. is 4 meters per minute, rapid traverse is 6 meters per minute. All the motions are smooth and the operations are reliable.

High efficiency: Hydraulic cutter release and disk spring clamping are used to ensure fast and reliable tool changing. The rigidity of spindle and feed can be meet the need of heavy cut. The NC rotary table or NC dividing head can be suppiec to perform the simultaneous movement of the 4 axes.

XK8140A外观图



XK8140A外观图

数控万能工具铣床 CNC Universal Tool Milling Machine

XK8140A数控万能工具铣床，是我厂参考国际同类先进机床的结构特点，自行开发的新一代数控万能工具铣床，产品结构上比过去的机床有较大的突破，适合于现代高速度、高精度、高效率加工。

此机床采用SIEMENS公司全数字控制系统及主轴电机、伺服电机，亦可配三菱、FANUC等数控系统，立卧主轴无级调速，液压松刀，可实现三轴半闭环控制，完成两轴圆弧运动、三轴直线及螺旋线运动。

CNC UNIVERSAL TOOL MILLING MACHINE MODEL XK8140A is a vew generation of the CNC universal tool milling machines developed by ourown works. It makes a breakthrough in structure as compared with the traditional machines. It also posseses certain features of the advanced machines of its kind in the world and is suitable for the high speed, high accuracy and high efficiency work in modern times.

The machine adopts the all digital controled CNC system, spindle motor and servo motor made in SIEMENS Company and can be fitted with MITSUBISHI FANUC and so on as well. The vertical and horizontal spindle speed changing steplessly, hydralic cutter release. It can realize 3-axes semiclosed-loop control and perform 2-axes circular interpolation movement and 3-axes linear and helical interpolation movement.

XK8140A数控万能工具铣床，按照ISO9001-1994 GB/T19001-1994标准译审合格，特发此证书。


质量体系认证证书
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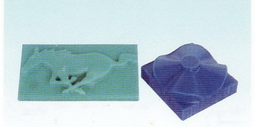

若配置其他公司（型号）数字控制系统，功能以随机技术文件为准。
本样本所列规格数据如有变更，恕不另行通知。
Details given herein are subject to alteration without notice.

主要技术规格 TECHNICAL SPECIFICATIONS			
水平工作台	台　面	Surface of horizontal working table	400 × 800 mm
	T槽数	Number of T-slot	5
	T槽宽度	Width of T-slot	14 mm
	T槽间距	Distance between T-slot	80 mm
行程	横　向	Max. cross travel of spindle slide	400 mm
	纵　向	Max. longitudinal travel of working table	500 mm
	垂　向	Max. vertical travel of working table	400 mm
主轴	转速范围	The range of spindle speeds	0 - 3000 r/min
	额定扭矩	Rated torque	77 Nm
	主轴锥孔	Spindle nose taper	ISO40 锥度 7 : 24
	立铣头回转角度	Swivel angle of vertical milling head	± 90°
	立铣头套筒行程	Vertical quill trave	60 mm
	刀具拉紧力	Force of draw-tools	600 kg
进给速度		Feed rate	5 - 4000 mm/min
快速进给		Rapid traverse	6000 mm/min
主电机	额定功率	Spindle motor	5.5/7.5Kw
	额定转速	Rated revoluted speed	1500 r/min
	额定扭矩	Rated torque	35 Nm
伺服电机	额定转速	Rated revoluted speed	2000 r/min
	额定扭矩	Rated torque	6.5 Nm
水平主轴中心至工作台面距离:		Distance from axis of horixontal spindle to surface of working table	172.5 - 572.5 mm
垂直主轴端面至工作台面距离:		Distance from nose of vertical spindle to surface of working table	115 - 515 mm
垂直主轴中心至床身垂直导轴面距离:		Distance from axis of vertical spindle to surface of vertical guideway	220 - 620 mm
精度	定位精度	Position accuracy	0.02 mm
	重复定位精度	Repeatablity	0.01 mm
机床总功率		Overall power	15 Kw
外形尺寸(长×宽×高)		Overall dimensions (L × W × H)	1430 × 1940 × 1940
净　重		Net weight of machine	2500

XK8140A

数控万能工具铣床
CNC Universal Tool Milling Machine

CNC 系统技术规格及功能　CNC SPECIFICATIONS AND CHARACTERISTICS

- 系统型号：SINUMERIK 810D
- 控制坐标数：3 轴（x, y, z）
- 同时控制坐标数：
  两轴圆弧、三轴直线插补
- 旋转轴定义
- 程序存储容量：128KB
- 自动方式
- 手动方式
- 示教方式
- 轮廓检测
- 间隙补偿
- 过象限误差补偿
- 工作区域限定
- 软件限位
- 钻孔、铣削循环
- 公 / 英制混合测量
- RS 232C 通讯接口
- 动态显示
- 2D+2 螺旋插补
- 加速度平滑
- 可编程加速度
- 采用 FRAME 可实现坐标变换、倾斜

- 交流伺服和主轴驱动器
  …采用 SIEMENS 611D
- 交流伺服和主轴电机
  …采用 1FK6.1PH6

※（详见 SIMEMS 810D 手册）

- System model: SINUMERIK 810D
- Controlled axes: 3 axes (X, Y, Z)
- Simultaneous controllable axes:
  2 axes circular; 3 axes linear interpolation
- Infinitely rotating rotary axes
- Memory capacity: 128 KB
- AUTO mode
- JOG mode
- LEARN (teach in) mode
- Look-ahead detection of contour violation
- Backlash compensation
- Quadrant error compensation
- Working area limitation
- Software travel limit
- Drilling and Milling cycle
- Meters/Inch or mixed
- RS 232C interface
- Program window for display of current block
- 2D+2 helical interpolation
- Smoothed acceleration
- Programmable acceleration
- Coordinate transformtion and
  Inclined machining with FRAME
- AC Servo & spindle drive
  …SIEMENS 611D
- AC Servo & spindle motor
  …1FK6.1PH6

※（Refer to SIMEMS 810D catalog for detail）