



北京京仪世纪自动化设备有限公司  
BEIJING JINGYI CENTURY AUTOMATIC EQUIPMENT CO., LTD.

# XH7125 立式加工中心



(原北京仪表机床厂)  
BEIJING INSTRUMENT MACHINE TOOL WORKS

# 立式加工中心

## VERTICAL MACHINING CENTER

### 用途与特点



XH7125 立式加工中心外形小巧美观，加工范围广泛，既可进行简单零件的加工，同时又可进行复合工序、复杂型面的零件加工，特别是有色金属零件的加工，是各行业进行中、小型零件加工的最好选择。

机床主体结构由底座与立柱组成，工作台通过滑台在底座上完成机床的X与Y向运动，Z向运动则通过主轴箱在立柱上的上下移动来完成。机床的主要基础大件均采用高强度铸铁，合理布局加强筋的箱体结构是机床高精度和刚度的良好保证。

机床主轴锥孔为ISO40, 7:24，刀柄为BT40。整体单元式主轴结构，使机床主轴刚性好，精度高。工件夹紧、放松方式为气动方式，浮动式气缸结构可减少换刀过程对主轴轴承的冲击，从而提高主轴精度的稳定性。每次换刀同时进行主轴吹气，吹去主轴锥孔面的尘埃及杂质，保证与刀柄的结合面清洁程度。

刀库可容纳不同形式的加工刀具，在加工复杂零件时，通过移动式换刀方式，提供多工序中不同的加工刀具，满足现代加工的高效、高自动化的要求。

机床进给由带有预拉伸的滚珠丝杠和直线滚动导轨组成，使机床运动刚性高、精度稳定。

机床配有自动润滑装置，可对导轨与丝杆进行周期润滑，经有效防护后，可最大限度的保持机床的精度，提高机床的使用寿命。

机床的整体全封闭式防护罩，改善了机床操作者的工作环境。机床切屑回收方便，良好冷却系统可以最大可能地排除加工区域的切屑并带走热量，有效减小零件变形量。

### USES AND CHARACTERISTICS

The appearance of the vertical machining center XH7125 is very exquisite, as well as its applicability is wide. It can be used to process both the simple spare parts and the complex procedure spare parts, especially for the nonferrous metal. It is the best choice for processing the middle and small size spare parts.

The main structure is composed by foundation and upright column. The travels for X and Y directions are realized by the working table through the slide stage on the foundation. The travel for Z direction is realized by the spindle box moving up and down on the upright column. The reasonable layout and the strong muscle box body structure guaranteed its high accuracy and rigidity.

The spindle taper bore is ISO40, 7:24, and the tool holder is BT40. Overall unit type structure makes the spindle high rigidity and accuracy. The clamping and relaxing of work piece are by air-operated. The floating air cylinder structure reduces impact to spindle bearing when changing tools, thus improve the stability of the spindle accuracy. The spindle taper can be cleaned by air blow when changing tools, which ensures the surface of tools keeping clean.

The tool house can hold kinds of cutting tools. It is through moving way to change tools and supply different cutting tools when processing complex procedure parts, so as to satisfy the nowadays requirements of high efficiency and automation.

The feeling is composed by pre-extendedly ball leading screw and straight-line rolling guide, which make its high rigidity and stable accuracy.

The machine is adopted self-lubricating. It can cycle lubricate the guide and leading screw to protect the machine keeping high accuracy and its using life.

The machine is closed in complete shield, which improves the working situation for the operator. It is very convenient to recycle the cutting scraps. The cooling system can both clean the scraps in the operating area and remove the heat to effectively reduce the distortion of parts.



## XH7125

机床加工范围 Working Range	工作行程 (mm)	X 向	Working Travels (mm)	Longitudinal	400
		Y 向		Cross	260
		Z 向		Vertical	350
主轴端面至工作台距离 (mm)		Distance from nose of spindle to surface of working table (mm)		60 - 410	
工作台 Working surface of table	长 x 宽 (mm)		L x W		500 x 250
	T 槽数量 x 间距 (mm)		T-slots of table No. x Distance between		3 x 80
	T 槽宽度 (mm)		T-slots of table Width		14
	承重 (Kg)		Bear the weight of		200
	主轴转速	伺服主轴	Spindle speed	Servo spindle motor	0-8000 rpm
	主轴锥孔		Spindle taper bore		ISO40,7:24
	刀柄形式		Type of tool holder		BT40
	主轴直径 (mm)		Spindle diameter		ø55mm
	拉钉		Retention knob		BT40-1
斗笠式刀库 Funnel-Shape Type Tool Changer	刀具规格		Tape of Tool		BT40
	刀库容量		Quantity of tool		12
	刀具最大直径		Max Tool Diameter		ø100/ø150
	换刀时间 (刀对刀)		Time of changer (tool to tool)		6sec
位置精度 Position accuracy	定位精度 (mm)		Positioning accuracy		0.01 mm
	重复定位精度 (mm)		Repeatable positioning accuracy		0.006 mm
快速进给 Rapid traverse rate (m/min)	X向 (m/min)		Longitudinal		12 m/min
	Y向 (m/min)		Cross		12 m/min
	Z向 (m/min)		Vertical		12 m/min
电机功率 Power of motor (KW)	主轴电机	伺服主轴	Spindle motor	Servo spindle motor	3.7/5.5 KW
	伺服电机	X 向	Servo motor	Longitudinal	1.0 KW
		Y 向		Cross	1.0 KW
		Z 向		Vertical	1.5 KW
冷却泵		Cooling pump motor		0.25 KW	
数控系统 基本功能 Function of CNC control	基本控制轴		Basic controlled axes		3 (X、Y、Z)
	三轴直线插补		3 axes (x,y,z) linear interpolation		
	两轴圆弧插补		2 axes circular interpolation		
	螺旋插补		Helical interpolation		
	程序存储容量		Capacity of program memory		128KB
	静态、动态图形显示		Static \Dynamic graphic display		
	手动、自动		Manual \Automatic operation		
	MDI 工作方式		MDI operation		
	RS-232C 接口		Input and output interface RS-232C		
	DNC 功能		DNC function		
	反向间隙补偿		Backlash compensation		
	螺距误差补偿		Screw - pitch error compensation		
	刀具长度补偿		Tool length compensation		
	刀具半径补偿		Tool radius compensation		
其它 Others	机床重量 (Kg)		Weight		2200
	外形 (长 x 宽 x 高 mm)		Overall dimensions ( L x W x H )		1765x1810 x1760

## 可选功能项

## Optional function

1	选装第四回转轴	Fix fourth axis
2	主轴中心出水结构	Structure of spindle center pour

## 随机附件(随主机供应)

## Standard Equipments (With main machine supply)

1	BT40-ER32-75 弹簧夹头刀柄	1 个	Drill Chuck Arbor
2	ER32-5 卡簧	1 个	Drill Chuck
3	ER32-10 卡簧	1 个	Drill Chuck
4	BT40-1 拉钉	1 个	Retention Knob
5	机床垫铁	4 个	Anti-vibration Mounting Pad

## 特殊附件

## Special Equipments (At extra cost)

1	精密平口钳 125	1 个	Precise flat-mouth pincers 125
2	刀具长度测定器	1 个	Apparatus for tool length
3	寻边器	1 个	Apparatus for sides
4	立卧式数控转台	1 个	Vertical and horizontal CNC rotary table



北京京仪世纪自动化设备有限公司

BEIJING JINGYI CENTURY AUTOMATIC EQUIPMENT CO., LTD.

地址：北京永外宋家庄苇子坑 2 号 Address: No. 2 Weizikeng, Songjiazhuang, Yongding Men Wai, Beijing, China  
 邮编：100079 Postcode: 100079  
 销售处：(010) 67621142 67627287 Sale Department: (010) 67621142 67627287  
 传真：(010) 67613286 Fax: (010) 67613286  
 网址：www.chinabyj.com http://www.chinabyj.com  
 E-mail: byj@chinabyj.com E-mail: byj@chinabyj.com