

YK2212B 数控弧齿锥齿轮铣齿机

III. 机床的主要技术参数 Main Specifications of Machine

			YK2212B
(一) 被加工工件尺寸 Work to be cut			
最大加工模数 Max. module	mm	3	
最大节锥母线长度 Max. pitch cone distance	mm	65 (螺旋角30° 时) (spiral angle 30°)	
最大节圆直径 Max. pitch diameter	mm	125 (螺旋角30° , 传动比10:1 及2:1 时) (spiral angle 30° ,ratio10:1 & 2:1)	
根锥角 Root angle	最大 Max. 最小 Min.	90° 4°	
最大传动比 Max. ratio		10:1	
齿圈最大齿宽 Max. face width	mm	20	
最大齿高 Max. cutting depth	mm	6	
加工齿数 Number of teeth		5~100	
(二) 工件主轴主要参数 Work spindle			
主轴锥孔大端直径 Diameter of taper hole at large end	mm	44.399	
锥度 Taper		莫氏 5# (选配莫氏4#过度套) Morse taper5# (A reducing bush of Morse taper 4# is equipped on the machine.)	
锥长 Length of taper	mm	110	
主轴通孔直径 Diameter of through hole	mm	20	
主轴前部螺纹 Thread diameter at front part of spindle		M72×2	
(三) 刀盘直径 Cutter diameter	1/2" ,1 1/10" ,1 1/2" ,2" ,3 1/2"		
(四) 工件箱调整 Workhead settings			
主轴最大垂直位移 Max. offset of spindle	mm	向上Up 30, 向下Down 20	
主轴端面到机床中心距离 Distance from face of spindle to machine center	mm	30~190	
(五) 刀盘转速 (无级) Cutter speed (stepless)	rpm	150~1000	
主轴伺服电机功率 Power of main motor	kw	3	
(六) 摇台调整量 Cradle settings			
调整角 Setting angle		0° ~360°	
径向刀位 Radial	mm	0~64	
(七) 床位 Sliding base			
自中心位置的最大位移量 Max. movement from machine center	mm	-15~100	
(八) 机床总功率 Total power of machien	KVA	10	
(九) 机床外形尺寸 Overall dimensions of machine	mm	2676×2534×1700	
(十) 机床净重 Net weight	t	2.8	

注: 随着产品不断更新, 技术数据将有所变更, 届时请联系我们。

Note: The specifications are reference for you only, because of the continuous development of our product.

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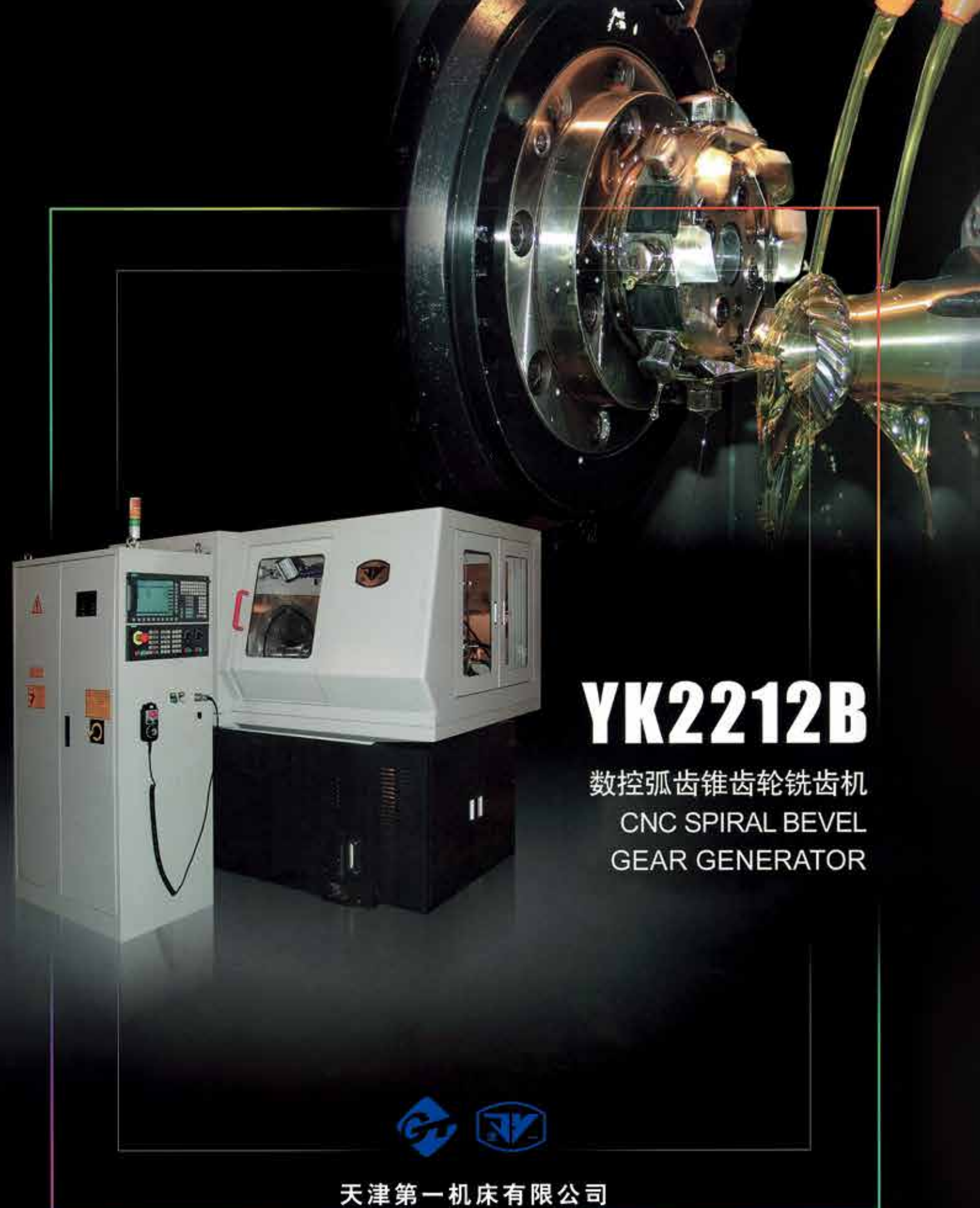
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YK2212B

数控弧齿锥齿轮铣齿机

CNC SPIRAL BEVEL

GEAR GENERATOR



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YK2212B

数控弧齿锥齿轮铣齿机 CNC SPIRAL BEVEL GEAR GENERATOR

I. 机床的主要用途

本系列机床集我公司多年研究开发弧齿锥齿轮铣齿机床及数控技术应用经验，采用现代设计方法和机电一体化技术而研制的新型数控弧齿锥齿轮铣齿机。

本系列机床特别适用于加工小型减速机行业、摩托车及自行车行业中小规格弧齿锥齿轮及准双曲面齿轮，同时也更适用于高档电动工业缝纫机及电动工具等行业的小模数弧齿锥齿轮及准双曲面齿轮。最适用于成批生产，也可用于大量及单件小批生产，组线方便、操作简便、稳定可靠。

II. 机床主要性能和结构特点

1. 本系列机床系三轴数控弧齿锥齿轮铣齿机，即摇台回转（X轴）、工件主轴回转（Y轴）、床鞍进给（Z轴）三轴联动完成铣齿运动，刀轴的旋转由主轴伺服电机控制，实现无级调速，噪声低。
2. 本系列机床调整方便，可根据不同切削方法的要求，对滚切、分齿、切深进给、铣刀转速、摇台正反向进行程序设定，同时可大大提高机床加工效率。
3. 本系列机床用电子手轮对刀、调刀。Z轴设有软、硬二重极限保护，具有安全保护功能。
4. 机床摇台传动采用高精度圆柱齿轮副，工件箱传动采用高精密蜗轮副传动，运动平稳，保证了摇台结构的高动态刚性，高速、高效及分齿传动的高精密性，切齿精度均可稳定达到GB6级。
5. 本系列机床采用德国西门子（SIEMENS）公司828D系统，同时根据用户要求可配置日本法那克（FANUC）公司的数控系统，实现机床的自动循环控制、手动控制及故障诊断。
6. 本系列机床具有独立、密封的电气控制柜，并配置空调。
7. 本系列机床配置安全防护。

I. Main Applications of Machine

These are a new series of CNC machines produced on the base of our experiences for developing spiral bevel gear generators and application of CNC technology in many years, with modern design method and integrative technology of mechanics and electronics.

This series of machines are suitable for cutting small size spiral bevel gears used for small size speed reducer, motorbike and bicycle industries, and for cutting fine spiral bevel gears used for top grade sewing machines and power tools. It is most suitable for batch production as well as suitable for mass or jobbing production. The machine is easy for operation and the quality is stable and reliable. It's convenient to arrange the production line.

II. Main Performances and Structural Characteristics of Machine

1. This series of machines are designed to operate as three-axes CNC control spiral bevel gear generator, i.e., cradle roll (X axis), work spindle rotation (Y axis) and sliding base movement (Z axis) being simultaneously controlled by control system for cutting the gears. The rotation of cutter spindle is controlled silently by a servo motor for its stepless control..

2. This series of machines are easy to adjust, with setting up the procedure for generating, indexing, infeed, cutter speed and cradle return roll according to requirements of different cutting method, meanwhile the productivity of machine has a great increase.
3. Tool setting and adjustment of the machines are made through an electronic handwheel. There are soft & hard limits on the machine for the protection functions.
4. A high precision cylindrical gear pair is used for the cradle movement and the workhead is driven by means of a high precision worm and worm wheel pair. The smooth transmissions ensure the high dynamic rigidity of the cradle mechanism and high precision of high speed, high efficient indexing motions. The cutting accuracy of gears can reach Grade 6 of the GB Standard stably.
5. This series of machines are equipped with CNC control system 828D (SIEMENS) or FANUC CNC to accomplish the automatic or manual control and fault diagnosis.
6. This series of machines are equipped with an independent close type electrical cabinet with an air conditioner.
7. An enclosur is available on this series of machines.

机床布局图

Layout of the Machine

