

技术参数 / Technology Parameter

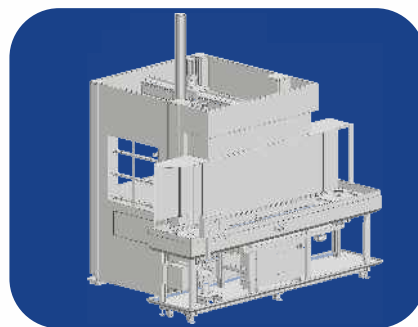
主要技术规格 Specifications	单位 Unit	Y7226CNC13
最大工件直径 Max. workpiece dia	mm	262
加工齿数范围 Range of processed teeth	mm	5-500
最大工件模数 Max. workpiece module	mm	0.5-5
砂轮大小 Grinding wheel size	mm	Φ275 × Φ160 × 160
修整轮大小 Dressing wheel size	mm	Φ123/Φ140 × Φ52 × 40
砂轮主轴最大转速 (B轴) Max. speed of grinding wheel spindle (B-axis)	rpm	7000
工作台最高转速 (C1/C2轴) Max. worktable speed (C1/C2-axis)	rpm	3000
砂轮修整轴 (B2轴) Grinding wheel dressing spindle (B2-axis)	rpm	9000
X轴行程 X-axis stroke	mm	245
Y轴行程 Y-axis stroke	mm	220
Z轴行程 Z-axis stroke	mm	220
A轴行程 A-axis stroke	Deg	±45°
C3轴行程 C3-axis stroke	Deg	-45°~+225°
U轴行程 U-axis stroke	mm	43
W1/W2轴行程 W1/W2-axis stroke	mm	315
C4轴 (修整器中心摆动轴) 行程 C4-axis (trimmer center swing axis) stroke	Deg	±13°

标准配置 / Standard Configuration

主机 Main machine	1pc	电箱 Electrical box	1set
液压系统 Hydraulic system	1set	气动系统 Pneumatic system	1set
润滑系统 Lubrication system	1set	静电吸雾装置 Electrostatic Mist Absorption Device	1set
平衡系统 Balancing System	1set	自动对齿机构 Automatic tooth align mechanism	1set
负压式冷却过滤装置 Negative pressure cooling filter	1set	静电式集雾器 Electrostatic mist collector	1set
排屑小车 Chip conveyor	1set	压缩空气冷干机 Compressed air dryers	1pc
砂轮法兰盘 Grinding wheel flange	2set	死顶尖 Back dead centre	2pcs
金刚石修整笔 Diamond dressing pen	2pcs	机床减震垫脚 Vibration damping feet for machine tools	6sets
专用工具 Specialized tools	1set		

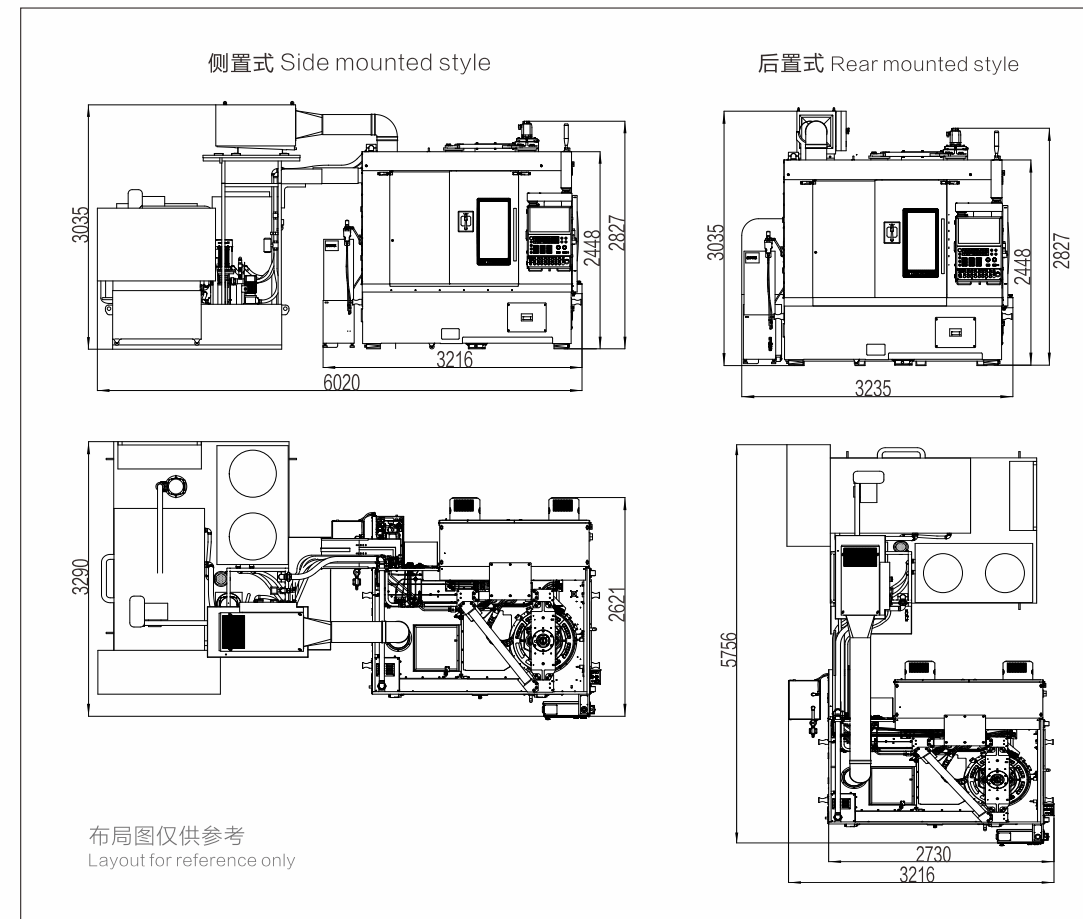
可选配置 / Optional Configuration

- 自动上下料装置 (桁架机械手/关节机器人+自动循环料仓/堆垛式料仓)
Automatic loading and unloading (Truss manipulator/Joint robot+Automatic storage bin/Stacking storage bin)
- 工件夹具 Workpiece fixture
- 活动顶尖 Tip top of the line
- 金刚滚轮 Diamond roller



平面布局图 / Machine Layout

单位 (mm)



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智者·总是领先一步 ZHEJIANG TOMAN

Y7226高效数控双工作台磨齿机
Y7226 high-efficiency CNC gear grinding machine with multi-station



陀曼智能/齿轮装备
Toman Intelligence / Gear Equipment

Y7226高效数控双工作台磨齿机

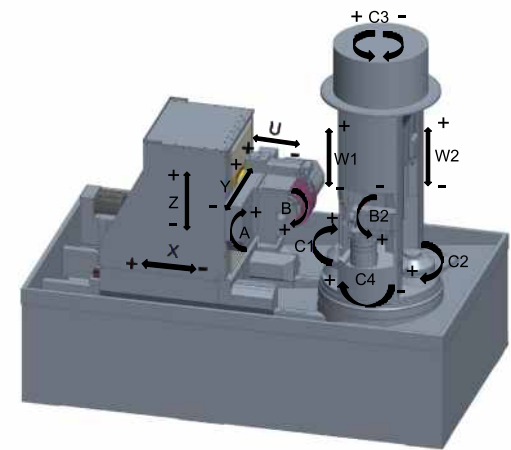
Y7226高效数控磨齿机是适用于乘用车齿轮、商用车齿轮、高精度减速机齿轮等中小模数齿轮的磨齿加工，尤其是适用于新能源汽车齿轮的加工。

Suitable for small and medium module gears in passenger vehicle, commercial vehicle and high precision reducer etc., especially for the processing of new energy vehicle.



机床数控轴 / Machine tool CNC axis

各坐标轴结构简介:
Introduction to the structure of each axis



- | | |
|--|--|
| A轴
砂轮架旋转轴
Rotation movement of tool holder | C4轴
滚轮压力角调整轴
C4-axis: Roller pressure angle adjustment axis |
| B轴
砂轮主轴
B-axis: Grinding wheel spindle | X轴
立柱径向进给轴
X-axis: Radial feed axis of column |
| B2轴
砂轮修整主轴
B2-axis: Grinding wheel dressing spindle | Y轴
砂轮切向进给轴
Y-axis: Grinding wheel tangential feed axis |
| C1轴
工件主轴1
C1-axis: Workpiece spindle 1 | Z轴
砂轮轴向进给轴
Z-axis: Grinding wheel axial feed axis |
| C2轴
工件主轴2
C2-axis: Workpiece spindle 2 | W1/W2轴
CNC尾架轴
W1/W2 axis: CNC tailstock axis |
| C3轴
小立柱旋转轴
C3-axis: Small column rotary axis | U轴
冷却喷嘴调整轴
U-axis: Cooling nozzle adjustment axis |

机床主要特点 / Main Features

机床采用双工位结构，可交替磨削、装料和卸料，保证磨齿精度的同时最大程度缩短非加工时间。

The machine adopts double-worktable structure, which can alternate grinding, loading and unloading to ensure the precision of grinding teeth while minimizing the non-processing time.



工件主轴采用大扭矩同步电机驱动，提高了机床传动精度和动态响应性能。
The workpiece spindle is driven by a high-torque synchronous motor, which improves the transmission accuracy and dynamic response performance of the machine.

高刚性高精度的砂轮主轴结构设计，可实现大进给、高效率、高速连续展成磨削和多头蜗杆砂轮修整与磨削，大幅提高了磨削效率。

The high rigidity and high precision grinding wheel spindle structure design can realize large feed, high efficiency, high speed continuous spreading grinding and multi-head worm gear dressing and grinding, which greatly improves the grinding efficiency.



采用大功率、高精度修整主轴，大幅提高了修整精度和效率；修整装置结构紧凑、闭环控制，实现修整轮精确摆角，可对压力角进行精确微调，还可以实现砂轮的变压力角修整、压力角补偿和三截面插补等功能。

Adopting high-power, high-precision dressing spindle greatly improves dressing accuracy and efficiency; dressing device has compact structure and closed-loop control, realizing precise swing angle of the dressing wheel and accurate fine-tuning of the pressure angle, and also realizing the functions of variable-pressure-angle dressing of the grinding wheel, compensation of the pressure angle, and interpolation of the three cross-sections.



自动对齿装置位于机床右侧床身上，在工作磨削的同时，在上料工位同步对齿，对齿过程不会占用在何加工时间。

The automatic tooth align device is located on the right side of the machine tool. While grinding workpiece, synchronized tooth aligning in the loading station, the tooth aligning will not take up the processing time.

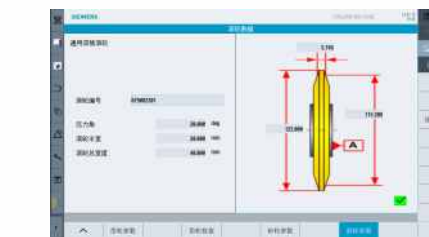
整机采用模块化设计，液压、气动和润滑装置集中后置，便于操作和维护，同时用户可以根据需要选配自动上下料装置。

The whole machine adopts modular design, the hydraulic, pneumatic and lubrication devices are centrally rearward, which is easy to operate and maintain, meanwhile, the user can choose the automatic loading and unloading device according to the need.

Y7226 high-efficiency CNC gear grinding machine with multi-station

过滤装置可根据用户现场选择常规的后置式，也可选配窄形布局的侧置式，使机床可以根据客户现场灵活调整布局。
Filtering device can be selected according to the user site of the conventional rear-mounted, can also be equipped with a narrow layout of the side-mounted, so that the machine tool can be flexibly adjusted according to the customer site layout.

机床软件功能 / Machine tool software functions

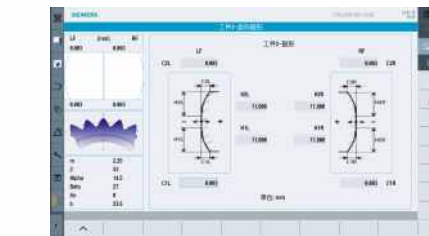


支持多种滚轮安装及修整工艺，如通用双锥滚轮、通用V型滚轮、组合双锥滚轮、组合V型滚轮、如通用双锥单面等。

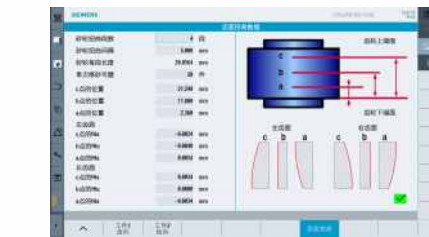
Support a variety of roller installation and dressing process, such as general-purpose double cone roller, general-purpose V-roller, combined double cone roller, combined V-roller, such as general-purpose double cone single-sided, etc.



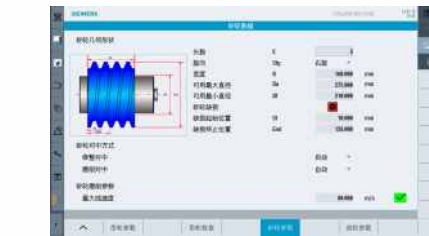
配置变压力角修整和变导程修整功能，左右齿面的压力角可以单独补偿。
Equipped with variable pressure angle trimming and variable lead trimming functions, the pressure angles of the left and right tooth surfaces can be compensated individually.



配置齿向任意修形功能--鼓形修形、非对称鼓形修形、锥度修形、非对称锥度修形、齿向修缘、齿向分段修形等功能。
Configuration of tooth direction arbitrary trimming function - drum trimming, asymmetric drum trimming, taper trimming, asymmetric taper trimming, tooth direction trimming edge, tooth direction segment trimming and other functions.



配置齿面扭曲补偿功能（三截面修形）。
Equipped with a tooth surface distortion compensation function (three-section trimming).



砂轮缺损自动跳过功能。
Automatic skip function for grinding wheel defects.