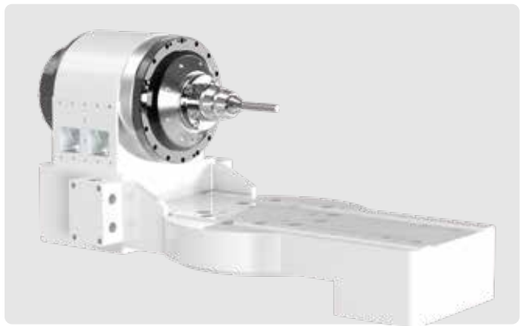
QD568 5-AXIS CNC TOOL GRINDER
五轴数控工具磨床

Features | 特点

1.Suitable for grinding and re-grinding of large-diameter rotary tools, capable of completing the entire grinding and re-sharpening process in a single setup.
2.Processable tool materials include high-speed steel, carbide, ceramics, etc.
3.Can be processed round rod tool diameter range 3mm to 32mm, the maximum length of the workpiece 350mm; Cutting edge length is up to 300mm; Disk tool diameter less than 320mm.
4.5-axis 5-linkage grinding ball cutter, round nose cutter, forming cutter, etc., suitable for mass production of standard cutting tools and small batch production of non-standard cutting tools.
5.Machine design requirements: a circular arc-shaped sealed hood with two side doors for easy maintenance.

- 适用于大直径回转类刀具的磨削和重磨，能在一次装夹的情况下完成整个磨削和修磨过程
- 可加工刀具材料包括高速钢、硬质合金、陶瓷等
- 可加工圆棒类刀具直径范围3mm至32mm，工件最大长度350mm；切削刃长度最大为300mm;盘类刀具直径小于320mm
- 5轴5联动方式磨削球刀、圆鼻刀、成型刀等，适用于标准刀具的批量生产和非标刀具的小批量生产
- 圆孤型密封机罩，两面开门，维修方便



Workpiece Spindle | 工件主轴

Workpiece rotation indexing axis DD direct drive.

- 工工件主轴：工件旋转分度轴 DD 直驱。

Grinding Spindle | 磨削主轴

high-speed electric spindle, dual grinding heads (permanent magnet synchronous) HSK50E interface, manual disassembly.

- 磨削主轴：高速电主轴,双磨头（永磁同步）HSK50E接口，手动拆卸。

Using genuine NUM software | 采用正版NUM软件

Main functions of NUM CNC programming software

NUM CNC programming software is a programming and operation software designed specifically for CNC five axis CNC machine tools. It can generate, optimize, and simulate tool paths, significantly improving machining efficiency and product quality. Here are some of the main features of the software:
Tool path generation and optimization: NUM software can automatically generate tool paths based on machining requirements, and improve the efficiency and quality of the paths through optimization algorithms.
Simulation function: Before formal processing, the software can simulate and run to help users check the correctness and feasibility of the path in advance.
Tool data management: The software provides comprehensive tool data management functions, including tool type selection, geometric parameter settings, etc., making it convenient for users to manage tools.
View and Print: Users can view real-time views of the machining process through the software and print detailed machining reports.

NUM数控编程软件是一款专为CNC五轴数控机床设计的编程和操作软件。它能够生成、优化和模拟刀具路径，显著提高加工效率和产品质量。以下是该软件的一些主要功能：

刀具路径生成与优化：NUM软件能够根据加工需求自动生成刀具路径，并通过优化算法提高路径的效率和质量。

模拟功能：在正式加工前，软件可以进行模拟运行，帮助用户预先检查路径的正确性和可行性。

刀具数据管理：软件提供了完善的刀具数据管理功能，包括刀具类型选择、几何参数设置等，方便用户进行刀具管理。

视图与打印：用户可以通过软件查看加工过程中的实时视图，并打印出详细的加工报告。

选择刀具类型：软件支持多种刀具类型选择，包括钻头、阶梯钻、成型铣刀等，满足不同加工需求。

通过使用NUM数控编程软件，用户可以更加高效地进行CNC机床编程和操作，提高加工效率，降低生产成本。

Advantages of genuine software

Legal Compliance: Avoid legal risks, and prevent lawsuits and fines resulting from the use of pirated software.
法律合规：避免法律风险，防止因使用盗版软件而面临的法律诉讼和罚款。

Technical Support: Access official technical support to promptly resolve software-related issues and ensure stable system operation.
技术支持：获得官方技术支持，及时解决软件使用中的问题，确保系统稳定运行。

Software Updates: Receive regular official updates and patches to enjoy the latest features and security fixes, improving software performance and safety.
软件更新：定期获取官方更新和补丁，享受最新功能和安全修复，提升软件性能和安全性。

Data Security: Genuine software undergoes rigorous testing, reducing risks of vulnerabilities and malicious code to protect corporate data security.
数据安全：正版软件经过严格测试，减少漏洞和恶意代码的风险，保护企业数据安全。

Training Resources: Gain access to official training resources to help employees quickly master software usage skills and enhance work efficiency.
培训资源：获得官方培训资源，帮助员工快速掌握软件使用技巧，提高工作效率。

After-Sales Service: Benefit from official after-sales services, including warranties, maintenance, and technical consultations, ensuring long-term stable software operation.
售后服务：享受官方售后服务，包括保修、维护和技术咨询，确保软件长期稳定运行。

Full Functionality: Genuine software offers complete features without limitations, enabling businesses to fully utilize all software capabilities.
功能完整：正版软件功能齐全，无功能限制，确保企业能够充分利用软件的所有功能。

Specifications | 技术参数

Stroke

X-axis Stroke X轴行程	840 mm
Y-axis Stroke Y轴行程	500 mm
Z-axis Stroke Z轴行程	310 mm
Swivel Angle A-axis Stroke A轴旋转范围	0-∞
Swivel Angle B-axis Stroke B轴旋转范围	0-360°

Grinding Range

Precision of machining tool contour 加工刀具轮廓精度	±0.005mm
Max. Turning Diameter 最大加工工件直径	Φ3mm-ϕ32（disc<ϕ320）
Max. Workpiece Length 最大工件长度	＜350 mm
Cutting edge length 切削刃长度	＜300mm
Max. weight 最大工件重量	20 kg

Resolution

Linear axis positioning accuracy直线轴定位精度	±0.002mm
Linear axis repeat positioning accuracy直线轴重复定位精度	±0.001mm
A-axis repeat positioning accuracy A轴重复定位精度	4 arc sec
B-axis repeat positioning accuracy B轴重复定位精度	4 arc sec

Machine power

Electrical Power 电源	AC380V 50HZ three-phase
Total Power 总功率	35kw
Electric spindle power电主轴功率	24kw/(6000r/min,51Nm)
X/Y-axis power X/Y功率	1.3kw/1500rpm/8.34Nm
Z-axis power Z轴功率	2.9kw/1500rpm/18.6Nm
A-axis power A轴功率	0.6kw/200rpm/60 Nm
B-axis power B轴功率	1.2kw /100rpm/230 Nm

Tool holder

Tool holder 刀柄	Can be equipped with W20, W25 hydraulic tool holder, SCHUNK tool holder

Controller

Controller 系统	NUM/SYNTEC

Machine Dimensions

Weight 重量	5.5T
Dimensions (L x W x H) 长x宽x高	2380×2420×2500mm（including robot automatic loading and unloading）
Dimensions (L x W x H) 长x宽x高	1870×2420×2500mm（Excluding robot loading and unloading）