

HST-LDQ220A Automatic Cutting Machine



This machine is a PLC-controlled metallographic sample cutting machine. It features automatic and precise control in the X, Y, and Z directions. Intelligent cutting adjusts the feed rate according to the material hardness to achieve the fastest cutting effect. The cutting speed is frequency-controlled, ensuring high reliability and controllability. It includes: (i) an electronic handwheel for automatic switching; (ii) a touchscreen display of various cutting data; (iii) precise positioning; and (iv) four cutting modes: oscillating cutting, continuous cutting, reciprocating cutting, and variable speed cutting. During cutting, the cutting speed can be adjusted according to the material hardness to achieve rapid cutting. The cutting speed for solid steel cylinders can reach 15 mm per minute. To facilitate cleaning of the cutting chamber and ensure spindle motor safety, we have adopted a mechanical-electrical separation design. The cutting chamber safety cover features an extra-large observation window, allowing users to easily observe the entire sample cutting process. LED lighting is installed inside the cutting chamber, providing effective illumination of the entire area. The ventilation fan inside the cutting chamber

ensures efficient removal of steam and fumes generated during cutting, increasing brightness and clarity within the work area. The design is more user-friendly, utilizing ergonomic principles. Key features include low noise, easy operation, attractive appearance, and safe use. It is an essential piece of equipment for laboratory sample preparation.

Machine type: Vertical. Main components include an upper section (safety cover), middle section (frame), right sliding door, side door, lower frame (electrical box, toolbox), clamps, rinsing faucet, and independent cooling water tank.

Equipped with a Mitsubishi programmable controller, offering extremely high reliability and powerful control capabilities.

Designed specifically for high-capacity cutting of large workpieces, the HST-LDQ220A makes maintaining machine parts and handling large workpieces easier. Sliding and hinged doors provide more space and unrestricted access, making it easier to load large workpieces into suitable positions. Workpieces can also be fed into the cutting chamber from the top, front, and left.

The working area features a fully enclosed structure with a transparent protective cover for observation during cutting. A cooling water tank is provided for storing coolant; tap water should never be used as coolant. After cutting, use the faucet on the left to rinse away any debris and close the safety door.

Main Parameter

Manual/automatic can be selected by the user.	Three-axis linkage, controlled by a 10-inch industrial touchscreen; also switchable to a handwheel control.
Grinding wheel diameter	Ø610X4XØ32
Cutting feed rate	0-15 mm/min (users can adjust the speed setting as needed)
Workbench size	700x800 mm (x*y)
Maximum travel distance on the Y-axis	750 (mm)
Maximum travel distance on the Z-axis	290 (mm)
Maximum travel distance on the X-axis	150 (mm)

Maximum cutting diameter	220 (mm)
Cooling water tank volume	250L
Variable frequency motor	15kW, speed: 100-3000r/min, power supply: 380V, 50HZ
Machine dimensions	1850x1600x1900 mm(L*W*H)
Organism form	Vertical
weight	About 2500 (kg)
power supply	Three-phase five-wire 380V 50HZ: A, B, C, N

Main Accessories Included:

1. One set of environmentally friendly dust removal equipment
2. Two wrenches
3. One waste bin
4. Two 500X4X32 cutting discs
5. Five bottles of environmentally friendly coolant/lubricant
6. Rotary clamp (optional)
7. Vertical clamp (optional)

HST GROUP Co., LTD.

NO. 4915, West Jingshi Road, Jinan 250012, PR CHINA.

Tel: +86-15910081986

www.hssdgroup.com E-mail: admin@hssdtest.com