

HST-LDQ140Z Automatic Metallographic Specimen Cutting Machine



Overview

This machine is a metallographic specimen cutting machine automatically controlled by PLC, with precise control in the X, Y, and Z directions. Intelligent cutting can change the feed rate according to the material hardness to achieve the fastest cutting effect. The cutting speed is controlled by frequency conversion, which has high reliability and control ability; 1. The touch screen displays various cutting data, 2. precise positioning, 3. swing cutting, continuous cutting, reciprocating cutting, variable speed cutting, and four functional cutting methods. During cutting, the cutting speed can be changed according to the hardness of the material to achieve fast cutting. The cutting speed for solid steel cylinders can reach 15 millimeters per minute. For the convenience of cleaning the cutting chamber and ensuring the safety of the spindle motor, we have adopted a separation of mechanical and electrical components; The cutting room safety cover has a large observation window, making it easy for users to observe the entire cutting process of the sample; LED lighting is installed inside the cutting room to effectively illuminate the entire area used in the cutting room; The ventilation fan in the cutting room can ensure the efficient flow and discharge of various steam and smoke generated during cutting, increasing the brightness and clarity of the studio; The design is more user-friendly, utilizing principles of ergonomics Main features: low noise, easy operation, beautiful appearance, safe use It is one of the essential equipment for laboratory sample preparation.

Body form; Vertical. It mainly consists of an upper part (safety cover), a middle part (frame), a right sliding door, a side opening door, a lower frame (electrical box, toolbox), fixtures, flushing faucets, and a cooling water tank (independent).

Adopting a variable frequency motor directly connected to the cutting blade, stepless speed regulation, simple design, sturdy structure, direct drive provides power transmission between the motor and the cutting blade, ensuring high efficiency, low noise, minimal maintenance, and longer service life.

HST-LDQ140Z is designed specifically for high-capacity cutting of large workpieces, making it easier to maintain machine parts and handle large workpieces. Sliding doors and hinged doors provide you with more space and unrestricted access, making it easier to load large workpieces in the appropriate location. The

workpiece can also be fed into the cutting chamber from the front, left, and right directions.

The work area adopts a fully enclosed structure and has a transparent protective cover for observation during cutting. Equipped with a cooling water tank specifically for storing coolant, avoid using tap water as coolant. After the cutting work is completed, use the left flushing faucet to flush the indoor garbage and close the safety door.

Main technical parameters

Manual/automatic can be selected by oneself	Three axis linkage, 10 inch industrial touch screen control
Grinding wheel diameter	Ø400X3XØ32
Cutting feed speed	0-15 millimeters per minute (users can modify the set speed as needed)
Workbench dimensions	400x500 mm (mm) (x * y)
Maximum Y-axis travel distance	300 mm
Maximum Z-axis travel distance	180 mm
Maximum travel distance of X-axis	150mm
Maximum cutting diameter	140mm
Cooling water tank capacity	120L
Variable Frequency Motor	5.5kw, Rotational speed; 300-3000r/min RPM, power supply; 380V,50HZ
Overall dimensions	1300mm x 1300mm x 1850mm
Body form	vertical
weight	About1600kg
power supply	Three phase five wire 380V 50HZ: A, B, C, N
fixture	Opening 200mm

Equipped with main accessories

1. A set of environmentally friendly dust removal device
2. Two wrenches
3. A waste bin
4. Two 400X3X32 cutting pieces
5. Four bottles of environmentally friendly cooling and lubricating fluid