HTS 2000

Automatic cup wheel grinding machine









HTS 2000 with hydropneumatic clamping device



Liquid cooling of the sample

The reference machine for safe, fast and reproducible grinding

At a glance

- Automatic cup wheel grinding machine for preparation of steel and iron samples
- Various clamping devices for any given samples geometry available
- Ideally suited for use in laboratory or plant for quality control purpose of foundries, steel works and other metal producing companies
- Quick and easy sample handling with PLC control system

Reproducible grinding for precise analyses

The HTS 2000 cup wheel grinding machine prepares iron and steel samples of all conceivable geometries for spectral analysis. The grinding process is controlled by a PLC control system. The reproducibility of sample preparation is improved considerably. The grinding support is driven by a servo motor. Cup wheel wear is monitored by a measurement facility. This ensures extremely precise grinding results in conjunction with short processing times and long service life.

The sample temperature may be up to 900°C. The sample is cooled during the grinding process with compressed air or by liquid coolant, depending upon the machine configuration. The tank for the cooling facility can be removed from the enclosure in a few simple steps for fast and straightforward cleaning.



Permanent magnet clamping plate with stop bracket

Numerous options for different requirements

A hydropneumatic clamping fixture is available for clamping samples of any given geometry. An electromagnetic or permanent magnet clamping plate is available for use with magnetic samples.

Cup wheels are available with a range of hardnesses and grains. This assures perfect adjustment to a range of different sample material.

PLC for precise, simple and safe grinding

All parameters required for sample processing are entered on an operator terminal. They can be saved and protected by a password. The subsequent operating cycles are then controlled automatically by the program controller. Maloperations are virtually impossible. Grinding results can be reproduced at any time.

The machine is fully enclosed and therefore generates low noise. It corresponds to the effective safety standards. A dust exhaust facility can be connected without difficulty as the machine is equipped with a connecting sleeve as standard.



Measuring facility for detection of cup wheel wear



Terminal for easy and fast operation



Model: HTS 2000

• Colour: blue/light blue

· Labeling text: English

· Operating manual: 1 copy english

Dimensions L x W x H

Overall dimensions of machine: 950 x 700 x 1,700 mm

Machine floor area: 950 x 700 mm

Weight

Machine: Approx. 750 kg

Power supply and consumption

Voltage: 400 V, 50 Hz, 3-phase AC

Neutral conductor: Not required
Power consumption: Approx. 3.7 kVA

Compressed air supply and consumption

Pressure setting: 6 ba

Consumption: Approx. 750 dm³/N per sample

Discharge fitting - dust

Location of dust extraction sleeve: On the rear side of the machine

Diameter of dust extraction sleeve: OD = 125 mm, ID 120 Required exhaust rate: 15 m³/min at 2,100 Pa

Electrical switch gear cabinet

Programmable controller:

Control Voltage:

Protection class:

IP 44

Insulation class:

B SIMATIC S 7

24 V DC

IP 44

Insulation class:

B

Sample insertion and discharge

Insertion method: Manual into a clamping device

Processing parameters

Grinding dept: Max. 2 mm

Machining programs: 8, directly accessible by start buttons

Processable samples

Steel and iron
 Temperature: max. 900 °C

Options

- · Hydropneumatic clamping device for
 - Cylindric samples: diameter 32 55 mm, thickness 8 60 mm
 - Production samples: Length up to 70 mm, width: 32 55 mm, thickness 8 60 mm
- Electromagnetic clamping device for

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- Magnetic samples with plane surface: Diameter 30 50 mm, thickness 4 60 mm
- Liquid cooling device
- Demagnetizing device
- Dust collector

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C & The design of the machine complies with the applicable accident prevention and VDE (German association of electronic engineers) regulations. We reserve the right to make technical changes.

