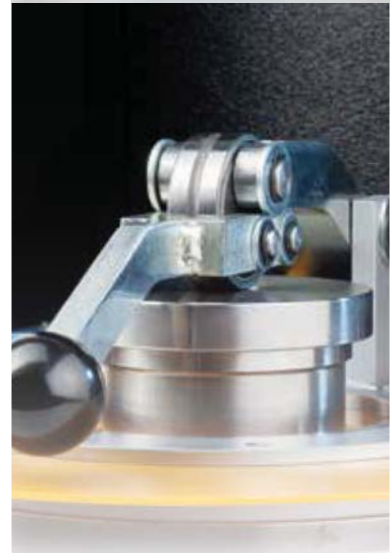


# TP 20 E

Bench-top pellet press

# HSM 50

Bench-top pulverizing mill



# HERZOG

# Your bench-top solution for



Access to the press tool via safety flap

## PELLET PRESS TP 20 E

### Improved operator comfort – Increased efficiency

The TP 20 E is the bench-top laboratory press for easier and more efficient preparation of pressed pellets for XRF analysis. The semi-automatic TP 20 E produces perfect pellets at the press of a button. The pressure is built up automatically using a hydraulic aggregate instead of a hand pump. This means significant reduced physical workload, more comfortable working conditions and efficiency enhancement for the operator.

### Easy to use – Safe to handle

The sample material is filled into the press tool manually. The operator inserts the press tool in the machine and closes the safety input/output flap. The machine will not start until the flap is closed.

By pushing the 'start' button, the piston moves out until it achieves its maximum pressure force of 200 kN and the motor stops. The hydraulic system keeps the pressure until the operator pushes the 'stop' button to let the piston move backwards.

For safety reasons it is not possible to open the input/ output flap during the complete process. The flap is released as soon as the piston is retracted completely. Then the press tool with the pressed pellet can be removed and the machine is ready for the next sample.



Press tool of TP 20 E

### Options

Various press tools for free pressing, pressing into aluminium cups or steel rings (40 mm or 51.5 mm diameter) can be used as options. A specially designed support for the TP20 E (option) ensures a stable stand.



# pulverizing and pelletizing

## PULVERIZING MILL HSM 50

### Space-saving solution for a wide range of application

The HSM 50 is the compact bench-top machine for efficient pulverizing. The grinding mill is suitable for the pulverizing of different kinds of material, for example silicate, cement, ceramic material, ores, iron sinter, slag ferroalloys and various other minerals. According to the application the operator can choose between 10 or 50 ccm grinding vessel (chrome steel or tungsten carbide).

### Simple operation

The sample material is filled into the grinding vessel. Then, the grinding vessel with puck and lid is inserted and fixed manually using the machine clamping device. The grinding time can be adjusted and the grinding cycle is initiated by pressing the start button.

### Safe operation

After closing the flap the machine is locked during the grinding operation by a safety switch. The grinding vessel is manually removed from the machine and the ground material can be discharged for further processing. The machine is totally enclosed, sound insulated and requires a minimum of operator's time and maintenance. Safety switches automatically deactivate the machine in case of malfunctions during operation.



Easily accessible clamping device



Manual clamping device with and without grinding vessel (50 ccm)



Available press tools for TP 20 E and grinding vessels (50 and 10 ccm) for HSM 50

# Technical data

## Model TP 20 E

- Color: white/blue
- Lettering: English
- Instruction manuals: 1 copy, English
- Accessories: 1 set of spanners

## Dimensions L x W x H

Machine:	581 x 320 x 537 mm
Machine including packaging crate:	800 x 550 x 1,050 mm

## Weights

Machine:	130 kg
Machine including packaging crate:	190 kg

## Power supply and consumption

Voltage:	400 V, 50 Hz, 3-phase
Neutral conductor:	Not required
Power consumption:	0.5 kVA
Compressed air supply:	Not required

## Electrical switch cabinet

DDC system:	Siemens LOGO
Type of protection:	IP 54

## Process parameters

Pressure holding time:	To be adjusted individually
Press force:	200 kN
Piston stroke:	32 mm max.

## Options

- Press tool 40 mm diameter for free pressing
- Press tool 40 mm in aluminium cups
- Press tool 40 mm for pressing in steel rings
- Press tool 51.5 mm for pressing in steel rings

## Model HSM 50

- Color: white/blue
- Lettering: English
- Instruction manuals: 1 copy, English
- Accessories: 1 set of wrenches

## Dimensions L x W x H

Machine including packing:	850 x 850 x 1,100 mm
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## Weight

Machine including packing	180 kg
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## Power supply and consumption

Voltage	400 V, 50 Hz, 3 Phases
Neutral conductor	Not required
Connected load	2.5 kVA

## Electrical control cabinet (integrated)

Control	Simatic C7
Control voltage	24 V
Protection	IP 44
Insulation class	B

## Options

- Grinding vessel 10 ccm (chrome steel or tungsten carbide)
- Grinding vessel 50 ccm (chrome steel or tungsten carbide)

*The machines are built according to the European CE-guidelines*

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**CE**  
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.

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