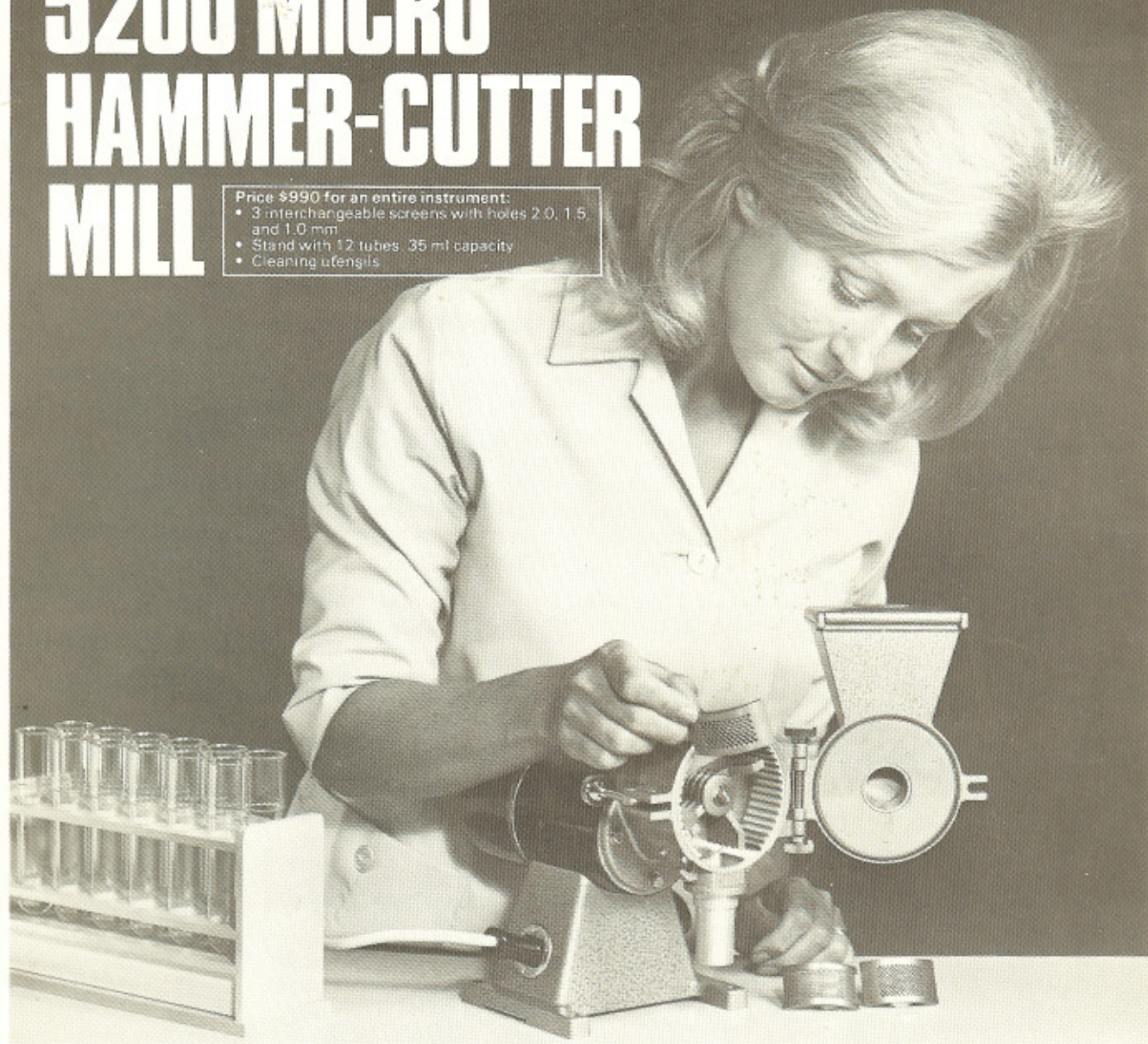


SPEX

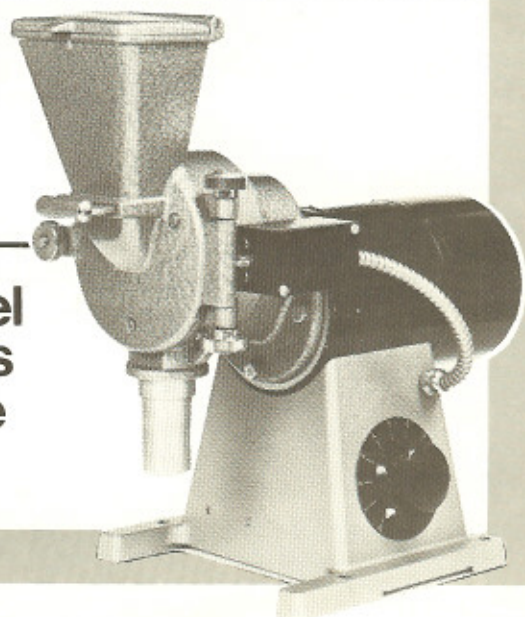
5200 MICRO HAMMER-CUTTER MILL

Price \$990 for an entire instrument:
• 3 interchangeable screens with holes 2.0, 1.5,
and 1.0 mm
• Stand with 12 tubes, 35 ml capacity
• Cleaning utensils



**Pulverizes almost anything
from cotton and wool
to rock samples**

**A compact mill with stainless steel
grinding mechanism. Disintegrates
most substances to a fine particle
size in only 30-120 seconds.**



SPEX

Efficient grinding achieved

(a) by the shearing and cutting action of three swinging hammers with sharp and serrated edges.
(b) by the crushing action due to the impact of the material against the hammers.
These *multiple* grinding forces account for the versatility of the Micro Hammer-Cutter Mill.

Minimum sample quantity

Even a few grams can be pulverized.

Hopper capacity

Approx. 120 ml.
Adjustable feed of material to grinding chamber by means of a conveniently located slide.

Hermetic closure

No loss of material during grinding due to:
(a) snap-action hopper lid,
(b) sealing of grinding chamber door by rubber gasket,
(c) airtight fitting of plastic tube to mill outlet.

Largest initial particle size

About 6 mm – depending on nature of material.

Ground particle size

Using the 0.5 mm screen, grinding friable medium-hard materials, approx: 100% – 72 mesh; 98% – 85 mesh; 95% – 100 mesh; 70% – 150 mesh; 40% – 200 mesh.

adjustable

(a) by means of interchangeable screens which slide quickly into position
(b) by varying motor speed.

Screens

Seven screens available:
3.0 2.0 1.5 1.0 0.8 0.5 0.2 mm.
The ground product is reduced to a very much finer size than the holes of the appropriate screen.

Safety

The door is connected to a safety switch which cuts out the motor as soon as the door is opened. The mill cannot be restarted until the door is closed. When the safety switch cuts out the motor it also actuates a braking mechanism which brings the motor to a dead stop within a second.

Receptacles

Plastic collecting tubes of 35 ml capacity – push fitting – enable ground product to be clearly seen. Larger receptacles (e.g. flasks or bags) can be used and fastened to a pair of lugs provided for this purpose at the mill outlet.

Cleaning

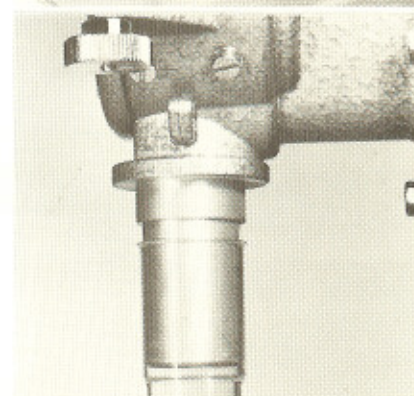
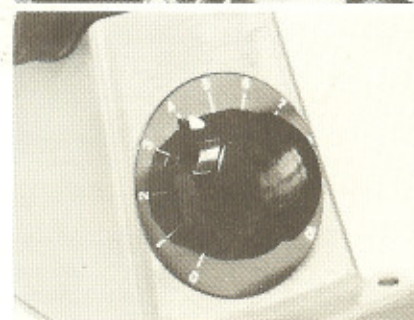
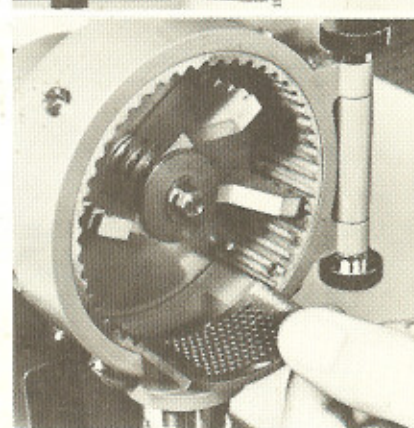
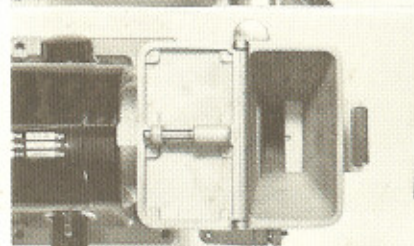
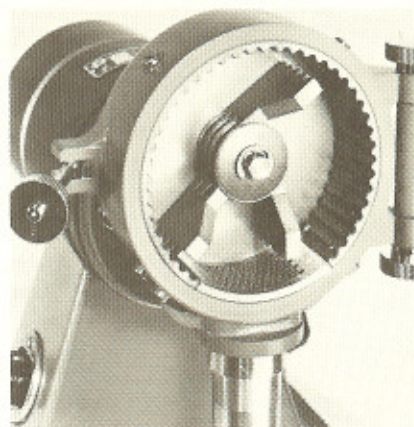
Easily achieved due to the full-size hinged door. Further facilitated by grinding mechanism being of stainless steel.

Overall dimensions

About 27 cm high × 15 cm wide × 28 cm long. Occupies only 15 cm × 16 cm of bench space.

Weight

5.2 kg., collecting tubes in wooden stand: 0.5 kg.



SPEX

The Micro Hammer-Cutter Mill is unique

It combines the action of two mills — a hammer mill and a knife mill. That's how it can perform equally well with both rock samples and fibrous, light and fleecy materials.

Both kinds of material are ground to powder by the rotating hammers. The hard samples are pulverized by the pounding of the rotating hammers, and the fibrous products are reduced by the shearing action of the sharp serrations at the tips of the hammers and on the grinding chamber lining.

Conventional hammer mills are not particularly suitable for paper and fibrous materials while the knives of conventional knife mills would quickly be blunted by rock-like samples.

Continuously adjustable speed control

Incorporated to lessen the impact of hammers when dealing with softer and more sensitive substances.

First choice of every laboratory

If a laboratory hasn't a mill of any kind, then the Micro Hammer-Cutter Mill, type 5200, is the logical choice. It is capable of pulverizing an extremely wide range of materials — almost anything from cotton and wool to rock samples. By investing in the 5200, a laboratory can save the money it would otherwise need to spend on purchasing several other types of mill.

Applications of the Micro Hammer-Cutter Mill

The 5200 will pulverize anything that breaks, is dry and does not contain too much oil or fat, such as:

minerals	wood	grain
chemicals	bark	seeds
coal	twigs	drugs
coke	roots	dried and fat-free meat
soil samples	dry leaves	skin
artificial fertilizers	cork	bone
brittle plastics	paper	glands
cotton	cellophane	hair
wool	fabrics	seaweed
hay	synthetic fibres	sea shells

Grinding time

Only 30-120 seconds are needed for disintegrating most substances.

Summary of Technical Details



Construction: Grinding chamber lining, door lining, hammers and screens are made of 400 series hardened stainless steel.

Motor: Totally enclosed variable speed brake motor; 115 volt, AC, 2A; overload protection by push-button circuit-breaker.

Drive: Connection between motor and hammer shaft is by means of a toothed belt.

Mounting platform: Where it is inconvenient to bolt the mill to a bench, a special wooden mounting platform as shown in the adjoining illustration is available. It provides a stable base for the machine, and the entire unit can be easily moved from place to place.

Questionnaire for Test Grinding of Samples

If you wish to have up to 3 samples ground, please complete both parts of this Questionnaire and enclose it with your samples.

Mail to: SPEX Industries, Inc. 1 Leonard St., Metuchen, NJ 08840 Ref: for grinding.

Please fill in or check appropriate answer

To be ground in: ☐ 5200 MICRO HAMMER-CUTTER MILL

Sample Composition: _____

Quantity to be Ground per load: _____

Number of Samples per Day: _____

Purpose of Grinding: _____

SAFE HANDLING OF SAMPLES SUBMITTED FOR TEST GRINDING

Is enclosed sample hygroscopic, explosive, pyrophoric, radioactive, carcinogenic, toxic or in any other way hazardous to handle in its form or after grinding? Yes ☐ No ☐

If yes, please include complete and specific safety handling, storage and shipping instructions.

Name _____

Affiliation _____

Address _____

_____ Zip Code _____

Telephone _____ Signature _____



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