

# Retsch XRD-Mill McCrone

available from McCrone Microscopes & Accessories



## Focus On Accuracy

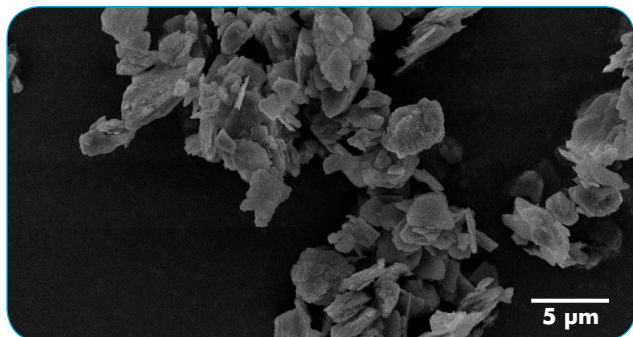
The XRD-Mill McCrone effectively reduces samples to sub-micron sizes suitable for x-ray diffraction, x-ray fluorescence, infrared spectroscopy, and atomic absorption analysis. With virtually no sample loss and even particle size distribution, the XRD-Mill McCrone remains the industry standard.

The XRD-Mill McCrone carries out size reduction by friction. 48 cylindrical grinding elements are placed into the grinding jar in eight rows of six elements each.

During operation, the jar's circular motion causes the elements to grind the sample from  $< 0.5$  mm to the low  $\mu\text{m}$ -range (typically  $< 5$   $\mu\text{m}$ ).



Clay 0.5 mm



Clay after grinding in XRD-Mill McCrone for  $< 5$  minutes; final size:  $< 3$   $\mu\text{m}$

## Product Advantages:

- Crystal lattice preserved during grinding operation
- Very narrow and reproducible particle size distribution
- Compact, bench-top sized model
- Adjustable grinding power (four steps)
- Suitable for dry and wet grinding
- Easy to clean
- Quiet operation
- Preparation kit available for pre-crushing samples

Contact McCrone Microscopes & Accessories for a demonstration. We are committed to helping you choose the right mill for your needs.

## The XRD-Mill McCrone has applications for a variety of materials, including:

Bones  
Borides  
Carbides  
Cement

Ceramics and Glass  
Clay  
Construction Materials  
Metals

Mica  
Minerals  
Nitrides  
Plant Materials

### FEATURES

|                                    |  |
|------------------------------------|--|
| <b>Applications</b>                | Grinding, mixing and triturating, dry and wet            |
| <b>Field of application</b>        | X-ray diffraction  |
| <b>Feed material</b>               | Medium-hard, hard, brittle, fibrous                      |
| <b>Material feed size*</b>         | < 0.5 mm   |
| <b>Final fineness*</b>             | < 1 $\mu\text{m}$  |
| <b>Speed at 50 Hz (60 Hz)</b>      | 1,000 - 1,500 $\text{min}^{-1}$ in four steps            |
| <b>Number of grinding stations</b> | 1  |
| <b>Typical mean grinding time</b>  | 3 to 30 minutes  |
| <b>Dry and Wet grinding</b>        | Yes  |
| <b>Material of grinding tools</b>  | Agate, zirconium oxide, corundum                         |
| <b>Grinding jar size</b>           | 125 ml   |
| <b>Drive and drive power</b>       | 50W, 220-240 V, 50/60 Hz                                 |
| <b>Power connection</b>            | 1-phase  |
| <b>Power consumption</b>           | 100W   |
| <b>Size</b>                        | 8" W x 6.25" H x 20.5" D (205mm W x 155 mm H x 520 mm D) |
| <b>Net weight</b>                  | 42 lbs. (~19 kg)   |
| <b>Standards</b>                   | CE   |

\* Depending on feed material and instrument configuration and settings. Ask your McCrone Technical Representative for a complete list of specifications.

Let the expert consultants at McCrone Microscopes & Accessories help you design custom-tailored equipment packages to meet your specific microscopy needs. From product selection to installation and training, with McCrone Microscopes & Accessories, you have the expertise of the most trusted name in microscopy every step of the way.

We are the instrument sales division of The McCrone Group, boasting one of the most complete lines of products for microscopists. We are the authorized dealer for Nikon microscopes and measuring equipment, Linkam thermal stages, the JEOL NeoScope benchtop SEM, digital imaging systems, and microscope accessories.



Sample preparation kit.

**For a demonstration, or more information, please contact:**

**McCRONE**  
MICROSCOPES & ACCESSORIES  
[www.mccrone.com](http://www.mccrone.com)

mmaorder@mccrone.com • 630-887-7100  
850 Pasquinelli Drive • Westmont, IL 60559