



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai 400076.

Reference No. (PR No. 1000016541)

RFx No. 6100000715

TECHNICAL SPECIFICATIONS

XRD-Mill McCrone

I. Cat No. 20.770.0001 XRD-Mill McCrone – 1 no.

Complete XRD-Mill McCrone package with 2 grinding jars with screw top lid of PP, 1 pouring lid, 1 loading device.

1. Description:

- 1.1. The XRD-Mill McCrone was specially developed for the preparation of samples for subsequent X-ray diffraction (XRD).
- 1.2. The mill is used for applications in geology, chemistry, mineralogy and materials science, quality control as well as R&D.
- 1.3. The XRD-Mill McCrone was specially developed for the preparation of samples for subsequent X-ray diffraction (XRD).
- 1.4. The mill is used for applications in geology, chemistry, mineralogy and materials science, quality control as well as R&D.
- 1.5. The grinding vessel consists of a 125 ml capacity polypropylene jar fitted with a screw capped gasket less polyethylene closure.
- 1.6. The jar is filled with an ordered array of 48 identical cylindrical grinding elements, available in agate, zirconium oxide or corundum.
- 1.7. The grinding time for optimum micronization is between 3 and 30 minutes.
- 1.8. A typical sample volume is between 2- and 4-ml Applications: bones, borides, carbides, cement, ceramics, clay, construction materials, glass, metals, mica, minerals, nitrides, plant materials, slate.

2. Features:

- 2.1. Applications: grinding, mixing, and triturating, dry and wet
- 2.2. Feed material: medium-hard, hard, brittle, fibrous.
- 2.3. Material feed size*: < 0.5 mm
- 2.4. Final fineness*: <1 μm Speed at 50 Hz (60 Hz): 1,050, 1,200, 1,350, 1,500 min⁻¹
- 2.5. No. of grinding stations: one
- 2.6. Typical mean grinding time: 3 - 30 min
- 2.7. Dry grinding: yes
- 2.8. Wet grinding: yes
- 2.9. Material of grinding tools: agate, zirconium oxide, corundum
- 2.10. Grinding jar sizes: 125 ml
- 2.11. Setting of grinding time: digital, 00:00:10 to 99:59:59



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai 400076.

- 2.12. Drive: DC-Motor
- 2.13. Drive power: 50W
- 2.14. Electrical supply data: 220-240 V, 50/60 Hz
- 2.15. Power connection: 1-phase
- 2.16. Protection code: IP 30
- 2.17. Power consumption: 100W
- 2.18. W x H x D closed: 205 x 155 x 520 mm
- 2.19. Net weight: ~19 kg
- 2.20. Standards: CE

II. Corundum – 3 no.

grinding elements
Cat No. 02.368.0122
Corundum, grinding elements
(1set = 48 grinding elements)

III. Grinding sets – 1 no.

Cat No. 01.462.0263
Grinding sets RS 200 – 250 ml Hardened steel

Warranty: All products should be covered under standard manufacturing warranty of at least 1 year from the date of installation.