



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

PR No. 1000016892

Rfx No. 6100000705

Details Technical Specification

ULTRA MICROTOME

1. Cutting transmission should be done by vibration decoupled gravity stroke
 - 1.1 Specimen feed at steps of 1 nm or better
 - 1.2 Cutting speed should be controllable in a range of 0.05 to 100 mm/sec
 - 1.3 Complete system should be controlled by a touch screen controller of size 10" or more
 - 1.4 Knife stage should be fully motorized and controllable by the touch screen controller
 - 1.5 Movement range of knife stage in E-W (X) and N-S (Y) directions should be at least 25 mm & 10 mm respectively
 - 1.6 Countdown, section counters, speed, feed, stage movement parameters should be visible on controller screen
 - 1.7 Details of user, sectioning, knife parameters and grid box parameters should be downloadable via USB (logbook)
 - 1.8 It should be possible to make segments of knife and it should be approached automatically
 - 1.9 Ultramicrotome should have automatic trimming function, programmable by the touch controller
 - 1.10 Stereomicroscope with magnification range of 10x to 50x or more should be provided
 - 1.11 It should have eucentric movement with defined click stop positions for glass knife and diamond knife
 - 1.12 There should be 4 LED illuminations with top light, spotlight, back light and specimen trans Illumination
 - 1.13 All illuminations should have independent control via touch screen controller
 - 1.14 Accessories like forceps with straight and curved tip and a perfect loop (05 numbers for each) should be provided with the equipment.
 - 1.15 Offered ultramicrotome should have provision for future upgradation with cryo attachments for cryo-sectioning with controls built in the existing touch controller
 - 1.16 A 3.0 mm diamond knife of 35° should be provided
 - 1.17 Two sample holders for holding embedded sample up to 8 mm thickness should be provided**

Glass Knife maker & accessories

- 2.1 100% balanced break method
- 2.2 1.19 Breaks glass from 6.4 to 10mm
- 2.3 Variable scoring lengths with Accurate glass strip positioning
- 2.4 Drawer system with convenient and safe knife removal
- 2.5 Auto reset of breaking and scoring mechanism
- 2.6 Push action score for even scoring and Adjustable scoring pressure
- 2.7 Breaking wheel with scale for defined and reproducible glass break
- 2.8 Glass strips 6.4 mm & 8 mm - 20 pcs. each.
- 2.9 Trufs 6.4 mm & 8 mm, - 500 pcs. each



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- 2.10 Easymold, embedding mould for 5.6 mm & 8 mm dia.
- 2.11 Knife box 1 each for 6.4 mm and 8 mm glass knives
- 2.12 Grid box for 100 grids, 10 pcs.
- 2.13 Copper grids of mesh 100, 200, 300 & 400 each 100 pcs.
- 2.14 Dental wax

- 2.15 Others**
- 2.16 A vibration free table and ergonomic chair should be provided with the system
- 2.17 3 years warranty should be provided from the date of installation**