



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

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(Rfx No. 6100001932)

**Technical Specification for AMC for Field Emission Gun Scanning Electron
Microscope (FEG-SEM) JSM7600F with EDS & WDS System (1 Year)**

| Sr. No. | Scope of work | Description | Technical Compliance (Yes / No) | Additional Information (if any) |
|---------|---|---|---------------------------------|---------------------------------|
| 1 | Instrument Condition | Chamber Vacuum, pressure, overall instrument performance, instrument resolution check | | |
| 2 | Electronics and earthing/ Power supply unit | Check the main voltage and cable condition, Check DC supplies, Value and stability, check all panel earthing resistance values/leakage current. | | |
| 3 | Nitrogen gas /cooling water | Check the N2 gas pressure and performance of water-cooling unit | | |
| 4 | Rotary pump/TMP pump | Check the performance of rotary pump and Turbo Molecular Pump | | |
| 5 | Vacuum sequence and level | Check the timely operating of valves, gauges and leak detection. | | |
| 6 | Column and Alignment | Check column alignment and perform alignment if necessary | | |
| 7 | Sample exchange chamber | Check the sample exchange chamber handle and ensure smooth insertion of samples | | |
| 8 | Specimen stage | Check X, Y, Z, T and R motor performance | | |
| 9 | Operation panel | Check performance of knobs, track ball and buttons | | |
| 10 | PC-SEM application and PC | Instrument PC and software check | | |
| 11 | Detector and other control units | Check SEI, LEI, LABE, RBEI, SMV, AEM/PCD, PVG, CWC | | |

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|----|---|--|--|--|
| 12 | Energy Dispersive X Ray Analysis (EDS) | Performance check and calibration, hardware and software check | | |
| 13 | Wave length Dispersive X ray Analysis (WDS) | Performance check and calibration, hardware and software check | | |

Service Level Agreement
Maintenance plan of JEOL FEG SEM JSM 7600F

| Sr. No. | Scope of work | Description | Technical Compliance (Yes / No) | Additional Information (if any) |
|---------|------------------------------|--|---------------------------------|---------------------------------|
| 1 | Preventive maintenance visit | The vendor needs to provide preventive maintenance inspections and carry out repairs, calibration, adjustments, alignments and cleaning as may be necessary two times during the year of the term of this plan at reasonably spaced intervals. | | |
| 2 | Emergency Service | The vendor needs to provide emergency visits in case of equipment failure. The number of emergency visits should be unlimited. | | |
| 3 | Replacement Parts | During the preventive maintenance or emergency visit, if any original equipment part or consumable are required, then this part will be provided by the customer from his stock of spare parts or the customer will import the same from the manufacturer. | | |
| 4 | Coverage hours | The vendor shall perform maintenance and repair services at the location of malfunctioning device between the hours of 9:30AM to 6:00PM Monday to Friday. | | |