



महर्षि दयानन्द सरस्वती विश्वविद्यालय, अजमेर

NIT-69

तकनीकी रिपोर्ट

2026-MDSUA-553607-1

विश्वविद्यालय में विभिन्न शैक्षणिक विभागों हेतु मशीन/उपकरण (रूसा अनुदान के अंतर्गत) क्रय करने हेतु जारी ई. निविदा सूचना संख्या 69 दिनांक 22.04.2026 एवं निविदा तिथि वृद्धि सूचना के क्रम में तकनीकी समिति की बैठक दिनांक 14.05.2026 को आयोजित की गई। इस सम्बन्ध में निम्नानुसार फर्मा से प्राप्त निविदा प्रपत्र के क्रम में टेक्नीकल बिड की टर्म्स एण्ड कण्डीशन तथा स्पेसिफिकेशन के अनुसार तुलनात्मक विवरण निम्नानुसार है:-

| क्र.सं. | विवरण   | भैसर्स साइंस प्रैलेस, अजमेर  |
|---------|---|------------------------------|
| 1.      | Bid Fee Deposited   | 5000/-<br>596781/1.05.2026   |
| 2.      | Bid Processing Fee Deposited (Only for E-Bid)   | 1500/-<br>551134/1.05.2026   |
| 3.      | Bid Security Deposited  | 125940/-<br>576780/1.05.2026 |
| 4.      | Bid Document and Terms & Conditions duly singed   | Yes                          |
| 5.      | Annexure - A,B,C,D of Bid Document Duly Signed  | Page No. 37 - 40             |
| 6.      | Annexure E (Declaration by bidders)   | Page No. 41 & 89             |
| 7.      | Annexure F - Price Charging Certificate   | Page No. 42,90 & 94          |
| 8.      | Annexure =G -Agreement Format   | Page No. 43                  |
| 9.      | Annexure-H - Certificate by Bidders - For compliance of Finance Department Rajasthan Order No. F2(1)FD/G&T/SPFC/2017 Dt 15.1.21 | Page No. 44                  |
| 10.     | Annexure I - Undertaking to be submitted by Principal Manufacturer  | Page No. 45                  |

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|--------------|---|---------------------------|
| 11.          | Annexure - J - बिडदाता के व्यापार का विवरण  | Page No. 46               |
| 12.          | Annexure - K - बिडदाता के बैंक खाते का विवरण  | Page No. 47               |
| 13.          | Annexure - N & P - Format for Technical Compliance Sheet<br>Annexure Q - Format for Financial Compliance Sheet<br>Annexure L - GST Registration Certificate & Declaration<br>Photocopy of Firm/Bidder's PAN Card  | Page No. 49,51,52, 54, 56 |
| 14.          | Annexure O - Brochures, Literatures, Certificates as demanded in Technical Specifications Sheet   | Yes                       |
| 15.          | 1. Attested copy of partnership deed in case of partnership firm.<br>2. Registration number and year of registration in case partnership firm is registered with registrar of firm.<br>3. Address of residence and office telephone numbers in case of sole proprietorship.<br>4. Registration issued by Registrar of companies in case of company. | Page No. 57 & 62          |
| 16.          | Annexure M - Average annual turnover (No Final Account) of the bidder should be at least 100% of estimated cost of tender for the previous three financial years certificate of CA required   | Page 50, 67, 68, 74       |
| 17.          | Other Points : GST Clearance  | - Page No. 38 - 60        |
| 18.          | Balance Sheet   | Page No. 75-88            |
| पत्र / अपत्र |   | ५१५१                      |

नोट:-

1. स्वसिफिकेशन रिपोर्ट संलग्न।
2. तकनीकी रिपोर्ट के आधार पर वित्तीय बिड खोली जायेगी।

Prof. Arvind Pareek

Prof. Subhash Chandra

Asstt. Registrar (GAD)



महर्षि दयानन्द सरस्वती विश्वविद्यालय, अजमेर

क्रमांक: एफ.2( )सा.प्र/मदसविवि/2026/

दिनांक: 29.06.2026

आवश्यक सूचना

विश्वविद्यालय द्वारा जारी निविदा सूचना संख्या 69 दिनांक 22.04.2026 (UBN No. MDU2627GLOB00001) जो कि विश्वविद्यालय के विभिन्न शैक्षणिक विभागों में मशीन/उपकरण एवं निविदा सूचना संख्या 70 दिनांक 22.04.2026 (UBN No. MDU2627GLOB00002) क्रय किये जाने हेतु जारी की गई थी, के क्रम में तकनीकी रिपोर्ट [www.mdsuajmer.ac.in](http://www.mdsuajmer.ac.in) एवं राज्य सरकार की वेब साइट [sppp.rajasthan.gov.in](http://sppp.rajasthan.gov.in) एवं <http://eproc.rajasthan.gov.in> पर दिनांक 29.06.2026 को अपलोड कर दी गई है। अतः इस सम्बन्ध में यदि निविदादाता फर्म को कोई आपत्ति हो तो दिनांक 30.06.2026 को अपरान्ह 2.00 बजे तक ऑन लाईन सूचित करें।


— ६० —  
सहायक कुलसचिव (सा.प्र.)

क्रमांक: एफ.2( )सा.प्र/मदसविवि/2026/

दिनांक: 29.06.2026

प्रतिलिपि निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है :-

1. ए.सी.पी., मदस विश्वविद्यालय, अजमेर को को उक्त की प्रति प्रेषित कर लेख है कि इसका प्रकाशन विश्वविद्यालय की ऑफिशियल वेब साइट [www.mdsuajmer.ac.in](http://www.mdsuajmer.ac.in) एवं राज्य सरकार की वेब साइट [sppp.rajasthan.gov.in](http://sppp.rajasthan.gov.in) एवं <http://eproc.rajasthan.gov.in> पर करवाने का कष्ट करें।
2. कुलगुरु सचिवालय/निजी सहायक-कुलसचिव/निजी सहायक-वित्त नियंत्रक, मदसविवि, अजमेर।

  
सहायक कुलसचिव-सा0प्र0

**Technical Compliance Sheet-**

✓ **ITEM NAME- Attenuated Total Reflectance (ATR) FTIR**  
**Make- Bruker GmbH**

| S. No |                                 | Technical Specification   | Features available in equipment write (Yes/No)  |
|-------|---------------------------------|---|---|
| 1.    | Spectrometer Housing            | Fully Computer Controlled Benchtop FTIR System<br>The instrument should indicate whether the source and laser are operational   | Yes   |
| 2.    | Interferometer                  | Permanently aligned rock solid cube corner design , insensitive to vibration / tilt with a> 10 year lifetime and 5 year warranty against breakage , Zn SE Optics : sealed and desiccated with gold-coated mirrors , Zinc selenium beam splitter and zinc selenium windows | Yes<br><b>Any breakage caused due to physical damage is not covered under warranty.</b>   |
| 3.    | ATR                             | Platinum ATR Monolithic Diamond soldered in tungsten carbide > ten year life time ATR   | Yes   |
| 4.    | Wavenumber Range                | 6000 to 500 cm-1 or better  | Yes   |
| 5.    | Wavelength Accuracy             | ±0.0005 cm-1@2000 cm -1 or better   | <b>Alpha II offers the best wavenumber accuracy of 0.05 cm<sup>-1</sup> (standard deviation of 10 repeated measurements)</b>  |
| 6.    | Wavenumber Precision            | 0.001 cm-1@2000 cm-1 or better  | <b>Offers 5 year warranty on the source. However, an extended warranty can be provided at an extra cost.</b>  |
| 7.    | IR Source                       | Long Lifetime (More than Five Years) IR Source with 10 Years warranty   | <b>IR Source with 10 Years warranty should be ensure</b>  |
| 8.    | Detector                        | High Sensitivity Temperature Controlled DLATGS/DTGS Detector  | Yes   |
| 9.    | Resolution                      | 0.6 cm-1 or Better  | <b>For most routine FTIR applications, spectral measurements are generally carried out at a standard qualitative and quantitative analysis. Although Bruker offers a spectral resolution of 2 cm<sup>-1</sup>, such higher resolution is typically required only for specialized applications involving gas-phase analysis.</b> |
| 10    | Signal to noise Ratio           | >50,000:1 or Better (One-minute measurement, 4 cm-1 Resolution (Attachment for the same from software showing value of signal to noise ratio should be attached)  | <b>Typically &gt;55,000:1 (1 min measurement time, spectral resolution 4 cm<sup>-1</sup>). Refer to the specs sheet submitted.</b>  |
| 11    | Integrated High Pressure Device | With Calibrated Pressure Sensor   | Yes   |
| 12    | Background Correction           | System Should have online background correction facility which should enable system to collect background automatically while the instrument is idle. This will be required to minimize the analysis time   | <b>We confirm The system has online background correction facility</b>  |
| 13    | Calibration                     | Diode laser with high wavenumber accuracy and   | Yes   |




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|    |  |  |   |
|----|--|--|---|
|    | Laser  | precision with 10 years warranty   |   |
| 14 | Performance assurance                            | The Software should have real time data collection and should have the facility to continuously monitor the performance of the source detector power supply and laser.<br>Dedicated IR Pilot program different types of dedicated macro programs for contaminant analysis . identification , quantification or equivalent  | Yes<br><b>Demo can be arranged at Bruker's office in Mumbai or we can have an online demonstration.</b>   |
| 15 | Touch Panel /PC                                  | Touch panel or PC and WLAN Remote control should come with pre installed licensed software should also have compare software spectral search Quantitative Analysis Software , Automatic atmospheric suppression Spectral interpretation for unknowns Quality checks programs , The transfer of digital data files (for eg. ASCII Files) to excel /Origin and processing should be possible | Yes<br>Touch panel  |
| 16 | Libraries  | Built in library with at least 30000 reference spectra   | Yes, More than 26000 spectra  |
| 17 | Accessories                                      | Sampling Chamber for powder , liquid film and Gas and KBr pellet holder  | <b>Alpha II can be upgraded to have an accessory for accommodating powder, liquid film and Gas and KBr pellet holder. Can be procured at an extra cost</b>                          |
| 18 | compliance                                       | Fully compliant with GLP/GMP and 21 CFR Part 11, IQ/OQ performed by certified engineer and two days of advanced application training for staff   | <b>Refer to our response in Point no. 8</b>   |
| 19 | Diagnostic                                       | System should have following diagnostic features. Continues Electronic Monitoring of multiple spectrometer components with temperature and humidity sensors.<br>Diagnostic status should be displayed on light bar which should give you a quick visual indication of sample quality instrument status   | <b>Software has this feature</b>  |
| 20 | Reference materials for instrument qualification | The instrument should be supplied with internal polystyrene film for validation with certificate of traceability and with 5 years validity.  | Yes<br><b>Alpha II offers an internal polystyrene film for validation with lifetime validity.<br/>A separate external Polystyrene film is quoted with traceability certificate.</b> |
| 21 | Upgradability                                    | the instrument should have upgradability features like upgrade with IR Microscope or other make accessories  | <b>The system can be upgraded with IR microscope imaging system in future at an extra cost.</b>   |
| 22 | Humidity tolerance of the probe                  | during rains, humidity may reach upto 70% in Ajmer. Probe must have protection and warranty against it.  | Yes   |
| 23 | Warranty   | 1 years comprehensive warranty   | Yes   |
| 24 |  | <b>Whether Qualified or not</b>  | Yes   |

**Technical Compliance Sheet-**

ITEM NAME- Gas Chromatograph  
Make - NUCON

| S. No. | Technical Specification  | Features available in equipment write (Yes/No)  |
|--------|--|---|
| 1      | Gas Chromatograph with FLAME IONISATION DETECTOR (F.I.D.)  | Yes   |
| 2      | MICROPROCESSOR Controls with keyboard entry of process parameters and timing functions with user friendly software in ROM, | Yes   |
| 3      | Method development facility and electricity failure back up.   | Yes   |
| 4      | Automatic Temperature Programming facility with Four Ramp for Oven.  | Yes   |
| 5      | Initial mid and final timing and Auxiliary Temperature Control Channel besides Oven.                                       | Yes   |
| 6      | Injector and Detector with Auto Diagnostics facility & AUTO COOLING FACILITY complete with necessary standard accessories. | Yes   |
| 7      | <u>STANDARD ACCESSORIES WITH INSTRUMENT.56</u>   | Yes   |
|        | Soap Bubble Flow Meter. 1 No.  | Yes   |
|        | Silicon Rubber Septums. 20 Nos. .Set of Fuses  | Yes   |
| 8      | Set of Fuses: 1 Set  | Yes   |
| 9      | Set of Tools: 1 Set  | Yes   |
| 10     | Copper Tubing for Gas Connections: 1 Set   | Yes   |
| 11     | FID Ignitor: 1 No.   | Yes   |
| 12     | Instruction manual: 1 No.  | Yes   |
| 13     | Dust Cover: 1 No.  | No  |
| 14     | <u>ESSENTIAL ACCESSORIES</u>   | <b>Mentioned in Brochure at extra cost, need to be Negotiate at the time of order</b> |
|        | 1) Nitrogen Phosphorus Detector (NPD) with Control Module. 1 No.   | Yes   |
|        | 2)Capillary Column Attachment for Split/Splitless Injection with S.S. Diaphragms Pressure Regulator. 1 Set                 | Yes   |
|        | 3)Fused Silica Capillary Column of 30 Meter Length. 0.53 mmid, 1.2 um film thickness, EC-5 (EQ. DB-5). 1 No.               | Yes   |
|        | 4) Single Channel Chromatography INTERFACE WINCHROM with Software (Window Based) to be used with your PC. 1 No             | Yes   |
|        | 5) Hamilton Liquid Syringe of 10 ul capacity. 1 No   | Yes   |
|        | 6) Silicon Rubber Septums (Packet of 100 Nos.) 1 Pkt   | Yes   |
|        | 7) Glass Column of 1/4" O.D x 6 feet Length Packed with 10% DC-200. 1 No   | Yes   |
|        | <b>Whether qualified or not</b>  | <b>Yes</b>  |

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**Technical Compliance Sheet-**

**ITEM NAME- Spectrophotometer**

**Make - LABINDIA**

| S.No. | Technical Specification  | Features available in equipment write (Yes/No)               |
|-------|--|--|
| 1     | UV-VIS Double beam with variable bandwidth and computer attachment and software.   | Yes  |
| 2     | The instrument should be True Double beam with Czerny-Turner & holographic grating fully controlled by computer.                   | Yes  |
| 3     | Operative range of the instrument should be 190-900nm.   | Yes  |
| 4     | System must have PMT detector to cover entire wavelength range.  | Yes  |
| 5     | It should have continuously variable bandwidth from 0.5 nm-5 nm.   | Yes  |
| 6     | The Source should be Deuterium and Tungsten lamp with selectable switching facility.   | Yes  |
| 7     | System must have Photometric Range from -4 to 4 Abs.   | Yes  |
| 8     | System must have wavelength accuracy of $\pm 0.5$ nm or better.  | Yes  |
| 9     | System must have Stray Light should be $<0.05\%T$ at 220nm and 340nm for NaNO <sub>2</sub> .                                       | Yes  |
| 10    | System must have Baseline Flatness of 0.003 A or Better.   | Yes  |
| 11    | Noise Level of the instrument should be 0.0004 Abs or Better.  | Yes  |
| 12    | It should have wavelength programming with more than or equal to 8 wavelengths and should get selected during single spectral run. | <b>It has wavelength programming more than 20 wavelength</b> |
| 13    | System must be quoted with 10mm quartz cell for routine sampling.  | Yes  |
| 14    | Installation and training to the user to be provided by the vendor.  | Yes  |
| 15    | System should be quoted with Computer and Printer.   | Yes  |
| 16    | Warranty 1 year  | Yes  |
| 17    | Firm have ISO Certification  | Yes  |
|       | <b>Whether qualified or not</b>  | <b>Yes</b>   |

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**Technical Compliance Sheet**

**ITEM NAME- Horizontal Autoclave**

**Make MODI (ISI MARKED)/ GENIST**

| S.No. | Technical Specification  | Features available in equipment write (Yes/No) |
|-------|--|--|
| 1     | Horizontal High Pressure Cylindrical Steam Sterilizer - Single Door ISI Marked<br>Capacity 50 ltr or more  | Yes  |
| 2     | Size – Internal 20” Dia. x 48” Depth/  | Yes  |
| 3     | Capacity – 4 drum  | Yes  |
| 4     | Power – 9 kw   | Yes  |
| 5     | Mode of Heating: Electrical – 3 phase.   | Yes  |
| 6     | Working Pressure: 1.2 to 1.5 kgf / cm <sup>2</sup>   | Yes  |
| 7     | Working Temperature: 121 to 125° C; Hydraulic test pressure  | Yes  |
| 8     | Hydraulic test pressure: Jacket 2.6 kgf /cm <sup>2</sup> Chamber 1.9 kgf /cm <sup>2</sup>  | Yes  |
| 9     | Material of construction:<br>Chamber S.S.304, quality, 4 mm thick.<br>End-ring S.S.304, quality, 10 mm thick.<br>Jacket S.S.304, quality, 4 mm. thick.<br>Back Plate S.S.304, quality, 4 mm. thick.<br>Door plate S.S. 304, 12 mm. plate   | Yes  |
|       | Insulation Fiber glass wool. ( 50 mm. thick)<br>Outer cover S.S.304, 20 G sheet – mirror polished Without zinc metalizing from inside<br>Pipe lines S.S.304, quality seamless.<br>Fittings / Connections S.S.304, quality, B.S.P. threading.<br>Lock/ radial arm/hinge Lock .C.I. chrome plated/ powder coated<br>Gasket Silicone rubber, jointless square type.<br>Stand M.S duly painted | Yes  |
| 10    | Steam Generator ( Boiler): Shall be attached to underneath the jacket & fitted with M.O.C.: S.S. 304 quality – 14 G thick with heater plate of S.S. 304 quality 12 mm thick & boiler cover with perforation  | Yes  |
| 11    | Heater ( I.S.I Mark ) Water immersion type industrial  | Yes  |
| 12    | Water level magnetic switch To protect heater from low water level   | Yes  |
| 13    | Glass tube To indicate water level in boiler   | Yes  |
| 14    | S.S. ball Valves For water inlet & outlet.   | Yes  |
| 15    | Detailed Control & Fittings:<br>Multi control operating valve To carry out all function of cycle at one point i.e. Jacket to Chamber, Chamber fast-slow exhaust, Vacuum drying.  | Yes  |
|       | Door Single door shall be fitted with radial arms & automatic Pressure locking device so that the door cannot be opened till the steam is fully exhausted from the   | Yes  |





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|    | chamber.   |            |
|    | Quick vacuum drying - This allows the filtered and sterile air to break the chamber vacuum & Apparatus helps in quick drying   |            |
|    | Accidental vacuum - A safety device for break /jacket air valve jacket against accidental vacuum and for automatic air removal to obtain saturated steam.  |            |
|    | Safety valve jacket A safety device against excess pressure -in /steam generator.  |            |
|    | Dial type thermometer Indicates sterilization temperature.   |            |
|    | Plug screen A device to prevent large particles from Entering chamber drain line.  |            |
|    | Compound Gauge Indicates chamber, pressure/ vacuum   |            |
|    | Pressure gauge Indicates jacket / boiler pressure  |            |
|    | Steam trap FT 14 float type  |            |
|    | Non Return Valve Swing type  |            |
|    | Valves S.S. 304 Quality.   |            |
|    | Chamber condensate line fitted with a thermostatic steam trap and check valve for thorough evacuation of air and condensate from the chamber to achieve optimum temperature and an extra by-pass line in case of emergency.      | Yes        |
|    | Drain line S.S. 304 quality - 2" N.B. drain header   | Yes        |
| 16 | Electrical Panel:<br>Contractor: Cutler and Hammer make; Pressure Switch: Denfoss or equivalent make, Indicating Lamp: Neon lamp for main and heater. Digital autoclave controller with Temperature controller, timer and alarm. | Yes        |
| 17 | Certificate of ISI Mark from BIS to be attached.   | Yes        |
|    | <b>Whether qualified or not</b>  | <b>Yes</b> |

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**Technical Compliance Sheet-**

**ITEM NAME –Electrospinning Machine  
Make E NANO**

| S. No. | Technical Specification  | Features available in equipment write (Yes/No) |
|--------|--|--|
| 1.     | Nanofiber electrospinning system   | Yes  |
| 2.     | Spinning Arrangement: Horizontal spinning, Vertical spinning, under solvent spinning   | Yes  |
| 3.     | High Voltage Power supply: Input voltage: 90-240 VAC Voltage range: 0-30 kV 20W, Output current range: 0 to 400 uA Voltage output continuously adjustable from zero to maximum output<br>Microprocessor based controller system Overload trip- unit shut down if current exceeds 20% of the maximum output current | Yes, 210-240VAC                                |
| 4.     | Syringe pump : Single Channel Flow rate: 0.1 microl/min to 3 ml/min, Highly précised operations Microprocessor based operation for precise flow control Infusion/withdrawal pumping system Programmable Volume and Time control  | Yes  |
| 5.     | Collector Stationary collector Drum collector Fibre alignment Adjustable speed of rotating drum (200 to 3500 RPM)  | Yes  |
| 6.     | Spinneret : Multi nozzle Four nozzle spinning single nozzle High throughput fibre fabrication  | Yes  |
| 7.     | Linear Stage Switch Automated Easy distance adjustment between collector during operations: X axis control (Auto switch) Y axis control (Auto switch), Z axis manual control   | Yes  |
| 8.     | Control panel: Temperature and humidity indicator, Power light, Main emergency stop button, On/Off switch button, speed controller   | Yes  |
|        | <b>Whether qualified or not</b>  | <b>Yes</b>                                     |

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Technical Compliance Sheet

ITEM NAME- Water Bath Cooling and Heating

Make Polyscience/Grant LT Ecocool 150

| S.No. | Technical Specification  | Features available in equipment write (Yes/No)                              |
|-------|--|---|
| 1.    | Programmable, -20 °C or less to +135 °C or more.   | Yes   |
| 2.    | Temperature stability to ±0.07 °C or less, 6 Liter cap,  | Yes   |
| 3.    | Bench top model, Bypass tubing, Male inlet.  | Yes   |
| 4.    | Outlet adapters for 3/8, 1/4, and 3/16" (0.95, 0.63, and 0.47 cm) tubing, 1/4" to M16 adapters | Yes in PolyScience<br><br>Not mentioned in brochure of Grant LT Ecocool 150 |
| 5     | CE/USFDA certified   | Yes   |
|       | Whether qualified or not   | Polyscience is qualified  |

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**Technical Compliance Sheet**

**ITEM NAME- Laboratory Refrigerator**

**Make- Easycool**

| S.No. | Technical Specification  | Features available in equipment write (Yes/No) |
|-------|--|--|
| 1     | Double Door to hold buckets in a row on the lower most rack temperature +1 to +8°C with +/- 0.5 °C   | Double door model is available                 |
| 2     | Precision. +/- 1 °C stability and +/-2 °C uniformity.  | Yes  |
| 3     | 1300x675x1380 internal dimension, 1325L.   | Yes  |
| 4     | Highest temperature uniformity and recovery.   |  |
| 5     | Standard Stainless Steel exterior as well as interior with sliding racks for adjustable shelves to mix drawers, grids and shelves without any internal modification. | Yes  |
| 6     | Preferably with double layered glass doors   | Yes  |
| 7     | High and low temperature alarm.  | Yes  |
| 8     | Circulating forced air with auto switch off when door opens.   | Yes  |
| 9     | Low power consumption.   | Yes  |
| 10    | Low sound level.   | Yes  |
| 11    | Microprocessor control with digital display.   | Yes  |
| 12    | Adjustable temperature set points.   | Yes  |
| 13    | Glass /Polymer inner doors.  | Yes  |
| 14    | Lockable double roll castors for easy transportation and also easy to mount stainless steel adjustable feet.   | Yes  |
| 15    | CFC free environment friendly refrigerant.   | Yes  |
|       | <b>Whether qualified or not</b>  | <b>Yes</b>                                     |

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## Technical Compliance Sheet

✓ ITEM NAME- Vertical Autoclave-Double Wall, Standard - 2

Make MODI/ACE

| S.No. | Technical Specification   | Features available in equipment write (Yes/No)                     |
|-------|---|--|
| 1     | Phase/volt                      Single phase/220 volt   | <b>Modi- Single Phase/ 230 Volt<br/>ACE- single phase 220 volt</b> |
| 2     | Working pressure              15 – 22 p.s.i.  | <b>Modi- not mentioned<br/>ACE- yes</b>                            |
| 3     | Working temperature        121 – 125° C   | Yes  |
| 4     | Hydro test                      2.5 kg/cm <sup>2</sup>  | Yes  |
| 5     | Material of Construction:   | Yes  |
|       | Chamber                      S.S. 316 Quality, 14 G.  | <b>Modi- SS304<br/>ACE- SS316</b>                                  |
|       | Ring                              S.S. 304 Quality, 16 mm. thick  | <b>Modi- Not mentioned<br/>ACE- SS304</b>                          |
|       | Lid                                S.S. 304 Quality, 6 mm. thick. Dished type.  | <b>Modi- Not mentioned<br/>ACE- SS304</b>                          |
|       | Bottom                         S.S. 316 Quality, 14 G. Dished type.   | <b>Modi- Not mentioned<br/>ACE- SS304</b>                          |
|       | Key wings                      S.S. 304 Quality, ½" B.S.P   | <b>Modi- Not mentioned<br/>ACE- SS304</b>                          |
|       | Key wings knob              Bakelite, star type.  | Yes  |
|       | Gasket                         Silicone rubber, square type Joint   | <b>Yes</b>   |
|       | Resting tray                  S.S. 304 Quality, perforate round type.   | Yes, in ACE  |
|       | Fittings / connections      S.S. 304 quality, B.S.P. threading.   | Yes, in ACE  |
|       | Outer cover                  S.S. 304 Quality, 20 G. mirror finish.   | Yes, in ACE  |
|       | Heater Cover                S.S. 304 Quality, perforated type.  | Yes, in ACE  |
|       | Leg                              S.S. 304 Quality   | Yes, in ACE  |
|       | Wall                             Double   | Yes, in ACE  |
| 6     | Features:<br>Pressure Gauge, Steam release valve, Vacuum breaker/Air valve, Safety valve, Pressure switch. Low water level cut off switch, Basket, Automatic purging & Steam Exhaust, Water level indicating gauge glass tube with S.S. guard, Chamber drain line with S.S. valve, Digital temperature controller with timer & alarm, Pedal type lifting arrangement, Power saving relay, almost 50%. | Yes  |

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|----|---|---|
| 7  | Electrical:<br>M.S. panel, Air break contactor, Toggle switch, Indicating lamp, Heating element – I.S.I. marked.  | Yes   |
| 8  | Certificates:<br>Material testing, Calibration certificate of Pressure gauge, Autoclave controller, etc., Hydro test certificate, Warrantee.  | Yes   |
|    | Specifications<br>Capacity: 80 –100 L.  | ACE- Yes<br>Modi- No  |
|    | Sterilization Timer: 0 – 90 min.  | ACE – Yes<br>Modi- No   |
|    | Temperature Range: 110°C to >130°C. Temperature Acc.:±0.1 °C at 121 °C  | ACE – Yes<br>Modi- No   |
|    | Microprocessor Controlled Fully Automatic Sterilizing Operation.  | Yes.  |
|    | Microprocessor Programmable PID control with dual display system for current and set temperature with sterilization process signal lamp and option of Sterilization cycle and time. | Yes<br><b>Programmable PID Temperature controller with features shall be fitted</b> |
|    | System should have Safety alarm/signal lamp for over-pressure,  | <b>Safety alarm provided</b>  |
|    | Over-temp and over-current and must include water level sensor with signal lamp.  | Yes   |
|    | Exterior body made up of Heavy Duty Epoxy Resin/high grade stainless steel, powder coated steel, while chamber must be made up of Stainless Steel 304.                              | Yes   |
|    | Basket: System should have at least 2 unit of Stainless Steel wire Basket.  | Yes<br><b>2 units provided</b>  |
|    | Power Consumption: 3KW or More.   | Modi- Yes<br>ACE- <b>3 KW</b>   |
|    | Working Pressure: Minimum of 2.0 kg/cm <sup>2</sup> at 132°C.   | ACE- Yes<br>Modi- No  |
|    | Door Packing: Heavy duty raise door with Mechanical Swing door.   | <b>Heavy Duty provided</b>  |
|    | Pressure Gauge: 0-4kg/cm <sup>2</sup> System should have outer compact dimension.   | ACE- yes<br>Specifications not mentioned<br>Modi-<br><b>Yes provided</b>            |
| 10 | Hydraulic test certificate from the manufacturer must be enclosed   | <b>At the time of Supply</b>  |
| 11 | CE, ISO Certified Company   | ACE- ISO, WHO<br>GMP  |
|    | <b>Whether qualified or not</b>   | <b>ACE is qualified</b>   |

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