

## CSIR - NATIONAL METALLURGICAL LABORATORY

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No. NML-FG/MER-ABHI/42-19/Corr-I

Date: 22.11.2019

## CORRIGENDUM - I

Sub: Tender for supply of Microwave Digestion Table-Top System.

Ref: 1) Enquiry No. NML-FG/MER-ABHI/42-19 Dated 05.11.2019

2) CPPP Tender ID No. 2019\_CSIR\_489921\_1

With reference to the above procurement, It is informed that technical specifications have been revised as per Annexure I. The bid may be submitted as per the revised technical specifications. All other terms and conditions will remain unaltered.

Stores & Purchase Officer

नलिन कुमार सिंह/NALIN KUMAR SINGH भंडार एवं क्रय अधिकारी/Stores & Purchase Officer एन॰एन॰एन॰,जमरोदपुर/NML, Jamshedpur-831007

is is required to react solid ore/metal/mineral samples in a closed vessel by raising the imperature and pressure through microwave irradiation  1. Top/Front Loading microwave made of stainless steel with electrically-controlled safety. swivelling lid and circular oven for homogenous microwave distribution  11. Permanent oven ventilation with guided exhaust airstream (>1m²/min)  12. Oven completely be coated with COROSSION RESISTANT COATING  13. Exhaust system to reduce noise and prevents corrosion on electronics  14. Over-temperature switches (for overheating and safety)  15. Jual Magnetron; Total power: Minimum 1600 W  16. General deprecation of the microwave vessels (vessel volume: 100ml)  17. Light weight and non-segmented PP and TFM/PTFE make, with capacity for minimum 10 stand-alone pressure vessels (vessel volume: 100ml)  18. Set and real temperatures of all samples as well as pressures of all vessels shall be displayed individually in real-time and shall be memorized.  18. Rupture disc burst and overheating detection  19. Instinctual operation, self-explaining, with conformable software, allowing control of the microwave system and reconstruction of data records  19. Pre-programmed EPA applications  10. A temperature program should include set-temperature, ramp-time, maximum power, maximum pressure and holding time
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<ul> <li>swivelling lid and circular oven for homogenous microwave distribution.</li> <li>Permanent oven ventilation with guided exhaust airstream (&gt;1m²/min)</li> <li>Oven completely be coated with COROSSION RESISTANT COATING</li> <li>Exhaust system to reduce noise and prevents corrosion on electronics</li> <li>Over-temperature switches (for overheating and safety)</li> <li>Ual Magnetron; Total power: Minimum 1600 W</li> <li>Ingh-quality modified PTFE based with PTFE lid and self-sealing sealing-lip</li> <li>O-60 bar</li> <li>O-260°C</li> <li>O mL</li> <li>Light weight and non-segmented PP and TFM/PTFE make, with capacity for minimum 10 stand-alone pressure vessels (vessel volume: 100ml)</li> <li>Set and real temperatures of all samples as well as pressures of all vessels shall be displayed individually in real-time and shall be memorized.</li> <li>Rupture disc burst and overheating detection</li> <li>Instinctual operation, self-explaining, with conformable software, allowing control of the microwave system and reconstruction of data records</li> <li>Pre-programmed EPA applications</li> <li>A temperature program should include set-temperature, ramp-time, maximum power,</li> </ul>
<ul> <li>III. Permanent oven ventilation with guided exhaust airstream (2111 / 1111)</li> <li>IIII. Oven completely be coated with COROSSION RESISTANT COATING</li> <li>V. Exhaust system to reduce noise and prevents corrosion on electronics</li> <li>V. Over-temperature switches (for overheating and safety)</li> <li>III. Light weight and power: Minimum 1600 W</li> <li>III. Light weight and non-segmented PP and TFM/PTFE make, with capacity for minimum 10 stand-alone pressure vessels (vessel volume: 100ml)</li> <li>II. Set and real temperatures of all samples as well as pressures of all vessels shall be displayed individually in real-time and shall be memorized.</li> <li>III. Rupture disc burst and overheating detection</li> <li>III. 15-20 min cooling time</li> <li>II. Instinctual operation, self-explaining, with conformable software, allowing control of the microwave system and reconstruction of data records</li> <li>III. Pre-programmed EPA applications</li> <li>III. A temperature program should include set-temperature, ramp-time, maximum power</li> </ul>
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maximum pressure and nothing time
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and real-time display of variables and shall be memorized
II. Display screen shows set and real-time display of variables of the second of the s
which the second data records containing all volumes, temperature and pressure
System shall be able to memorize data records containing as magnetron temperature and mascurves of all samples individually digested in this run as well as magnetron temperature and mascurves of all samples individually digested in this run as well as magnetron temperature and mascurves.
and notifor
samples
II. Precision:+/-1°C Min. 3 USB port , 1 Serial port , Min. 2 Ethernet ports
Provision for Remote control via LAN or mobile devices
Provision for Remote Control via EAR of Mosas
Power Supply: 230 V, 50/60Hz, 16 A, 2.700W
Noise level: < 40dB
Ambient conditions: 15-35°C, 85% Relative Humidity
12 months for vessels and hardware from date of installation
Company shall provide training at CSIR-NML, Jamshedpur.  Post Delivery inspection shall be carried out at CSIR-NML along with company representative
Post Delivery inspection shall be carried out at CSIN-INVIC along with company of 3 years
Company shall provide the cost of comprehensive AMC for an additional duration of 3 years
10 extra complete set of digestion vessel with consumables viz., lip seal ring (10X), lid (20X)
rupture discs (10X), sample sleeves (50X), etc.  Price as per Technical Specifications + Warranty of 12 months for vessels and hardware from da
Price as per Technical Specifications + Warranty of 12 months for vessels and flatoward from de of installation + dedicated training on site+ 3 years comprehensive AMC+ accessories as above
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नलिन कुमार सिंह/NALIN KUMAR SINGH