

**PROCUREMENT DEPARTMENT, ISLAMABAD  
FOREIGN SECTION**

(To be completed, initialed, signed  
and stamped by the principal)


**ANNEXURE 'A'**

**Material** PETROLEUM TESTING EQUIPMENT  
**Tender Enquiry No** PROC-FE/CB/P&P/LAB-5143/2021  
**Due Date**  
**Evaluation Criteria** FULL

**SCHEDULE OF REQUIREMENT**

| Sr No | Description   | Unit   | Quantity | Unit Price<br>(FOB) | Total Price<br>(FOB) | Unit Price<br>C & F BY SEA | Total Price<br>C & F BY SEA | Deviated From<br>Tender Spec. If Any |
|-------|---|--------|----------|---------------------|----------------------|----------------------------|-----------------------------|--------------------------------------|
| 1     | SALT IN CRUDE ANALYZER (Stanhope Seta 99700-6 or equivalent)<br>(Specification as per attachment)   | Number | 1        |                     |                      |                            |                             |                                      |
| 2     | REID VAPOUR PRESSURE BATH (Stanhope Seta 22210-3 or equivalent)<br>(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 3     | SALT IN CRUDE ANALYZER (Stanhope Seta 99700-6 or<br>equivalent)(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 4     | SALT IN CRUDE ANALYZER (Stanhope Seta 99700-6 or<br>equivalent)(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 5     | REID VAPOUR PRESSURE CYLINDER ASSEMBLY (For Condensate, Crude<br>and Petroleum Products, ASTM D323), 180 TO 700 kPa (Stanhope Seta 22410-<br>0 or equivalent)(Specification as per attachment)                                  | Number | 2        |                     |                      |                            |                             |                                      |
| 6     | CENTRIFUGE MACHINE (Oil testing) with all accesaries (Stanhope Seta<br>90000-3 or equivalent)(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 7     | VISCOMETER BATH, DIGITAL CONSTANT TEMPERATURE VISCOSITY<br>BATH,(With Calibrated Cannon-Fenske Viscometer Code 350,200,300)<br>ALONGWITH ALL ACCESSORIES (Stanhope Seta KV-6 or<br>equivalent)(Specification as per attachment) | Number | 1        |                     |                      |                            |                             |                                      |
| 8     | PETROLEUM DISTILLAION UNIT, LEFT HAND, ALONG WITH ALL<br>ACCESSARIES (Setastill 11860-3 or equivalent)(Specification as per<br>attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 9     | SALT IN CRUDE ANALYZER (Stanhope Seta 99700-6 or equivalent)<br>(Specification as Per attachment)   | Number | 1        |                     |                      |                            |                             |                                      |
| 10    | REID VAPOUR PRESSURE CYLINDER ASSEMBLY (For Condensate, Crude<br>and Petroleum Products, ASTM D323), 180 TO 700 kPa (Stanhope Seta 22410-<br>0 or equivalent)(Specification as per attachment)                                  | Number | 1        |                     |                      |                            |                             |                                      |
| 11    | PENSKY MARTENS FLASH POINT TESTER (Closed Cup) "SETA 13661-4"<br>or Equivalent,TEMP RANGE 400C,ASTM D93-IP34;ASTM<br>D3934;(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 12    | PETROLEUM DISTILLAION UNIT, LEFT HAND, ALONG WITH ALL<br>ACCESSARIES (Setastill 11860-3 or equivalent)(Specification as per<br>attachment)  | Number | 1        |                     |                      |                            |                             |                                      |
| 13    | REID VAPOUR PRESSURE BATH (Stanhope Seta 22210-3 or equivalent)<br>(Specification as per attachment)  | Number | 1        |                     |                      |                            |                             |                                      |

Note:

  
**YAHYA TAJVED**  
 C.E I/C (P&P)-CA/T&SS  
 Process & Plants  
 Ext: 3674

  
**Saadat Ali**  
 Dy. Chief Chemist  
 QCD-1 (P&P), Ext: 2155

**NOTE:**

- 1.** Bid Validity: Bids must be **valid for 180 days** from the date of Technical Bid Opening.
- 2.** Bid Bond Amount: USD 2,200/- (United States Dollar Two Thousand Two Hundred only).  
**Bid Bond must be valid for 210 days from the date of Technical Bid Opening. Bidders are advised to carefully read all clauses related to Bid Bond in Tender Document.**
- 3.** Evaluation Criteria: - Full Consignment Wise CFR Karachi
- 4.** Delivery Period: 04 months from establishment of LC
- 5.** Bidders are advised to carefully read all the terms and conditions of the Tender Document "Master Set of Foreign Tender Document (Press-Single Stage Two Envelop) " available on OGDCL website which is an integral part of this Schedule of Requirement
- 6.** "Bidders quoting equivalent parts must provide a certificate from at least three well renowned/E&P companies of foreign jurisdiction other than bidders/manufacturers own country, stating that equivalent (quoted parts) are used by them and performance of such parts is found satisfactory. Copies of purchase orders (unpriced) must also be provided. The certificate(s) / sale record is mandatory and due to non-submission thereof, the bid will be rejected."

**Specifications of Laboratory Equipments****Petroleum Testing Equipment**

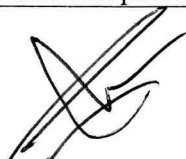
| No. | Description  | Specifications  |
|-----|--|---|
| 1   | <p><b>Salt in Crude Analyzer</b><br/>with all with accessories and spares<br/>for three years operation</p> <p>ASTM D3230<br/>(Seta 99700-6 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ Parameters: Salt contents, conductance, temperature and Salt concentration of crude oil according to ASTM D-3230 (Automatic calculation of Salt concentration) pre-calibrated for use in conformity to ASTM D3230.</li> <li>➤ allows user calibration of ASTM values (ie: display values can be verified and/or recalibrated by the user against salt solutions of known conductivity)</li> <li>➤ Salt concentration range: 0 to 150 lb/1000 bbl (ptb)</li> <li>➤ Salt concentration values displayed automatically</li> <li>➤ No need for mixing of salt standards</li> <li>➤ Typical test time of less than 30 seconds</li> <li>➤ Moisture proof membrane touch screen Calibration modes allow verification using user standards</li> <li>➤ RS232 - PC compatible</li> <li>➤ Fully portable, all items contained in aluminum carry case</li> <li>➤ Supplied with beaker and sensor support stands</li> <li>➤ Optional bench top stand</li> <li>➤ Interchangeable plug-in sensor</li> <li>➤ Battery or mains power supply</li> <li>➤ Auto or manual calibration</li> <li>➤ RS 232C (USB) interface for printer or PC with data software for Windows. Measurements can be displayed or exported to pc or to a LIMS network. The instrument is suitable for bench top or hand-held operation and operates from battery or mains voltage.</li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> <li>➤ carry case, recharger, mains adaptor, beaker holder, sensor connection cable with integral temperature probe,</li> </ul> |



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|   |  | software, RS232 cable and instruction manual  |
| 2 | <p><b>R.V.P Bath, (Reid Vapour Pressure Bath)</b></p> <p>ASTM D323 Procedures A &amp; C &amp; D; ASTM D1267; ASTM D4953 Procedure A; IP 69 Procedures</p> <p>(Stanhope Seta 22210-4 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ Test Temperature range: Ambient +5 to 90 °C ± 0.1°C</li> <li>➤ Temperature uniformity: ± 0.1 °C @ 37.8 °C</li> <li>➤ Control: Digital temperature control</li> <li>➤ Bath Volume: 80 Litre</li> <li>➤ Capacity: up to 4 cylinder assemblies</li> <li>➤ Low fluid level and over-temperature protection <ul style="list-style-type: none"> <li>➤ SUPPLIED WITH: 4 pressure cylinder mounting brackets, mains lead and instruction manual.</li> <li>➤ with accessories and spares for three years operation</li> </ul> </li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul>  |
| 3 | <p><b>Salt in Crude Analyzer</b><br/>with all with accessories and spares for three years operation</p> <p>ASTM D3230</p> <p>(Seta 99700-6 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p>  | <ul style="list-style-type: none"> <li>➤ Parameters: Salt contents, conductance, temperature and Salt concentration of crude oil according to ASTM D-3230 (Automatic calculation of Salt concentration) pre-calibrated for use in conformity to ASTM D3230.</li> <li>➤ allows user calibration of ASTM values (ie: display values can be verified and/or recalibrated by the user against salt solutions of known conductivity)</li> <li>➤ Salt concentration range: 0 150 lb/1000 bbl (ptb)</li> <li>➤ Salt concentration values displayed automatically</li> <li>➤ No need for mixing of salt standards</li> <li>➤ Typical test time of less than 30 seconds</li> <li>➤ Moisture proof membrane touch screen</li> <li>➤ Calibration modes allow verification using user standards</li> <li>➤ RS232 - PC compatible</li> <li>➤ Fully portable, all items contained in aluminum carry case</li> <li>➤ Supplied with beaker and sensor support stands</li> <li>➤ Optional bench top stand</li> <li>➤ Interchangeable plug-in sensor</li> <li>➤ Battery or mains power supply</li> <li>➤ Auto or manual calibration</li> <li>➤ RS 232C (USB) interface for printer or PC with data software for Windows. Measurements can be displayed or exported to pc or to a LIMS network. The instrument is suitable for bench top or hand-held operation and operates from battery or mains voltage.</li> <li>➤ Power requirements: compatible with Pakistan standards</li> </ul> |



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|   |   | <ul style="list-style-type: none"> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> <li>➤ carry case, recharger, mains adaptor, beaker holder, sensor connection cable with integral temperature probe, software, RS232 cable and instruction manual</li> </ul>  |
| 4 | <p><b>Salt in Crude Analyzer</b><br/>with all with accessories and spares<br/>for three years operation</p> <p>ASTM D3230</p> <p>(Seta 99700-6 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ Parameters: Salt contents, conductance, temperature and Salt concentration of crude oil according to ASTM D-3230 (Automatic calculation of Salt concentration) pre-calibrated for use in conformity to ASTM D3230.</li> <li>➤ allows user calibration of ASTM values (ie: display values can be verified and/or recalibrated by the user against salt solutions of known conductivity)</li> <li>➤ Salt concentration range: 0 150 lb/1000 bbl (ptb)</li> <li>➤ Salt concentration values displayed automatically</li> <li>➤ No need for mixing of salt standards</li> <li>➤ Typical test time of less than 30 seconds</li> <li>➤ Moisture proof membrane touch screen</li> <li>➤ Calibration modes allow verification using user standards</li> <li>➤ RS232 - PC compatible</li> <li>➤ Fully portable, all items contained in aluminum carry case</li> <li>➤ Supplied with beaker and sensor support stands</li> <li>➤ Optional bench top stand</li> <li>➤ Interchangeable plug-in sensor</li> <li>➤ Battery or mains power supply</li> <li>➤ Auto or manual calibration</li> <li>➤ RS 232C (USB) interface for printer or PC with data software for Windows. Measurements can be displayed or exported to pc or to a LIMS network. The instrument is suitable for bench top or hand-held operation and operates from battery or mains voltage.</li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> <li>➤ carry case, recharger, mains adaptor, beaker holder, sensor connection cable with integral temperature probe, software, RS232 cable and instruction manual</li> </ul> |
| 5 | <p><b>R.V.P cylinder assembly</b> for<br/>condensate /crude and petroleum<br/>products as per ASTM-D323</p> <p>(Stanhope Seta 22410-0,22550-0 or<br/>equivalent)</p>  | <ul style="list-style-type: none"> <li>➤ Determines Reid vapour pressure of non-viscous petroleum products and volatile crude oil</li> <li>➤ Test Pressure Range: 0 to 700 kPa (26-100psi)</li> <li>➤ Quick leak-free boyonet connection between chambers</li> <li>➤ Chromium-plated brass construction</li> <li>➤ ½ inch gate valve between gasoline and air chamber</li> <li>➤ ¼ inch needle valve to gasoline chamber</li> <li>➤ Hydrostatically pressure tested at 1380kpa (200psi)</li> <li>➤ Seta Reid vapor pressure gauge pressure upto 700kpa (100 psi)</li> </ul>  |

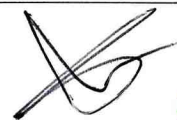
  
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|   |  | <ul style="list-style-type: none"> <li>➤ Supplied with all accessories and spares for three years operation</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul>  |
| 6 | <p><b>Centrifuge Machine (Oil Test Centrifuge Machine)</b></p> <p>ASTM D91; ASTM D893</p> <p>(Stanhope Seta 90000-3 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ With all required accessories and spares for three year operation</li> <li>➤ 4 place swing out rotor (capacity 4 samples)</li> <li>➤ Static, near vertical bucket positioning</li> <li>➤ Specifically designed for testing oils</li> <li>➤ Heated chamber, ambient to 80°C</li> <li>➤ Membrane 'touch' control panel</li> <li>➤ Pre-heat facility to ensure bowl is at test temperature prior to test</li> <li>➤ Universal buckets for 12.5 ml, 6 and 8 inch glassware</li> <li>➤ Microprocessor control with 99 memories</li> <li>➤ Optional trolley</li> <li>➤ Isothermal heaters fitted internally to the centrifuge chamber</li> <li>➤ Temperature control using unique algorithm to compensate for air resistance heating</li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul> <p>SUPPLIED WITH:</p> <ul style="list-style-type: none"> <li>➤ Rotor, Buckets and tube cushions.</li> </ul> <p>SELECTION OF ACCESSORIES:</p> <ul style="list-style-type: none"> <li>➤ 1) Bucket adaptors and tubes according to test method requirements.</li> <li>➤ 2) 90001-2 (bucket adaptor pack of 4) &amp; 90040-0 (Tube 8 inch*100 ml cone shaped pack of 6) are 'Required Accessories', these are specified for ASTM D91; D893; D1796; D2711; D4007 test methods.</li> <li>➤ Centrifugal force (RCF): 2214 gm (maximum)</li> <li>➤ Rotational speed: 3000 rev/min (maximum)</li> <li>➤ Timer range: 10 sec to 100 hours or continues operation</li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul> |
| 7 | <p><b>VISCOMETER BATH FOR</b></p> <p>as per ASTM-D-445 ,ASTM-D-446<br/>(Stanhope seta KV-6, 84200-3 or</p>   | <ul style="list-style-type: none"> <li>➤ Capacity 50 liter</li> <li>➤ Bath fluid, Oil, Silicone fluid or water</li> <li>➤ Accommodate up to 06 standard viscometers with universal viscometer holder</li> <li>➤ Digital temperature control setting with display</li> </ul>  |

  
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|   | <p>equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p>  | <ul style="list-style-type: none"> <li>➤ Capable of providing stable test temperature from ambient to 150C</li> <li>Temperature Stability: <math>\pm 0.01^{\circ}\text{C}</math> up to and including <math>100^{\circ}\text{C}</math>, <math>\pm 0.03^{\circ}\text{C}</math> above <math>100^{\circ}\text{C}</math></li> <li>➤ Toughened front glass window with provision for fitting of diffused back lighting</li> <li>➤ Integrated heating and stirring system</li> <li>➤ Stainless steel internal components providing long term durability</li> <li>➤ Two positions for reference thermometers</li> <li>➤ Digital display with 0.01 resolution</li> <li>➤ Voltage 220/240V, 50/60 Hz <ul style="list-style-type: none"> <li>➤ SUPPLIED WITH: 6 covers for test wells, mains lead and instruction manual.</li> <li>➤ Universal Viscometer Holder</li> </ul> </li> </ul> <p>Power requirements: compatible with Pakistan standards</p> <ul style="list-style-type: none"> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul> |
| 8 | <p><b>Distillation apparatus (Setastill Distillation) for petroleum products</b></p> <p>As per ASTM-D-86</p> <p>Stanhope Seta 11860-3 or equivalent</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p>   | <ul style="list-style-type: none"> <li>➤ Distillation Range: Ambient to <math>400^{\circ}\text{C}</math></li> <li>➤ Condenser Tank Volume: 7.2 litre</li> <li>➤ Supplied with all required accessories and spares for three years operation</li> <li>➤ Warranty: Minimum 2 years (after commissioning) <ul style="list-style-type: none"> <li>The 'Required Accessories' listed below are needed for ASTM D86 method.</li> <li>➤ Seta 11869-2 Kit comprises 125ml Distillation Flask NS 19/26, Thermometer centring device NS 19/26, 5 Flexible Stopper Caps for side arm, 100 ml Receiver, 2 Flask Support Boards 38 mm &amp; 50 mm, Boiling Chips, 5 ml Residue Cylinder, Condenser Cleaning Tool.</li> </ul> </li> </ul> <p>➤ Power requirements: compatible with Pakistan standards</p>  |
| 9 | <p><b>Salt in Crude Analyzer</b> with all with accessories and spares for three years operation</p> <p>ASTM D3230</p> <p>(Seta 99700-6 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ Parameters: Salt contents, conductance, temperature and Salt concentration of crude oil according to ASTM D-3230 (Automatic calculation of Salt concentration) pre-calibrated for use in conformity to ASTM D3230.</li> <li>➤ allows user calibration of ASTM values (ie: display values can be verified and/or recalibrated by the user against salt solutions of known conductivity)</li> <li>➤ Salt concentration range: 0 150 lb/1000 bbl (ptb)</li> <li>➤ Salt concentration values displayed automatically</li> <li>➤ No need for mixing of salt standards</li> <li>➤ Typical test time of less than 30 seconds</li> <li>➤ Moisture proof membrane touch screen</li> <li>➤ Calibration modes allow verification using user standards</li> </ul>   |



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|    |   | <ul style="list-style-type: none"> <li>➤ RS232 - PC compatible</li> <li>➤ Fully portable, all items contained in aluminum carry case</li> <li>➤ Supplied with beaker and sensor support stands</li> <li>➤ Optional bench top stand</li> <li>➤ Interchangeable plug-in sensor</li> <li>➤ Battery or mains power supply</li> <li>➤ Auto or manual calibration</li> <li>➤ RS 232C (USB) interface for printer or PC with data software for Windows. Measurements can be displayed or exported to pc or to a LIMS network. The instrument is suitable for bench top or hand-held operation and operates from battery or mains voltage.</li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul> <p>carry case, recharger, mains adaptor, beaker holder, sensor connection cable with integral temperature probe, software, RS232 cable and instruction manual</p> |
| 10 | <p><b>R.V.P cylinder assembly</b> for condensate /crude and petroleum products as per ASTM-D323</p> <p>(Stanhope Seta 22410-0 or equivalent)</p>        | <ul style="list-style-type: none"> <li>➤ Determines Reid vapour pressure of non-viscous petroleum products and volatile crude oil</li> <li>➤ Test Pressure Range: 0 to 700 kPa (26-100psi)</li> <li>➤ Quick leak-free boyonet connection between chambers</li> <li>➤ Chromium-plated brass construction</li> <li>➤ ½ inch gate valve between gasoline and air chamber</li> <li>➤ ¼ inch needle valve to gasoline chamber</li> <li>➤ Hydrostatically pressure tested at 1380kpa (200psi)</li> <li>➤ Seta Reid vapor pressure gauge pressure upto 700kpa (100 psi )</li> <li>➤ Supplied with all accessories and spares for three years operation</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul>  |
| 11 | <p><b>Pensky-Martens Closed Cup Flash Tester</b></p> <p>ASTM D93</p> <p>(Seta Pensky-Martens Closed Cup Flash Point Tester - 13661-4 or equivalent)</p> | <ul style="list-style-type: none"> <li>➤ For flash point determinations of fuels, lubricating oils, liquids containing suspended solids and liquids that tend to form a surface film during testing.</li> <li>➤ Ambient to 370°C temperature range</li> <li>➤ Variable ramp rate</li> <li>➤ Two speed stirrer</li> <li>➤ Forced air cooling facility</li> <li>➤ Procedures A and B</li> <li>➤ Integral two speed stirrer</li> <li>➤ Accelerated cooling</li> </ul>   |

  
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|    | <ul style="list-style-type: none"> <li>• Conforms to ASTM D93 and related specifications</li> <li>• electric heating</li> </ul> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p>  | <ul style="list-style-type: none"> <li>➤ Open cup test conversion</li> <li>➤ Brass Test Cup with Handle</li> <li>➤ Thermometer Holder</li> <li>➤ Cover Assembly</li> <li>➤ Warranty: Minimum 2 years (after commissioning)</li> </ul>   |
| 12 | <p><b>Distillation apparatus (Setastill Distillation) for petroleum products</b></p> <p>As per ASTM-D-86</p> <p>Stanhope Seta 11860-3 or equivalent</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p>  | <ul style="list-style-type: none"> <li>➤ Distillation Range: Ambient to 400 °C</li> <li>➤ Condenser Tank Volume: 7.2 liter</li> <li>➤ Supplied with all required accessories and spares for three years operation</li> <li>➤ Warranty: Minimum 2 years (after commissioning) <ul style="list-style-type: none"> <li>The 'Required Accessories' listed below are needed for ASTM D86 method.</li> <li>➤ Seta 11869-2 Kit comprises 125ml Distillation Flask NS 19/26, Thermometer centring device NS 19/26, 5 Flexible Stopper Caps for side arm, 100 ml Receiver, 2 Flask Support Boards 38 mm &amp; 50 mm, Boiling Chips, 5 ml Residue Cylinder, Condenser Cleaning Tool.</li> </ul> </li> <li>➤ Power requirements: compatible with Pakistan standards</li> </ul> |
| 13 | <p><b>R.V.P Bath, (Reid Vapour Pressure Bath)</b></p> <p>ASTM D323 Procedures A &amp; C &amp; D; ASTM D1267; ASTM D4953 Procedure A; IP 69 Procedures</p> <p>(Stanhope Seta 22210-4 or equivalent)</p> <p><b>Electrical Requirements:</b><br/>220-240V 50/60Hz</p> | <ul style="list-style-type: none"> <li>➤ Test Temperature range: Ambient +5 to 90 °C ± 0.1°C</li> <li>➤ Temperature uniformity: ± 0.1 °C @ 37.8 °C</li> <li>➤ Control: Digital temperature control</li> <li>➤ Bath Volume: 80 Litre</li> <li>➤ Capacity: up to 4 cylinder assemblies</li> <li>➤ Low fluid level and over-temperature protection <ul style="list-style-type: none"> <li>➤ SUPPLIED WITH: 4 pressure cylinder mounting brackets, mains lead and instruction manual.</li> <li>➤ With accessories and spares for three years operation</li> </ul> </li> <li>➤ Power requirements: compatible with Pakistan standards</li> <li>Warranty: Minimum 2 years (after commissioning)</li> </ul>  |



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**Instruction to Bidder/Supplier:**

- a) Only genuine Manufacturers having 15 years or more experience of manufacturing petroleum testing equipment backed by ISO Certification will be considered suitable for evaluation.
- b) All equipment's should be supplied in ready to use condition, equipped with all necessary accessories and spares.
- c) Additional / optional spares and consumables for three years operation should be quoted separately, however quantities of spares/accessories can be increased or decreased according to OGDCL requirements. Unpriced list of spare parts to be attached with technical bid. Priced list with quantity and unit price to be provided with financial bid only. Cost of spares would not be part of financial evaluation.
- d) Quotation should list all main units, accessories, spares and other items separately, detailed manufacturer's technical literature should be provided.
- e) Installation / Commissioning of equipment in Pakistan is supplier responsibility, CV of supplier concerned technical professional should be included in the bid for this purpose further necessary training (if required) of lab officials will have to be provided by the supplier at the time of commissioning/installation.
- f) Country of manufacturing for each product will have to be mentioned clearly.
- g) Equipment(s) should be provided/supplied with Certificate of Calibration and Performance.

**Necessary Attachments:**

- a) Product data / literature in original printed by manufacturer.
- b) Valid ISO 9001-2008 certification for manufacturing of quoted product.
- c) Original authority letter issued by the manufacturer to bidder and bidder authority letter to local agent (if any) not only for quoting their product but to provide back-up services and supplies also.
- d) Declaration for back-up services regarding repair & maintenance, trouble shooting and supply of optional accessories or spare for quoted product. Bidders to quote prices per visit which will be valid for next three years and this will not be part of financial evaluation.
- e) Name of few clients who have been supplied with the same quoted product/equipment (at least one from Pakistan) with their contact number and year of supply and their performance comments on quoted equipment.

  
**Saadat Aif**  
By Chief Chemist  
OGDCL (P&P), Ext: 2135