03. TECHNICAL SPECIFICATIONS

03. SPECIFICATION OF EVAPORATION BATH WITH RELATED ACCESSORIES TO DETERMINE THE GUM CONTENT IN FUEL ACCORDING TO IP 540 & ASTM D 381 /IP 131

This instrument (Evaporation Bath with related Accessories) should be fully complied with to determine the Gum content in Gasoline (92 & 95 Octane) according to ASTM D 381 test method, Existent Gum content in Jet A-1 ASTM D 381 & IP540 and Existent Gum content in AVGAS according to ASTM D 381 /IP 131.

DEISCRIPTION	COMPLY/NOT COMPLY
1. Main Instrument Test Methods (up dated version), IP 540 – Aviation Turbine Fuels ASTM D 381 & IP131 – Aviation Gasoline & Motor Gasoline 92 & 95 Octane Power supply: 230 volts ± 10 %, 50 - 60 Hz	
2. Measurement Range: Temperature Range : 150 °C to 260°C Temperature Stability of Well : 155 ± 5 °C (Air Jet Apparatus), 232 °C± 3 °C (Steam Jet Apparatus)	
3. Heaters **: Integrated Air pre heater & Steam Super Heater** – electrically heated, capable of delivering to the bath inlet the required amount of air or Steam at 232±3°C	
4. Evaporation bath: Electrically heated thermostatically control Solid Block capable to perform minimum 5 tests simultaneously using air or Steam & including thermometer well.	
5. Conical jet adapter : Capable of delivering air or steam flow of 1000 mL/s±150 mL/s.	
6. Flow meter : Capable to measuring an air flow rate 600 mL/s ±90 mL/s .	
7. Temperature Control & Display : Digital temperature Controller with capable to Display both set & actual temperature. Capable to measure temperature using glass thermo meter, including adjustable over temperature cut off.	
8. Calibration certificates for evaporation bath Temperature & air, Steam flow gauges should be from ISO 17025 accredited laboratory or with valid traceability.	
9. Accessories i. 100 mL Beakers (50mm outer diameter and 78+/- 2mm height) – 25 nos	
ii. Sintered glass filter funnel (capacity150mL, coarse pore diameter 150 -250 µm) – 25 nos.	
iii. Graduated Cylinders (capacity 50±0.5 mL, with spout) – 25 nos.	

iv. Glass cylinders (2L) – 4 nos	
v. Recommended Spare Accessories should be provided for 02 years uninterrupted service	
10. Optional Accessories, i. Steam calibration tube – 05 Nos.	
ii. liquid glass thermometer (ASTM 3C/IP 73C), range -5 to +400°C – 05Nos.	
iii. 6 nos. of forceps for *Handling Equipment,* (stainless steel, spade ended) or tongs (stainless steel)	
11. Recommended Consumables for continue sample analysis for 02 years should be supplied	
Other Requirements: I) Manufacturing and assembly of the total unit should be in the country of origin.	
ii) Should manufacture in USA, UK, Europe and Japan.	
iii) Supplier should supply all technical details with the brochure containing all above for evaluation purposes.	
iv) Those who do not provide supportive literature of manufacturer / equipment may not be considered for evaluation.	
v) Supply Equipment should be in the latest model.	
vi) Equipment should not be obsolete within next 05 years.	
vii) Minimum of 02 years warranty period.	
viii) Capability and facilities of after sales services available in Sri Lanka	
ix) Capability of attending for breakdown within 24 hours.	
x) Details of previous customers	
xi) Availability of training facilities	

Signature of the Bidder: …… Date:…… **(Common Company Seal)**