

**RESPONSE FOR CLARIFICATION: KE-MAWASCO-374469-GO-RFQ- SUPPLY DELIVERY, INSTALLATION AND TESTING OF WATER METERS, WATER METER EQUIPMENT AND TOOLS (NON REVENUE WATER GOODS).**

As interested and participating bidders in the above-mentioned quotation, we would like to request for clarifications as below:

**1. INSERTION FLOW METER**

- Your specifications call for Insertion Flow Meter with 700mm Stem length. **Kindly advise if you would like to have the meter to measure both FLOW and PRESSURE?**

- Specifications indicate on flow measurements, however, insertion flow meters come with provision for pressure measurements this is a good addition if there are no cost implications

We can also offer the meter with a GSM module for remote data transmission via Email/SMS. This is offered with FREE LIFETIME CLOUD ACCESS. Kindly advise.

- You are advised to stick to the specifications. Alternative solutions will not be considered.

You have requested for Hydraulic Hose Spiral cable, RS 232 Communication lead, RS232 Infra-red reading head for logger to PC; Quick-fit female, male ¼" BSP. **These accessories are not required for use with our Insertion meters. Please advise where and how you intend to use them?**

- Specifications indicates that a data logger is required with accessories for physically downloading data from the site as opposed to remote transmission of data.

**2. UNDER PRESSURE DRILLING MACHINE 1" TO 2" (MANUAL TAPPING TOOL)**

- Your specifications under "INSERTION METERS" call for "Under-pressure tapping machine with sets of head DN25mm and DN30mm" and you have also provided specification for the above mentioned product (1" to 2").

- Specifications indicates that the machine should be capable of drilling 1", 1¼", 1½" and 2".

Please confirm if you need one machine or two machine?

- Schedule of requirements and technical specifications indicate two machine capable of tapping both steel and PVS pipes.

Kindly advise specifications as required.

- Use specifications under pressure drilling machine 1" to 2" (manual tapping tool)

Also confirm the Pipe Diameter Ranges as ours are available in (4" to 12", 12" to 20", 24" to 36", 36" to 48" and 4" to 72")

- Available pipe diameter ranges from 4' to 16'

**3. METER CALIBRATION BENCH**

- Provide Technical Specifications

**Standard Water Meter Test Bench Specification**

The meter test bench shall test up to eight 15mm, 20mm, or 25mm meters in line, on the same axis and at least four 32mm, 40mm, 50mm meters in-Line on the same axis.

The test bench shall be manufactured for a left to right or a right to left flow as designated and required.

All adapters for testing each size of meter shall be included. Offset or riser adapters are not acceptable.

Individual meters shall be removable without disturbing the other meters and shall be clamped and sealed between rubber gaskets by turning a hand-operated wheel at each meter testing station.

Each meter shall be positioned inside a fixed cast iron yoke for structural support of the sealing surface. Each yoke shall be coated with electrostatically applied e-coat epoxy for maximum abrasion and impact protection.

The main test bench water passage shall be manufactured of waterworks brass meeting standard UNS/CDA No. C83600.

The pan and lower shelf shall be type 304 stainless steel.

The legs shall be fabricated structural carbon steel with a electrostatically applied corrosion-resistant coating.

Legs should be available with adjustable feet to account for variance in floor level and ensure proper draining. All steel bolts shall be zinc plated.

The plumbing connection shall be 3/4-1/2" above the floor.

1" FIP ball valves shall be used as an inlet valve and as an outlet flow control valve. The valves shall be a three-piece stainless steel design with stainless steel ball which shall rotate between two PTFE seats. The stem that operates the ball shall exert no other force on it except to turn the ball.

In addition to the inlet valve and outlet flow control valve, the test bench shall have a blow-off valve to release water pressure after the test.

Bleeder valve shall be located at the outlet of each individual meter test station to precisely set each meter register before the test.

A pressure gauge shall be located on the inlet and the outlet of the test bench.

Plastic components of any kind shall not be permitted in the meter clamping system for safety and durability.

Flow rates shall be adjustable between 1 liter per minute and 130 liters per minute when testing 15mm, 20mm and 25mm meters and 17litres per minutes and 417mm per minute. When testing 32mm, 40mm and 50mm. Flow rate shall be displayed in unit per minute and guaranteed to accuracy +/- 3%.

Bench shall be rated for a working pressure of 10 bar.

Bench shall be of modular construction for ease of service.

The manufacturer of the water meter test bench shall be economically stable and have continuously manufactured water meter testing benches for at least 100 years.

Spare parts and technical support shall be available from the manufacturer.

The water meter testing bench shall bear the Manufacture name and country of origin .

**Volumetric Tanks:**

50 liter and 600 liter volumetric Calibrated Testing Tanks shall be made of stainless steel and guaranteed to accuracy within one-fourth of one percent at full scale.

Tanks shall include an exterior sight glass to ensure maximum resolution.

Tanks shall be calibrated by gravimetric method at the manufacturing facility and certified by the manufacturer.

The bench shall require a 1" male iron pipe water connection capable of providing 150 liters per minute at 7 bar.

The bench shall require a drain line for disposing of water when draining the calibrated testing tanks.

Spare parts and technical support shall be available from the manufacturer.

The volumetric testing tanks shall bear the name of manufacture and country of origin.

**4. EXTENSION OF QUOTATION CLOSING DEADLINE**

- With respect to the above clarifications, we are humbly requesting you to extend the tender closing date to 25<sup>th</sup> August 2023 in order to give us ample time to engage our manufacturers and offer you the best available products in the market.

- There will be no extension for submission of Quotation for supply delivery, installation and testing of water meters, water meter equipment and tools (Non Revenue Water goods),Quotation No. KE-MAWASCO-374469-GO-RFQ.