STATEMENT OF WORK

Analytical Balance

Background

Analytical balances are pieces of equipment used to measure small masses ranging from one tenth of a milligram to many grams. The measuring pan of an analytical balance is usually located inside a transparent enclosure with doors to protect the pan from dust and air currents in the room. Analytical balances meant to detect very fine increments, so the slightest room vibrations or air current can impact the results. As such, analytical balances should be used in a with as few disturbances as possible. Analytical balances need to be monitored carefully for damage and calibrated frequently using NIST-traceable weights.

Purpose

The TDR & SA group at Kansas City Laboratory routinely uses analytical balances to weigh both standards and samples for regulatory analysis. The current primary balance used for this purpose has become unstable and takes a very large amount of time to equilibrate every time something is placed on the weighing pan, up to several minutes each time. This is a problem because an analyst cannot tare the balance until the weight is determined, per the balance's electronics, to be stable. This situation results in the analyst waiting several minutes to make *each* measurement until the balance determines itself to be stable (because it is standard to tare the balance before every new measurement). Thus, a weighing task that would normally take a few minutes has ballooned in time to a couple of hours. This is not a good use of analyst time and calls into question the reliability of the balance.

Scope

Analytical Balance. Minimum Technical Specifications

System Requirements

- Resolution: 0.1 mg, 0.01 mg preferred
- Can be used with NIST-traceable reference weights

Analytical Balance Specifications

- Fast settling time and consistent results for routine to complicated weighing procedures
- Fully automatic time- and temperature-controlled internal calibration adjustment
- Advanced weighing technology provides fast and accurate results
- Durable high-grade chemical-resistant die-cast aluminum housing

- Overload Protection guards the weighing cell against excess weight overload
- Software that displays how much of the entire weighing range has been used
- Direct connection to a PC or printer via RS232 or USB slot allows convenient transfer of weighing results
- High-contrast display (HCD) and intuitive menu for simple operation
- Programmable smart keys for shortcut access to preferred applications

Performance Specifications

- Weighing units: mg, g
- Weighing resolution: 0.1 mg or smaller (0.01 mg preferred)
- Calibration type: internal and external
- Language: English
- Output: digital screen and USB
- Low settling time (time for stable reading)
- Size: desktop/benchtop

Trade and Service Specifications

1. The instrument must be a newly manufactured unit, not used and refurbished or previously used for demonstration.
2. FOB destination to include inside delivery and clean-up of area after installation.
3. The entire system must be warranted for parts and labor for 12 months from the date of formal government acceptance. The vendor must also be capable of servicing the instrument through the covered warranty period. The system must include at least a one (1) year warranty and shall include at a minimum: coverage on all non-consumable items and parts supplied including base instrument, factory-certified replacement parts, engineer labor and travel costs. Any equipment repair and maintenance work shall be performed by an OEM-trained engineer.
4. The Government must be able to expect routine customer service and technical support to be available from the vendor during its lifecycle (assumed 10 years).
5. Instrument to be delivered no later than 60 days after issuance of deliver order.
6. Delivery must be performed during normal business hours of Monday through Friday, excluding federal holidays, between 8 am and 4 pm Pacific Time. Contractor shall provide a 48-hour advance notice of delivery.

Records and Reports

The Contractor shall, commensurate with the completion of each service call (inclusive of warranty service), provide the end-user of the equipment with a copy of the field corrective service report identifying the equipment name, manufacturer, model number, and serial number of the equipment being repaired and detailing the reason for the warranty call, a detailed description of the work performed. The parts and the test equipment used to repair the system shall be on the report. This will include the name(s)

and contact information of the engineer who performed the repair, and for information purposes, the on-site hours expended, and parts/components replaced.

Section 508 Compliance

The Contractor shall be familiar with Section 508 requirements as described at http://www.section508.gov/ in order to ensure that documents generated as part of the tasks are fully Section 508-accessible.

Deliverables

Deliverable	Quantity	Delivery Date
Analytical Balance	2	Within 60 days of award

Period of Performance

The period of performance begins the date of contract award and continues for one year from the date of formal government acceptance.

Shipping Destination

FDA/KCL
10749 W. 84th Terrace
Lenexa, KS 66214

POC: Erica Bakota-Chemist
Phone: (913) 752-2746
E-mail: Erica.Bakota@fda.hhs.gov

Quotation Instructions

All quotes are due by e-mail to Nina Montgomery, Nina.Montgomery@fda.hhs.gov on or before July 7, 2022 at 10:00 am (Eastern Standard Time).