

SUPPLY, INSTALLATION, COMMISSIONING & TESTING OF A WEIGHBRIDGE SYSTEM

I. SCOPE OF WORK

- a. The bidder is to execute Supply, Installation, Commissioning and Testing of a weighbridge system (including Platform, Load Cell, Junction Box, Digital Weight Indicator, Software, Desktop Computer, Printer, Online UPS, Power & Signal Cable) for bulk bitumen delivery.
- b. Bidder needs to arrange for calibration of the weighbridge system and stamping by the BSTI when installation & commissioning will be completed. All related cost shall be included with the offer price.
- c. The base of the weighbridge platform shall be RCC built with RCC ramp on both drive up and drive down side. All civil and other related works regarding platform installation and RCC ramp construction is in the scope of the bidder.
- d. The Weighbridge Vehicle Management/ Weighing Application Software shall be installed in a Desktop Computer with Online UPS that will be situated in the Weighbridge Control Room.
- e. All related works such as all power & signal cable supply, all the outdoor installation work such as earth excavation, cable laying, brick soling, necessary backfilling, etc. for underground cabling & tracing through cable-trays and G.I. Pipe for overhead cabling and indoor installation work such as all control room cabling, which shall be done as PVC casing & capping wiring, with any necessary related devices shall be in the scope of the bidder.

II. WEIGHBRIDGE SYSTEM

Quantity: 01 Set

A. Weighbridge Basic Specification

Type	: Pitless type electronic weighbridge
Rated Capacity	: 80 MT (Min.)
Graduation	: Min. 10 kg
Zero tracking	: Auto & Manual

B. Platform

Platform size	: Min. 12m x 3m
Construction	: Heavy-duty steel construction, non-skid steel checker plate surface Platform of optimum rigidity
Foundation & Ramp	: RCC (Reinforced Cement Concrete) foundation with foundation plates; Drive up and drive down Ramps are to be RCC construction with max. 10% slope.

C. Load Cell

Capacity	: 20,000 kg (20 T) (Min.)
Material	: Chromium Alloy Steel/ Stainless Steel
Working Temperature	: -40 to +70°C
Maximum Overload	: 200% (Max.)
Ingress Protection	: IP67 or better
Quantity	: Min. 4 Nos.
Accuracy	: Min. 0.020% (1 part in 5000)
Integrated cable	: Min. 15m long
Load Cell Accessories	: Mounting plate, kit & standard accessories compatible to load cell

D. Load Cell Junction Box & Signal Cable (Cable quantity: as required)

Junction Box is to be installed between platform and Digital Weight Indicator/ Weighbridge Desktop Computer.

Ingress Protection : IP65

Accessories & Cable glands : Standard accessories set & cable glands compatible to Load Cell

Signal Cable is to be used between Junction Box and Digital Weight Indicator/ Weighbridge Desktop Computer to ensure minimum signal loss. Distance between Load Cell Junction Box and Digital Weight Indicator/ Weighbridge Desktop Computer \approx 150 m.

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III. DIGITAL WEIGHT INDICATOR (CONTROLLER)

Quantity: 01 Set

Display	: LCD, Dot Matrix with Backlight. Min. 130 x 40 mm Display Window or better
Weighing Units	: Tonnes (T), Kilograms (Kg),
Outputs	: RS232 Serial Printer Output; RS232 Serial Data Output to Computer
Features	: Manual Mode of Weighing, Zero tracking etc.

IV. VEHICLE MANAGEMENT/ WEIGHING APPLICATION SOFTWARE:

Quantity: 01 Set

The Weighbridge Vehicle Management/ Weighing Application Software system shall be able to recording and analyzing all weighbridge operations & record all vehicle movements. This software shall be installed and operated from the Weighbridge Desktop Computer situated in the Weighbridge Control Room.

Weighbridge Desktop Computer Specification:

Brand	: 4th Generation Desktop Make HP/ Dell
Operating System	: Windows 10 OS, 64-bit or better (With Licensed Software)
Processor	: Intel Core i7 Processor, 4.7 GHz, 24 MB cache or better
Memory	: 4 GB RAM at 1333 MHz or better
Storage	: 1 TB HDD or better
Display Type	: 23" LED Monitor (Min.)
Display Resolution	: 1920 x 1080, 24 bit/pixel color (Min.)
Ports	: 4 Nos. USB ports (Min.) (all forcibly disabled) + HDMI port

All Weighing operations should be automatically recorded on the computer and tickets can be printed off on the computer's printer. Every successful ticket printed shall be backed up by the system.

Each ticket should have the following information: 1st weight; 2nd weight; Net weight; Vehicle No.; Vehicle Reg./ Entry Permit No.; Description of Goods; Customer/ Supplier; Customer/ Supplier sign; W.B. operator/ Officer Sign; Authorized Sign.

And new boxes can be created to put in extra details. There should also a "Comments" box.

The system should contain a reporting facility based on templates to report on different aspects of the data which shall be printed by laser printer.

LASER Printer Model: Canon LBP 6230DN DUPLEX or equivalent.

Software License & Validity

Bidder shall provide proper license for the software with lifetime validity.

Power Supply

Available System Power : 240VAC \pm 10%, 50 Hz with On-line UPS;

Online UPS (Industrial Grade): Quantity: 01 No.

Capacity : Min. 1200 VA

Backup : Min. 04 Hrs

Brand : ARK/ MaxGreen/ APOLLO/ APC/ Digital X/ POWER GUARD or equivalent

V. Manufacturing country: USA/ UK/ EU/ Japan

VI. OTHER DEVICES/ ACCESSORIES

Bidder should offer any other devices/ accessories necessary for complete system implementation.

IX. DOCUMENTATION, SOFTWARE AND OTHER REQUIREMENTS

01. Certificate from manufacturing country to be submitted with the technical offer.
02. Weighbridge should be brand new and Min. 01 (one) year warranty from the date of handover to be submitted with the technical offer.
03. Supporting Catalogue/ datasheet, brochure (in English) should be submitted with the technical offer.
04. User manual, operational/ maintenance manual (in English) should be supplied at the time of product delivery.
05. Successful bidder shall take proper approval of P&I & civil drawing of weighbridge installation site from ERL before installation and commissioning.
06. Successful bidder shall provide a backup soft copy of the Weighbridge Vehicle Management/ Weighing Application Software after successful commissioning of Weighbridge System.

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