



INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD
Kandi, Sangareddy Dist- 502 284, Telangana, INDIA
Tel: +91 40 2301 6822 Fax: +91 40 23016032 / 23016003
Email: office.stores@iith.ac.in

FOREIGN PURCHASE ORDER

PO.No. IITH/PUR/5(5.15)/BASHA/2022/JICA-05

Date: 20-01-2023

To,
M/s GDS Instruments,
A Division of Global Digital Systems Ltd.
Unit 32 Murrell Green Business Park
London Road, Hook, Hampshire, RG27 9GR, U.K.

Sub: - Supply, Installation & Commissioning of Fully Automated Unsaturated Soil Triaxial Testing System with Bender Elements - Reg.

Ref: - IITH Tender Ref: - IITH/JICA/BASHA/CE/2022/O/T005G dated 19.09.2022.

Dear Sir,

Kindly arrange to supply the following items on the terms and conditions mentioned below and overleaf:

Sl.No.	Description of the item(s)	Qty.	Unit Price in GBP	Total Price in GBP
01	Fully Automated Unsaturated Soil Triaxial Testing System with Bender Elements	1	67,380.00	67,380.00
			Packing & Freight Charges	3,180.00
Total Price (CIP Hyderabad Airport) in GBP				70,560.00

PLEASE SEND YOUR ORDER ACKNOWLEDGEMENT (PROFORMA INVOICE) THROUGH E-MAIL/FAX IMMEDIATELY.

IMPORTANT TERMS & CONDITIONS

- 1. ACKNOWLEDGEMENT:** Acknowledgement for the receipt of the Purchase order should be sent immediately through E-mail intimating the probable date of shipment. A formal order acknowledgement should be sent within 15 days of receipt of the order & Original 5 Nos of copies of JICA Contract should also be sent along with order acknowledgement. and the INTEGRITY PACT on Non-Judicial Stamp Paper & 3% Performance Bank Guarantee (refer column 8).
- 2.** Please dispatch the items **BY AIR on Freight prepaid basis for Customs Clearance at Hyderabad, Telangana State, India.** The items may please be dispatched in the name of The Director, Indian Institute of Technology Hyderabad, Kandi 502 284, Sangareddy, Telangana State, India.
- 3.** Our Imports are under Open General License Scheme as applicable to us vide Import Policy for 2015-20 of Government of India.
- 4. DELIVERY:** The material should be dispatched within **26 weeks** from the date of receipt of Letter of Credit.

5. **WARRANTY:** Warranty should be provided for **12 Months** from the date of installation, commissioning and testing of the equipment. The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary. The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. This includes cost, insurance, freight, custom duty, local taxes if any should be borne by the beneficiary or his agent. No cost will be borne by IIT Hyd.
6. **Installation & commissioning** should be completed within one month of receipt of goods in IITH Stores.
7. **PAYMENT TERMS:** The Letter of Credit will be established by Bank of India, Tokyo Branch. The payment will be on 90% & 10% basis, i.e. 90% after delivery & 10 % after installation through Bank of India, Tokyo (As per Tender Chapter – 3: Conditions of contract, clause 15 (B)).
8. **Performance Security:**
 - Within fifteen (15) days of the award of contract, the vendor shall furnish a Performance Bank Guarantee amounting to **03%** of the purchase order value in the form of Demand Draft/Bank Guarantee (from scheduled bank only) favoring the Director, Indian Institute of Technology, Hyderabad.
 - IIT Hyderabad will forfeit the **03%** Performance Bank Guarantee if vendor fails to execute the order as per the Purchase Order. This Security Deposit will be refunded to the vendor only on successful installation, commissioning and training of the supplied equipment / system & completion of warranty obligation.
 - The Performance Security should be valid for a period of 60 (sixty) days beyond the date of completion of all contractual obligations of the supplier, including warranty obligations, since the same Performance Security will be extended as Warranty Bank Guarantee.
9. **Details of documents to be submitted:** The following shipping documents should be submitted in Original along with other LC documents to the Bank of India, Tokyo & copy to us by email. The documents should be consigned in the name of IIT Hyderabad.

For claiming Part, I - 90% payment

- a. Airway Bill – 2 copies
- b. Original Invoice with 1 spare copy claiming 90% value.
- c. Packing list original – with 2 spare copies. Please ensure to prepare and send to us separate packing list for each package / container of the consignment.
- d. A Warranty Certificate – with 2 spare copies. The goods in question should cover a warranty of - months against all manufacturing defects from the date of acceptance of material in IITH.
- e. Inspection Certificate that “having been inspected by your qualified Engineer and have been packed in accordance with the terms and conditions of IITH Purchase Order.
- f. Certificate of Origin – 2 copies (with original).
- g. Acceptance certificate for 90% payment duly signed by IITH
- h. Copy of 3% PBG.

Intimation of Shipment: Pre Alert Advice regarding AWB/BL copy, invoice, packing list, must be intimated to us (Email: office.stores@iith.ac.in, ar.purchase@iith.ac.in & ramakrishna.p@admin.iith.ac.in) and our customs clearing agent well in advance. The name & address of our customs clearing agent is M/s. Prakash Freight Movers Ltd., Email: hyderabad@pfmlindia.com, Email: gaurav@pfmlindia.com, Phone No. +91 (40) 66810031/32, Fax: +91 (40) 6681 0033.

For claiming Part II - 10% payment:

- a. Invoice with 1 spare copy claiming 10% value.
- b. Acceptance certificate for 10% duly signed by IITH.

10. **Liquidated Damages:** If you fail to deliver the goods by the stipulated date, a sum equivalent to 1% of contract value for each week of delay or part thereof until actual delivery will be deducted from the contract value, as liquidated damages, subject to maximum deduction of 10% of contract value. Once the maximum is reached, termination of contract may be considered by IITH.
11. **DEMURRAGE CHARGES:** In case of **demurrage/Penalty** for delay in filing Bill of Entry due to wrong shipment papers, due to delay in intimation about the dispatch of shipment, Custom Queries or if the flight arrives on holidays (Sat & Sun) or any other reason not attributable to IITH and Custom Clearing Agent. The demurrage charges will be borne by Supplier/Indian Agent.
12. **Risk Purchase Clause:** If you fail to deliver the goods within the maximum delivery period specified, IITH may procure on such terms and in such manner as it deems appropriate. Goods or services similar to those undelivered and you are liable to IITH for any excess costs for such similar goods and services.
13. **Arbitration:**
- Unless otherwise specified, in all cases of disputes which cannot be settled by mutual negotiations, the disputes or differences shall finally be settled and binding on both parties by arbitration in conformity with the rules of Indian Arbitration and Conciliation Act 1996. All disputes or differences whatsoever arising between the parties out of relating to the construction, meaning and operation or effect of the general terms and conditions including the Purchase Order or the breach thereof shall be binding on the parties.
 - Performance of the Purchase Order shall continue during arbitration and any subsequent proceedings.
 - The jurisdiction and venue of arbitration shall be Hyderabad. The Arbitrator will be the Director, IITH or his nominee.
14. **FORCE MAJEURE:** If the performance of the obligation of either party is rendered commercially impossible by any of the events hereinafter mentioned, the same party shall notice of 15 days from the date of such an event in writing to the other party (i) Government Regulations (ii) Legislation (iii) Natural Disasters (iv) Strikes (v) Lockout (vi) Act of God.
15. **PACKING:** Kindly ensure that the material is well packed with a water proof paper or polythene sheet and suitably cushioned to withstand the rigorous of journey from warehouse to warehouse. All fragile items must be packed in suitable crates.

THE ORDERED ITEMS SHOULD BE SENT IN POSSIBLE MINIMUM NUMBER OF PACKAGES, TO AVOID PAYMENT OF MUCH AIRFREIGHT CHARGES ETC. Each package should be suitably numbered and copy of the detailed packing list relating to its contents kept in it. Kindly also keep a set of three copies or the (i) invoice (ii) complete packing list and (iii) catalogue / pamphlet in a pouch externally fixed to the cases in a conspicuous location. The pouch can be a piece of water proof canvas cloth of suitable size or a polythene cover sealed on all sides and nailed to one of the sides of the case. This will help us and our clearing agent to arrange prompt clearance of the material from the customs authorities in India.

All packages should bear the following marks:

PACKAGE NUMBER..... ORDER REF. No. SIZE..... NETT WEIGHT....
 GROSS WEIGHT..... HANDLE WITH UTMOST CARE.....
 DELICATE SCIENTIFIC MATERIAL FOR RESEARCH ACTUAL USER (NON-INDUSTRIAL)
 IMPORTER CODE No. 0910004013
 PAN No. AAAAI2661J, GST No. 36AAAI2661J1ZP
 CONSIGNEE: THE DIRECTOR, INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD
 Kandi, Sangareddy - 502284 Telangana. INDIA

Kindly note that the entire material against this Order should be supplied in one lot. Pro-rata and trans-shipment is not permissible. Any loss on account of this will be to your account.

16. **HSN Code:** The HSN Code of the item/equipment should be specified in the Invoice.

17. **CONTACT DETAILS OF FREIGHT FORWARDER:** Please contact our Indian Clearing Agent for getting the details of their partner clearing agent in your Country in case of Ex-Works/FOB/FCA Orders. M/s. Prakash Freight Movers Ltd., Email:hyderabad@pfmlindia.com, Email:gaurav@pfmlindia.com, Phone No. +91 (40) 6681 0031/32, Fax: +91 (40) 6681 0033.

18. **All other Terms & Conditions as per the tender no. IITH/JICA/BASHA/CE/2022/O/T005G dated 19.09.2022.**

Your specific cooperation is once again requested for scrupulous compliance to our terms contained in this Purchase Order.

Kindly acknowledge receipt of this Order.

Yours faithfully,


20/10/2023

(K RAMESH KUMAR)
Assistant Registrar

Prepared by:  20/10/2023 Reviewed by: _____

Indian representative:

M/s. Aimil Ltd.
Instrumentation & Technologies
314-316, 3rd Floor, Swapnalok Complex, S.D.Road,
Secunderabad, Telangana – 500 003.
Tel: 040-30280500, Fax: 040-30280512, Mob:9908711195
Email id: hyderabad@aimil.com, muralikrishnag@aimil.com

Copy also to: -

- 1) Accounts Section [Funds: Institute / Project: JICA Funds]
- 2) Indentor: [Dr. Munwar Basha, Dept. of Civil Engineering].
- 3) Stores & Purchase Section
- 4) State Bank of India, IIT Hyderabad Branch, Kandi, Sangareddy - 502 284
- 5) M/s. Prakash Freight Movers Ltd., Hyderabad ... with a request to arrange for transit coverage of the above consignment from warehouse to warehouse of the Institute. The value of the item may please be noted as
Rs. _____/-
- 6) Customs, 7) Guard File 8) File copy.

ANNEXURE-1 of the PO

IITH/PUR/5(5.15)/BASHA/2022/JICA-05

SL. NO.	PRODUCT CODE	PRODUCT DESCRIPTION	Price Per unit in GBP	QTY	Price In GBP
1	The main item as per tender	GDSTAS (50kN / 2MPa / 100mm) Triaxial Automated System			
2	DWG-LF50KNGA0002-PS	50kN electro-mechanical, two column digital loading frame. - Keypad and LCD display for stand-alone operation - Velocity control - Displacement control - Optional closed loop displacement/load control. - Speed range 0.00001mm to 89.99999 mm per minute. - Accepts triaxial cells up to 150mm sample diameter. - Maximum load: 50kN - Maximum travel: 100mm - Platen diameter: 158mm - Horizontal daylight 380mm - Vertical daylight 800mm - USB port for PC control - 380mm (Depth) x 480mm (Width) x 1400mm (Height)	9090.00	1	9090.00
3	DWG-100TC2GA0025-P	Triaxial cell for test specimens up to 100mm (4 inch): - Maximum pressure 2000 kPa with water as cell fluid (1000kPa with Air) - Hard Anodised - Banded Acrylic Cell Chamber - Complete with five hydraulic ports and valves	4650.00	1	4650.00
4	CL00038	Base Pedestal 50mm for 100mm Triaxial Cell	580.00	1	580.00
5	CL00039	Base Pedestal 70mm for 100mm Triaxial Cell	530.00	1	530.00
6	DWG-MISCELSA0151	Top Cap Set, 50mm diameter, comprising:- 50mm top cap plain with dimple 50mm top cap with dimple and back pressure connection 50mm extension top cap with stud for connection to load cell & vacuum connection 50mm Vylastic (suction) Sleeve	310.00	1	310.00
7	DWG-MISCELSA0152	Top Cap Set, 70mm diameter, comprising:- 70mm top cap plain with dimple 70mm top cap with dimple and back pressure connection 70mm extension top cap with stud for connection to load cell & vacuum connection 70mm Vylastic (suction) Sleeve	310.00	1	310.00
8	TX00142	2MPa Pore Pressure Transducer with 5 Pin DIN Plug for GDS Data Interface. Accuracy 0.10% of Full Range Output (FRO)	480.00	1	480.00

9	DWG-MISCELSA0103	De-Airing Block for Pressure Transducer up to 3MPa with non volume change valve.	110.00	1	110.00
10	TX00400	Linear Displacement Transducer with 2m Cable and DIN plug to suit GDS Data Loggers. Linear Strain Type (Strain gauge based). Range: 50mm Accuracy: <0.075% Full Scale Output voltages at 10V excitation (Nominal): 50mm=90-95mV Diameter 19mm (typically requires displacement transducer bracket TX00198 for 25mm ram)	690.00	1	690.00
11	TX00198	Displacement Transducer Bracket Set for 25mm ram 19 mm bore	150.00	1	150.00
12	TX00036S	10kN internal submersible load cell. Unique two part construction for improved reliability. Accuracy 0.1% of Full Range Output (FRO). Maximum pressure rating 7MPa. Diameter:79mm Height: 54mm Temperature -20°C to 80°C Temperature compensation to -20°C to 80°C Temperature effect 0.003%/°C Type 9	1290.00	1	1290.00
13	TX00136	Load Ram Assembly for Internal submersible load cell, 25mm plain ram for traditional triaxial cells. Includes cable and DIN plug for GDS PAD data acquisition device. 225mm long with M24 male threads	260.00	1	260.00
14	DWG-8CHPADGA0007-P	GDS 8-channel, 24-bit synchronous data acquisition with USB 2.0 interface. +/- 5 Volt excitation with 40mA available for each channel. 12 input gain ranges individually software selectable for each channel from 22mV to 32V. Includes Power and USB Cable	3770.00	1	3770.00
15	STDCON0002-P	V2 New Style 200cc/2MPa STANDARD Pressure/Volume Controller: - Remote keypad included - Automatically protected against pressure and volume over-ranges. - Volume accuracy 0.25% of measured value. - Pressure accuracy 0.15% of Full Range. - Volume change measured and displayed to 1cu.mm (0.001cc). - Pressure regulated and displayed to 1 kPa. - USB interface. - Includes USB and power cable	4620.00	2	9240.00
16	DWG-MISCELSA0091	Hydraulic Installation kit for GDS Systems, including: - 15 meters 1/8" Nylon tubing - 15meters 8mm Nylon tubing - Hydraulic sealant - Silicone Grease - pipe cutter - 8mm Tee Piece - 5 x additional nut and ferrule sets, 8mm - 5 x additional nut and ferrule sets, 1/8"	270.00	1	270.00

		- Metric Allen Key set - 2 x Adjustable spanners			
17	SW00002	GDSLAB - Kernel Module: GDSLAB modular software kernel module and dongle for Data Acquisition Only. Kernel and security dongle for single GDSLAB licence.- Acquisition Only. Also allows velocity controlled Unconfined Compressive Strength (UCS) tests	1330.00	1	1330.00
18	SW00003	GDSLAB Standard Saturation and Consolidation Module - B check - saturation ramps of cell pressure and back pressure - isotropic consolidation	740.00	1	740.00
19	SW00004	GDSLAB Standard Triaxial Testing Module: UU, CU, CD with pore pressure measurement - unconsolidated-undrained - consolidated-undrained with pore pressure measurement - consolidated-drained with pore pressure measurement	740.00	1	740.00
20	SW00005	GDSLAB Stress Path Module: Linear Stress Paths - p, q or s, t	740.00	1	740.00
21	SW00006	GDSLAB K-Zero Module: - K-zero consolidation - User defined control of stresses such that sample diameter remains constant using either feedback from direct measurement of radial strain (Hall Effect or LVDT) or from sample dimensions as calculated from the back volume change	740.00	1	740.00
22	SW00010	GDSLAB Advanced Loading Module: Load control low frequency cyclic loading - Independent control (constant ramp cycle) of: - axial stress, axial strain or axial load - radial stress - back pressure - low frequency cyclic loading	740.00	1	740.00
** Items for UNSAT Testing (Method A) on 50mm samples **					
23	CL00206-5	Base Pedestal 50mm Unsat 500kPa (5 bar) HAE for 100mm Triaxial Cell and double wall triaxial cell when used with an Access Ring. (Note: 1 bar, 3bar and 15 bar – supplied free of cost)	1210.00	1	1210.00
24	ADVCON1000V 4-0013-P	1000cc/2MPa Advanced Digital AIR Pressure/Volume Controller with USB interface - To give stand alone or PC control of pressure/volume. - Automatically protected against pressure and volume over-ranges. - Volume accuracy 0.25% of measured value. - Pressure accuracy 0.1% of Full Range. Volume change measured and displayed to 0.1mm ³ (0.0001cc). - Pressure regulated and displayed to 0.1 kPa	9170.00	1	9170.00
25	TX00058S-D	Atmospheric Air Pressure Transducer c/w Din connector	560.00	1	560.00
26	SW00007	GDSLAB Unsaturated soil Triaxial Module: - Four dimensional linear control paths (axial stress radial stress pore air pressure pore water pressure).	740.00	1	740.00

		- Complete flexibility of control for unsaturated triaxial tests			
**1. Bender Element Accessories for testing on 50mm triaxial samples **					
27	CL00003	Transducer Access Ring for 100mm Traditional Triaxial Cell 2MPa 12-port transducer access ring with blanking plugs and fixing bolts. This device allows easy access for Hall effect or LVDT local strain transducers, bender elements, additional hydraulic or electrical connections using 'inserts' and gives additional height for the use of internal load cells and extension testing devices, without the need to modify the triaxial cell mechanically.	2430.00	1	2430.00
28	CL00016	Base pedestal for bender element inserts 50mm to fit GDS 100mm triaxial cell (100TC2). Note: triaxial cell will require modification to allow cable entry/exit unless using a GDS transducer access ring.	730.00	1	730.00
29	CL00011	Top Cap for Bender Element insert, 50mm Diameter Includes: -single drained perspex topcap -stainless rear seal plate -sintered bronze porous disc -hydraulic drain connector. Excludes Bender Element Insert	730.00	1	730.00
30	BE00003-PL	Vertically Propagating Bender Element P- Wave Transmitter / S-wave Receiver: Combined P-wave transmitter / S-wave receiver bender element insert for triaxial base pedestal, comprising cylindrical Titanium insert with encapsulated element (nominal 20mm diameter x 22mm height) for connection to data interface/signal generator/signal conditioning. (Complete with bulk head connection and Lemo). Operating Temperature: -10°C to 50°C Maximum Pressure Rating: 3.5MPa	1020.00	1	1020.00
31	BE00004-PL	Vertically Propagating Bender Element S- Wave Transmitter / P-wave Receiver: Combined S-wave transmitter / P-wave receiver bender element insert for top cap comprising cylindrical Titanium insert with encapsulated element (nominal 20mm diameter x 22mm height) for connection to data interface/signal generator/signal conditioning. (Complete with bulk head connection and Lemo). Operating Temperature: -10°C to 50°C Maximum Pressure Rating: 3.5MPa	1020.00	1	1020.00
32	DWG-BENDELGA003 7-P	Bender Element - Master Signal Conditioning Unit: Master signal conditioning unit for use with 1 pair of bender elements. Amplification of source and received signals (P and S-wave) with user controlled hardware gain levels from x10 to x500 via software	7680.00	1	7680.00

		user controlled hardware gain levels from x10 to x 500 via software. High-speed 16 bit 2,000,000 Samples/second/channel. Channels are simultaneously sampled to acquire data from the receivers and excitation for the transmitters Note: Can be used with either vertical or horizontal elements			
33	SW00027	GDSBES -Bender Element Software: Site license for initial Bender Element Master Signal Conditioning Unit. Software to control data acquisition and driving signal generation for P-wave and S-wave Velocity tests. Summary of software functions: Generation of single or repeated sinusoidal, square or user defined wave forms, control of sampling rate and data handling, data display and analysis	1830.00	1	1830.00
**2. Bender Elements (BE) for 70mm dia.					
34	CL00017	Base pedestal for bender element inserts 70mm to fit GDS 100mm triaxial cell (100TC2). Note: triaxial cell will require modification to allow cable entry/exit unless using a GDS transducer access ring	730.00	1	730.00
35	CL00012	Top Cap for Bender Element insert, 70mm Diameter with Sintered bronze porous disc and hydraulic drain connection. Excludes Bender Element Insert	730.00	1	730.00
36	BE00003-PL	Vertically Propagating Bender Element P- Wave Transmitter / S-wave Receiver: Combined P-wave transmitter / S-wave receiver bender element insert for triaxial base pedestal, comprising cylindrical Titanium insert with encapsulated element (nominal 20mm diameter x 22mm height) for connection to data interface/signal generator/signal conditioning. (Complete with bulk head connection and Lemo). Note: Excludes modified base pedestal/top cap. Purchased separately. Operating Temperature: -10°C to 50°C Maximum Pressure Rating: 3.5MPa	1020.00	1	1020.00
37	BE00004-PL	Vertically Propagating Bender Element S- Wave Transmitter / P-wave Receiver: Combined S-wave transmitter / P-wave receiver bender element insert for top cap comprising cylindrical Titanium insert with encapsulated element (nominal 20mm diameter x 22mm height) for connection to data interface/signal generator/signal conditioning. (Complete with bulk head connection and Lemo). Note: Excludes modified base pedestal/top cap. Purchased Separately. Operating Temperature: -10°C to 50°C Maximum Pressure Rating: 3.5MPa	1020.00	1	1020.00
		Training included			0
		SUB TOTAL			GBP 67,380.00
		Packing			680.00
		Packing & Freight			2500.00
		TOTAL (MAIN EQUIPMENT) with inclusion of Freight charges- CIP Hyderabad			GBP 70,560.00