Tender No:					
KDU/PRO/CAP/230/2020		General Sir John Kotelawala Defence University, KandawalaEstate, Ratmalana, Sri Lanka. T: Phone: 2632028, 2622995 Fax: 2622504, 2623599 Web:www.kdu.lk			
		17 / 08 / 2020			
INVITATION TO BID AND GENERAL CONDIT	CIONS OF TENDER				
	for supply of item/s lis	niversity, as the Chairman, Department Procurement sted in the schedule in Annex "A". The relevant			
2. CLOSING DATE & TIME . after the closing time of the tender will be rejected &		1000 hrs. on 08 / 09 /2020. Any Bid submitted be returned to the bidder.			
3. VALIDITY OF BID. The bid state of closing of tender.	submitted under this tend	der must be valid for a period of 120 days from the			
4. <u>BID BOND / GUARANTEE.</u> (a) If the quoted bid value exceeds Rs: 2,000,000.00, such Bids should be accompanied with 1% of Bid Value an "on demand" and "unconditional" Bid Bond/Guarantee for a sum of Rs:					
(b) Submission of insufficient Bid Bond/Guarantee value or period will be considered as a " major deviation " and such offer will not be considered for further procurement action and will be rejected.					
5. <u>VALUE ADDED TAX</u> . The Bidders who bid for locally delivered items must have the VAT registration. The VAT portion must be shown separately in the price schedule in Annex "A" and VAT registration number must be indicated. If the quoted item is exempted from VAT or Bidding Company is not liable for VAT, reference number and date of relevant Act number/Gazette notification/a certificate (as applicable) <u>issued for the current financial year</u> from the Commissioner General of Inland Revenue to that effect should be submitted along with the Bid.					
6. BID SUBMISSION. The bidder must duly sign at the last page (before Annexes) of this document indicating the name of the signatory and the name of the company & place the company common seal to confirm the acceptance of tender conditions. The Bid/s that do not include authorized signature will be rejected. The Bid/s duly signed by the bidder enclosed and sealed in an appropriate cover addressed to the following address should be sent by registered post or could be deposited in the appropriate tender box placed at General Sir John Kotelawala Defence University. Kandawala Estate. Ratmalana (at the Main Entrance of General Sir John Kotelawala Defence University) on or before the time & date specified for the closing of tender. The tender reference number, date & time of closing tender should be indicated & underlined at the top left corner of the envelop.					
Tender Ref No :		i, rocurement Committee, Jhn Kotelawala Defence University			

7. The Bid/s must be submitted in the attached schedule of prices in Annex "A" as applicable. However, bidders could use similar formats prepared with their own letter heads with all the details mentioned therein and submit in three copies along with duly signed copy of a General Conditions of tender. The Bid/s must contain Technical Literature, Pamphlets, Drawings and Quality Standard Certificate etc necessary to determine characteristics of items offered and in case of Machinery/Vehicles & Equipment, servicing and workshop data/after sales service, back up facilities or any other facilities provided by the supplier.

Sri Lanka.

Kandawala Estate, Ratmalana,

8. SUBMISSION OF SAMPLES/PAYMENT OF TESTING CHARGES.

When it is required to submit samples, <u>every offer</u> must be accompanied with pre - marked samples. The marking of samples <u>indicating the Bidder & Offer number</u> must be done and the samples must be handed over to the officer at same place where tender box is placed <u>on or before the closing date & time of the Bid</u>. Samples submitted after closing time of the Bid will be rejected. The documents such as Air Way Bills etc, will not be accepted in place of samples. When the testing charges are required to be paid, bidders shall pay testing charges separately <u>for all offers</u> indicated in their bid/s.

(1	.)	Samples.	Please submit	samples
----	----	----------	---------------	---------

(2) <u>Testing Charges</u>. A sum of Rs. <u>per offer</u> must be paid to the Bursar of KDU, prior to the submission of bid and a copy of the receipt must be annexed to the bid. It is the responsibility of bidder to inform the Cashier of the Account Office to note the tender number on the receipt issued for such payments.

8. <u>BID OPENING</u>. All duly received bids <u>will be opened immediately after the scheduled closing time of Bids at the same venue</u>. Bidders or their accredited agents could be present at the time of opening of bids.

9. PRICES.

For locally delivered items (including locally manufactured items & foreign items imported by the bidders) price must be quoted in Sri Lankan Rupees, inclusive of all charges for delivery of items to General Sir John Kotelawala Defence University Ratmalana, Faculty of Allied Health Science (FAHS) Werahera and University Hospital Werahera or Southern Campus Sooriyawewa. <u>Unit price, VAT and Total price should be clearly indicated in schedule in Annex "A"</u>. Other than VAT, all other type of taxes (eg: NBT, BTT, etc.) should not be indicated separately and should be included in unit price.

- 10. **RESTRICTED TENDERS**. Invitation to Bids are circulated a mong the registered suppliers with Ministry of Defence (MOD), only bids submitted by registered suppliers will be allowed for consideration. However, Chairman, Department Procurement Committee reserves the right to invite the bids from multiple combinations of Procurement Methods as stipulated in Chapter III of the Government Procurement Guideline, 2006 to ensure highest competitiveness.
- 11. PERFORMANCE BOND/GUARANTEE. A successful bidder shall f u r n i s h a Performance Bond/Guarantee in the form of "On Demand" & "Unconditional" Bank/Insurance Guarantee for a sum equivalent to 10% of the contract value for every contract that exceeds Rs. 500,000.00 or equivalent amount in foreign currency through a recognized Commercial Bank registered in Sri Lanka or through an Insurance Company authorized by the Insurance Board of Sri Lanka to issue such Performance Guarantee for this purpose, within two weeks from the date of notification of award. The proceeds of the Performance Bond/Guarantee shall be payable to the Vice Chancellor of the General Sir John Kotelawala Defence University as compensation for any loss resulting from the supplier's failure to complete his performance obligations under the contract. If the contracted supplier fails to deliver the items on time or fails to complete the works as per the agreed contract, THE TOTAL VALUE OF THE PERFORMANCE BOND/GUARANTEE will be forfeited. If only partial delivery is made during the agreed contract period, the corresponding value percentage of undelivered quantity from the Performance Bond/Guarantee will be forfeited.
- 12. **SIGNING OF CONTRACT.** The notification of award will be transmitted to the successful bidder by post, by fax or e-mail. This notification constitutes the formation of the contract. The successful bidder should submit his written acceptance for the award and performance bond / guarantee (For awards over Rs. 500,000.00 without VAT) within 14 days of receipt of such notification. Upon acceptance of the award and furnishing of the Performance Bond/Guarantee, the successful bidder will have to enter into a formal contract with the Vice Chancellor of the General Sir John Kotelawala Defence University by signing the Contract.
- 13. **DELIVERY.** Preference will be given for early delivery. In case of bulk supplies for locally manufactured items, the delivery of total quantity must be completed within 120 days of signing of contract, unless mutually agreed for extended delivery period with General Sir John Kotelawala Defence University. The bidder/s must indicate the proposed delivery schedule in Annex "D". In the event of placing a purchase order with the successful bidder, the total quantity so ordered must be supplied as one consignment unless part deliveries are agreed upon in the contract. The deliveries not made as per agreed delivery schedule will be considered as bad performances by the suppliers and no extended delivery period will be authorized. Under extreme unavoidable conditions too, the Chairman, Department Procurement Committee (Vice Chancellor of the General Sir John Kotelawala Defence University) reserves the right to grant or refuse delivery period extensions only within the current financial year with or without liquidated claim for delayed deliveries and that decision will be final.
- 14. **LIQUIDATED DAMAGES.** In case of delivery period extensions requested by the successful bidder, a sum equivalent to 1% of the total value of the delayed supply per delay of one week or part thereof may be deducted from the payment due to the supplier from the General Sir John Kotelawala Defence University as liquidated damages up to the maximum limit of 12% of the total value of delayed supplies.
- 15. PAYMENT TERMS FOR LOCALLY DELIVERED ITEMS. Payment will be made after acceptance of items which should be subjected to a pre-acceptance inspection/testing by General Sir John Kotelawala Defence University authorities. The delivery made to the General Sir John Kotelawala Defence University should not be considered as quantities taken over by General Sir John Kotelawala Defence University until items are properly accepted after pre-acceptance inspection. Any item that does not conform to the specifications or already approved sample will be rejected & it is the responsibility of the supplier to remove them from General Sir John Kotelawala Defence University stores/premises within 07 working days of such intimation (either verbal or written) at his own cost and replace them with items conforming to specification within one month of such rejection. The bidder shall allow approximately 60-90 days' period of credit from the date of acceptance of items for Account Office, General Sir John Kotelawala Defence University to obtain liquid cash from General Treasury & release the payment.
- 16. **RIGHTS OF THE PROCUREMENT COMMITTEE**. The Department Procurement Committee reserve the right to accept or reject whole or part of this tender and their decision will be final. The successful bidders will be notified. Information with regard to rejected or unsuccessful bids will not be communicated.



	Societat de Justi Aotesewate Detence University
I/We agree to abide by the conditions of tender and und	dertake to supply the items as per delivery schedule mentioned in the contract
in the event of an order been placed with me/my firm/co	ompany as a result of this tender.
Signature	
Name of Signatory	

Date :- Company seal

.....Name of the Company/Bidder

DATE

SCHEDULE OF PRICES FOR LOCALLY DELIVERED ITEMS

S/N	ITEMS		DENO	QTY	PRICE EACH SLRS	TOTAL PRICE SLRS
	PURCHASE OF LAB ITEMS FOR					
	DEPARTMENT OF CIVIL					
01	ENGINEERING		N.T.	0.1		
01	Pipe frictions set		Nos	01		
02	Mini weather station		Nos	01		
03	Free and forced vortices (Accessory)		Nos	01		
	As per attached specification					
	TOTAL					
	DISCOUNT					
	TOTAL(AFTER DISCOUNT)					
	VAT %					
	GRAND TOTAL					
(A)	OTHER DETAILS					
	(i) DELIVERY PERIOD	_				
	(ii) MAKE & MODEL	_	•••••			
	(iii) VALIDITY PERIOD	-	•••••			•••••
	(iv) WARRANTY PERIOD	-	•••••			
	(v) PAYMENT TERMS	-	CREDI	T		
	(vi) COUNTRY OF ORIGIN	-	•••••		•••••	•••••
	(vii) DISCOUNT IF ANY	-	•••••		•••••	
	(viii) ANY OTHER TAXES	-	•••••	•••••	• • • • • • • • • • • • • • • • • • • •	••••••
(B)	VAT DETAILS		IFICATE	Z / VAT	EXEMPTION	ENT REGISTRATION LETTER ISSUED BY TE TO BE ATTACHED
(C)	PLACE OF DELIVERY	KAND	JOHN I	KOTEL. STATE	AWALA DEFI	TO THE "GENERAL ENCE UNIVERSITY, A ALONG WITH THE NVOICE.
(D) Any queries / information with regard to this procurement / tender could be obtained from Officer Commanding Logistics Services office at General Sir John Kotelawala Defence University through e-mail ocls@kdu.ac.lk and by telephone number 0112622504 during working hours.						
NOTE: UNIT PRICE AND TOTAL PRICE ARE TO BE INDICATED CLEARLY IN THE TENDER, IF NOT QUOTATION WILL BE REJECTED.						
	SUPPLIER NAME	•••••	•••••	•••••		Company Seal
	ADDRESS	•••••	•••••	••••		F J ~ 300

(E) Bid Reference: KDU/PRO/CAP/230/2020



1. Pipe friction set

TECHNICAL SPECIFICATIONS

- 1) Friction Loss In Pipes Apparatus comprising set of 5 variable-sized PVC pipes manifolded and valved together.
- The set of pipes mounted on melamine backboard suitable for wall-mounting.
- 3) Water re-circulation system the equipment should be self-standing without any external water supply system.
- Pressure tappings at appropriate points and including pressurized water manometers.
- 5) Feed pipe at top with air vent and containing Series 2000 Rotameter 10 to 100 litres/mm, transparent venturi meter, annulus and orifice plate assembly.
- 6) Second and third pipes 25 and 12mm bore respectively each divided into smooth and artificially roughened sections.
- 7) Fourth pipe of small bore (8.5mm) containing in line strainer and ball and gate valves (12mm dia.).
- 8) Final pipe containing enlarged section, pitot static tube assembly, a series of four slow bends, a series of four elbows and an angled seat valve.
- 9) 3-year Warranty
- 10) After sales service Please Specify

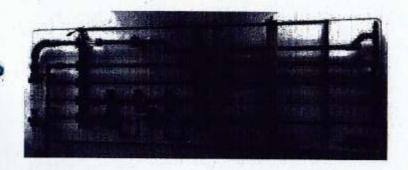


EXPERIMENTAL CAPABILITY

- Flow through smooth pipes of differing diameters under laminar and turbulent flow conditions with logarithmic plot of friction factor 'f' against Reynolds number (Stanton diagram).
- Flow through roughened pipes of different diameters under laminar and turbulent flow conditions with logarithmic plot of friction factor 'f' against Reynolds number (Nikuradse diagram).
- Investigations of the flow/pressure drop relationship for an annular pipe, using the concept of equivalent hydraulic diameter.
- .4) Investigation of pressure drops across various fittings enabling the results to be used to predict resistance coefficients or equivalent lengths.
- Investigation of various methods of flow measurement including variable area meter (Rotameter), Transparent Venturi Meter, Orifice Plate Meter and Pitot Static Tube.
- 6) Comparison of pressure drops across three different types of valve (i.e. ball valve, gate valve and seat valve) under different conditions of valve opening.

DIMENSIONS

Dimensions: 307 x 119 x 43cm



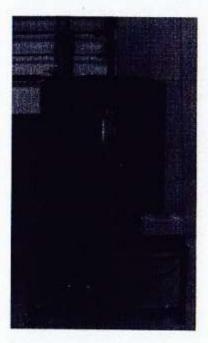


Fig. 5 Friction Loss In Pipes Apparatus

2. Mini weather station





TECHNICAL SPECIFICATIONS

- Unmanned weather acquisition system for meteorological data acquisition, storage, transmission and management operating as one unit.
- 2) User interface language of communication: English
- 3) Simultaneously monitor at least the following atmospheric and meteorological parameters: atmospheric temperature, atmospheric humidity, rainfall, wind speed, wind direction, barometric pressure, radiation, illumination in SI units.
- Real-time clock, timing storage of meteorological data, parameter setting, friendly interface and communication and display in English.
- 5) built-in high-capacity FLASH memory chip that can store more than one year meteorological data;
- 6) Wired communications and computer connection, GPRS wireless communication module to achieve meteorological equipment and computer monitoring center remote wireless connection.
- 7) At least 3 years warranty for the sensors and other parts
- 8) Please specify after sales service, item replaceability and item availability.
- 9) Specifications for METEOROLOGICAL PAPRAMETERS

Name	Measuring range	Resolution	Accuracy	
Wind speed sensor	0~45m/s	0.1m/s	±(0.3±0.03V)m/s	
Wind direction sensor	0~360°	1°	±3°	
Air temperature sensor	-50~+100°C	0.1℃	±0.5°C	
Air humidity sensor	0~100%RH	0.1%RH	±5%	
Soil temperature sensor	-50~+80°C	0.1℃	±0.5°C	
Soil moisture sensor	0-100%	0.1%	±3%	
Rain sensor	≤4mm/min	0.2mm	±4%	
Total radiation sensor	0.3~3μm	1W/m2	±5%	
Pressure sensor	10~1100hPa	0.1hpa	±0.3hPa	
Evaporation sensor	1000mm	0.1mm	±0.5%	

9) DATA LOGGER SPECIFICATIONS

- i. Weather proof
- ii. Compatible with most smart sensors
- Alarm output relay: Can be configured to be activated, deactivated or pulsed on userdefined sensor alarms.
- iv. Solar powered
- v. Rechargeable battery



vi. Rechargeable battery service life: 3-5 years

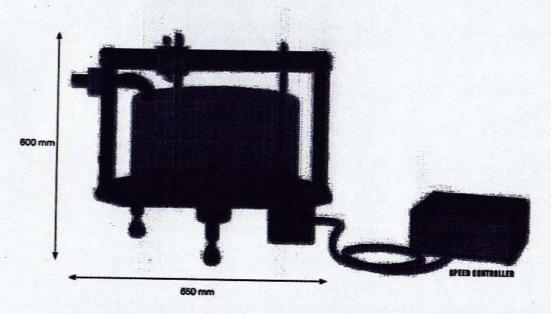
vii. Sensor network cable of 100 m or more

viii. At least 3-year warranty

ix. Specify after sales service terms

3. Free and forced Vortices

TECHNICAL SPECIFICATIONS



- TecQuipment or similar manufacturer- Should be compatible with the TecQuipment hydraulic Bench available
- A transparent, double-walled vessel that demonstrates the phenomena of free and forced vortices with measuring devices for calculating the water surface profile, mounted on a support frame
- 3. To produce a free vortex, a perforated transparent cylinder inside the main vessel, forming an annulus.
- 4. Equipped with speed controller to get variable speeds
- 5. traverse probe with scales calibrated in millimeters to measure water surface profile
- 6. Pitot tube with scales calibrated in millimeters to measure total head
- 7. Low-voltage variable-speed motor for safety
- 8. Five-year warranty
- 9. After sales service please specify
- 10. Water supply Up to 8 litres a minute
- 11. Electrical supply: 90 VAC to 250 VAC 50/60 Hz

In the capacity of -----

Seal (where applicable)

SPECIMEN FORM OF BID SECURITY

firmly	ce compa	ny) whos onto	e registered office i	s at	(her	nafter called "the Bidder") and We (name of bank or (hereinafter called "the Surety") are held and reinafter called the Authority") in the sum of e payment of which sum the Bidder and the Surety		
bind the	emselves Whereas	their succ s the auth	essors and assigns ority has invited th	jointly and seve e Tender and ot	rally by th her persor	ose presents. as to compete tenders in similar terms for the supply		
submit s called " honour	the same the Bid") certain ol	for the co in accor oligations	onsideration of the dance with such in	Authority, and t vitation, the Bo	he Bidder nd shall p	proposes to submit to the Authority a Bid (hereafter rovide security to the Authority that the Bidder will cordance with the following conditions.		
	(a)	That it s	hall remain in full f	Force and effect	until the e	arliest of		
					on date), the date stipulated by the Authority for the date above notified to the Authority by the Bidder and			
(ii) In the event of acceptance of the Tender by the Authority, the date upon when provides a performance security to the Authority in accordance with the terms of the comade between them, or								
	(b) Subject to this Bond being in full force and effect, the Surety shall pay the full amount specified in this Bond upon receipt of first written demand form the Authority stating that.							
	(i) The Bidder has withdrawn his Tender during the validity of this Bond, or							
	(ii) The Bidder has failed to provide a performance security to the Authority in accordance with the terms of the tender within 14 days from receipt of intimation of award of the Tender.							
	concerni	ng the Te				of forgiveness in or in respect of neither any matter bjection from the bidder shall in any way release the		
the Autl	hority sha	ıll return	s Bond shall not be the same to the Bid be governed by the	der.		rity and upon its ceasing to be in full force and effect		
	I exec	uted as a	deed on this () day of () 20 ()		
	For and	on behal	f of the Bidder			For and on behalf of the Surety		
		•				Signed by		
			`			In the capacity of		
	and by -					and by		

In the capacity of -----

Seal (where applicable)

DELIVERY SCHEDULE

(IT IS MANDATORY TO FILL THE FOLLOWING SCHEDULE BY THE BIDDER) TENDER NO: QTY :..... **DURATION** QTY EX STOCK QTY (WITHIN 01 WEEK) 01MONTH 02 MONTHS 03 MONTHS 04 MONTHS **TOTAL** NAME OF THE BIDDER : SIGNATURE OF BIDDER DATE :

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COMPANY SEAL