

Republic of the Philippines Department of Science and Technology PHILIPPINE TEXTILE RESEARCH INSTITUTE

General Santos Avenue, Bicutan, Taguig City, Metro Manila Tel Nos (632)837-2071 to 82 loc. 2360 to 2379 Telefax (632)837-1325 http://www.ptri.dost.gov.ph



INVITATION TO BID

1. The **PHILIPPINE TEXTILE RESEARCH INSTITUTE (PTRI)**, through the DOST-GIA and PCAARRD-GIA Projects intends to apply the sum of **EIGHT MILLION SEVEN HUNDRED THOUSAND PESOS (Php8,700,000.00)** being the total Approved Budget for the Contract (ABC) for payments of the following:

Item	Qty.	Particular	ABC	Source of Funds
1	1 Lot	Upscale Natural Dyeing Machine	Php2,000,000.00	DOST-GIA "Upscaling and
		(Fabricated)		Expanding the Production"
2	1 Unit	Tensile Strength Tester (Universal	5,200,200.00	PCAARRD-GIA
		Testing Machine)		"Characterization "
3	1 Lot	Enhancement of Textile Processing	1,500,000.00	DOST-GIA "Establishment of
		Facilities (Pilot Plant)		Innovation Center for Yarns"

Bids received in excess of any of the individual ABC shall be automatically rejected at the bid opening.

- 2. The PTRI now invites bids for the above equipment with <u>90 CALENDAR DAYS</u> delivery period. Bidders should have completed, within ten (10) years from the date and submission and receipt of bids, a contract similar to the Project as provided for in Section 23.5.1.3 (a) and (b) of the IRR of RA 9184. The description of an eligible bidder is contained in the Bidding Documents, particularly in Section II, Instruction to Bidders.
- 3. Bidding will be conducted through open competitive bidding procedures using non-discretionary "pass/fail" criterion as specified in the Revised Implementing Rules and Regulations (IRR) of Republic Act No. 9184 (RA 9184), otherwise known as the "Government Procurement Reform Act" (*Handbook on Phil .Government Procurement, 6th Edition, 2012*)

Bidding is restricted to Filipino citizens/sole proprietorship, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines.

- 4. Interested bidders may obtain further information from PTRI and inspect the Bidding Documents at the address given below from 8:00 a.m. to 5:00 p.m.
- A complete set of Bidding Documents in soft copy contained in a CD may be purchased by interested Bidders from the address below and upon payment of a **non-refundable fee** for the Bidding Documents in the amount of **0.1%** of the ABC.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that bidders shall pay the fee for the Bidding Documents not later that the submission of their bids.

- The PTRI will hold a Pre-Bid Conference on 19 August 2015, 9:00 a.m. (Item 1); 10:30 a.m. (Item 2) and 1:00 p.m. (Item 3), PTRI Training Room, PTRI Main Building, Gen. Santos Ave., Bicutan, Taguig City, which shall be open only to all interested parties who have purchased the Bidding Documents.
- Bids must be delivered to PTRI Training Room, PTRI Main Building, Gen. Santos Ave., Bicutan, Taguig City, on September 1, 2015 from 8:00 a.m. to 9:00 a.m. (Item 1), 9:30 a.m. to 10:30 a.m. (Item 2) and 12:00 p.m. to 1:00 p.m. (Item 3). All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 1.18 plus a Bid Securing Declaration.

Bids will be opened in the presence of the bidders' representatives who choose to attend at the address above. Late bids shall not be accepted.

- 8. Bids will be opened on 01 September 2015, 10:00 a.m. (Item 1), 11:00 a.m. (Item 2) and 1:30 p.m. (Item 3).
- 9. The PTRI reserves the right to accept or reject any bid, to annul the bidding process at any time prior to contract award, without thereby incurring any liability to the affected bidder or bidders.
- 10. For further information, please refer to:

Marilou G. Agustin Property, Procurement and General Services Section (PPGSS) Tel. No. (02) 827 2071 (loc. 2373) or Tel. / Fax No. (02) 837 0744 mgagustin@ptri.dost.gov.ph

Original Signed Engr. MAY S. RICO PTRI BAC Chairperson

Technical Specifications

1		Compliance
	UPSCALE NATURAL DYEING MACHINE (FABRICATED)	
	1.1 Yarn dyeing tank and accessories	
	a. 600 L volume rectangular stainless steel tank;	
	dimensions: (80cmx60cmx130cm), SS304, gauge 9 (4mm)	
	b. Gear assembly for yarn dyeing (stainless steel gears for	
	drive and gear train assembly) w/ speed reducer controls	
	c. Stainless steel tank cover (90cmx70cm); welded hinges,	
	SS304, gauge 9 (4mm) w/ attached pressure relief valve,	
	pressure gauge, temperature gauge	
	d. Locking mechanism - heavy duty latch type locking mechanism	
	e. Centrifugal pump - 1 - 1/2 hp, stainless steel impeller and body	
	for high temperature and pressure. For liquid recirculation.	
	f. Stainless steel rectangular basket, perforated w/ 3-5mm dia.	
	holes (50cmx110cmx75cm), SS304, 3mm thickness, welded hinges	
	for cover and latch lock with attached stainless steel side bar	
	handles.	
	g. Detachable stainless steel hank yarn dyeing assembly	
	(see attached diagram for details).	
	1.2 Dyeing and extraction machine and accessories	
	a. 300 L Volume cylindrical stainless steel tank, SS304, gauge 9	
	b. Stainless steel tank cover, SS304, gauge 10 w/ pivot arm	
	welded/screwed; counterweight	
	c. Locking mechanism - toggle hook/ pull action latch clamp	
	stainless steel	
	d. Dye extract viewing compartment - stainless steel w/ sight glass	
	rectangular - (36cmx31cmx31cm)	
	e. Centrifugal pump - 1-1/2 hp, stainless steel impeller and body	
	for high temperature and pressure.	
	f. Stainless steel basket - filter mesh SS304 mesh 30,	
	volume -230 L, latch type locking mechanism and SS support framing and handles	
	1.3 Winch type fabric dyeing machine (fabrication)	
	(see attached drawing with specifications)	
	1.4 Electric steam boiler (steam capacity - 150kg/hr; 3-50 kw;	
	max. pressure - 7 bar; steam temperature - 130°C-170°C)	
	1.5 Set-up and Control Mechanism	
	a. Control panel - power and motor pump controls, temperature	
	and pressure monitoring	
	b. Gauges and valves - temperature and pressure gauges, water	
	level gauges, stainless steel 304 - gate valves, ball valves, check	
	valves, pressure relief valves, steam trap valves	
	c. Pipes and fittings - all stainless steel pipes and fittings SS304;	
	water and solution pipes 1/2" - 1" ; drain pipes and recirculation	
	pipes 1- 1/2-2"	
	d. Stainless steel support/ footing for steel tank - c- bar; metal	
	platform (checkered plate) and step ladder	
	e. Electric chain hoist w/ moveable ball bearing trolley,	
	1/2 ton capacity w/ I-beam frame assembly	
	1.6 Additional Accessory	
	a. Electric metal chopper for dye plants (leaves,	
	barks, etc.) - fabricated	

r		
	Training on Basic Operation, Trouble Shooting and maintenance	
	Terms and Condition:	
	1 year warranty on materials and workmanship Delivery period: 90 calendar days	
	Delivery period. 30 calendar days	
2	Tensile Strength Tester	
	(Universal Testing Machine)	
	Capacity: up to 10 kN	
	Testing speed range: ≤ 0.001 to ≥ 1000 mm/min Data acquisition: ≥ 2.5 kHz	
	Crosshead speed accuracy (0 to constant load): $\leq \pm 0.1\%$	
	of set speed	
	Position measurement accuracy: $\leq \pm 2 \ \mu m$ or $\leq 0.1\%$	
	displacement	
	With ether net interface	
	Control Panel with live display	
	Vertical test space (height) ≥ 1250 mm With provision for quick attach/mount of load cells	
	Load Cells	
	Static Load Cell: 10kN with quick attach/mount feature	
	Static Load Cell: 1kN with quick attach/mount feature	
	Static Load Cell: 10N with quick attach/mount feature	
	Grips	
	Pneumatic grip, 10 kN capacity; Maximum specimen	
	thickness/opening ≥ 20 mm Four (4) pcs of compatible Jaw Faces; serrated or grooved;	
	25 mm wide x (\ge 30 but \le 50) high	
	Pneumatic grip; capacity 2kN; maximum specimen	
	thickness: ≥13 to ≤15 mm	
	Four (4) compatible rubber coated face; \geq 30 to \leq 38 mm	
	wide $x \ge 25$ to ≤ 30 mm high Four (4) compatible rubber coated face: ≥ 50 to ≤ 60 mm	
	Four (4) compatible rubber coated face; ≥ 50 to ≤ 60 mm wide x ≥ 25 to ≤ 30 mm high	
	Pneumatic Cord and Yarn and grip; Capacity 1kN;	
	maximum specimen diameter ≥ 3 mm or Spring loaded	
	grips with center stop for threads with compatible jaw	
	inserts (smooth) 10 mm high x 5 mm wide	
	Pneumatic grip; capacity 10N; with compatible jaw face (\geq 10 to < 12 mm wide x > 10 to < 12 mm bigb)	
	10 to \leq 12 mm wide x \geq 10 to \leq 12 mm high) Three (3) point flexure fixture/test kit; capacity \geq 5kN;	
	Maximum span/separation \ge 180 mm; minimum	
	span/separation ≤ 10 mm	
	Strain gauge extensioneter; ≥ 50 mm gauge length; ± 10%	
	maximum strain	
	With calibration certificates	
	With provision of table for the equipment	
	Power requirement: 220-240 V; 60 Hz Control unit for the pneumatic system Electric, foot-operated switch with all the required accessories (e.g. valves, air hoses etc.)	

	Air compressor
	With compatible equipment UPS
	Software
	Compatible software for data acquisition of
	tensile/compression and flexural tests; in English
	Language; compatible to Windows 7 OS or latest
	Interface
	Branded desktop computer, Compatible Operating System;
	Intel core i5 or better; at least 2GB of memory; at least
	250GB HD; with Multi DVD writer; Standard keyboard and
	mouse; 3 in 1 printer; LCD or LED monitor
	With provision of table for the desktop computer with
	adjustable chair
	With compatible UPS
	Air conditioning unit (2.5 hp; inverter type; with installation)
	Warranty and Installation
	Installation and Initial operation c/o service engineer
	Training on use, application and maintenance of
	equipment after installation
	Provision of off-shore training (factory site) for two (2) on
	basic material science, testing and equipment
	troubleshooting within one year after installation
	Full on-site technical support
	Warranty of at least 1 year on parts and services against
	defects, at least 3 years free preventive maintenance
	and
	calibration with test certificate
3	Enhancement of Textile Processing Facilities (Pilot Plant)
	SCOPE OF WORK:
	A.) Painting of exterior walls
	B.) Repair of windows and replacement of broken glasses
	C.) Repair and Painting of Roofing
	D.) Landscaping Works
	E.) Provision of Signage's