

**Scheme of Fund for Regeneration of Traditional Industries
(SFURTI-COIR BOARD)**
(Ministry of Micro, Small and Medium Enterprises, Govt. of India Project)

**APITCO Limited, Hyderabad
(Implementing Agency for Vizianagaram Coir Cluster)**

RE-TENDER NOTICE

No. SFURTI/Re-Tender/VCC/2020

Date: 25th January 2020

The sealed tenders are invited from the reputed machinery manufacturers/fabricators involved in manufacturing/repairing/maintenance of Rubberized Coir Processing Machinery for Supply, Erection, Assembly and Testing of Rubberized Coir Mattress Manufacturing Unit at the Common Facility Center of Vizianagaram Coir Cluster, Gumpam village. The bidders are advised to visit project site and discuss with the Implementing Agency, APITCO Ltd/Special Purpose Vehicle (Vizianagaram Coir Cluster) of the project to understand scope of the work. The bidder may verify existing components to understand present status and requirements of fabrication work to supply full-fledged Rubberized Coir Mattress Manufacturing unit. The approximate value of work is around Rs 127 lakhs (Inclusive of GST) apart from value of components available at project site. The bidders are requested to submit Technical and Financial Bids for undertaking above mentioned works.

The tender specifications will be issued by hand on working days from **25-01- 2020 to 14-02-2020** between 11:00 Hrs. and 17:00 Hrs at **1-34, Gumpam (V), Pusapatirega (M), Vizianagaram District, Andhra Pradesh. Contact for information: 7981464780/9849398589**

Date of Publishing Tender	25 th January 2020
Pre-Bid meeting	4 th February 2020 at 11.00 AM at # 1-34, Gumpam (V), Pusapatirega (M), Vizianagaram District, Andhra Pradesh.
Last date for submission of Tenders	14 th February 2020 up to 1.30 PM
Opening of Tenders	14 th February 2020 at 3.00 PM at # 1-34, Gumpam (V), Pusapatirega (M), Vizianagaram District, Andhra Pradesh.

**Managing Director
APITCO Limited
Hyderabad**

RE - TENDER DOCUMENT

Details of Fabrication, Installation and Testing of Coir Mattress Manufacturing Unit for the Common Facility Center at 1-34, Gampam (V) of Vizianagaram Coir Cluster

S. No.	Description	Qty.
1	<p>RUBBERISED COIR FLEECE MANUFACTURING LINE</p> <p>The plant should be capable of producing in continuous process, endless fleece of maximum width 2.3 meters.</p> <p>The Rubberised Coir Sheet Forming Plant should consists of</p> <p>A. Feeding Section B. Web Forming Section: C. Spray Station: D. Drying Section: They are detailed below</p> <p>Feeding Section</p> <p>Fibre feed system should consist of specially designed feed conveyor with fibre opener picker drum and pneumatic fibre conveyor system. This section is used for further loosening and pickering of the fibre and feeding into the web former.</p> <p>Web Forming Section</p> <p>The Web Forming Section should have a Vaned Fibre Distributor, Layering Drum and Twin Conveyors. The high-speed layering drums should ensure uniform web density and vertical orientation of fibre. The feed to the layering drum is to be regulated by separate variable speed controlled feed system designed to achieve the required uniform web density and vertical orientation of fibre.</p> <p>Spray Station</p> <p>There should be two Spray Stations delivering atomised compounded latex through a pair of banks of Latex Spray Guns. The guns should provide fine coating of atomized latex to the coir web, whereby the binding of the coir web is ensured. The Latex Spray Guns should be easy to detach, maintain and</p>	1 No.

S. No.	Description	Qty.
	<p>reconnect and are designed sturdy.</p> <p>The first spray station should be located just before the fleece enters the Drying Section. The second Spray Station should be located after the first pass of the slat conveyor and just before entering the Drying Section for the second pass.</p> <p>Drying Section:</p> <p>The Dryer Section should remove excess moisture in the latex. The Drying Section should have a three-pass slat conveyor system with synchronized common drive. The hot air delivery and distribution system should be designed to ensure uniform distribution of hot air over the entire fleece. All external panels, both fixed and hinged, are to be double-walled and insulated with high-grade imported resin bonded glass wool.</p> <p>The thermic fluid heated hot air generator with in-line heat exchanger and blower. The hot air distribution should be staggered for maximum delivery at the first and second pass of the slat conveyor</p> <p>Calendaring of the fleece is to be done at the end of the second pass.</p> <p>Cutting Section:</p> <p>A trolley mounted motorized circular cutter should cut the fleece to the desired length. It should have independent control and safety guard, handle etc. This is to be designed to cut the fleece without interrupting the production.</p> <p>Capacity: 500 kg Rubberised Coir Fleece per hour.</p> <p>Total power required : 60 hp approximately.</p>	
2	<p>PRE-LAMINATION SPRAY SYSTEM</p> <p>This Spray system is introduced to avoid a separate Spray Cabin. The in-line spray station provides a light coat of latex for binding the laminations before pressing. The diluted latex is delivered from a separate pressure tank. The Pre-lamination Spray is</p>	1 No

S. No.	Description	Qty.
	to be mounted on a Slat conveyor just before cutting section. Power required: 3 hp	
3	DRUM PRESS The Drum Press should consist of a positively driven feeding conveyor, large diameter drum rollers, and a holding roller table. The drum design should ensure the fleece orientation does not dislocate or collapse while pressed. The drum and feed roll conveyor should have separate geared drives. Power required: 2.5 hp	1 No
4	ELECTRONIC WEIGHING TABLE The dry fleece exiting the dryer is measured in length, cut across and stacked on the electronic weighing table. The stacked fleece is then weighed to pre-determined weights before lamination. The weights, time, date and batch are monitored and recorded. The production from the RCP is recorded electronically at this point.	1 No
5	HYDRAULIC MAT PRESS Up stroke gravity return Hydraulic Hot Mat Press for pressing rubberised coir mattress using heated Thermic Fluid Specific pressure 0.5 kg/cm ² Size of platen (solid) 108" x 98" Thickness of platen 40MM +/- 1mm No. of heating platen Nine No. of daylight Eight No. of ram Four Dia of ram 100mm (minimum) Stroke of ram 1800mm Distance between platens 300 mm for first two and remaining 250 mm Closing time 20-30 seconds Way of operation Manual/automatic System of heating Thermic Fluid Power Required 10 hp	1 No
6	BAND SAW CUTTING MACHINE	2 Nos

S. No.	Description	Qty.
	<p>The four-wheeled Cutting Machine should consist of a C-shaped multilayer frame, moving tables, endless band saws, sharpening devices, tensioning devices, etc.</p> <p>Power required: 2 hp.</p>	
7	<p>DE-AMMONIATING STIRRER & MIXING TANKS</p> <p>The Latex Stirrer will have 2 hp motor and reduction gear common drive to all the 4 agitators. The whole equipment will be mounted on heavy duty frame work with suspended stirrer shaft and blades. There will be 4 Latex tanks (i.e., 1 SS & 3 MS) of 200 litre capacity placed on individual trolleys. The tanks will have epoxy coating inside and enamel paint outside.</p>	1 No
8	<p>DUST EXTRACTION SYSTEM</p> <p>Dust rising from the Untwisting Section volumetric chambers and the layering drums are sucked out to the dust extraction system. All necessary suction blowers and dusts dust catchers etc. are included</p> <p>Power required: 20 hp.</p>	1 No
9	<p>AIR COMPRESSOR</p> <p>One single stage, rotary screw element complete with:</p> <p>Dry paper type suction air filter with silencer. Conveniently located for easy replacement of filter element. Unloader with Integrated regulating valve for load/unload control system. Simple design with only one moving part needs no regular adjustments. Three-way solenoid valve required for load/unload regulation of the compressor. Air/Oil temperature switch/gauge.</p> <p>Air oil temperature at element outlet and to shut down the compressor in case of too high element outlet air temperature.</p> <p>Air check valve at the element discharge end. Air oil receiver tank consisting of: Sight glass for oil level indication and oil filling arrangement. Minimum pressure valve to close off the compressor from the air net when the unit is stopped or running unloaded</p>	1 No

S. No.	Description	Qty.
	<p>and to maintain required air pressure in the system for proper oil lubrication. Safety valve. Gauge for air oil receiver pressure. Oil draining arrangement. Three stage air oil separation system. First by cyclonic action (Centrifugal), second by gravitational (heavier particles separate down), Third by passing through coalescent filter. Air & Oil cooler assembly – Air & oil cooler are compact block coolers of Aluminum for optimum heat transfer. Lower pressure drop and lower weight. After cooler reduces the temperature at outlet air to approximately 8 to 10o C above ambient temperature. Oil filter mounted on air oil cooler for filtration of lubricating oil. Thermostatic valve to regulate oil temperature within the system.</p> <p>Power required: 20 hp.</p>	
10	<p>CHIMNEY & FLUE DUCT Standard Chimney of appropriate Diameter to maintain steady up-draft of flue gases, ladder, as per IS standards Power required : 7.5 hp</p>	1 No
11	<p>UTILITY PIPELINES Standard utility pipelines for Thermic Fluid, Compressed Air for delivery at various tapping points in the plant. Pipeline for Thermic fluid include provision for booster pump to maintain dual temperature for various equipment including solenoid valves, normal valves and globe valves, where ever necessary. A receiver tank, moisture controller are required Thermic fluids, insulation of pipe lines, OHT are also included</p>	One set
12	<p>MATERIAL HANDLING EQUIPMENTS Various material handling equipments to move raw materials, semi-finished goods and finished goods like trolleys, barrel movers etc. Trolleys : 4 Nos (8' x 9') Barrel movers : 1 Nos etc.</p>	One set
13	<p>WEIGHING EQUIPMENTS Weighing Equipments like platform scales at various point of production and packing for dispatch</p>	One set

S. No.	Description	Qty.
	Plat form weighing balance – 1No (8’ x 8’) each, 100 Kg capacity 100 Kg capacity weight balance (Small size) – 2 Nos	
14	HAND TOOLS Hand tools for routine maintenance, minor repairs and in-house fabrications like welding set, angle grinders, Hand drilling machines etc. Platform drilling machine upto 3/4th inch with motor – 1No Angel Grinding Machine – 4” – 1No Welding Machine – 20amps with cables and accessories Hand Tools including all set of spanners, hammer, screwdriver, box of wrenches, cutting players, tester, etc	One set
15	ELECTRIFICATION Which covers main panel board to individual machinery panels, then to each motor including electrical wiring etc.	One Set
16	Thermic Oil – 10 Barrels	10 Barrels

TERMS & CONDITIONS

1. PRICES:

Price should be inclusive of all taxes and duties if any, freight and insurance etc., shall be clearly mentioned.

2. LOSS OR DAMAGES:

External damages or shortages that are prima-facie result of rough handling in transit and due to defective packing should be replaced by you at your own cost

3. PAYMENT:

50% on receipt of goods in good condition

30% on completion of Erection work

20% on successful operation of the entire Plant

Payment for will be made by cheques on the branches of Bank of Baroda, Pusapatirega Branch.

4. BANK GUARANTEE:

The Vendor has to submit in advance a **Bank Guarantee** to the extent of 5% of the contract price covering a period of 12 months

5. ACCEPTANCE

It is not binding on the purchaser to accept the lowest or any tender. The purchase committee also reserves the right to accept or reject any particular tender without assigning any reasons there for.

6. LEAFLETS AND DESCRIPTIVE LITERATURE

Full descriptive particular and working drawings of the materials offered should accompany the tender. Information regarding the country of manufactures of original of materials used in the manufacture of the articles should be furnished.

7. DELIVERY

The period of delivery of destination including commencement, date of delivery and completion shall be within one month from the date of receipt of purchase order.

8. TEST

Manufacturer's test certificates for routine tests specified in the I.S. Specification No. should be forwarded in duplicate. The materials will be rejected if the tests are not satisfactory.

9. PENALTY

In case of delay in completion of the work, the purchaser may impose a penalty of 2% of value or take support of other vendors to complete. The same amount is to be deducted from the amount payable.

10. BID SECURITY

An amount of **Rs.50,000/-** towards Bid security must be paid in way of demand draft from any Nationalized Bank in favour of **The Managing Director, APITCO Limited payable at Hyderabad** should be enclosed with the quotation. Quotations will not be considered unless this deposit is paid. The tender covers without bid security payment superscription will be returned unopened. The Demand Draft for bid security shall be dated after the date of enquiry only. The manufacturer registered as SSI Units with industries department Government of Andhra Pradesh for the item to which they submit tender are exempted from payment of bid security. They should enclose copies of valid SSI registrations along with the tenders.

11. OTHERS

Telegraphic/email quotations will not be entertained under any circumstances. Clarifications, amplifications and / or any other correspondence from tenderer subsequent opening of tender will not be entertained. The tenderers are advised ensure that their tenders are sent in complete shape at the first instance itself.

12. GUARANTEE

The materials should be guaranteed by the tenderer for a period of 12 months from the date of utilization or 18 months from the date of receipt of materials whichever is earlier.

TECHNICAL BID

1. Name of the Tenderer :

- 1.1 Full address with PIN Code :
- 1.2 Telephone Nos. :
- 1.3 Email ID :
- 1.4 Fax Nos. :
- 1.5 Contact Person(s) :

2. Company particulars

- 2.1 Constitution/Company profile:
- 2.2 If the Company is Proprietary/Partnership:
give the name and address of Proprietor/
Partners/Directors.
- 2.3 The State in which the Company is registered:
- 2.4 Company Registration No. :
- 2.5 Name & address of the Bankers:
- 2.6 No. of years in business:
- 2.7 ISO Certification No. :
- 2.8 MSME acknowledgement No. and date:
- 2.9 NSIC Registration:
- 2.10 Register with any other organization:
- 2.11 No. of employees:
- 2.12 Details of infrastructure available:
(attach a separate sheet)

3. Financial Data:

- 3.1 Sales turnover for the last three years:
- 3.2 Profit after tax for the last three years:
(audited statement)
- 3.3 Permanent Income Tax Account No. :
- 3.4 VAT Registration No. :
- 3.5 TIN :
- 3.6 Service Tax Registration No. :
- 3.7 Whether EMD has been furnished as
prescribed. If so details. :
- 3.8 Number of years in business. :
- 3.9 Experience in execution of similar work (Enclose details)

Name

Date

Signature
Designation (Authorized Signatory)
Seal

Note: All requisite information shall be given in the format with reference to the item specified. Where space is insufficient, additional pages may be added

FINANCIAL BID

S. No.	Description	Qty.	Price
1	<p>RUBBERISED COIR FLEECE MANUFACTURING LINE</p> <p>The plant should be capable of producing in continuous process, endless fleece of maximum width 2.3 meters.</p> <p>The Rubberized Coir Sheet Forming Plant should consists of</p> <p>A. Feeding Section B. Web Forming Section C. Spray Station: D. Drying Section:</p> <p>They are detailed below</p> <p>Feeding Section</p> <p>Fibre feed system should consist of specially designed feed conveyor with fibre opener picker drum and pneumatic fibre conveyor system. This section is used for further loosening and pickering of the fibre and feeding into the web former.</p> <p>Web Forming Section</p> <p>The Web Forming Section should have a Vaned Fibre Distributor, Layering Drum and Twin Conveyors. The high-speed layering drums should ensure uniform web density and vertical orientation of fibre. The feed to the layering drum is to be regulated by separate variable speed controlled feed system designed to achieve the required uniform web density and vertical orientation of fibre.</p> <p>Spray Station</p> <p>There should be two Spray Stations delivering atomized compounded latex through a pair of banks of Latex Spray Guns. The guns should provide fine coating of atomized latex to the coir web, whereby the binding of the coir web is ensured. The Latex Spray Guns should be easy to detach, maintain and reconnect and are designed sturdy.</p> <p>The first spray station should be located just before the fleece enters the Drying Section. The second</p>	1 No.	

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	<p>Spray Station should be located after the first pass of the slat conveyor and just before entering the Drying Section for the second pass.</p> <p>Drying Section:</p> <p>The Dryer Section should remove excess moisture in the latex. The Drying Section should have a three-pass slat conveyor system with synchronized common drive. The hot air delivery and distribution system should be designed to ensure uniform distribution of hot air over the entire fleece. All external panels, both fixed and hinged, are to be double-walled and insulated with high-grade imported resin bonded glass wool.</p> <p>The thermic fluid heated hot air generator with in-line heat exchanger and blower. The hot air distribution should be staggered for maximum delivery at the first and second pass of the slat conveyor</p> <p>Calendering of the fleece is to be done at the end of the second pass.</p> <p>Cutting Section:</p> <p>A trolley mounted motorized circular cutter should cut the fleece to the desired length. It should have independent control and safety guard, handle etc. This is to be designed to cut the fleece without interrupting the production.</p> <p>Capacity: 500 kg Rubberised Coir Fleece per hour.</p> <p>Total power required : 60 hp approximately.</p>		
2	<p>PRE-LAMINATION SPRAY SYSTEM</p> <p>This Spray system is introduced to avoid a separate Spray Cabin. The in-line spray station provides a light coat of latex for binding the laminations before pressing. The diluted latex is delivered from a separate pressure tank. The Pre-lamination Spray is to be mounted on a Slat conveyor just before cutting section.</p>	1 No	

S. No.	Description	Qty.	Price
	Power required: 3 hp		
3	<p>DRUM PRESS</p> <p>The Drum Press should consist of a positively driven feeding conveyor, large diameter drum rollers, and a holding roller table. The drum design should ensure the fleece orientation does not dislocate or collapse while pressed. The drum and feed roll conveyor should have separate geared drives.</p> <p>Power required: 2.5 hp</p>	1 No	
4	<p>ELECTRONIC WEIGHING TABLE</p> <p>The dry fleece exiting the dryer is measured in length, cut across and stacked on the electronic weighing table. The stacked fleece is then weighed to pre-determined weights before lamination. The weights, time, date and batch are monitored and recorded. The production from the RCP is recorded electronically at this point.</p>	1 No	
5	<p>HYDRAULIC MAT PRESS</p> <p>Up stroke gravity return Hydraulic Hot Mat Press for pressing rubberised coir mattress using heated Thermic Fluid</p> <p>Specific pressure 0.5 kg/cm²</p> <p>Size of platen (solid) 108" x 98"</p> <p>Thickness of platen 40MM +/- 1mm</p> <p>No. of heating platen Nine</p> <p>No. of daylight Eight</p> <p>No. of ram Four</p> <p>Dia of ram 100mm (minimum)</p> <p>Stroke of ram 1800mm</p> <p>Distance between platens 300 mm for first two and remaining 250 mm</p> <p>Closing time 20-30 seconds</p> <p>Way of operation Manual/automatic</p> <p>System of heating Thermic Fluid</p> <p>Power Required 10 hp</p>	1 No	
6	<p>BAND SAW CUTTING MACHINE</p> <p>The four-wheeled Cutting Machine should consist of</p>	2 Nos	

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	a C-shaped multilayer frame, moving tables, endless band saws, sharpening devices, tensioning devices, etc. Power required: 2 hp.		
7	DE-AMMONIATING STIRRER & MIXING TANKS The Latex Stirrer will have 2 hp motor and reduction gear common drive to all the 4 agitators. The whole equipment will be mounted on heavy duty frame work with suspended stirrer shaft and blades. There will be 4 Latex tanks (i.e., 1 SS & 3 MS) of 200 litre capacity placed on individual trolleys. The tanks will have epoxy coating inside and enamel paint outside.	1 No	
8	DUST EXTRACTION SYSTEM Dust rising from the Untwisting Section volumetric chambers and the layering drums are sucked out to the dust extraction system. All necessary suction blowers and dusts dust catchers etc. are included Power required: 20 hp.	1 No	
9	AIR COMPRESSOR One single stage, rotary screw element complete with: Dry paper type suction air filter with silencer. Conveniently located for easy replacement of filter element. Unloader with Integrated regulating valve for load/unload control system. Simple design with only one moving part needs no regular adjustments. Three-way solenoid valve required for load/unload regulation of the compressor. Air/Oil temperature switch/gauge. Air oil temperature at element outlet and to shut down the compressor in case of too high element outlet air temperature. Air check valve at the element discharge end. Air oil receiver tank consisting of: Sight glass for oil level indication and oil filling arrangement. Minimum pressure valve to close off the compressor from the air net when the unit is stopped or running unloaded and to maintain	1 No	

S. No.	Description	Qty.	Price
	<p>required air pressure in the system for proper oil lubrication. Safety valve. Gauge for air oil receiver pressure. Oil draining arrangement. Three stage air oil separation system. First by cyclonic action (Centrifugal), second by gravitational (heavier particles separate down), Third by passing through coalescent filter. Air & Oil cooler assembly – Air & oil cooler are compact block coolers of Aluminium for optimum heat transfer. Lower pressure drop and lower weight. After cooler reduces the temperature at outlet air to approximately 8 to 10o C above ambient temperature. Oil filter mounted on air oil cooler for filtration of lubricating oil. Thermostatic valve to regulate oil temperature within the system.</p> <p>Power required: 20 hp.</p>		
10	<p>CHIMNEY & FLUE DUCT Standard Chimney of appropriate Diameter to maintain steady up-draft of flue gases, ladder, as per IS standards Power required : 7.5 hp</p>	1 No	
11	<p>UTILITY PIPELINES Standard utility pipelines for Thermic Fluid, Compressed Air for delivery at various tapping points in the plant. Pipeline for thermic fluid include provision for booster pump to maintain dual temperature for various equipment including solenoid valves, normal valves and globe valves, where ever necessary. A receiver tank, moisture controller are required thermic fluids, insulation of pipe lines, OHT are also included</p>	One set	
12	<p>MATERIAL HANDLING EQUIPMENTS Various material handling equipments to move raw materials, semi-finished goods and finished goods like trolleys, barrel movers etc. Trolleys : 4 Nos (8’ x 9’) Barrel movers : 1 Nos etc.</p>	One set	
13	<p>WEIGHING EQUIPMENTS Weighing Equipments like platform scales at</p>	One set	

S. No.	Description	Qty.	Price
	various point of production and packing for dispatch Plat form weighing balance – 1No (8’ x 8’) each, 100 Kg capacity 100 Kg capacity weight balance (Small size) – 2 Nos		
14	HAND TOOLS Hand tools for routine maintenance, minor repairs and in-house fabrications like welding set, angle grinders, Hand drilling machines etc. Platform drilling machine upto 3/4th inch with motor – 1No Angel Grinding Machine – 4” – 1No Welding Machine – 20amps with cables and accessories Hand Tools including all set of spanners, hammer, screwdriver, box of wrenches, cutting players, tester, etc	One set	
15	ELECTRIFICATION Which covers main panel board to individual machinery panels, then to each motor including electrical wiring etc.	One Set	
16	Thermic Oil – 10 Barrels	10 Barrels	

Name

Date

Signature
Designation (Authorized Signatory)
Seal