

## TERMS OF SUPPLY

- 1) **GENERAL-** Bamboo & Cane Development Institute (BCDI) was set up at Agartala by Development Commissioner (Handicrafts) with an objective to improve the production techniques, provide common facility services & develop proper techniques for treatment & preservation of Cane & Bamboo Handicraft items by using suitable chemical & lacquer to protect them from insects, fungus and to disseminate this techniques to the various pockets of these craft by giving practical demonstration. NCDPD has been entrusted with the responsibility of Running & Management of Bamboo & Cane Development Institute (BCDI), Agartala.

The NCDPD proposes to acquire Cane processing and product development machines as per the requirement of Bamboo Technology Centre (BTC), BCDI, Agartala. The location will be the campus of the BCDI, Agartala. The Purpose of the BTC is to provide common facility services to the artisans / craft persons, manufacturers / exporters with an objective to upgrade the level and technology and production of quality products. This quotation calls for the offer, supply, installation, commissioning, warranty and services of machines.

- 2) **DESIGN AND MANUFACTURE-** Offers are invited from reputed manufacturers/ suppliers in India or International of the listed machines with proven experience in the design, manufacture and supply of similar or equivalent machines for the processing of bamboo into products. (List of machines as appended.)
- 3) **SUPPLY-** Supply includes design, manufacture, transport, unloading, installation, commissioning, successful trial productions and training of operators. Machines should be offered complete in all respects including two sets of toolings.
- 4) **WARRANTY-** Machines supplied are to be warrantied for a period of 12 months from date of commissioning. Warranty includes replacement of any parts or entire machine, if found to be substandard or with manufacturing defects or not meeting performance guarantee criteria..
- 5) **PERFORMANCE GUARANTEE -** Machine must be proved to perform at the rated capacity at the time of commissioning of the equipments. Machines must perform to the rated capacity for the entire period of the warranty.
- 6) **PRICE** – Offered prices to include-
  - a) Cost of machine.
  - b) Duties and taxes, if any, as applicable.
  - c) Transport, loading, unloading and all related costs.
  - d) Installation and commissioning charges.
  - e) Training charges.
  - f) Tools to be supplied with each machine as specified.
  - g) Any miscellaneous charges including electric cabling, etc.

- Note - 1) the NCDPD will only provide suitable electric power outlet near the proposed location of the equipment.
- 2) Prices to be quoted for each individual machine giving separately the costs for each item 'a' to 'g'.
  - 3) Alternatively a supplier of all machines may offer on total turnkey basis including supply, transport, installation, commissioning and training.
  - 4) For imported equipments, the NCDPD will make efforts to obtain concessional or duty free import. Import duties if any will be payable by the purchaser, all other charges to be considered by the supplier to be to the suppliers account.
  - 5) Offers without detailed machine specifications and catalogues may not be considered.
- 7) **PAYMENT** - Terms for payment are as detailed.
- I. 10% on release of purchase order.
  - II. 60% on receipt of machines at site.
  - III. 20% on successful installation and performance evaluation.
  - IV. 10% on completion of the warranty period.
- 8) **EVALUATION** - Evaluation of the offers will be on technical and commercial basis considering all conditions and terms of the bids in compliance with points 1 to 7 detailed above. Prospective suppliers to provide reference list of existing installations along with letter of satisfactory performance & operation.
- 9) **RIGHTS** - The NCDPD reserves the right to -
- a) Purchase any or all the machines as listed.
  - b) To accept or reject any offer based on technical/commercial evaluation.
- 10) Last date for receipt of bid documents is 27/01/2012 (3.00 P.M.) at NCDPD, 43, Okhla Industrial Estate, Phase-III, New Delhi-110020.

LIST OF MACHINES-

Sl. No.	Description	Quantity
1	Sliding table panel saw with double roller carriage	1
2	Wide belt sander with accessories	1
3	Single spindle shaper	1
4	Jig saw	1
5	Bamboo stick polishing machine-8"	1
6	Single side glue spreader	1
7	Spray booth chamber	1
8	Hollow chisel mortise	1
9	High speed router	1
10	Cane straightening machine	1
11	Cane turning machine	1
12	Cane steaming machine	1
13	Electric arc welding machine	1
14	Portable dust extractor	4

SPECIFICATIONS OF PROPOSED MACHINES

## 1. Sliding table panel saw with double roller carriage

### SPECIFICATION:

Sliding Table Length	- 1600mm
Cutting Width to Rip Fence	- 1000mm(Manual Adjustment)
Cross Cut- Mitre Fence,	- Manual Adjustment Stops to 1600mm
Drive Rating And Rotational Speed	- Main Saw Blade
Main Motor-	- 4,00 kw(0.5HP) 380V-440V,50Z, 4200rpm
Scoring Unit	- With 0.37kw (0.5HP) Drive motor 8200rpm, 380-440V - Manual rise/fall and lateral adjustment - Manual rise/fall and tilt adjustment for the main saw blade 0-45°
Saw blade	- Dia Max.315mm,
Protection hood	- with extraction socket and boom
Table Extension	- 720MM - 2 Riving Knives(1XFor Concealed Cut) - Including 2 sets of saw blades

## 2. Wide belt sander with accessories

## SPECIFICATIONS

Single combination head with

Roller for calibration

- Belt cutting speed 18 m/s

Main motor with 1 speed of rotation

- 15kw

Pneumatic pad for fine sanding

- Useful working width 20mm

- Sanding belt oscillation system with electronic photocell

- complete with safety micro switches and

battery backup to stop the machine in case of power

failure/ belt breakage/mis tracking

Working thickness

- 3mm to 160mm

Belt feed speed

- 4 to 25 m/s

- with sanding belt tensioning unit, electronic oscillation,

dust hoods, safety systems

- including 10 sanding belts

### 3. Single spindle shaper

## SPECIFICATIONS

Spindle Speed	- 3000/4500/7500/10000rpm.
Spindle Motor	- 5HP 3Φ
Spindle Travel	- 130mm(5")
Tilting Angle	- 5°~90°~+45°
Table Size	- 700X900mm(27-1/2"X35-1/2")
Sliding Table Size	- 900X230mm(35-1/2"X9")
Sliding Table Travel	- 830mm(32-1/2")
Fence Size	-125X900mm (4-15/16"X35-1/2")
	- including 2 sets of tools

## 4 Jig saw

### Specification:

Machine Throat Depth	- 700 mm
maximum cutting thickness	- 150mm
	- Mortised movement of the saw blade
	complete with motor and drive
	- including 10 saw blades

## 5 Bamboo stick polishing machine-8"

### Specification:

Capacity	- 100kg/load (with 3 compartment)
Power rating	- 2 HP motor
Power Supply	- 3 Phase 415 Volts 50 Hz Ac supply - complete with accessories

## 6 Single side glue spreader

### Specification:

Suitable for one side glue application on strips of bamboo, cane or solid wood

working width	- max.300mm
Working thickness	- min. 1.0mm max. 30mm
Roller type	- with motorised feed Doctor roller for adjusting amount of glue application - complete with infeed and outfeed roller tables

## 7 Spray booth chamber

### Specification:

Type	- Water Curtain
Effective Size	- 8 feet width X4 feet depth X8 feet height
Extraction System	- Two numbers of centrifugal blowers each with 2HP electrical motors having capacity of 5000m <sup>3</sup> / hr@ 40mm Head with MS housing and epoxy paint all over.
Water Circulation System-	Suitable centrifugal pump with 2.0 HP capacity
Flow capacity	- 10000 LPH with 12 meter head Spray nozzles with baffle system Water gutter with G.I. material.(optional as SS 304 material) Baffle with G.I. materail (Optional as SS 304 material) G.I. Demister pads. SS ball valve for the pipe line with non return valve 4'close type grill
Booth Housing	- G.I.Material
Bottom Water Tank	- G.I.Material (Optional as SS 304 material)
Electrical fittings	- Electricl starters for all the motors, required internal wiring etc."
Vibration mounts	- For all the base legs

## 8 Hollow chiesel mortiser

### Specification:

Chiesel Range	- 1/4"~1"
Table	- 14"X27-1/2"
Table Cross Traverse	- 5"
Table Longitudinal traverse	-18"
Table Vertical Traverse	-12"
Head Drive	- Hydraulic
Clamp Drive	- Hydraulic
Chuck Capacity	-1-1/8"
Spindle Speed	- 3400RPM
Max.Stock width	- 12"
Max.Mortising Depth	- 4"
Head Motor	- 2HP
Hydraulic Pump Motor	- 2HP

-including 10 hollow chisels of various sizes

## 9 High speed router

### Specification:

Chuck to table top maximum- 7"(178mm)

Throat Depth-25-1/2"(650mm)

Drive Motor -2HP

Table Size-20"X30"

Table Tilt -45°

Spindle Speeds - 10000/20000 r.p.m(2Speeds)

Collet Size -6/9/12mm

Machine Size-61"X31"X62"

including 3 collets and 5 router bits of various sizes

## 10 Cane straightening machine

### Specification:

Maximum Dia- 35mm $\Phi$ thickness

Operating Temp- 300° C maximum

Power Rating- 3HP

Power Supply- 3phase, 415volts, 50Hz Ac Supply

Including 2 sets of tools

## 11 Cane turning machine

### Specification:

Maximum Dia- 35mm dia thickness

Power rating- 3HP

Power Supply- 3phase, 415volts, 50Hz Ac Supply

Including 2 sets of tools

## 12 Cane steaming machine

### Specification:

Maximum Temp- 80° C maximum

No of canes- 25 canes/batch

Power Rating- 4.5kw/ Gas fired

Power Supply- 3phase, 415volts, 50Hz Ac Supply

## 13 Electric arc welding machine

### Specification:

Capacity - 300 amps complete with

Power cable and plug -10meters

Welding cable - 10meters

Welding cable - 10meters

Welding rod holder Operator shield

including 1 box of electrodes

## 14 Portable dust extractor

### Specification:

Motor - 3 HP

Impeller Dia. - 13 1/2"

Air Flow - 1862CFM

Drum Dia - 500CM

Inlet Dia.(inch) - 6"X1,4"X3

Sound Rating(DB)- 0-90

Bag Volume(CUFT) - 11 - single bag

Including flexible hose – 3mtrs length