

#### BHARAT HEAVY ELECTRICALS LTD. HARIDWAR

## TECHNICAL SPECIFICATIONS

FOR PROCUREMENT OF

MODULAR & STANDLONE OFFICE

FURNITURE AND STORAGES ETC.

1<sup>st</sup>, 3<sup>rd</sup> & 4 <sup>th</sup> Floor

# Annexure - 1 TECHNICAL SPECIFICATIONS FOR PROCUREMENT OF MODULAR & STANDLONE OFFICE FURNITURE AND STORAGES ETC. BY BHEL, HARIDWAR

#### 1. SPECIFICATIONS FOR GM / AGM TABLE SUITE :

Providing and placing Executive Desk having drawer unit + Side Return Unit with mounted pedestal + Two Drawer Mobile Pedestal + Back Unit.

**Main Table**: The table top and side panels shall be made of 25mm thickness particle board of Grade II Type II as per IS-3087-2005 with laminated / pre laminated finished of approved shade.

Modesty panel shall be made from 18mm particle board .The main table is provided by Mobile Pedestal having of 1 File Drawer and 1 Box Drawer mounted 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascias is made out of 18mm pre-laminated board (PLB), the back of the drawer unit is made from 9mm PLB. The units are assembled by knockdown fittings such as Minifix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. The handles etc. shall be as per manufacturer specification.

**Side Unit with Mounted Pedestal:** Side unit top shall be made from 25mm PLPB/laminate finished. Pedestal is fixed to the underside of this Side top using MS tubular props. Three Drawer Pedestal Comprises of 3 Box Drawer. The drawer top, and side panels including the drawer fascias is made out of 18mm pre-laminated particle board (PLB), the back of the drawer unit is made from 9mm PLB. All the exposed edges is concealed with machined pressed 2mm PVC lipping .The units are assembled by knockdown fittings such as Minifix & dowels. The drawer boxes are mounted on rollers slides to enable smooth operation of the drawer. The filing drawers are mounted on slides with ball bearings. The pedestals shall have central locking mechanism. The handles etc. shall be as per manufactures specification. Pre laminated Particle Board shall be Grade II Type II conforming to IS:12823:1990

**Back Unit**: The storage cabinet carcass, shelves and shutters will be made up of 18mm thick pre-laminated particle board however the back Panel shall be made out of 9mm thick pre-laminated particle board. The shelves shall be adjustable. Hinges, locks handles etc. shall be as per manufacturer specification. Pre-laminated Particle Board shall be Grade II Type II conforming to IS:12823:1990

The minimum sizes of the units are as under:

- 1. The size of the main desk shall be 2000mm W x 1000mm D x 750mm H.
- 2. The size of the Side Unit shall be 1380mm W x 600mm D x 750mm H
- 3. The size of the back unit shall be 1380mm XW 500mm D x 610mm H
- 4. Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H

- 5. The table shall be supplied with CRCA powder coated key board with mouse tray made of 0.8mm CRCA. It shall also have an in-built LHS/RHS mouse tray, made of 0.8mm thick M.S. sheet. The Powder coating thickness shall be 40 microns.
- 6. The table shall be supplied with Powder coated CPU trolley on castors made up of 0.8mm CRCA with front 2 castors lockable. The Powder coating thickness shall be 40 microns.

#### Note:-

- 1) All material like laminate /pre-laminated boards / particle board shall be used of relevant ISI specification.
- 2) All exposed edges of top surface, shelves etc. shall be suitable sealed.

#### 2. SPECIFICATIONS FOR SDGM / DGM TABLE SUITE :

Providing and placing of table console having following component.

**Main Table** :The top and side panels shall be made of superior quality particleboard of 25mm thickness of Grade II Type II conforming to IS-3087-2005 with laminated / pre-laminated finished of approved shade. Modesty panel shall be made from 18mm thick PLPB(Pre-lam Particle Board ). Pre laminated Particle Board shall be Grade II Type II conforming to IS:12823: 1990

**Side Table:** The top shall be made of superior quality particle board of 25 mm thickness of Grade II Type II conforming to IS:12823:1990. The top and Side Panels will be cladded with post forming laminate of thickness 0.6mm and other exposed edges is concealed with 2mm PVC Lipping. Modesty panel are made from 18mm thick PLPB(Pre-lam Particle Board ) and exposed concealed with 0.8mm PVC Lipping. Pre-laminated Particle Board shall be Grade II Type II conforming to IS:12823:1990

**Back Unit**: Top panel shall be 25mm thick plain particle board of Grade II Type II conforming to IS:12823 clad with laminate / pre laminate finish with 0.6mm thick post formed laminate and flat edge duly sealed. Shutters, Side and Bottom panels shall be made of 18mm pre laminated particle board with edges concealed.

**Mobile Pedestal**: Three Drawer Pedestal Comprises of 1 File Drawer and 2 Box Drawer. The drawer top, and side panels including the drawer fascias is made out of 18mm pre-laminated board (PLB). The drawer boxes are mounted on rollers slides to enable smooth operation of the drawer. The drawers are mounted on slides with ball bearings. The pedestals shall have central locking mechanism. The handles etc. shall be as per manufacturer specification. The Pre-Lam Particle Board shall be of Grade II and Type II as per IS 12823: 1990

The minimum sizes of the units are as under:

- 1. The size of the main desk shall be 1800mm W x 900mm D x 740mm H.
- 2. The size of the side unit shall be 1550mm W x 520mm D x 705mm H.
- 3. The size of the back unit shall be 1280mm W x 520mm D x 705mm H
- 4. The size of mobile pedestal shall be 646mm W x 390mm D x 435mm H

- 5. The table shall be supplied with CRCA powder coated key board with mouse tray made of 0.8mm CRCA. It shall also have an in-built LHS/RHS mouse tray, made of 0.8mm thick M.S. sheet. The Powder coating thickness shall be 40 microns.
- 6. The table shall be supplied with powder coated CPU trolley on castors made up of 0.8mm CRCA with front 2 castors lockable. The Powder coating thickness shall be 40 microns.

#### Note:-

- 1) All material like laminate /pre-laminated boards/particle board shall be used of relevant ISI specification.
- 2) All exposed edges of top surface, shelves etc. shall be suitable sealed.

#### 3. SPECIFICATIONS FOR CONFERENCE ROOM TABLE:

Providing and fixing **CONFERENCE ROOM Table** with the following specifications.

The table is to be supplied in completely knock down conditions for assembly at site. The construction of the main table shall be free standing structure constructed with the help of minifix dowels and pins. The table should be made up of 32mm thick MDF board with balancing laminate. Top is finished with 0.4mm PVC membrane foil using wrap around technology. The table should have waterfall edge .The foil shall be coated with PU layer for better scratch and wear resistance. MDF Board shall be of Interior Grade as per IS 12406: 2003

The 2-seater C of size-1350mm x 600mm, 1-seater rectangular of size-750mmx600mm, and 2-seater semicircular of size-1350mm x 710mm or 1seater quarter circular of size 710mm x 710mm.

The table connections have to be made in such a way that no gaps should be seen in between the tables.

The main table shall be supported on 2 nos. gable ends and a modesty panel.

The gable ends shall be constructed out of 25 mm thick pre-laminated particle board finish as per approved shade.

Modesty panel shall be made up of 18mm thick pre-laminated particle board finish.

The provision of Wire carrier shall be as per manufacturer specifications.

Table shall be assembled at site in following configuration.

- 1) Conference Table 22 Seater -1 nos
- 2) Conference Table 18 Seater -1 nos
- 3) Conference Table 12 Seater -1 nos
- 4) Conference Table 8 Seater -2 nos

<u>Note: The seating system design shall be decided by BHEL with rectangular ,semicircular and quatercircle module )</u>

#### 4. SPECIFICATIONS FOR GM/AGM MAIN REVOLVING CHAIR:

Providing and Supplying of ergonomically designed fabric upholstered high back revolving chair for GM/AGM.

The Seat and Back Cushion of the chairs should be pressed on 12mm hot press moulded ply. The seat cushion of the chair should be made up of 50mm thick High Density of 45±2 Kg/m³ polyurethane mould and back cushion should be made up of 38mm thick High Density 33±2 Kg/m³. The polyurethane foam shall be as per manufacturer's specification. The hardness of foam shall be 20 kg on hampden machine and 25% compression and it should be covered with fabric as per manufacturer's shade card. (Fabric colour shall be approved by BHEL)

The arms of the chairs should be black as per manufacturer specification.

The Gas lift mechanism should be tested as per BIFMA X 05.01.2002 Standards. The tilting mechanism should be synchro-tilt mechanism as per international ergonomics standards any position locking.

The pedestal should be five legged injection moulded in black 30% glass –filled nylon and fitted with 5 nos twin wheel castors. The castors of the chairs should be glass filled, twin wheel castors confirming to BIFMA Standards X 05.01.2002 tested to perform 1,00,000 cycles with 225 lbs Load.

NOTE: The back and base of chair should be supplied with black polypropylene moulded covers.

(Fabric colour shall be approved by BHEL)

Overall Height of chair should be minimum 1225 mm ( Inclusive of maximum adjustment of gas lift mechanism )

All material should be used of relevant ISI specification NOTE: The item no 4 & 5 should be from the same family of chair.

#### 5. SPECIFICATIONS FOR SDGM/DGM MAIN REVOLVING CHAIR:

The specification for SDGM/DGM main revolving chair shall be same as that of item No 4 of the GM/AGM main revolving chair except dimension of chair.

NOTE: The back and base of chair should be supplied with black polypropylene moulded covers.

(Fabric colour shall be approved by BHEL)

Overall Height of chair should be minimum 1090 mm (Inclusive of maximum adjustment of gas lift mechanism)

All material should be used of relevant ISI specification NOTE: The item no 4 & 5 should be from the same family of chair.

#### 6. SPECIFICATIONS FOR EXECUTIVE MAIN REVOLVING CHAIR:

The Seat and Back Cushion of the chairs should be pressed on 12mm hot press moulded ply. The seat cushion of the chair should be made up of 50mm thick High Density of 45±2 Kg/m³ polyurethane mould and back cushion should be made up of 38mm thick High Density 33±2 Kg/m³. The polyurethane foam shall be as per manufacturer's specification. The hardness of foam shall be 20 kg on hampden machine and 25% compression and it should be covered with fabric as per manufacturer's shade card.

The arms of the chairs should be black.

The Gas lift mechanism should be tested as per BIFMA X 05.01.2002 Standards.

The pedestal should be five legged injection moulded in black 30% glass –filled nylon and fitted with 5 nos twin wheel castors. The castors of the chairs should be glass filled, twin wheel castors confirming to BIFMA Standards X 05.01.2002 tested to perform 1,00,000 cycles with 225 lbs Load. It should have synchro single point locking arrangement.

Note –. The back and base of the chair should be supplied with fabric upholstered . (Fabric colour shall be approved by BHEL)

All material should be used of relevant ISI specification

Overall Height of chair should be minimum 1100 mm (Inclusive of maximum adjustment of gas lift mechanism)

All material should be used of relevant ISI specification.

NOTE: The item no 6 & 7 should be from the same family of chair.

## 7. SPECIFICATIONS FOR NON-EXECUTIVE AND CONFERENCE ROOM REVOLVING CHAIR:

The specification for non-executive main revolving chair should be same as that of item No 6 of executive main revolving chair except dimension of chair.

**Note** -The back and base of chair should be supplied with **fabric upholstered** . (Fabric colour shall be approved by BHEL)

Overall Height of chair should be minimum 970 mm (Inclusive of maximum adjustment of gas lift mechanism)

All material should be used of relevant ISI specification

NOTE: The item no 6 & 7 should be from the same family of chair .

#### 8. SPECIFICATIONS FOR FIXED BASE CUSHION CHAIR FOR CONFERENCE ROOM:

The back chairs for the conference rooms and meeting rooms shall be low back chair . The arms of the chairs should be black . The chair shall be supplied with PU moulded seat and back . The under structure should be made of tubular cantilever type MS ERW tube black powder coated . The chair shall be supplied with fabric of approved make and shade for seat and back.

Note -The back and base of the chair should be supplied with fabric upholstered .

#### All material should be used of relevant ISI specification

The dimensions of the chairs should be as follows:

Overall Height of chair: 890 mm max.

The chair should be preferably the same family as that of Executive main revolving chair at SI no – 6&7.

#### 9. SPECIFICATIONS FOR LARGE VERTICAL STORAGE UNIT;

The height of the storages shall be 1200 mm and depth shall be 450 mm. The storage shall be provided with 2 nos. adjustable shelves ( 3 compartment ), which can be adjusted vertically through the cabinet storages.

The carcass amd fascia should be constructed from 0.8mm thick CRCA steel with epoxy powder coated finish. The top shall be of 28 mm prelaminated board .

The base should have levelers for adjustment of any unevenness of the floor.

The cabinet shall be supplied with locking system.

The complete unit shall be as per manufacturer's specifications.

**Note:** Doors shall be either hinged or sliding type.

#### All material should be used of relevant ISI specification

Size of Storage: 900mm W x 450mm D x1200mm H.

#### 10. SPECIFICATIONS FOR SMALL VERTICAL STORAGE UNIT:

The storage shall be provided with 1 nos. adjustable shelfs (2 compartment) which can be adjusted vertically through the cabinet storages.

The carcass amd fascia should be constructed from 0.8mm thick CRCA steel with epoxy powder coated finish. The top shall be of 28 mm prelaminated board .

The base should have levelers for adjustment of any unevenness of the floor.

The cabinet shall be supplied with suitable locking system.

The complete unit shall be as per manufacturer's specifications

Note: Doors shall be sliding type.

All material should be used of relevant ISI specification.

Size of Storage: 900 mm W x 450mm D x 730mm H.

#### 11. SPECIFICATIONS FOR MOBILE COMPACTOR STORAGE UNITS:

Manufacturing and supplying of **Compactor** as per the following specification. The compactor should consist of storage units of 450mm deep, movable and bolted to undercarriage which rolls on the channels and firmly embedded to the ground.

The size of each storage body shall be of width 900mm, depth 450mm and a height of 2080 mm.including the storage body height with undercarriage The main body should be rigid knock down construction is made of out of Side /back/top Panels made up of minimum 0.8mm thick CRCA steel conforming to IS: 513 -2008 Grade. Each body block should consists of one single fixed unit, one double mobile one single mobile unit and add on as per site conditions and each unit should have 5 loading levels formed by 4 nos of adjustable shelves. The storage body units are bolted to the undercarriage. The shelf panel of storage unit should be made of 0.8mm thick CRCA steel confirming to IS: 513 -2008 grade to take the maximum load bearing capacity of 75 Kg uniformly distributed per shelf.

The shelves should be mounted on support brackets & its level should be adjustable. There should be 4 adjustable shelves per body giving 5 loading levels.

The under carriage should be made with HR sheet min 2.5 min confirming to IS 10748 -2004 suitably fabricated using welding to take the loads.

The MSU should be running on a guide track of size 28 mm M.S. round with necessary bracing/channel and base plate. Rails should be 25 mm square bright bar.

The bodies including shelves and undercarriages should be given 7 tank antirust surface treatment and finished with powder coating using epoxy polyester powder of 40microns.

A centralized or independent locking arrangement should be provided through the locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together.

All the units should be provided with chrome plated handles. All the MSU should be provided with the features such as mechanical drive with a handle for mechanically assisted drive mechanism consisting of a series of sprocket and chain mechanism for smooth movement of the compactor with minimum effort. It should be fitted with safety guard which is to be engaged when entering the common aisle. This should prevent from operating system when an individual is in the working aisle. The guide track should be provided with an end stopper to avoid derailment of the units.

It should be provided with the label holders.

#### Assembly of each body shall be-

#### 11A) 1 Bay pushpull type mobile compactor storage unit.

	1	Single Static 1 bay pushpull Type	1
	2	Single last 1 bay pushpull Type	1
Ī	3	Twin Mobile 1 bay pushpull Type	3

Qty-1

The each compactor consist of 8 bodies.

Note - With hinge Door.

#### 11B) 3 Bay Drive Type Mobile Compactor storage unit .

**Qty - 1** 

Ī	1	Single Static 3 bay Drive Type	1
Ī	2	Single last 3 bay Drive Type	1
Ī	3	Twin Mobile 3 bay Drive Type	5

The each compactor consist of 36 bodies.

Note - With hinge Door.

#### 11C) 2 Bay Drive Type Mobile Compactor storage unit .

Qty - 8

1	Single Static 2 bay Drive Type	1
2	Single last 2 bay Drive Type	1
3	Twin Mobile 2 bay Drive Type	5

The each compactor consist of 24 bodies.

Note - With hinge Door.

#### 11D) 4 Bay Drive Type Mobile compactor storage unit .

**Qty - 1** 

1	Single Static 4 bay Drive Type	1
2	Single last 4 bay Drive Type	1
3	Twin Mobile 4 bay Drive Type	6

The each compactor consist of 56 bodies.

Note - Without hinge Door.

#### 11E) 3 Bay Drive Type Mobile Compactor storage unit .

**Qty - 1** 

1	Single Static 3 bay Drive Type	1
2	Single Last 3 bay Drive Type	1
3	Twin Mobile 3 bay Drive Type	6

The each compactor consist of 42 bodies.

**Note - Without hinge Door.** 

NOTE :Each body of compactor shall be supplied with lockable hinged doors. Each body shall have 4 adjustable shelfs (5 compartment). All material should be used of relevant ISI specification.

#### 12. SPECIFICATIONS FOR SOFA SETS IN GM/AGM CABINS:

Supplying one and three seated sofa sets. The sofa sets shall be completely made up powder coated internal metal frames. Seat support shall be in supplied with good quality webbing and quality injection moulded PU Foam . PU Foam should thick and soft with variable hardness .PU-Foam finished with fabric as per selected sample.

Three seated sofa shall have overall size of 2040 W x 600D x 860 H mm,

Seat Height: 400mm

One seated sofa shall have overall size of 920W x 600D x 860 H mm,

Seat Height 400mm

All material should be used of relevant ISI specification

#### 13. SPECIFICATIONS FOR LOUNGE SOFA SETS:

Supplying one, two and three seated sofa sets of specified size and dimension . Seat rest ,Back rest and Side arms assembly consists of a fabricated inner frame assembly with moulded polyurethane foam having density =  $45 \pm 2$  Kg./cm which provides strength as well as comfort to the sofa. The complete moulded backrest assembly is covered with a replaceable fabric upholstery cover.

Three seated sofa shall have overall size of 1800L x 740 D x 740 H mm Two seated sofa shall have overall size of 1300L x 740 D x 740 H mm One seated sofa shall have overall size of 600L x 740 D x 740 H mm

All material should be used of relevant ISI specification.

#### 14. SPECIFICATIONS FOR CENTRE TABLE:

The centre table should be of premium quality. **It should be 0.95 cm thick float glass** with high Quality teak wood framing / MS ERU high quality chrome plated framing.

material should be used of relevant ISI specification.

Approx. Size shall be - 900mm (W)x 550mm(D)x 425 mm (H) (min) NOTE: The item no 14 & 17 should be from the same family.

#### 15. SPECIFICATION FOR RECEPTION TABLE TWO ARC.-

Manufacturing, supplying and placing in position of the reception table. Top of the table shall be made up of 25mm Pre- laminated Particle Board as per IS IS:12823, edges finished with 2mm PVC Lipping. Inside radius, outside radius and depth shall be 700, 1350 and 790mm respectively. It shall have counter frosted glass10mm thick with diamond cut finish on the edges. Inside radius, outside radius and depth of glass shall be 1202.5,\1402.5 and 200mm respectively. Worktop height shall be 725mm and Counter height shall be 1035mm .Angles sustained with the arc must be 60 degree .Modesty panel shall be made of MS perforated sheet and shall have dimensions 0.8mm (thick) x665mm (height) below the work surface and 0.8mm (thick) x 260mm (height) above the work surface. Legs of the desk shall be made of 18mm Prelaminated Particle Board and height 604 mm.

#### All material should be used of relevant ISI specification

Approx .Size of Reception table shall be 2400mm (W) x 1060mm (D) x 1370mm (H).

#### 16. SPECIFICATIONS FOR LOW HEIGHT PARTITIONS FOR STAFF WORKSTATIONS:

Supplying and erecting minimum 50 mm thick frame & tile based low height partition of 1200mm height partition of modular grid system consisting of CRCA Steel framework with frame and tile system.CRCA steel shall be IS: 513.

#### PARTITION FRAME SPECIFICATION:

The horizontal and vertical section for the 50mm thick framework to be constructed out of CRCA steel sections of minimum 1.2 mm thickness for horizontal members and 1.5 mm thickness for verticals member. The configuration of the partition frame shall be as per manufacturer's specification.

The metal components should be finished with powder coating of 40 - 60 microns in desired colour.

The skeleton should include top runners, bottom skirting etc. End trims and corner connectors in form of different types of joinery such as 90°, 120°, 180° etc.

The exposed ends of the frames are to be finished with 1.2 mm thick aluminum extrusion alloy epoxy powder coated end covers and posts at different junctions.

All the metal components such as steel and aluminum are to be pre-treated in 7 tank pre-treatment plant prior to powder coating.

The framework should have snap fitted skirting of minimum of 85mm height made up of 0.8 mm thick CRCA steel.

The junctions are neatly rounded off by means of metal caps.

Tiles made up of 0.8mm thick CRCA steel duly powder coated finish. The colour of the powder coated tiles shall be in plain colour.

Height adjuster: Heavy-duty glide screws of suitable design with good material shall be provided at the base of the frame at suitable intervals for adjusting the level of the workstation up to +/-10mm to take care of variations in the floor level.

All the above tiles should be fitted with snap on with clips.

#### TILES IN LOW HEIGHT PARTITIONS

**Laminate Tiles:** shall be made up of 9mm pre-lam particle board having edges sealed with black paint.

**Steel Powder Coated Tiles :** shall be made up of 0.8mm thick CRCA sheet powder coated with 50microns thickness

**Soft Pinup Tiles** on single side of partition made of minimum 6mm thick as per manufacturer's specifications. Fabric shall be free from weaving defects. The manufacturing of the above shall be as per manufacturer's specifications at least one ineach workstation.

White Marker Tiles shall be made up of 9mm pre-lam particle board with glossy/matt grid finish having edges sealed with black paint .

**Magnetic Tiles** on single side of partition shall be made up of 0.8mm thick CRCA sheet hot pressed on MDF board and wrapped with Fabric.

**Bottom Tiles:** Bottom tiles shall be of metal tiles in 0.6mm thick M.S.CRCA Grade D as per IS:513-1994 with suitable power coat painting 40 microns.

#### TABLE TOPS & GABLE ENDS FOR WORKSTATIONS:

The basic material of the table top should be made out of 25 mm thickness pre-laminated particle board The table should have a balancing laminate on the bottom. The bracket shall be in CRCA steel duly powder coated up to 40-60 microns and as per manufacturer's specifications. The tables should be finished with 2 mm thick PVC edge bidding from all sides. All the tables should be provided with gable ends made up of 25 mm thick pre-laminated particle board as per design and colour as per shade card of the manufacturer and approved by BHEL. The Gable ends should be attached to the partitions and table with the help of necessary brackets and bars. All exposed surface should be properly sealed with PVC bidding.

**Keyboard Tray with Mouse Tray for Workstation**: Key Board Tray and Mouse Tray shall be made out of minimum 0.8mm thickness CRCA Steel mounted below the worktop with the help of roller ball telescopic channel and the item shall be as per manufacturer's design and specifications.

**CPU Trolley:** CPU Trolley made out of minimum 0.8mm thick CRCA Steel with adjustments of four Castors, out of which front two castors shall be lockable and the item shall be as per manufacturer's design and specifications.

**Storage:** Storage unit shall be of 450mm width x 435mm depth 720 mm height 3- drawer epoxy power coated steel storage unit. The front facia and top of the pedestal are to be finished with 12mm thick pre-laminated particle board. Out of 3 drawers (Box+Box+File), the bottom most will be the file drawer and top drawer shall have a pencil tray. The storage unit shall also have suitable sliding arrangement, handle locking facility, etc.

**Wire management:** Entry of wires into the work station partitions shall be possible from the floor. Partition shall have provision of running electrical, data and telephone cables etc. horizontally and vertically along the skirting with provision of clipping arrangement inside the skirting & frame. Provision of electrical and data slots on tiles above and below the work top or on skirting shall be provided by the manufacturer according to the approved sample of electrical and data switch plates provided by engineer in charge.

The transmission of cables shall be at special beams fixed to the frames, which are fitted with switch board plate on which the high quality switches/sockets shall be fitted.

The Dimensions of Curvilinear Executive workstation – 1800 mm X 1800 mm

The Dimensions of Pentagonal Non - Executive workstation - 1350 mm X 1200 mm

All material should be used of relevant ISI specification.

Each workstation shall have minimum one White Marker Tile, one Soft Pinup Tile and one magnetic Tile. However exect no / colour sceme shall very at the time of ordering.

#### 17. SPECIFICATIONS FOR CORNER TABLE:

The corner table should be of premium quality. It should be **0.95 cm thick float glass** with high Quality teak wood framing / MS ERU high quality chrome plated framing.

All material should be used of relevant ISI specification.

Approx. Size - 550mm (W)x550mm (D)x 425mm (H) (min)

NOTE: The item no 14 & 17 should be from the same family.

#### 18. SPECIFICATIONS FOR FIXED BASE CUSHION CHAIR GM/AGM:

The back chairs for the visitor shall be low back chair . The arms of the chairs should be black . The chair shall be supplied with PU moulded seat and back . The under structure should be made of tubular cantilever type MS ERW tube black powder coated . The chair shall be supplied with fabric of approved make and shade for seat and back.

Note -The back chair should be supplied with polypropylene moulded covers. . The chair should be preferably the same family as that of GM/AGM main revolving chair at SI no -4&5

All material should be used of relevant ISI specification

The dimensions of the chairs should be as follows:

Overall Height of chair: 920 mm max.

## **Annexure-II**

SL NO	DESCRIPTION	Quoted Model Name / No *	Page no/SI no in the cataloque /Leaflet	Confirmation to specification "Yes/No"	Deviation from the specification (Please attached details)
1	GM/AGM Suite Main Table as per enclosed specification (Refer item no 1 Annexure- I )				
2	GM/AGM Suite Side Unit as per enclosed specification (Refer item no 1 Annexure- I)				
3	GM/AGM Suite Back Unit as per enclosed specification (Refer item no 1 Annexure- I)				
4	GM/AGM Suite Mobile Pedestal as per enclosed specification (Refer item no 1 Annexure- I)				
5	DGM/SDGM Suite Main Table as per enclosed specification (Refer item no 2 Annexure- I)				
6	DGM/SDGM Suite Side Unit as per enclosed specification (Refer item no 2 Annexure- I)				
7	DGM /SDGM Suite Back Unit per enclosed specification (Refer item no 2 Annexure- I)				
8	DGM/SDGM mobile pedestal as per enclosed specification (Refer item no 2 Annexure- I)				
9	Conference room Table as per enclosed specification ( (Refer item no 3 Annexure-I)				
10	GM Main Revolving Chair as per enclosed specification (Refer item no 4 Annexure- I)				
11	DGM Main Revolving Chair per enclosed specification (Refer item no 5 Annexure- I)				
12	Executive Main Revolving Chair Model as per enclosed specification ((Refer item no 6 Annexure- I)				
13	Non-executive & conference room Revolving Chair as per enclosed specification (Refer item no 7 Annexure- I)				
14	Fixed Base Cushion Chair as per enclosed specification (Refer item no 8 Annexure- I)				

15	Large Vertical Storage Unit as per enclosed specification (Refer item no 9 Annexure- I)		
16	Small Vertical Storage Unit as per enclosed specification (Refer item no 10 Annexure- I )		
17	(Refer item no 11 A annexure- I)		
18	3 Bay Drive Type Mobile Compactor Storage Unit hinge door as per enclosed specification (Refer item no 11 B Annexure- I)		
19	(Refer item no 11 C Annexure- I)		
20	GM Sofa Set three Seater as per enclosed specification (Refer item no 12 Annexure- I ) ,		
21	GM Sofa Set single Seater as per enclosed specification (Refer item no 12 Annexure- I),		
22	Annexure- I)		
23	Lounge Sofa Two Seater as per enclosed specification ( (Refer item no 13 Annexure-I)		
24	Lounge Sofa Three Seater as per enclosed specification ((Refer item no 13 Annexure- I)		
25	(Refer item no 14 Annexure- I )		
26	Reception Table Two Arc. as per enclosed specification (Refer item no 15 Annexure- I )		
27	EXECUTIVE WORKSTATIONS: 6 PERSON MODULE as per enclosed specification (Refer item no 16 Annexure- I )		
28	EXECUTIVE WORKSTATIONS: 3 PERSON MODULE as per enclosed specification (Refer item no 16 Annexure- I )		
		 1	

29	NON-EXECUTIVE Workstation for 4 person module as per enclosed specification (Refer item no16 Annexure- I)		
30	NON-EXECUTIVE Workstation for 8 person module as per enclosed specification (Refer item no16 Annexure- I )		
31	Corner Table as per Enclosed specification (Refer item no17 Annexure -1)		
32	Fixed Base Coshion chair for GM/AGM as per Enclosed specification (Refer item no18 Annexure -1)		
33	EXECUTIVE WORKSTATIONS: 4 PERSON MODULE as per enclosed specification (Refer item no 16 Annexure-I )		
34	EXECUTIVE WORKSTATIONS: 2 PERSON MODULE as per enclosed specification (Refer item no 16 Annexure- I )		
35	Non-Executive Workstation for 6 person module as per enclosed specification (Refer item no16 Annexure- I )		
36	Non-Executive Workstation for 2 person module as per enclosed specification (Refer item no16 Annexure- I )		
37	4 Bay Drive Type Mobile Compactor Storage Unit without hinge door as per enclosed specification (Refer item no 11D Annexure- I)		
38	3 Bay Drive Type Mobile Compactor Storage Unit without hinge door as per enclosed specification (Refer item no 11E Annexure- I)		
	* Please attach product catalogue		

### **ANNEXURE-III A**

### QUALIFYING CRITERIA

The BIDDER has to submit the following details for considering the technical offer:

SI. No.	REQUIREMENTS	VENDOR'S RESPONSE		
1.0	Only those manufacturers, who have supplied furniture i.e. modular workstations, tables, chairs, storages etc. as mentioned in the tender to reputed manufacturing / service organizations in the past three years on the date of opening of tender will be considered.			
1.1	The vendor should submit relevant Purchase Orders placed by reputed organisations for each type of modular workstations/tables/chairs/storages of the tender.			
1.2	Vendor shall clearly mention the name of contact person/address/telephone number/FAX number/email address of the organisation with respect to the POs submitted			
1.3	BHEL reserves the right to get feedback from their customers about the products supplied to them. In case of any adverse feedback, the vendor is liable to be rejected.			
1.4	BHEL reserves the right to verify the information provided by vendor. In case the information provided by vendor is found to be false/ incorrect, the offer shall be rejected.			
2.0	The vendor should have the following facilities for qualification of this tender and registration.			
2.1	ISO-9001-2008			
2.2	ISO-14001-2004			
2.3	OHASAS-18000-2007			
2.4	Certification from BIFMA. The manufacturer should have in house facility for testing products as per BIFMA derived guidelines.			
2.5	Computerized controlled through feed multi station edge preparation machine with gluing and cutting for, flush trimming, scrapping and butting.			
2.6	Computer controlled press brake for sheet metal bending.			
2.7	Converised powder coating plant with baking oven and powder applications.			
2.8	In the event of non availability of facilities mentioned under point number 2.5, 2.6 and 2.7 the offer will not be considered by BHEL.			
3.0	The vendor should score a minimum 60 marks out of 100 for their qualification as per Annexure-II A. The vendor should submit all necessary information /document / balance sheet / Annual Report etc. in this regard as per requirement of the format.			

#### ANNEXURE-III B

SI. No	Thrust Area	Score	Remarks
I	NATURE OF COMPANY	20	
	Public Limited	20	
	Private Limited/Partnership Firm	10	
	Sole Proprietor	5	
II	Similar Experience (supply & commissioning of total number of workstations in the last three years)	20	
	Above 10000 seats	20	
	From 8001 to 1000 seats	15	
	From 5001 to 8000 seats	10	
	From 2001 to 5000 seats	5	
	Less than 2000 seats	0	
III	Similar Experience (supply & commissioning of total number of tables in the last three years)	5	
	Above 4000 Nos.	5	
	From 2001 to 4000 Nos.	3	
	Below 2000 Nos.	0	
IV	Similar Experience (supply & commissioning of total number of chairs in the last three years)	5	
	Above 5000 Nos.	5	
	From 2000 to 5000 Nos.	3	
	Below 2000 Nos.	0	
V	Average Annual Turnover in last 3 financial years	20	
	More than Rs. 100 crores	20	
	From Rs. 51 to Rs. 100 crores	10	
	Less than Rs. 51 crores	0	
VI	Facilities and registration of manufacturer	20	
	ISO 9001-2008	2	

ISO 14001-2004	3	
OHASAS 18000-2007	5	
Test Facilities as per BIFMA (Refer AnnIII A)	5	
BIFMA Certification	5	

SI. No	Thrust Area	Score	Remarks
VII	Dealer / Service Network from Haridwar	10	
	Within 150 km	10	
	Beyond 150 km	5	
	Beyond 250 km	0	

Note: 1) The minimum score required for qualification is 60 out of 100.

- 2) Alternate materials other than specification given in the tender will not be accepted.
- 3) All documents / balance sheets/Annual Reports etc. in support of the above column must be submitted.
- 4) Submission of any false information shall lead to rejection of the offer of vendor.
- 5) Annual turnover of the company should only be for furniture and related items.

#### **ANNEXURE-IV**

#### **TERMS & CONDITIONS**

- 1. Any item not forming part of this is required for installation of the furniture, the same shall be supplied free of cost by the vendor.
- 2. The vendor shall install the furniture free of cost.
- 3. The order shall be placed on the vendor who is technically qualified and lowest overall for the complete BOQ (except optional or dropped items) Therefore, it is mandatory to quote for all the items of the tender by the vendor.
- 4. Item Nos. 33, 34, 35 and 36 are optional items. Optional items may or may not be ordered by BHEL.
- 5. Vendor may be technically disqualified
  - i) If they fail to quote for all the items.
  - ii) If any item quoted by them is technically rejected or does not fulfill the qualifying criteria.
- 6. BOQ mentioned in the tender is approximate. The BOQ may increase or decrease. However, the order value at the time of placement of order shall vary by around  $\pm 20\%$ .
- 7. The furniture is to be installed in the Main Administrative Building of HEEP, Haridwar. The civil work is in progress. The furniture shall be installed floor wise after completion of the floor. As such the deliveries of the furniture shall be done in a phased manner according to completion of each floor.
- 8. The quantities indicated against the delivery are tentative. However, the exact quantity of each item required shall be informed to the vendor 45 days prior to completion of each floor.
- 9. The offered items by the bidders shall be warranted for minimum one year from the date of acceptance of the furniture after installation at site.
- 10. The technical bid shall comprise of the following:
  - a) Filled in Technical quote as per Annexure-II
  - b) Technical/functional specifications of the item offered as per Annexure-II.
  - c) Catalogue containing image of the item model name /model No. etc. as

#### per Annexure-II.

- d) Information related to qualifying criteria as mentioned in Annexure-III.
- 11. The technical offer shall be accompanied by relevant product catalogues and data sheets.
- 12. The specification mentioned above are only broad descriptive in nature. However, the suppliers shall give detailed specification, drawings with standards for all the materials, arrangements, etc. as proposed by them along with their offer.
- 13. Vendor shall submit photographs of similar workstation executed already to be enclosed along with the offer.
- 14. The maintenance period is one year after acceptance of the furniture and the supplier has to provide at least 4 free service camps at each office location after the installation of workstations/furniture.
- 15. The supplier may have to provide architectural services towards designing/drawing/layout for modular workstations free of cost to BHEL irrespective of the size of the project, if required.
- 16. Final colour scheme and upholstery of fabric colour will be approved by BHEL at the time of placement of order. Vendor to furnish various colour schemes available with them.
- 17. A reference list of installations executed needs to be submitted along with the offer.