



Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

MATERIALS MANAGEMENT / CAPITAL EQUIPMENT

An ISO 9001
Company

ENQUIRY	Phone: +91 431 257 79 38 Fax : +91 431 252 00 31 Email : tvenkat@bheltry.co.in Web : www.bhel.com
---------	---

	Enquiry Number: 2621300008	Enquiry Date: 15.03.2013	Due date for submission of quotation: 15.04.2013
--	---	---	---

You are requested to quote the Enquiry number date and due date in all your correspondences. This is only a request for quotation and not an order

Please note that under any circumstances both **delayed offer** and **late offers** will not be considered. Hence vendors are requested to ensure that the offer is reaching physically our office before 14.00 hrs on the date of tender opening.

Item	Description	Quantity	Delivery Schedule
10	Optimizer - 3 Bay with static, last drive and 3 numbers of twin mobile drive cover in each set with required rails as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	3 Nos.	1 month from the date of purchase order
20	Optimizer - 2 Bay with static, last drive and 3 numbers of twin mobile drive cover in each set with required rails as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	4 Nos.	
30	Optimizer - Single Bay with static, last drive and 3 numbers of twin mobile drive cover in each set with required rails as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	6 Nos.	
40	VSDU 1200 mm (W) x 450 mm (D) x 1200 mm (H) as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	40 Nos.	



Bharat Heavy Electricals Limited

(High Pressure Boiler Plant)

Tiruchirappalli – 620014, TAMIL NADU, INDIA

MATERIALS MANAGEMENT / CAPITAL EQUIPMENT

An ISO 9001
Company

Item	Description	Quantity	Delivery Schedule
50	VSDU 1200 mm (W) x 450 mm (D) x 740 mm (H) as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	10 Nos.	1 month from the date of purchase order
60	VSDU 900 mm (W) x 450 mm (D) x 1200 mm (H) as per the technical specification & commercial conditions applicable (to be downloaded from web site www.bhel.com or http://tenders.gov.in)	60 Nos.	

Important points to be taken care during submission of offer:

1. Rate shall be quoted for item wise.
2. Offer shall be evaluated for Item SI.Nos.10, 20 & 30 as a Single Package (over all L1 basis) and Item SI.Nos.40, 50 & 60 as another single package (over all L1 basis). Hence, offer should be quoted for all the items ie. for both packages, otherwise your offer will not be considered for respective package.
3. Material shall be delivered to
FOR, BHEL, Stores
Power Plant Piping Unit
Thirumayam, Pudukkottai Dist.
4. EMD for this Tender will be (INR) : 1,00,000.00
5. Delivery required 1 month from the date of purchase order.
6. Offer shall be submitted in Two Part Bid system as per terms and conditions enclosed.
7. E&C Charges shall be quoted for tender SI.Nos.10 to 30 only. However no E&C Charges are applicable for tender SI.Nos. 40 to 60.
8. Check-list to be filled and enclosed along with the offer failing which, the offer will not be considered for evaluation.
9. All updates, amendments, corrigenda, etc., (if any), for each tender will be posted only on the above websites from time to time, as and when required, until each tender is opened. There will be no publication of such updates, amendments, corrigenda, etc., through newspapers or any other media

BHEL's General guidelines / instructions including bank guarantee formats and list of consortium banks, Commercial terms check-list can be downloaded from BHEL web site <http://www.bhel.com> or from the Government tender website <http://tenders.gov.in> (public sector units > Bharat Heavy Electricals Limited page) under Enquiry reference "2621300008".

Tenders should reach us before 14:00 hours on the due date
Tenders will be opened at 14:30 hours on the due date
Tenders would be opened in presence of the tenderers who have submitted their offers and who may like to be present

Yours faithfully,
For BHARAT HEAVY ELECTRICALS LIMITED

Sr.Manager / Capital Equipment / MM

Specification for Drive Type Optimizer Storage System (3 Bay) – 3 Nos.

Optimizer Storage System – An Efficient space saving storage arrangement catering to a variety of office requirements for storage of office files, stationary items, manuals, documents, etc.

Type **D3** - 3 Bay Drive Type Optimizer

Each of above configurations can have the following type of blocks:

- Single Face Fixed Unit **(SFFU)**
- Single Face Movable Unit **(SFMU)**
- Double Faced Movable Unit **(DFMU)**

The Optimizer shall be of Box Cladded structure with 0.8mm (minimum) thickness CRCA Steel confirming to IS:513 Gr.D for back, side and top sheets. Each body block (SS/SL/TM) building consists of one main unit & then Add-on units (1, 2 & 3 – depending on no. of bays 1, 2, & 3) . Twin mobile blocks are to be placed in between single static and single last units. The number of twin mobile blocks will be specified by BHEL as 2,3, etc.

A. SINGLE FACE FIXED BLOCK & LAST MOVABLE BLOCK:

Dimensions of single face static block and single face last drive block are given below:

1. Width : Around 900 mm
2. Depth : Around 450 mm
3. Height : Around 1950 mm
4. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves

B. DOUBLE FACED MOVABLE BLOCK:

Dimensions of double faced movable blocks (twin mobile with centre partition) are given below:

1. Two units of same size of individual block as mentioned in 'A' shall be integrated.
2. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves on each side.

The above body units are to be bolted to the undercarriage. The approximate height of undercarriage shall be 65mm (approx) and height of rails shall be 35mm (approx).

Painting: The steel bodies including shelves are to be treated for antirust surface and powder coated with approved colour. The final finish shall be of epoxy polyester powder coating with a dry film thickness of minimum 40 microns. Before powder coating, metal surfaces are to be treated for anti rust and cleaned properly.

Partitions / Accessories for Optimisers:

1. Total height from ground level shall be approx. 100 mm more than the height of superstructure (1950 mm body + 65mm undercarriage + 35mm channel)
2. General arrangement as per enclosed sketches.
3. Under carriage shall be of fabricated type using structural steel sections.
4. Bolted construction for superstructure with steel slotted / rolled / formed angles(as required), corner plates, electroplated / galvanized nuts & bolts are to be used.
5. All load-bearing shelves shall be of 1.0 mm (minimum) thickness CRCA steel sheet with allowable load carrying capacity of 70 kg. per shelf.
6. One number of acrylic or metallic card holder has to be provided in static and last dive block. In twin mobile, two numbers of acrylic or metallic card holders shall be provided.
7. Suitable square steel bright bar / channels of suitable size are to be used for rails for smooth operation.
8. Drive Wheel : For the movement of units a drive wheel and sprocket-chain mechanism with provision for manual locking of individual units when in use has to be provided.
9. Centralised locking arrangement has to be provided through locking stiffener mounted onto the back of single last unit so that it gets locked on channels when all the units are brought together.
10. Each drive type unit has to be provided with locking knob near the Drive wheel for manual locking of individual units when a person is using those units.

General:

1. The proposed system is *Drive Type* optimizer with drive wheels fitted. The system shall be such that the manual effort required for opening / closing of the rack is minimum.
2. Required length of rails / channels are to be provided for each system.
3. Suitable elegant wheels shall be provided on the mobile blocks for opening / closing .
4. The aisle width shall be sufficient enough for a person to enter inside and access either side of the storage racks. The Equipment is to be guaranteed for its satisfactory performance for 12 months from the date of installation.
5. Offers received from Indian OEMs only will be considered by BHEL.
6. OEM should have their own press brake, powder coating plant with baking oven, powder applications, etc.
7. Offers received from other than OEMs without required facilities as mentioned in point No. 6 will not be considered by BHEL.

PREPARED BY		CHECKED BY	
Signature		Signature	
Name	G.Madhuramani	Name	M.P.Balasubrahmanyam
Designation	Sr.Manager	Designation	Add. General Manager
Department	Management Services	Department	Management Services

Specification for Drive Type Optimizer Storage System (2 Bay) - 4 Nos.

Optimizer Storage System – An Efficient space saving storage arrangement catering to a variety of office requirements for storage of office files, stationary items, manuals, documents, etc.

Type **D2** - 2 Bay Drive Type Optimizer

Each of above configurations can have the following type of blocks:

- Single Face Fixed Unit **(SFFU)**
- Single Face Movable Unit **(SFMU)**
- Double Faced Movable Unit **(DFMU)**

The Optimizer shall be of Box Cladded structure with 0.8mm (minimum) thickness CRCA Steel confirming to IS:513 Gr.D for back, side and top sheets. Each body block (SS/SL/TM) building consists of one main unit & then Add-on units (1, 2 & 3 – depending on no. of bays 1, 2, & 3) . Twin mobile blocks are to be placed in between single static and single last units. The number of twin mobile blocks will be specified by BHEL as 2,3, etc.

C. SINGLE FACE FIXED BLOCK & LAST MOVABLE BLOCK:

Dimensions of single face static block and single face last drive block are given below:

1. Width : Around 900 mm
2. Depth : Around 450 mm
3. Height : Around 1950 mm
4. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves

D. DOUBLE FACED MOVABLE BLOCK:

Dimensions of double faced movable blocks (twin mobile with centre partition) are given below:

1. Two units of same size of individual block as mentioned in 'A' shall be integrated.
2. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves on each side.

The above body units are to be bolted to the undercarriage. The approximate height of undercarriage shall be 65mm (approx) and height of rails shall be 35mm (approx).

Painting: The steel bodies including shelves are to be treated for antirust surface and powder coated with approved colour. The final finish shall be of epoxy polyester powder coating with a dry film thickness of minimum 40 microns. Before powder coating, metal surfaces are to be treated for anti rust and cleaned properly.

Partitions / Accessories for Optimisers:

1. Total height from ground level shall be approx. 100 mm more than the height of superstructure (1950 mm body + 65mm undercarriage + 35mm channel)
2. General arrangement as per enclosed sketches.
3. Under carriage shall be of fabricated type using structural steel sections.
4. Bolted construction for superstructure with steel slotted / rolled / formed angles(as required), corner plates, electroplated / galvanized nuts & bolts are to be used.
5. All load-bearing shelves shall be of 1.0 mm (minimum) thickness CRCA steel sheet with allowable load carrying capacity of 70 kg. per shelfe.
6. One number of acrylic or metallic card holder has to be provided in static and last dive block. In twin mobile, two numbers of acrylic or metallic card holders shall be provided.
7. Suitable square steel bright bar / channels of suitable size are to be used for rails for smooth operation.
8. Drive Wheel : For the movement of units a drive wheel and sprocket-chain mechanism with provision for manual locking of individual units when in use has to be provided.
9. Centralised locking arrangement has to be provided through locking stiffener mounted onto the back of single last unit so that it gets locked on channels when all the units are brought together.
10. Each drive type unit has to be provided with locking knob near the Drive wheel for manual locking of individual units when a person is using those units.

General:

1. The proposed system is *Drive Type* optimizer with drive wheels fitted. The system shall be such that the manual effort required for opening / closing of the rack is minimum.
2. Required length of rails / channels are to be provided for each system.
3. Suitable elegant wheels shall be provided on the mobile blocks for opening / closing .
4. The aisle width shall be sufficient enough for a person to enter inside and access either side of the storage racks. The Equipment is to be guaranteed for its satisfactory performance for 12 months from the date of installation.
5. Offers received from Indian OEMs only will be considered by BHEL.
6. OEM should have their own press brake, powder coating plant with baking oven, powder applications, etc.
7. Offers received from other than OEMs without required facilities as mentioned in point No. 6 will not be considered by BHEL.

PREPARED BY		CHECKED BY	
Signature		Signature	
Name	G.Madhuramani	Name	M.P.Balasubrahmanyam
Designation	Sr.Manager	Designation	Addl. General Manager
Department	Management Services	Department	Management Services

Specification for Drive Type Optimizer Storage System (Single Bay) – 6 Nos.

Optimizer Storage System – An Efficient space saving storage arrangement catering to a variety of office requirements for storage of office files, stationary items, manuals, documents, etc.

Type **D1** - Single Bay Drive Type Optimizer

Each of above configurations can have the following type of blocks:

- Single Face Fixed Unit **(SFFU)**
- Single Face Movable Unit **(SFMU)**
- Double Faced Movable Unit **(DFMU)**

The Optimizer shall be of Box Cladded structure with 0.8mm (minimum) thickness CRCA Steel confirming to IS:513 Gr.D for back, side and top sheets. Each body block (SS/SL/TM) building consists of one main unit & then Add-on units (1, 2 & 3 – depending on no. of bays 1, 2, & 3) . Twin mobile blocks are to be placed in between single static and single last units. The number of twin mobile blocks will be specified by BHEL as 2,3, etc.

E. SINGLE FACE FIXED BLOCK & LAST MOVABLE BLOCK:

Dimensions of single face static block and single face last drive block are given below:

1. Width : Around 900 mm
2. Depth : Around 450 mm
3. Height : Around 1950 mm
4. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves

F. DOUBLE FACED MOVABLE BLOCK:

Dimensions of double faced movable blocks (twin mobile with centre partition) are given below:

1. Two units of same size of individual block as mentioned in 'A' shall be integrated.
2. No. of Loading Levels : 5 level formed by 4 Nos. of adjustable shelves on each side.

The above body units are to be bolted to the undercarriage. The approximate height of undercarriage shall be 65mm (approx) and height of rails shall be 35mm (approx).

Painting: The steel bodies including shelves are to be treated for antirust surface and powder coated with approved colour. The final finish shall be of epoxy polyester powder coating with a dry film thickness of minimum 40 microns. Before powder coating, metal surfaces are to be treated for anti rust and cleaned properly.

Partitions / Accessories for Optimisers:

1. Total height from ground level shall be approx. 100 mm more than the height of superstructure (1950 mm body + 65mm undercarriage + 35mm channel)
2. General arrangement as per enclosed sketches.
3. Under carriage shall be of fabricated type using structural steel sections.
4. Bolted construction for superstructure with steel slotted / rolled / formed angles(as required), corner plates, electroplated / galvanized nuts & bolts are to be used.
5. All load-bearing shelves shall be of 1.0 mm (minimum) thickness CRCA steel sheet with allowable load carrying capacity of 70 kg. per shelf.
7. One number of acrylic or metallic card holder has to be provided in static and last dive block. In twin mobile, two numbers of acrylic or metallic card holders shall be provided.
8. Suitable square steel bright bar / channels of suitable size are to be used for rails for smooth operation.
9. Drive Wheel : For the movement of units a drive wheel and sprocket-chain mechanism with provision for manual locking of individual units when in use has to be provided.
10. Centralised locking arrangement has to be provided through locking stiffener mounted onto the back of single last unit so that it gets locked on channels when all the units are brought together.
11. Each drive type unit has to be provided with locking knob near the Drive wheel for manual locking of individual units when a person is using those units.

General:

1. The proposed system is *Drive Type* optimizer with drive wheels fitted. The system shall be such that the manual effort required for opening / closing of the rack is minimum.
2. Required length of rails / channels are to be provided for each system.
3. Suitable elegant wheels shall be provided on the mobile blocks for opening / closing .
4. The aisle width shall be sufficient enough for a person to enter inside and access either side of the storage racks. The Equipment is to be guaranteed for its satisfactory performance for 12 months from the date of installation.
5. Offers received from Indian OEMs only will be considered by BHEL.
6. OEM should have their own press brake, powder coating plant with baking oven, powder applications, etc.
7. Offers received from other than OEMs without required facilities as mentioned in point No. 6 will not be considered by BHEL.

PREPARED BY		CHECKED BY	
Signature		Signature	
Name	G.Madhuramani	Name	M.P.Balasubrahmanyam
Designation	Sr.Manager	Designation	Addl.General Manager
Department	Management Services	Department	Management Services

Specification for Vertical Storage with Sliding Door Unit (VSDU)
1200X450X1200 mm = 40 Nos., 900 x 450 x 1200 mm = 60 Nos.,
1200x450x740mm = 10 Nos.

Storage Unit : Required for the storage of variety of office documents, office files, stationary items, manuals, documents, etc.

Construction : CRCA Steel confirming to IS:513 Gr. D , with metal door and wooden top. The minimum thickness of CRCA steel is 1.00mm and the thickness of pre laminated particle board is 25mm. The edges of PLB are to be finished with 2 mm thick PVC lipping. Provision of metal top (below PLB) has to be ensured.

Dimensions: Type- A: 1200mm (W) x 450mm (D) x 1200mm (H) - Approx.
 Type- B: 900mm (W) x 450mm (D) x 1200mm (H) - Approx.
 Type- C: 1200mm (W) x 450mm (D) x 740mm (H) - Approx

Sliding Door Arrangement: Full height sliding door with top hanging arrangement to prevent derailment. Each door shall be provided with two plastic rollers having steel ball bearing for smooth movement of door.

Locking & Handle: Aesthetically appealing die cast 5 lever cam lock with 2 keys. Keys should have unique system such that interchangeability with other unit is not there. Handle shall be of plastic flush & recessed model.

Shelves: CRCA Steel confirming to IS:513 Gr. D , thickness 1.00 mm (minimum) – height wise adjustable shelf mounting. Uniformly distributor Load carrying capacity of 70 kg maximum for each shelf. Two numbers of adjustable shelves per storage unit. (3 levels formed by 2 Nos. of adjustable shelves)

Painting: Epoxy polyester powder coated to the thickness of minimum 40 microns. Before powder coating, metal surfaces are to be treated for antirust.

- Note:** 1) Offers received from Indian OEMs only will be considered.
 2) OEM should have their own press brake, powder coating plant with baking oven , powder applications, etc.
 3) Offers received from other than OEMs without required facilities as mentioned in point No. 2 will not be considered by BHEL.

PREPARED BY		CHECKED BY	
Signature		Signature	
Name	G.Madhuramani	Name	M.P.Balasubrahmanyam
Designation	Sr.Manager	Designation	Addl.General Manager
Department	Management Services	Department	Management Services