

**Bharat Heavy Electricals Limited**  
**High Pressure Boiler Plant**  
**Tiruchirappalli – 620 014. India**  
**Civil Engineering Department (Factory)**

<b>TENDER DOCUMENT (PRICE BID)</b>	
<b>Name of work</b>	: Providing and applying Epoxy coating and Epoxy painting in DM water tank & DM water plant area respectively in Bldg. 50 AUSC works
<b>Tender Schedule No</b>	: CF: TS: 037 / 19 - 20
<b>Value of Work</b>	: <b>Rs. 2,53,562.30 + Applicable GST</b>
<b>EMD</b>	: <b>Rs. 5,070/-</b> (Rupees Five Thousand and Seventy only)
<b>Period of Contract</b>	: 02 (Two) Months
<b>Issued to:</b>	:
<b>Date of Notification</b>	: <b>09.01.2020</b>
<b>Last Date for Receipt of Tenders</b>	: <b>14.01.2020 @ 10:00 hrs.</b>

**BHARAT HEAVY ELECTRICALS LIMITED  
TIRUCHIRAPALLI - 620 014**

**SCHEDULE - A**

**Name of Work:** **Providing and applying Epoxy coating and Epoxy painting in DM water tank & DM water plant area respectively in Bldg 50 AUSC works.**

I / We \_\_\_\_\_ have read the condition of tender attached here to and agree to abide by such conditions. I/We offer to execute the works in **CF: TS: 037/19-20** for a period of **02 (Two) Months** at the percentage below / at par / above the rates contained in Bill of Quantities appended below from Page 03.

I / We further agree to sign an Agreement Bond to abide by the General Conditions of Contract and to carryout all works according to the specifications for materials and works of Bharat Heavy Electricals Limited, Tiruchirapalli-620 014. In case of acceptance of the tender by the BHEL, I / We bind myself / ourselves to execute the contract documents within 7 days after notice that my/our tender has been accepted and this contract has been awarded to me / us and thus failing which I/We shall have no objection to the forfeiture of the Earnest Money amount to **Rs. 5,070.00** lodged with Bharat Heavy Electricals Limited, Tiruchirapalli - 620 014.

I / We further agree to include all tools & plants and consumables required for the work in my / our scope but required power and water will be provided at one point by BHEL at free of cost and based on this, we have quoted our percentage.

**Note:** Details & Quantities of each item of work shown in the BILL OF QUANTITIES are only approximate and the same is appended below. They are given as a guide for the purpose of tendering only and are liable to variation and alteration of the Competent Authority. The work under each item as executed shall be measured and priced at the overall percentage quoted by the contractor **Below (100-X) % / At par (100%) / Above (100+X) %** of the rates provided in Bill of Quantities appended below from **Page 03.**

Sl. No.	Approx. Value of work	Common single Percentage Rate (Below (100 – X)% / At Par (100%) / Above (100 +X) %) to be quoted with respect to the rates provided in the Bill of Quantities (all items as enclosed in the Price Bid of the Tender Document) from <b>Page No. 3.</b>	
		In Figures	In Words
1.	<b>Rs. 2.54 Lakhs (100%) (Excluding GST)</b>		

**Note: BHEL estimate total 100% is given below. Contractor has to quote Common single percentage, Below (100-X) % / At par (100%) / Above (100+X) %, with respect to the estimate total in Bill of Quantities below, at page 2 both in figures and in words.**

**BHEL / TRICHY-620 014 , CIVIL ENGINEERING DEPARTMENT (FACTORY)**

**BILL OF QUANTITIES**

**Name of work: Providing and applying Epoxy coating and Epoxy painting in DM water tank & DM water plant area respectively in Bldg. 50 AUSC works.**

<b>Sl. No.</b>	<b>DESCRIPTION</b>	<b>Units</b>	<b>Qty.</b>	<b>BHEL Rate (Rs. P.)</b>	<b>Amount (Rs. P.)</b>
10	<p>Providing &amp; applying Two pack epoxy coating over wall &amp; floor of underground Demineralized water tank(11 X 8.5X 3.5 m) as per specification &amp; special note given below . Epoxy Protective Coating shall be a pigmented, non-toxic coating, based on solvent-free epoxy resins, providing excellent chemical and corrosion resistance, equally effective on dry or damp surfaces. The product shall be a two-pack solvent free epoxy coating with a volume solids content of minimum 65%. After suitable primer, the product shall be applied in two coats to a wet film thickness of 200 microns per coat. The product shall have a pot life of 30 - 40 minutes at 20°C and 10-15 minutes at 35°C. The product shall have chemical resistance to a range of aggressive chemicals but specifically, 25% Sodium hydroxide, 30% Sulphuric Acid, 20% Hydrochloric Acid.</p> <p>Scope includes, Surface preparation of the area by thorough cleaning of surface to free dust, dirt, oil and foreign material from floor, preparation of floor surface for epoxy primer using machine grinding. Any cracks on floor more than 3mm to be grove cut and filled with epoxy and other smaller cracks to be dressed with epoxy.</p> <p>Recommended Brands : BASF, CIPY, FosRoc, SIKH, PIDLITE STP, HUNTSMAN, BOSTIK, CLEAN TECH, AUTOMOTIVE SOLUTIONS, MYK ARMENT. Color as approved by Engineer In charge</p>	M2	250	940.00	2,35,000.00
20	<p>Providing &amp; applying Epoxy paint of 0.5mm thickness over Wall &amp; Under the roof slab of DM plant room, specification given below with special note inclusive and completion of work to the fullest satisfaction of Engineer-in-charge.</p> <p>Required specification is as per the following steps.</p> <ol style="list-style-type: none"> <li>1) Surface preparation of the top surface, by thorough cleaning of surface to free dust, dirt, oil and foreign material, preparation for epoxy primer using machine grinding.</li> <li>2) The surface is then to be coated with suitable high strength bond primer of suitable thickness (as per manufacturer recommendations)</li> <li>3) Application of epoxy paint of desired colour approved by Engineer In charge for a thickness of 0.5 mm</li> </ol>	M2	85	195.90	16,651.50

Sl. No.	DESCRIPTION	Units	Qty.	BHEL Rate (Rs. P.)	Amount (Rs. P.)
30	<p>Pencil coping of 25mm Song the floor and wall joint as per specification given in below Procedure with special note inclusive and completion of work to the fullest satisfaction of Engineer-in-charge.</p> <p>Specification for 25mm Pencil coping along the wall:</p> <p>Providing Pencil coping of 25mm along the wall at floor and wall joint location to provide a Dust free flooring, subject to everyday cleaning and swabbing. The required specification is as per the following steps.</p> <p>1) Surface preparation of the top surface, by thorough cleaning of surface to free dust, dirt, oil and foreign material. preparation for epoxy primer using machine grinding.</p> <p>2) The coping should be made to match the 3mm Epoxy flooring and as per the manufacturers recommended procedure</p>	M	20	95.54	1,910.80
<b>BHEL estimate total (100%)</b>					<b>2,53,562.30</b>

**Special Note:**

1. The epoxy is to be prepared and mixed to requirement as per the procedure suggested by the manufacture.
2. The epoxy to be used is to be of the following make BASF, CIPY, FosRoc, SIKH, PIDLITE STP, HUNTSMAN, BOSTIK, CLEAN TECH, AUTOMOTIVE SOLUTIONS, MYK ARMENT.
3. The epoxy flooring is to be applied on concrete surface
4. The layer should be Seamless, Joint less and monolithic.
5. The colour of epoxy will be decided at the time of contract. The colour should be added to epoxy as per laying requirement so as to achieve final desired colour.
6. The surface made with epoxy should have excellent physical and chemical resistant properties.
7. Any curing required during laying and after finishing should be carried out by the contractor.
8. The contractor should give a guarantee for 12 months from the date of completion of the work and should rectify faults that come on the surface.
9. The corner near wall and machinery should be suitably pencil coped for 25mm and the open edges should be suitably sloped for smooth finish with existing floor.
10. The payment will be made as per the actual units of work done.
11. The vendor should indicate the Brand name of Epoxy that they will be using and should provide application method during tendering stage.

**Mentioned rates excludes GST%**