



# कार्यालय स्वास्थ्य, सुरक्षा एवं पर्यावरण विभाग,

बी.एच.ई.एल.- हीप,रानीपुर, हरिद्वार-249403 (उत्तराखंड)

फोन: +91-1334-284380, फैक्स: +91-1334-226460, ई-मेल: abhai@bhelhwr.co.in

## TENDER NOTICE

**Open tenders are invited in sealed envelopes in two parts, i.e, (i) Techno-Commercial Offer and (ii) Price Bid for the under-mentioned works:**

Tender no. & date	Description of items	Estimated cost	Earnest Money	Period of work
BHEL/HSE/15/09 dt. 26.03.2015	Renovation & Fabrication of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works.	Rs. 20.03 Lac	Rs. 60,000/- (Sixty Thousands)	6 months

Last date for sale of tender document : 21.04.2015 up to 12:00 Noon

Date for submission of tender : 21.04.2015 up to 1:45 pm

Date of opening of tender : 21.04.2015 at 2:00 pm

Place of sale of tender: Office of Manager (HSE) in Adm. Building no. 4, HEEP, BHEL, Haridwar

Place of deposit of tender: Tender Room, 4<sup>th</sup> floor, Main Administrative Building, HEEP, BHEL

Tender cost: Rs 250/- (Two hundred fifty only) for each tender (non-refundable) to be submitted in the form of demand draft made in favour of Accounts Officer, BHEL, Haridwar payable at Haridwar.

**Amendment / Corrigendum, if any will be hosted on our website & not through press advertisement. Please visit our website before submitting your offer.**

**Manager (HSE)**



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Renovation & Fabrication of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works.

NIT no : BHEL/HSE/15/09  
Date: 26.03.2015

## **UNDERTAKING:**

The contractor shall sign the undertaking as below;

1. I/We have carefully perused all the terms and conditions of the tender, NIT including general conditions of contract and special conditions mentioned in the tender before quoting the offer and I/we commit to abide by them in toto.
2. **I/We have submitted the signed tender document in Part-1 of the offer. Part-2 offer i.e. price bid contains only the BOQ and the quoted rate.**
3. I/We shall abide by the laws applicable to me/us.
4. I/ we shall decide the number of employees to be deployed for execution of the work and give instruction to my/ our employees. BHEL will have nothing to do or be concerned with the employment of my/ our employees.
5. I/ We shall abide by the Service Tax Act/ Rules as applicable.
6. In case of non-compliance of any of the statutory obligations, labour laws by me/us, I/we shall be responsible for all expenses/ liability occurring /accruing on BHEL because of this including expenditure on legal proceedings. All such expenses shall be recoverable from any of my/ our running contract with BHEL or any contract entered thereafter.
7. **I/ we agree to abide by the special conditions no. 21 regarding liquidated damages and penalty.**
8. The details of earnest money enclosed with the offer;
  1. Amount Rs. ....
  2. Cash Receipt No. .... Date.....
  3. Bank Draft No. .... Date..... Name of Bank.....

**Contractor**

**Manager (WEX-HSE)**



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Renovation & Fabrication of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works.		NIT no : BHEL/HSE/15/09 Date: 26.03.2015
<b>CHECKLIST</b>		
<b>Note: Tenderer is required to fill in the following details and should specify respective enclosures attached against each details in the format itself.</b>		
<b>S.No</b>	<b>CRITERION</b>	<b>STATUS (TO BE FILLED BY TENDERER )</b>
1.	Name & address of the Tenderer	
2.	E-Mail ID	
3.	Phone No. (Office) Mobile No. (if any) Fax No.	
4.	Name & designation of the official of the tenderer to whom all the references shall be made	
5.	Whether EMD submitted (By cash/ demand draft). Give detail	
6.	Service Tax Registration No.	
7.	Proof of turnover during last 3 financial years.	
8.	Financial statement of accounts (audited balance sheet of last 3 financial years)	
9.	Whether tender cost submitted along with Techno-Commercial offer in case tender document is downloaded from web-site.	
10.	Whether complete tender document has been submitted.	

**Signature of Contractor with name, seal & date**



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NIT no : BHEL/HSE/15/09  
Date: 26.03.2015

## **QUALIFYING CRITERIA FOR TENDER**

Tenderer should fulfill the following qualifying criteria of the above tender:

- I. Tenderer should have valid Service Tax Registration no. and submit proof of the same or should be willing to submit undertaking to obtain the same within one month. Successful bidder will have to submit valid Service Tax Registration no. after issue of letter of intent (LOI) in case they do not possess valid Service Tax Registration no.
- II. Average Annual financial turnover of Tenderer during the last 3 years ending 31st March of the previous financial year, should be at least 30% of the estimated cost.
- III. Vendor should have successfully completed one similar work order not less than the 30% of the estimated cost in one single work order.
- IV. Vendor should have successfully completed one similar work, similar work order means Renovation/Fabrication/Installation of Dust/Fumes extraction system Works.
- V. Tenderer must submit tender cost along with Techno-Commercial offer in case tender document is downloaded from web-site.

***\*Note: The qualifying criteria may be relaxed solely at the discretion of BHEL in case of inadequate response in the tender.***

***BHEL reserves the right to accept or reject any/all tender(s) without assigning any reason thereof.***



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Date: 26.03.2015

## INSTRUCTIONS FOR TENDERER

1. The offer shall be submitted as per the instructions of tender document. Only One set of tender document signed by authorized representative of tenderer and signed & stamped on each page shall be submitted as detailed further. Tenderer should note specifically that all pages of tender document, including the NIT pages for this particular tender shall be submitted by them (after signing/ stamping on each page) as a part of their offer. Price shall not be mentioned by them anywhere in the techno-commercial portion of offer; it shall be mentioned in the relevant price bid offer only and submitted in separate sealed envelope. In case of any clarification, bidder may contact this office. No overwriting / correction in tender documents by tenderer shall be allowed. However if correction is unavoidable, the same may be signed by authorized signatory.
2. Tender must be submitted in two parts, i.e., (i) Techno-Commercial Offer and (ii) Price Bid. Both the offers i.e., "Techno-Commercial offer" and "Price Bid" must be sealed in separate envelopes super scribed with NIT no. and name of the contractor. All the envelopes must be sealed in another envelope super scribed with NIT no. , name of the contractor and name of work.
3. **Techno-commercial offer should contain all the documentary proof pertaining to qualifying criteria, signed tender document, General conditions of contract, signed bill of quantity, tender cost, earnest money etc.**
4. **The signed bill of quantity should be submitted with the Techno-commercial offer.**
5. **Price Bid should contain only the price bid sheet. The percentage rate quoted on the sheet shall be applicable uniformly for all the items of bill of quantities.**
6. On the date of opening of tender, only Techno-Commercial offer shall be opened. Price Bid of acceptable Techno-Commercial offers shall be opened on another day which will be intimated to parties.
7. Earnest money must be kept in Techno-Commercial offer. Offer without requisite earnest money will not be considered. **The earnest should be in the form of bank draft to be made in favour of A.O. (Works), BHEL, Haridwar payable at Haridwar.**
8. Tender documents are also available on web site i.e. [www.bhelhwr.co.in](http://www.bhelhwr.co.in) and the same can be downloaded and used as tender document for submitting the offer. In case tenderer uses this facility, the cost of tender document as indicated in the tender notice will have to be deposited by the tenderer along with the Techno-Commercial offer. **Tender cost should be paid separately and not included in the Earnest Money.**
9. BHEL reserves the right to accept or reject any or all offer without assigning any reasons thereof. BHEL also reserve the right to cancel the tender wholly or partly without assigning any reason thereof. Also BHEL shall not entertain any correspondence from bidders in this matter (except for the refund of EMD).
10. Bidders must visit site/work area and study the job content, facilities available, availability of materials, prevailing site conditions including law & order situation etc. before quoting for this tender. They may also consult this office before submitting their offers, for any clarifications regarding scope of work, facilities available at sites or on terms and conditions. No additional claim shall be entertained by BHEL in future, on account of non-acquaintance of above.
11. For any clarification on the tender document, you may seek the same through telephone/ e-mail to the undersigned before last date of sale of tender document. BHEL shall not be responsible for receipt of queries after this date for seeking clarification due to any reason whatsoever.
12. In the event of any typing error / other clerical errors in the tender documents, noticed by the tenderer, the same must be pointed out before submission of offer, or else, BHEL's interpretation shall prevail & binding on the tenderer.  
Thanking you,

For BHARAT HEAVY ELECTRICALS LTD.

**Manager (WE&S-HSE)**

**Contact Details** : Tel. No. : 01334-284380

Fax No. : 01334-226460

E-mail : [abhai@bhelhwr.co.in](mailto:abhai@bhelhwr.co.in)



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NIT no : BHEL/HSE/15/09  
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## **SPECIAL CONDITIONS:**

1. These special conditions shall be read in conjunction with General Conditions of contract.
2. The contractor will have to comply with the Service Tax registration and abide by the relevant laws/rules following during execution of contract:
3. **Contractors are advised to see the site before quoting the rates.**
4. The contractor shall observe provisions of the Factories Act/ Rules in respect of working hours, holidays, rest intervals, leaves, minimum wages and overtime to his employees. Work in second / third shift, overtime, Sundays or on other declared holidays should be carried out after getting written permission from Engineer Incharge.
5. Contractor shall decide the number of employees to be deployed for execution of work awarded to him and he or his authorized representative will be solely entitled to dictate such workers about the manner of carrying out the work as per specifications/quality plan.
6. The contractor shall not employ a worker less than 18 years of age on the premises of BHEL or otherwise during execution of his work.
7. Contractor must ensure that the employees deployed in the premises of BHEL are physically and mentally fit and do not have any criminal record. Such employees should possess requisite skill, proficiency, qualification, experience etc.
8. Contractor will be responsible for good conduct of his employees. In case of any misconduct / misbehavior by any employee, the contractor will replace such employee(s) immediately.
9. Contractor shall pay minimum wages as applicable from time to time including leave with wages to their workers as per rules /act and any changes made thereafter.
10. In case of non-compliance of any of the labour laws, the contractor shall be responsible for all the expenses /liability occurring / accruing on BHEL because of this including expenditure of legal proceedings. All such expenses shall be recoverable from the contractor from any of his running contracts/security deposit/other dues with BHEL or from any contract entered with BHEL thereafter.
11. The work shall be governed by General terms and conditions of BHEL contract, special conditions, environment-related conditions, safety clause and any other relevant condition mentioned here.
12. All material brought to site for the use in the work should be ISI marked, if available in market. However, all the material used in work shall have to be got approved by the Engr.I/C before execution of the work. The contractor may have to furnish test certificate of all the materials to the satisfaction of department. If required, the material shall be got tested by the deptt. at CBRI or any other govt. approved agency at the risk and cost of the contractor.
13. Any extra item concerning to the completion of work will have to be executed by the same contractor, as per direction of Engineer In charge. The rates of such item will be decided by the competent authority (for award of work) but on no account the work will be stopped.
14. Quantities mentioned in bill of quantity may vary on either side as per actual requirement at site.
15. **Earnest Money deposited by the tenderer will be forfeited if:**
16. **After opening the tender, the tenderer revokes his tender within the validity period or increases his earlier quoted rates.**
17. **The tenderer does not commence the work within the period as per LOI/ contract. In case the LOI/ contract is silent in this regard then within 15 days after award of contract.**
18. Earnest Money deposit shall not carry any interest.
19. Security deposit from successful Tenderer shall have to be deposited before start of the work. The rate of security deposit will be as follows: For works upto Rs. 10 lacs :10%, above Rs. 10 lacs. upto Rs. 50 lacs. : 1 lacs+7.5% of the amount exceeding Rs. 10 lacs. and for works above Rs. 50 lacs.: Rs. 4 lacs + 5% of the amount exceeding Rs. 50 lacs.
20. Security deposit shall be released as follows: 50% shall be released along with the final bill and balance 50% shall be released after satisfactory completion of the maintenance period of the work duly verified by Site In charge and clearing of all dues. **The maintenance period of the work shall be one year.**
21. Sales tax and other taxes shall be recovered as per rule.



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22. Contractor will have to protect BHEL equipment and material from fire hazards or any other damages or loss. Contractor will keep watch on his employees and he will be liable for any pilferage/ loss to BHEL due to acts of omission and commission by his employees. Similarly liability for any compensation to any outsider on account of any act of omission and commission by the employees deployed by the contractor shall lie exclusively with him.
23. **Liquidated Damages & Penalty**  
**This clause shall be applicable in accordance to clause no.44 of general condition of contract.**
24. Regular meeting (fortnightly or as decided by BHEL) shall be held between BHEL and contractor to review the issues related to progress, penalty, quality and any other aspect.
25. **The contractor shall have to deploy sufficient number of skilled, semi-skilled and unskilled manpower for quality and timely completion of the work.**
26. **In case any defect is found during guarantee period of 1 year from the date of completion of work, the contractor will have to repair the same at his risk and cost. The contractor must attend to repair the same within 15 days of notice to this effect by Engineer In charge, failing which balance security deposit may be forfeited.**
27. Document in support of Qualifying criteria for acceptance of tender  
Tenderer must submit proof of documents required as per qualifying criteria of tender along with the techno-commercial offer.
28. The bidder may have to produce original document for verification if so decided by BHEL.
29. No excuses like hindrance because of jungle, extreme weather conditions, non-availability of labour and material etc will be entertained for not completing the work in time.
30. All necessary precautions with respect to safety at site and environmental aspects shall have to be taken by the contractor for activities performed by his workers.
31. For safety in execution of the work, the contractor must ensure that all labour engaged in the work at site should wear personal protective equipment's (PPEs) as required in the activity. If the contractor requests for issue of PPEs for use at site, BHEL may consider issuing the same (subject to availability) at BHEL purchase cost and recovery shall be made from the bills payable.
32. BHEL shall not be responsible for providing accommodation of staff of contractor during the period of work or subsequent maintenance.
33. The gate passes/ tokens to be issued by the CISF UNIT shall have to be returned to the pass section of CISF after completion of work, failing which recovery at the rate as applicable shall be made from the contractor.
34. **No escalation in cost will be permitted under any circumstances.**
35. Period of validity of offer should be 90 days from the date of opening of tender.
36. **Contractors are advised to see the site before quoting the rates.**
37. **Rates should be quoted for items given in the bill of quantity inclusive of CST and Service tax and ED extra as applicable.**  
**Note:** Service Tax shall be reimbursed as per actual. However while raising the invoice on BHEL contractor is required to break up the Billing amount into gross value of work done & tax portion separately. Service tax is payable against service tax registration by the party and they have to show service tax portion separately in their invoice.
38. BHEL reserves the right to cancel the tender at any stage of tendering till signing of agreement without assigning any reasons thereof. Tender cost in that event shall not be refunded.
39. The contractor may be paid during the progress of the work 75% of the value of any materials which are in the opinion of the Engineer-in-charge is in accordance with the contract and are actually required for incorporation in the work and which have reasonably been brought to the site in connection with and are adequately stored and/ or protected against damage from weather or other cause.



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40. **Contractor must sign on all pages and fill up the offer in all respect.**
41. **The Bill of Quantity has been prepared on tentative quantities and they vary as per actual site condition.**
42. Contractor found or reported for noncompliance of the legal obligations during the execution of the contract, shall be debarred from the issue of NIT's for at least 01 year or till the proof of compliance is produced.
43. The work shall be governed by the specifications, general terms & conditions of BHEL contract, special conditions, environment related conditions, new safety clause and any other relevant conditions applicable time to time.
44. Contractor has to complete the work in time as per demand of the site in-charge.
45. The contractor not completing the work as per site requirement & as directed by the site in-charge, action, as deemed fit will be taken including debarring for the issue of further NITs.
46. Quantities of individual item may vary up to 10% on either side as per actual site requirement.
47. Schedule / analyzed item rates are liable for correction if there is any omission or typographical or calculation error.
48. In case more than one contractor quotes L1 rates, the work may be awarded through draw of lottery as per following guide lines; i) Lottery shall be drawn between those L1, who have no work (as per billing) on the day of opening of the tender ii) In case there is no contractor qualifying for (i), the work may be awarded to that contractor who is having the lowest percentage of pending (unbilled) work calculated on his highest limit of registration.
49. BHEL reserves the right to sub-divide the work between more than one parties as per the work requirement.
50. BHEL reserves the right to award only a fraction or part of the work given in the bill of quantity.
51. BHEL reserves the right to cancel the tender at any stage of tendering till signing of agreement without assigning any reason(s) thereof. The tender cost in that event shall not be refunded.
52. Power of attorney / subletting will not be accepted for execution of work.
53. Rates shall be quoted in figures as well as in words and contractor must put his name and signature on each page of the tender documents / undertakings, while submitting his offer, failing of which tender may be liable for rejection.
54. No excuses for hindrance viz. jungle, extreme weather condition, non-availability of labour etc. will be entertained for not completing the work.
55. All necessary precautions for safety & environmental aspects shall have to be taken by the contractor for the activities performed by his workers.
56. The contractor shall have to carry out the work any where out side / in side factory area and nothing extra will be paid for any extra lead and lift for carrying out the work at various heights / conditions.
57. Involvement in any undesirable activity by him or his workmen will be viewed seriously and attract strict action including cancellation of contract or debarring from tendering.
58. Any offer without proper earnest money, with any ambiguity, unsigned documents, unclear quotation and against the above instructions will be treated as invalid and will not be considered at all and the responsibility for the same will lie on the contractor
59. Service tax will be paid extra, if applicable.
60. **Contractor shall employ qualified & experienced Supervisor and workman to carryout the work. The supervisor shall supervise the day to day activities at site and report the same to site in-charge.**



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## BILL of Quantity

 HEALTH, SAFETY & ENVIRONMENT HEEP, BHEL, HARDWAR			
Renovation & Fabrication of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works.		Date of opening: 21.04.2015	
		NIT No:- BHEL/HSE/15/09 Dt. 26.03.2015	
Estimated Cost: Rs 20.03 lacs.		Time of comp. : 6 months	
Earnest Money : Rs. 60,000/-		Tender Cost : Rs. 250/-	
BILL OF QUANTITY			
S.N.	Description of items	Qty.	Unit
1	Redesigning, renovation & upgrading the existing local exhaust equipment's in shop including Fabricating, Installing & commission of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works like duct work, making hole in the wall if required, mechanical dampers for regulation of airflow and ID fan, each buffing wheel with dedicated hood inclusive of bottom collection tray necessary as per site requirement and direction of engineer in charge including all labour and T&P, Transfer duct, Filter, ID Fan, Manual damper for controlling the airflow.	1	Set
Note:-			
<ol style="list-style-type: none"><li>1. One set comprising Three Machine in polishing section at New Blade Shop.</li><li>2. Supports to be provided to maintaining the gaps between hood &amp; buffing wheel.</li><li>3. The bottom tray of hood should be connected to a flexible PVC hose in turn clamped to the hood.</li><li>4. The other end of the hose should be connected to the fixed duct.</li><li>5. The ducts from each wheel should be connected to the fixed branched duct.</li><li>6. Fan and filter should be installed outside the plant with suitable weather enclosure, Duct will be passed through the wall. Duct will be mounted on the suitable height from the ground floor over steel or concrete platform including making the walls good.</li><li>7. The agency must provide operation &amp; maintenance manual and training to BHEL staff at free of cost.</li><li>8. All taxes will be paid extra as applicable.</li><li>9. Contractor has to take all the safety precautions advised to him by engineer-in-charge.</li><li>10. Contractor is advised to apprise himself thoroughly with the site conditions before submitting the quotation.</li><li>11. The work shall be governed by the specifications, general terms &amp; conditions of BHEL contract, special conditions to be provided along with tender documents, environment related conditions, safety clauses and any other relevant conditions applicable time to time.</li></ol>			



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## TECHNICAL DATA SHEET

S.N	ITEM DESCRIPTION	SPECIFICATION
<b>Design Data</b>		
1	Gas Volume	4400 m3/hr
2	Operating Temp.	1000 Deg. C
3	Inlet Dust Load	5gm Gm/m <sup>3</sup>
4	Outlet Dust Load	10 Mg/m3
5	ACR	1 M <sup>3</sup> /min/m <sup>2</sup>
6	Flange to flange pressure drop	150 mmWG
<b>BAG FILTER DETAILS</b>		
1	Fabric type	Pleted Bags
2	Bag Size	225x1000 mm x mm
3	Tube Sheet dia	225 mm
4	Nos.of Bags	16 Nos
5	Total Filtering Area	73 m <sup>2</sup>
<b>MATERIAL / THICKNESS</b>		
1	Casing	3 mm
2	Tube Sheet	5 mm
3	Hopper	5 mm
<b>BAG CLEANING MECHANISM</b>		
1	Cleaning time	Adjustable
2	Cleaning cycle	Adjustable
3	Size of solenoid valve	40NB
4	Nos.of solenoid valve	4 Nos
<b>HOPPER</b>		
1.	Plate angle	70 Deg
2.	Material	Mild Steel
3.	Rotary air lock size	200 NB
4.	Geared motor for rotary air lock	75KW
<b>COMPRESSED AIR REQUIREMENT</b>		
1.	Air quantity (Max.)	12 m3/hr
<b>BAG FILTER FAN</b>		
1.	Capacity	4400 M <sup>3</sup> /hr
2.	Arrangement	Direct Driven
S.N.	ITEM DESCRIPTION	SPECIFICATION
3.	Static Pressure(MMWG)	300 mm WC
4.	Shaft Power	5KW Kw
5.	Motor Rating	5.5 KW
6.	Fan Speed(rpm)	2840
7.	Efficiency	80%
8.	Casing Material/ thickness	3 mm



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## SCOPE OF SUPPLY

SCOPE OF SUPPLY		
<b>A</b>	<b>MECHANICAL</b>	
1	Casing, tube sheet, inlet and outlet flange with one set of counter flanges.	SUPPLIER
2	Filter bags, cages, ventures, blow pipes and other bag fixing accessories.	SUPPLIER
4	All foundation bolts, nuts, washers, other bolts and loose fittings, as would be necessary for erection of the bag filter.	SUPPLIER
5	Compressed air header and piping from header to Bag filter.	SUPPLIER
6	Manometer	SUPPLIER
7	Platform for Header, Top Railing, Ladder cage	SUPPLIER
8	Centrifugal fan with energy efficient motor	SUPPLIER
9	Expansion joint at inlet & out let of the fan	SUPPLIER
10	Air filter and regulator with gauge for compressed air	SUPPLIER
<b>B</b>	<b>ELECTRICAL &amp; INSTRUMENTATION</b>	
1	All required solenoid valves. Coil of valves of 110 VAC. 50 Hz. 40 NB	SUPPLIER
2	DP switch and pressure switch	SUPPLIER
3	Sequential controller, solid state type for pulse operation	SUPPLIER
4	Cable from solenoid valve to junction box	SUPPLIER
5	Junction box	SUPPLIER
<b>C</b>	<b>Drawing, Design and Engineering</b>	
1	GA and load data drawing (In AutoCad Format)	SUPPLIER
2	Erection drawing of Bag filters	SUPPLIER
3	Operation and Maintenance Manual	SUPPLIER
4	Civil foundation drawing	SUPPLIER
<b>D</b>	<b>GENERAL</b>	
1	Painting of all equipment (1 coat of red oxide and 2 coat of synthetic enamel paint)	SUPPLIER
2	Electrical cabling work	SUPPLIER
3	Compressor and piping up to header	SUPPLIER
4	Civil work	SUPPLIER
5	Dust disposal system beyond Rotary air lock (one point discharge)	SUPPLIER
6	Erection & commissioning	SUPPLIER




# कार्यालय स्वास्थ्य, सुरक्षा एवं पर्यावरण विभाग,

बी.एच.ई.एल.- हीप, रानीपुर, हरिद्वार-249403 (उत्तराखंड)

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## Price Bid

	<b>HEALTH, SAFETY &amp; ENVIRONMENT HEEP, BHEL, HARDWAR</b>	<b>Renovation &amp; Fabrication of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works.</b>	<b>Date of opening: 21.04.2015</b>
			<b>NIT No:- BHEL/HSE/15/09 Dt. 26.03.2015</b>
<b>Estimated Cost: Rs 20.03 lacs.</b>		<b>Time of comp. : 6 months</b>	
<b>Earnest Money : Rs. 60,000/-</b>		<b>Tender Cost : Rs. 250/-</b>	

### BILL OF QUANTITY

S. N.	Description of items	Qty.	Unit	Rate @ Rs./-	Amount Rs./-
1	Redesigning, renovation & upgrading the existing local exhaust equipment's in shop including Fabricating, Installing & commission of Fine Alloy Steel Dust Extraction cum Filtration system and their associated works like duct work, making hole in the wall if required, mechanical dampers for regulation of airflow and ID fan, each buffing wheel with dedicated hood inclusive of bottom collection tray necessary as per site requirement and direction of engineer incharge including all labour and T&P, Transfer duct, Filter, ID Fan, Manual damper for controlling the airflow.	1	Set		

\* Note:-

1. One set comprising Three Machine in polishing section at New Blade Shop.
2. Supports to be provided to maintaining the gaps between hood & buffing wheel.
3. The bottom tray of hood should be connected to a flexible PVC hose in turn clamped to the hood.
4. The other end of the hose should be connected to the fixed duct.
5. The ducts from each wheel should be connected to the fixed branched duct.
6. Fan and filter should be installed outside the plant with suitable weather enclosure, Duct will be passed through the wall. Duct will be mounted on the suitable height from the ground floor over steel or concrete platform including making the walls good.
7. The agency must provide operation & maintenance manual and training to BHEL staff at free of cost.
8. All taxes will be paid extra as applicable.
9. Contractor has to take all the safety precautions advised to him by engineer-in-charge.
10. Contractor is advised to apprise himself thoroughly with the site conditions before submitting the quotation.
11. The work shall be governed by the specifications, general terms & conditions of BHEL contract, special conditions to be provided along with tender documents, environment related conditions, safety clauses and any other relevant conditions applicable time to time.