



# भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड, भारत, पिन-826004

(मानव संसाधन एवं विकास मंत्रालय, भारत सरकार के अधीन एक राष्ट्रीय महत्व का संस्थान)

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA, PIN-826004

(An Institute of National Importance under Ministry of H.R.D., Govt. of India)

STORES & PURCHASE SECTION Phone:(0326) 2235678 || Email : purchase@ismdhanbad.ac.in || Website : www.iitism.ac.in

No. M-500485-2016-17

Date: 07<sup>th</sup> April 2017

## **NOTICE INVITING TENDER**

**Subject:** NIT No. Mining-500485-2016-17 for Supply & Installation of High Speed Digital Video Camera with accessories and Advanced Motion Analysis Software for use in rock blasting  
(Due date 09.05.2017)

Sir(s),

Indian Institute of Technology (Indian School of Mines), Dhanbad invites tenders/ quotations for Supply, Installation, High Speed Digital Video Camera with accessories and Advanced Motion Analysis Software for use in rock blasting - 01 No in our Mining Department. **Particulars of tender cost, earnest money deposit and date and time of submission and opening of tenders are as under:**

S No	Items	Particulars
1.	Tender cost	Rs.1,000.00 (Rupees One Thousand only)
2.	Earnest money deposit	Rs. 90,000.00 (Rupees Ninety Thousand only)
3	Last date for seeking clarification(s), if any	<b>02.05.2017 at 3:00 P.M.</b>
4.	Date and time for submission of tenders	<b>09.05.2017 at 3:00 P.M.</b>
5.	Date and time of opening of tenders	<b>09.05.2017 at 4.00 P.M.</b>

Tender document containing following document is available in our website [www.ismdhanbad.ac.in/tender\\_page](http://www.ismdhanbad.ac.in/tender_page)), which may kindly be referred.

1. Technical specifications as per Annexure-I
2. General terms & condition as per Annexure-II
3. Particular of Bank Guarantee towards EMD as per Annexure –III
4. Compliance Statement as per Annexure -IV

***Those firms who do not want to quote may please intimate us along with reasons for same as it will help us to update our suppliers list.***

Encl: As above

Deputy Registrar



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## Annexure-I

### SPECIFICATIONS OF HIGH SPEED DIGITAL VIDEO CAMERA WITH ACCESSORIES AND ADVANCED MOTION ANALYSIS SOFTWARE

<b>HIGH SPEED VIDEO CAMERA</b>	
<b>Sensor</b>	CMOS Sensor, Colour
<b>Pixel Resolution</b>	1280 x 1024 upto 700 frames/s & with reduced resolution at other fps
<b>Frames per seconds (fps)</b>	Upto 15,000
<b>Lens Mount</b>	Standard F/C-mount or any other
<b>Lens</b>	80-200 mm f/2.8 F-mount Zoom Lens or better
<b>Shutter</b>	Electronic shutter
<b>Synchronization</b>	Multiple Cameras sync facility
<b>Memory on-board/internal</b>	Minimum 8 GB
<b>Solid State Data Storage</b>	Built in Solid State Data Storage Drive of minimum 512GB or more for field application
<b>Display</b>	Camera hardware should include highly bright minimum 175 mm or more for live view, for review display and play back.
<b>Camera Control on Board</b>	Camera should include on board control facility for controlling all camera functions and display camera field view. It should be able to review recorded video files.
<b>Camera Control, Remote Access</b>	Camera should have Web-Control Interface for remote control through internet browser from any computer connected to the internet. This should require no software be installed on the controlling computer.
<b>I/O connectors</b>	Ethernet connection, Video out HDMI, USB power adapter cables for DC and AC Power operation.
<b>Power supply</b>	220 VAC adapter & provision for battery operation. Internal battery pack should give minimum 180 minute backup. System must include Battery charger with portable battery pack (for extended in-field monitoring)
<b>Trigger</b>	External essentially wireless for rock blasting where wires are not permitted to lay and internal using camera controller (Portable Wireless Trigger System must be included which must work upto 500 meters or more)
<b>Rugged Housing for field work</b>	All electronics and lens etc. should be fully concealed. Camera housing should be rugged for opencast mining operations with accessories
<b>Essential Accessories</b>	Portable wireless trigger including Transmitter and receiver with Tripods & Case minimum 500 meter range distance for safety, Battery charger with portable battery pack (for extended in-field monitoring , suitable camera tripod with carrying case, high speed rock blasting operation at minimum Safe Distance of 300 m. SDHC Card 10 GB or more may be provide with facility of SDHC card reader, power adaptors, cables for DC and AC operation, operation manual. Suitable Data Collection on notebook hardware and software may also be included for extended video files management in the field during projects.
<b>Software</b>	Motion analysis software to be used for analysis of mine bench blasting operations in terms of finding firing times of detonators, burden rock mass movement, burden velocity, fly rock ejection, stemming ejection



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	etc. Software should have the facility of point tracking velocity vs time graph import and export of multiple file types. State of the art digital image processing tools,. The software should also be capable of tracking blast event movement without having to use special marker.
<b>Warranty</b>	1 years comprehensive parts and labour warranty
<b>Training</b>	Demonstration of camera and software in the actual mining field condition by the manufacturer/ representative
<b>Note</b>	The quoting firm must submit the user list of camera in the mining research organizations/industries



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## Annexure-II

### GENERAL TERMS & CONDITIONS

#### NIT No. Mining-500485-2016-17

Sealed tenders under **two-bid system** are invited from manufacturers/ their authorized dealers/ agents for supply and installation in IIT (ISM) Dhanbad of items specified in *Annexure-I*.

1. Offer should be submitted under **TWO-BID** system in two separate sealed covers i.e. “**Techno-commercial bid**” and “**Price bid**”.
2. *a) In a tender, either the Indian agent on behalf of the principle/ OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.*  
*b) If an agent submit bid on behalf of the principle/ OEM, the same agent shall not submit a bid on behalf of another principle/ OEM in the same tender for the same item/product.*
3. **Techno-commercial Bid**: should contain the following documents/information:
4. **Tender Cost**: Cost of the tender document is to be paid by way of an A/C payee demand draft for an amount indicated in Page No 01 and drawn in favor of Registrar, IIT(ISM) is entitled for Excise Duty Exemption under Govt of India notifications and is registered with DSIR, Govt of India for this purpose. This may be taken into consideration while quoting minimum possible rate. *Exemption Certificates* can be issued in favour of manufacturers only. It will not be issued any Indian Agent/dealer or distributor at any circumstances. IIT(ISM) will provide only custom duty exemption certificate for availing concessional custom duty. IIT(ISM) will not pay any extra custom duty other than duty exemption certificate.
  - a. Dhanbad and payable at SBI, ISM campus branch or any other Bank/ Branch located in Dhanbad. Tender cost is non-refundable and non-transferable. Alternatively, intending tenderers may **download** the complete set of tender document from IIT (ISM) website ([www.ismdhanbad.ac.in](http://www.ismdhanbad.ac.in)) and submit the same duly signed on all pages by the tenderers along with demand draft for tender cost
5. **Earnest Money Deposit (EMD)**: Should be submitted in form of A/C payee demand draft drawn in favor of Registrar, IIT(ISM) is entitled for Excise Duty Exemption under Govt of India notifications and is registered with DSIR, Govt of India for this purpose. This may be taken into consideration while quoting minimum possible rate. *Exemption Certificates* can be issued in favour of manufacturers only. It will not be issued any Indian Agent/dealer or distributor at any circumstances. IIT(ISM) will provide only custom duty exemption certificate for availing concessional custom duty. IIT(ISM) will not pay any extra custom duty other than duty exemption certificate.
  - a. and payable at SBI, IIT (ISM) campus branch or any other Bank/ Branch located in Dhanbad. It can also be submitted in the form of bank guarantee issued by a Nationalized Bank in India in the format given in Annexure-IV.
  - b. Tenders without payment of tender cost and EMD will not be considered, unless the tenderer is exempt from such payment under Govt. Rules/ Regulations as amended from time to time and claims such exemption along with relevant and valid supporting documents.
  - c. All relevant technical specifications/details of offered items, drawings, printed technical leaflets, and commercial details which are necessary to ensure that offer is complete in all respects should be attached with the technical bid documents.
  - d. A ‘*Compliance Statement*’ along with a certificate and duly signed that the tenderer satisfies the technical requirements given in **Annexure-I**. The said statement should be in a tabular form with the columns: sl. no., (2) technical requirement as per NIT; (3) what is offered by the tenderer; and (4) status of compliance: Complied/Not complied).
  - e. IIT(ISM) does not bind itself to offer any explanation to those bidders whose Technical Bids have not been found acceptable by the Evaluation Committee of the Institute.
6. **Further the following documents have to be furnished by the tenderers**:
  - a) Self attested copies of credentials in support of capability to undertake the supply/work.
  - b) Technical literature/catalogue with the detail specification of the material



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- c) Satisfactory performance certificate from their customers for same/similar supply/service must be enclosed alongwith the technical bid.
- d) Income tax PAN, Sales tax regn. Nos. (VAT/CST/TIN), & Bank A/c no., name of bank & branch.
7. **Price should be quoted on FOR, IIT(ISM) Dhanbad basis in case of Indigenous supply and CIF, Kolkata basis as well as FOR IIT(ISM) Dhanbad basis in case of foreign supply.** The packing, forwarding, freight and transit insurance charges, if any must be included in the price and should not be claimed separately. Duties & taxes, if applicable, are to be shown separately clarifying whether those are extra or included in the price. Price bids of only technically qualified tenderers shall be opened in their presence on a pre-notified date and time.
8. **Educational discount, if any, should be clearly mentioned.**
9. IIT(ISM) is entitled for Excise Duty Exemption under Govt of India notifications and is registered with DSIR, Govt of India for this purpose. This may be taken into consideration while quoting minimum possible rate. *Exemption Certificates* can be issued in favour of manufacturers only. It will not be issued any Indian Agent/dealer or distributor at any circumstances. IIT(ISM) will provide only custom duty exemption certificate for availing concessional custom duty. IIT(ISM) will not pay any extra custom duty other than duty exemption certificate.
10. IIT (ISM) does not issue form 'C' or 'D' for concessional Sales tax/VAT. Hence, full rate of sales tax as applicable to educational institutions against the form of certificate should be indicated.
11. **Warranty:** Minimum 01 year from the date of installation and commissioning at the site.
12. **Validity:** Offer must be valid for a period of **180 days** from the date of opening of tender
13. **Performance Bank Guarantee (PBG):** A bank guarantee issued by a Nationalized Bank in India towards PBG for an amount equal to 10% of basic value of purchase order and valid towards PBG for an amount equal to 10% of basic order value of purchase order and valid till the period beyond two months of completion of warranty period should be submitted in favour of REGISTRAR, IIT (ISM) DHANBAD.
14. **Delivery Period and Liquidated Damage:** The ordered materials/work complete in all respects are required to be delivered and installed within the period stipulated in the purchase order failing which liquidated damages of 1% per week for the delayed period subject to maximum of 5% of the total basic value of the order shall be deducted from the invoice of the supplier.
15. **Inspection:** Inspection shall be carried out at IIT (ISM), Dhanbad after arrival of the materials and decision of the Institute in this regard shall be final.
16. **Rejection and Replacement:** Rejection, if any, shall be notified to the supplier within 30 days of receipt and inspection of the material/workmanship. Rejected materials/work is to be removed by the supplier at his own risk and cost from IIT (ISM). Campus within 14 days of intimation of rejection. Defective Supplies are required to be replaced within 15 days of the removal of the rejected materials/work.
17. **Risk Purchase:** IIT (ISM) shall be at liberty to realize from the supplier the differential amount, if any, which it shall have to incur on purchase of the material/work at higher price(s) from elsewhere in the market, if the supplier, due to their fault, fails to supply the ordered quality and quantity of the material/work within the stipulated time.
18. Conditional offer will not be accepted.
19. **Payment:** will be made within 30 days (In case of inside in India)/ outside India through LC only) after satisfactory supply, inspection, installation/commissioning & acceptance and on submission of pre-receipted tax invoice, delivery challan, warranty certificate and installation report in triplicate and Performance Bank Guarantee. The invoice should be duly certified by the Head of Dept to which supply is made or any other IIT (ISM) official authorized for this purpose.
20. Your full address for correspondence and name address of the beneficiary's banker should be clearly indicated in the offer. **Institute does not make any advance payment.** However, as a special case 90% Letter of Credit Payment term is accepted only in case of foreign supplier and balance 10% after satisfactory, installation report received from the user department.
21. **Country of origin and port of shipment should be stated** in your offer clearly.



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22. Name and address of Indian Agent, percentage of agency commission, if any and role of the Agent with respect to the subject supplies and a statement thereon that "Agency Commission is included in the
23. FOB/CIF price of the offer" should be clearly indicated in your offer.
24. Earliest/ expected delivery period should be clearly indicated.
25. Packing should be suitable for 'Air freight'.
26. Please note that no part shipment/transshipment/third party shipment is acceptable to us.
27. **Last date** for receipt of tenders and date & time for opening of the same is given in page- 01. The tenders will be opened in the presence of representatives of tenderers present. ***In the event last date is a holiday/declared as a holiday, next working date will be the last date for submission/ opening of tender.***
28. Tender should be submitted in a sealed cover/envelope and must be superscribed as under:
  - i) "Tender No. Mining-500485-2016-17 (Supply & Installation of High Speed Digital Video Camera with accessories and Advanced Motion Analysis Software for use in rock blasting **(09.05.2017 at 4.00 p.m.)**).
  - ii) All tender shall be received upto to the time and date as stated in the tender notice, after which no tender shall be accepted in any circumstances.
  - iii) All tender must be sent by Registered Post/Speed Post/Courier along with Courier receipt, during IIT (ISM) working days only (i.e. Monday to Friday). Please note that no hand delivery of tender will be received at any circumstances.
29. The Institute at its discretion may change the quantity/quality/parameters/upgrade the criteria/drop any item(s) or part thereof at any time before placing the order. In case of any dispute, the decision of IIT(ISM) shall be final and binding on the bidders/tenderers.
30. The Institute reserves the right to accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid.

## **ABOVE TERMS AND CONDITIONS OF THE NIT ARE ACCEPTED**

1	Name and address of the tenderer	
2	Telecom nos. of the tenderer i.e. phone fax, & email id.	
3	Signature, name & designation of the person signing on behalf of the tenderer & his/her office seal	
4.	Name & designation of the contact person & his phone/mobile no.	



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## Annexure-III

### FORMAT OF BANK GUARANTEE TOWARDS EMD

Whereas \_\_\_\_\_ (hereinafter called "the Bidder") has submitted its bid dated \_\_\_\_\_ (date of submission of bid) for the supply of ..... (name and/or description of the goods) (hereinafter called "the Bid") against Tender Document No. \_\_\_\_\_ of the Indian School of Mines, Dhanbad.

KNOW ALL PEOPLE by these presents that WE \_\_\_\_\_ (name of bank) of \_\_\_\_\_ (name of country), having our registered office at \_\_\_\_\_ (address of bank) (hereinafter called "the Bank"), are bound unto \_\_\_\_\_ (name of Purchaser) (hereinafter called "the Purchaser") in the sum of \_\_\_\_\_ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this \_\_\_\_\_ day of \_\_\_\_\_ 2009.

THE CONDITIONS of this obligation are:

1) If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

2) If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:

(a) fails or refuses to execute the Contract Form if required; or

(b) fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders;

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to six months from the date of opening of tender or the period of the bid validity whichever is later and any demand in respect thereof should reach the Bank not later than the above date.

Signature of the Bank



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## Annexure-IV

### Compliance Statement

Sl. No	Technical requirement as per NIT	What is offered by the tenderer	Status of Compliance Complied/Not Complied
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