



सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
CSIR - NATIONAL METALLURGICAL LABORATORY
(Council of Scientific & Industrial Research)
JAMSHEDPUR - 831 007



ISO

9001:2008

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No.NML-FG/CSE-LCP/22-13

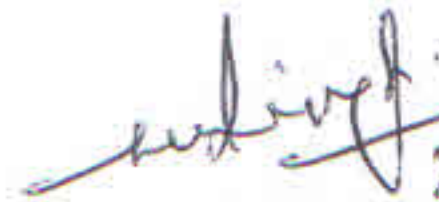
August 18, 2014

Sub: Request for submission of quotation for supply of Hot Dip Process Simulator (HDPS).

Dear Sirs,

Please send your quotation by **5.00 p.m. (IST) on 10-09-2014**. The quotation will be opened on the next working day at **3.00 p.m. (IST)**.

Sl. No.	Description	Quantity
1.	Hot Dip Process Simulator (HDPS) <u>Note:</u> Please see attached tender documents for technical specifications & other details.	1 No.

 21.08.14

(N. K. Singh)

Stores & Purchase Officer

Encl: Tender Documents.



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TENDER DOCUMENTS

OF

HOT DIP PROCESS SIMULATOR (HDPS)

Enquiry No.NML-FG/CSE-LCP/22-13 dt.18-08-2014

NIT Ref No.NML/PUR/NIT/2014-15(4) dt.18-08-2014

Enquiry No.NML-FG/CSE-LCP/22-13

Date : 18-08-2014

Name of Equipment: **HOT DIP PROCESS SIMULATOR (HDPS)****Detailed Specifications:**

	The hot dip process simulator should be able to perform realistic simulation of thermal treatment, galvanizing, galvannealing and aluminizing processes for automotive grade Advanced High Strength Steels (AHSS) in a laboratory scale.
Substrate	Sample size 120 x 220 x (0.3 to 3.2) mm with possibility to use small samples, Area of uniform temperature homogeneity 90 mm x 90 mm minimum, Temperature homogeneity within ± 5 K
	Specimen loading/unloading section should consist of interlocked door. The door should be vacuum tight and protected against unintentional opening during operation.
IR Heating furnace	Dew point, (controlled) up to $+70^{\circ}\text{C}$. Fast change from $+70$ to -60°C within 5 sec with N_2 and/or H_2 carrier gas, Fast change in gas atmosphere at strip from moistened oxidizing to reducing and vice versa, Gases: see gas mixing section please note: safety aspects apply
	Temperature up to 1100°C , accurate control (see below)
	Soak times
	300 s @ 950°C
	180 s @ 1050°C
	Temperature control ± 5 K
	Heating Rate
	50 K/s @ thickness ≤ 1 mm
	30 K/s @ thickness > 1 mm
	Temperature homogeneity across sample during soaking ± 5 K, typically ± 2 K
Induction heating	Gases:
	see gas mixing section
	please note: safety aspects apply
	Desirable Heating rate below curie (1) ~ 200 K/s @ 0.3 mm
	Heating rate below curie (2) max. 150 K/s @ 0.7 mm
	Sample should reach to a temperature of 760°C
	Desirable Overshoot 5°C max
	Visual access needed for in-line measurements during heating/ soaking (not necessarily during cooling)
	Temperature homogeneity in sample during soaking: ± 5 K
Cooling and inter- mediate process cooling	Fast Post cooling
	Cooling gas
	N_2 , H_2 (so "HNx")
	Cooling rates (post cooling)
	150 K/s @ 0.7 mm
	Desirable up to 250 K/s
	Controlled cooling rate
	Controlled cooling rate in normal cooling

Speed of displacement	Accommodate for position change between neighbouring units within 1s, except zinc bath
	Programmable displacement speed. (0.1 mm/s to 1300 mm/s), Smooth start/stop.
Process Gas and Humidification system (Gas mixing)	Input gasses under normal processing:
	N ₂ , CO, CO ₂ , H ₂ , dry air (N ₂ + 1000 ppm O ₂)
	Moisturizer (H ₂ O)
	Gas outputs:
	Laminar flow for fast gas atmosphere changes in the heating units. It should be possible to mix gases in any proportion (except air)
	1 high flow output for cooling section : N ₂ , H ₂ , HN _x
	Process gas as in chambers above or N ₂
	1 output for gas wiper: N ₂
	Humidification system should be self calibrating, DP (+70 to -60°C), fast DP changes and in-situ DP detection, fully automatic, temperature control for all flanges and piping between the upper unit and humidification system to ensure higher DP, thermocouples, thyristors and field wiring
Gas Wiping	Possible with N ₂
	Possible to adjust nozzle / strip distance & nozzle pressure
	Possible to adjust sample speed in the wiping unit
	Gas heating arrangement up to 500°C
Coating thickness and homogeneity	Sample dimension: 120 x 220 x 0.3-3.2 mm
	Coated area: 170 mm, adjustable
	Coating thickness: 40-200 g/m ² /side
	Homogeneous area : 90 x 90 mm
	Desirable minimum coating thickness : 30 g/m ² /side
	Coating Homogeneity: (±10%)
Bath	Metal bath with heating facility up to 850° C
	Stirring in the molten metal bath
	Temperature control (heater) ± 2 K
	Motion should be adjustable + controlled (rpm) + dross removal system, device should not be water cooled for safety reasons
Process control system	A compact software package (easy to learn) with graphical user interface (GUI) with respect to planning, carrying out experiment (data input, menu structure, adjustable parameters, etc.), compilation of experimental data and detection of faults, if any, reporting and evaluation of test should be provided.
Water cooling system for equipment	Proper cooling arrangement for the whole equipment including Infrared and induction heaters, as well as molten metal bath is to be provided
Control hardware and safety system	Proper safety arrangement is required for system, control mode, driving unit, gate valve, gas mixing, interlocks, gas pressure control, detecting sensors for gases in HDP simulator particularly for Hydrogen and carbon monoxide, cooling system, thermocouples, pyrometric dual wavelength camera, etc.

	Main control system with 19" TFT monitor and Work Station along with all the system and control software, Windows based system, remote sensing facility. Proper and safe electrical arrangement should be there for generation and distribution of electrical power throughout the equipment
P G Test Parameters	The contractor shall be responsible for attainment of the PG test parameters. The attainment of parameters of HDPS and its associated auxiliaries & accessories during PGT shall be within the ranges as per desired specifications
Selection Criteria for the Vendor	Proven records for the supply of similar equipment and its reliability (More than 25 installations and commissioning in the world) and after sale service provision in India.
Annual maintenance charges	The vendor should provide annual maintenance charges after the expiry of warranty period. The charges should indicate: a) Comprehensive, b) non-comprehensive and c) Call basis charges separately for Indian and Foreign engineer's visit.
Warranty	The vendor should provide warranty period of at least 1 (One) year from the date of successful installation & commissioning of the equipment.
Installation & Commissioning	The vendor shall arrange installation & commissioning of the equipment within 2 (Two) months from the date of supply of equipment to CSIR-NML.
Spares	The Spares & Accessories should be available for 15 (Fifteen) years with the supplier.
Accessories	The vendor should provide the list of essential accessories and consumables (except metals and alloys) with rates

OPTIONAL ACCESSORIES:

Area above zinc bath	Gas atmosphere above bath,
	Possible to influence the dew point above the bath
	(from -60°C up to 0°C) with simple bubbling system
Process Gas and Humidification system	1 output for area above bath to gas analyzer, Snout gases – CO ₂ , N ₂ , H ₂ , H ₂ O, N ₂ +1000 ppm O ₂ – DP 0°C
	Option to have 100% hydrogen gas with humidification
Wiping	Air Wiping (N ₂ +1000 ppm O ₂)
Liquid bath temperature	Provision for accurate measurement and control for molten bath temperature within ± 2K
Connectors	The vendor is also requested to provide all the necessary connectors for electrical, water and gases (NML will provide equipment external piping and cabling).

Enquiry No.NML-FG/CSE-LCP/22-13**Date : 18-08-2014****Name of Equipment : HOT DIP PROCESS SIMULATOR (HDPS)****TERMS & CONDITIONS**

1. Issue of Tender Documents : **25-08-2014 to 10-09-2014 upto (03.00 PM IST)**
(Tender Documents can also be downloaded from www.nmlindia.org)
2. (a) Last Date for submission of quotations (Two Bid) : **10-09-2014 till (05.00 PM IST)**
(b) Date of opening of Technical Bid : **11-09-2014 from (03.00 PM IST)**
(c) Venue of tender opening (Technical bid only): Old conference Room, CSIR-NML, Jamshedpur – 831007 (Please note that “**LATE**” & **DELAYED**” tenders will not be considered for opening in any case. Please ensure that tenders must reach the office on or before Due Date for submission of tenders) as mentioned at 2 (a) above.

The sealed cover containing Technical bid + Financial bid and superscribing the Enquiry No. & Due Date shall be submitted to Director, CSIR-National Metallurgical Laboratory, Jamshedpur-831007 **on or before 10-09-2014 till (05.00 PM IST)**. Both the technical and financial bids should be kept in separate sealed covers indicating the Enquiry No. & Due Date on the covers.

3. **E. M. D. (Earnest Money Deposit)**

Manufacturers/Agents must submit a Bid Security (EMD) **as per format enclosed of Rs.25,50,000/- (Rupees Twenty five lakhs fifty thousand only)** along with their Bids in the form of Demand Draft / Bankers Cheque/Bank Guarantee of any scheduled Indian Bank drawn in favour of **Director, National Metallurgical Laboratory, Jamshedpur**. Bids without EMD will not be valid or considered. EMD of unsuccessful bidders will be returned within **one** month of the award of the contract. However, firms registered permanently with DGS&D and NSIC, Govt. Public undertakings, Central Autonomous Bodies, who are exempted from payment of EMD, will be allowed exemption subject to production of documentary evidence to this effect. Such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies. EMD must be submitted in the sealed cover containing Technical Bid (Part-I). Foreign vendors/Indian Agents may submit Demand Draft drawn in favour of Director, NML, payable at Jamshedpur in foreign currency of equivalent amount **USD 42,040/- or Euro 31,655/-**.

4. The bid security shall be in Indian Rupees for offers received for supply within India and denominated in the currency of the bid or in any freely convertible foreign exchange in the case of offers received for supplies from foreign countries in equivalent Indian Rupees. The bid security shall be in one of the following forms at the bidders' option:
 - a) A bank guarantee issued by a Nationalized/ Scheduled Indian Bank/Foreign Bank operating in India in the format provided in the bidding documents and valid for 45 days beyond the validity of the bid. In case a bidder desires to submit a BG issued from a foreign bank, then the same should be confirmed and routed through Nationalised / Scheduled Indian Bank. or Through (b)

- b) Fixed Deposit receipt pledged in favour of the Laboratory. / Institute. or Through (C)
 - c) A Banker's Cheque or demand draft in favour of the NML, Jamshedpur issued by any Nationalised /Scheduled Indian Bank.
 - d) **In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.**
 - e) **If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/ product.**
5. Bids shall remain valid for minimum 180 days after the date of bid opening prescribed by NML. A bid valid for a shorter period shall be rejected by the NML as non- responsive.
 6. The Bid Security may be forfeited if the bidder withdraws or modifies or amends its tender or impairs or derogates from its bid during the bid validity period or fails to sign the contract or fails to furnish order acceptance or performance Security in time.
 7. In case of bidder intimates at the time of tender opening in writing that the bid security is kept inside the financial bid, in case of 2-bid system, then in such cases, the technical bid of the vendors may be accepted provisionally till opening of the financial bids with which the vendor has attached the bid security.
 8. In case a firm is unable to submit the EMD before the due date and time and the firm provides an undertaking that they will provide the EMD within the next 48 hours of due date of opening then the tender opening committee can provisionally accept the bid subject to the condition that the EMD should be submitted within the next 48 hrs to the SPO, CSIR-NML who will accept the same on the basis of an approval by the Director, CSIR-NML, Jamshedpur. It is also to be seen that it should not become the rule for some firms to submit their EMD's late or else the Director, CSIR – NML can take a decision not to accept such requests if it has become a repetitive case.
 9. Firms submitting bids in a single envelope against the requirement of two-bid systems will be considered for further evaluation at the risk & responsibility of the bidder. However, the opened price bid should be sealed immediately by the Tender Opening of the Institute (TOC), without disclosing the price.
 10. Bidders are not permitted to withdraw/alter or modify their bids after expiry of the deadline for receipt of bids. No request from bidder for extension of date of receipt of tender and opening shall normally be entertained.
 11. **Cost break up** indicating the applicable prices for each component of the equipment like price of the goods, costs for installation and commissioning, training should be mentioned in the commercial bid.
 12. The Institute reserves the right to seek **past purchase order copies** from the user organizations. The past purchase order copies obtained from the user organizations will be kept entirely confidential & this will only be for tallying the prices.
 13. Equipment manufacturers within India have to quote directly. Agents of Indian Equipment manufacturers who doesn't have a track record of supply of similar items i.e., installation and commissioning not done directly will not be entertained. In such cases bids submitted by Agents

of Indian Equipment manufacturers would be rejected on the grounds of subletting or subcontracting. Such offers from **so called agents of indigenous manufacturers** will summarily be technically rejected for not following laid down Terms & Conditions of tender document and for not having any installations done by them directly.

14. The institute also may seek **performance certificates** from equipment manufacturers/the user organizations so as to confirm satisfactory functioning, installation & commissioning of the equipment.

15. **Negotiations:**

(i) Negotiation if at all shall be an exception and only in the case of proprietary or in the case of with limited source of supply. Negotiations if at all required shall be held with the lowest (L-1) evaluated responsive bidder with the cogent reasons to be recorded.

(ii) Counter offers tantamount to negotiations and should therefore be avoided.

16. **In case of two-bid system adopted then the exchange rate as prevailing on the date of opening financial bid should be the basis for preparing the comparative statement.**

17. Orders for equipments shall be dispatched to the vendor in two copies with an instruction that the vendors has to return one copy duly signed as a token of the acceptance of the order or the vendor may be asked to submit the order acceptance promptly within 15 days or earlier.

18. The order confirmation should be received within 15 days however the sanctioning authority has to the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS).

19. Even after extension of time, if the order confirmation / performance security are not received, then in consultation with Purchase Committee / Technical & Purchase Committee, the purchase order should be cancelled and limited tender irrespective of the value may be invited from responding firms in line after forfeiting the bid security of the defaulting firm, where applicable provided there is no change in specifications. In such case defaulting firm should be considered again for tendering in the particular case. However, if the contract is signed across the table, then order acceptance is not required.

20. **PROCESS OF EVALUATION: (BETWEEN INR QUOTE & FOREIGN CURRENCY QUOTE).** The bidders should submit their quote as per the tender document which should be as follows:-

A) **For goods manufactured in India.**

- a) The price of the goods quoted ex-works including all taxes already paid.
- b) VAT and other taxes like excise duty etc., which will be payable on the goods if the contract is awarded.
- c) All Charges involved for inland transportation, insurance, Jharkhand road permit if required for delivering the goods at the desired destination i.e, F.O.R, CSIR-NML Stores, Jamshedpur, Jharkhand.
- d) The installation, commissioning, training, accommodation and travel charges if any.

B) For goods manufactured abroad.

- a) The price of the goods, quoted on FCA (named place of delivery abroad) or FOB (named port of shipment), as specified in the bidding document.
- b) The charges for freight forwarding, clearance, insurance, transportation, Jharkhand road permit of the goods till the place of destination i.e., upto CSIR-NML Stores, Jamshedpur.
- c) The installation, commissioning & Training charges if any.
- d) For other charges i.e., the CIF/CIP prices quoted by any foreign bidder shall be loaded further as mentioned in Clause No.21 (a) & (b).

The above points when added together as per (A) and (B) would be the basis of evaluation between indigenous & foreign bidders for deciding the lowest technically suitable bid. **Please note that this cost comparison of technically suitable bids is only applicable in cases where there is one or more indigenous (INR) Quotes compared to foreign currency quotations.**

The FOB/FCA price quoted should have all the charges built into it till the consignment is booked at the departing port. In case of import NML will arrange insurance from supplier's warehouse to NML stores at Jamshedpur.

Note: The offers of the firms who quote on Ex-works basis and do not mention the handling, documentation, packing, forwarding, transportation & insurance charges etc. separately will not be considered a responsive bid and the acceptance of such bid will vest entirely with the Director, NML, Jamshedpur.

21. **PROCESS OF EVALUATION (BETWEEN INR QUOTE & FOREIGN CURRENCY QUOTE).** The comparison between the indigenous and the foreign offers shall be made on FOR destination basis i.e, F.O.R CSIR-NML, Stores, Jamshedpur and CIF/CIP basis of the foreign currency quote respectively. However, the CIF/CIP prices quoted by any foreign bidder shall be loaded further as under:

- a) Towards customs duty and other statutory levies –as per applicable rates.
- b) Towards custom clearance, inland transportation etc. - 2% of the CIF/CIP value as per CSIR Purchase rules of Good and services – 2008 and Purchase manual of Best Practices – 2008.

The above cost comparison of technically suitable bids would be applicable only in cases where one or more indigenous and foreign quotes are being compared.

Note: Where there is no mention of packing, forwarding, freight, insurance charges taxes etc. such offers shall be rejected as incomplete. **For the purpose of Custom Clearance Kolkata Air Port / Sea Port would be our destination port.** All Firms quoting FOR NML, Jamshedpur should mention in their quote about Transport Charge, Road Permit and safe delivery at CSIR-NML Stores.

Note: In case where the foreign principal quotes and he does not have an agent in India then the foreign service engineer visit and AMC charges should be provided. The foreign service engineer's visit during installation & commissioning would be added for the purpose of cost comparison and selection.

22. **PROCESS OF EVALUATION: (BETWEEN TWO OR MORE FOREIGN CURRENCY QUOTES)**

In the purchase of many items against one tender, which are not inter-dependent or where compatibility is not a problem the comparison would be done on FOB/FCA price + warranty (one year) to facilitate the proper cost comparison of technically suitable foreign currency bids. This evaluation would be followed while comparing two or more foreign currency quotes. Thus the (FOB/FCA prices) + warranty (one year) would be taken into consideration while finalizing the technically suitable lowest quoting firm. All the bidding firms should ensure that their FOB/FCA price should have packing, forwarding, internal freight, insurance charges mentioned so as to make it a technically responsive quote. The CIF/CIP prices quoted in such cases only act as an estimate and would not be taken for comparison of two or more foreign currency quotes. The Annual Maintenance Charges would also not be the basis of evaluation. The Annual Maintenance charge would only be an estimate so that CSIR-NML can take a decision at a future date whether it wants to enter into an AMC for the particular equipment at the price quoted by the bidding firms. To make it a technically responsive bid firms should quote both FOB as well as their CIF Kolkata, India, charges although for cost comparison purposes and for deciding the technically lowest quote the (FOB/FCA prices) + warranty (one year) would only be the basis of evaluation between two or more foreign currency quotes taken into consideration.

Note: In case where the foreign principal quotes and he does not have an agent in India then the foreign service engineer visit and AMC charges should be provided. The foreign service engineer's visit during installation & commissioning would be added for the purpose of cost comparison and selection.

The Institute seeing the competitiveness of the CIF / CIP price quoted can place the order on CIF / CIP basis but the basis of evaluation for deciding a technical suitable lowest quoting bid would be **FOB/FCA prices) + warranty (one year).**

23. The Purchaser will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt fraudulent, collusive or coercive practices in competing for the Contract in question.
24. **Tenders received either by post or courier or by hand (excepting for tenders received against Single Tender Enquiry) shall be dropped in the tender box, duly locked and sealed and would be opened in presence of the Tender Opening Committee.**
25. If a tender, received in a cover without any superscription about its contents, is opened by any official receiving it, he shall himself mark on the cover the tender number and the date of its receipt and the date of its opening and shall sign it and cause it to be delivered to the Purchase Officer before the opening date. In such cases the Purchaser Officer informs the Tender Opening Committee verbally or in writing regarding the bid received.
26. A formal contract should be executed, with all necessary clauses which can be altered suitably wherever felt necessary by the Laboratory/Institute to make it a self contained contract. A simple one page contract can also be entered into by attaching copies of the General Conditions of Contract (GCC) & Special Conditions of Contract (SCC) and details of scope and specifications. The decision making committee at NML may decide to place order without mentioning specifically the General Conditions of Contract (GCC) & Special Conditions of Contract (SCC) and may follow its own format which is more comprehensive.

27. In all cases where a contract is to be signed on a stamp paper, a letter of Intent (LOI) may be issued to the firm in advance of the contract. The LOI should specifically mention, inter-alia, the deadline for signing of the contract which should not normally be more than two weeks from the date of issuance of LOI. The decision making committee at NML may decide not to furnish Letter of Intent but to directly place the purchase order.
28. **Any correction in the price quoted in the tender in words and/or figures** shall be encircled in red ink by the representative of finance and signed. The members of the tender opening committee shall endorse this.
29. **Two Bid System** : Under 2-bid system, the techno-commercial un-priced bid (technical bid) will be opened first and will be evaluated by the Technical Sub-committee (TSC) of the Technical & Purchase Committee (T&PC) with respect to the qualification criteria and the technical specifications as spelt out in the tender. The committee doing the evaluation will also draw a Technical Comparative Chart. The tender meeting the qualification criteria and technical specifications will be short listed for financial evaluation. Then, the financial bids of the short listed parties will be opened and evaluated for lowest responsive offer.
30. If the bidder has quoted certain optional items, these items should not be taken into consideration for the evaluation of the bid unless the specifications of the optional item quoted by the vendor are part of original indented specification.
31. **Performance Security**
The successful vendor shall furnish an unconditional Performance Bank Guarantee favoring Director, National Metallurgical Laboratory, Jamshedpur 831 007, Jharkhand, India valid till **60 days** after the expiry of warranty period from a scheduled Indian Bank for **10%** of F.O.B. value or **10%** of order value within **21 days** of placement of Purchase Order where full payment is to be made on Letter of Credit (L/C) or on delivery.
32. The terms FOB, FCA, CIF, CIP etc shall be governed by the rules prescribed in the current edition of the Inco terms published by the International Commerce, Paris.
33. The price quoted shall remain fixed during the contract period and shall not vary on any account. All lots and items must be listed and priced separately in the Commercial Bid. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the bid.
34. No outright advance payments will be made to the firms. Any advance will be against a bank guarantee of equivalent value.
35. **Amendment of Bidding Documents**
a) At any time prior to the deadline for submitting of bids, NML may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the bidding documents by amendment.

- b) All prospective bidders who have received the bidding documents will be notified of the amendment in writing or by cable or by fax, or by e-mail and will be binding on them. The same would also be hosted on the website of the NML and all prospective bidders are expected to surf NML's website before submitting their bids to take cognizance of the amendments.

36. **Language of the Bids**

The Language of the documentation & details in the Bids must be in **ENGLISH**.

37. The bidder shall provide an item-by-item commentary vis-à-vis NML's technical (Specifications demonstrating substantial responsiveness of the goods and services to these specifications or a statement of deviation and exceptions to the provision of the technical specifications.

38. **All bids will be submitted in TWO-BID Format** in separate sealed covers (Enquiry Number & Due Date must be compulsorily mentioned in both envelopes and on the main envelope).

- (i) **PART-I: TECHNO-COMMERCIAL BID** - giving Detailed Specifications, International Standards (BIS / INTERNATIONAL), Catalogues, List of users & Technical Details, Technical Compliance Sheet, etc. along with Operating Parameters, Pre-Installation Requirements, payment terms, warranty.
- (ii) **PART-II: PRICE BID** - giving full Prices in Foreign Currency or in Indian Rupees for -
 - (a) Main Equipment.
 - (b) Essential Accessories & Spares.

39. **Annual Maintenance Contract (AMC) :**

The Annual Maintenance charge would only be an estimate and would not be the basis of evaluation and selection of the technical suitably lowest quoting firm. The AMC Charges would only enable CSIR-NML to take a decision at a future date whether it wants to enter into an AMC for the particular equipment at the price quoted by the bidding firms.

- (a) AMC charges for 3 Years (Comprehensive and Non-Comprehensive) after the expiry of warranty period to be separately mentioned. The AMC charges would not be taken into consideration for deciding the technically suitable lowest quoting bid.
- (b) The scope of work under AMC (Comprehensive) for the Infrared camera should cover parts and labour for the active components (camera and power supply). Passive component lens and interfacing cables should also be covered under AMC. Non-Comprehensive AMC may also be quoted.

40. All Vendors / Agents must submit full details and requirements for Installation & Commissioning of the Equipment as per Technical Specifications submitted by them.

- (i) Water Supply (Filtered, Flow rate).
- (ii) Civil Works including Foundation, Flooring.
- (iii) Mechanical and Fabrication work required.
- (iv) Ambient Temperature Control (if required, as applicable).
- (v) Cooling requirement (if any).
- (vi) Electrical and Power requirements.
- (vii) Space and Dimensions for Installation of the equipment as per the Quotation of the Vendor.
- (viii) Requirements of Special Gases, if any.

41. All participating vendors are requested to provide the approximate period required for the equipment to become operational from the date of the arrival.

42. **Training** :

The supplier should provide onsite training for two weeks at CSIR - National Metallurgical Laboratory, Jamshedpur after installations and commissioning of the said equipment at NML free of cost. This training shall be to the satisfaction of NML Scientists.

43. **Installation & Commissioning** :

Installation & Commissioning will be the sole responsibility of the Supplier / Indian Agent. Installation & Commissioning with all infrastructural works have to be done by the supplier. The vendor and Indian Agent will complete the installation & commissioning within two months from the date of supply of equipment to CSIR-NML. CSIR-NML will provide the electrical connections and water supply to the equipment. All the necessary connectors will have to be provided by the vendor.

44. **Warranty** :

The Supplier must warrant that the goods supplied under the Contract are new, unused and the most recent or current and incorporate all recent improvements in design, materials as per specifications in this Tender Document. All Vendors (Manufacturers / Agents) must submit offers with at least **1 (One) year comprehensive warranty** after installation & successful commissioning of the equipment is complete in all respects **at Site, i.e., (CSIR-National Metallurgical Laboratory, Jamshedpur, India which would be considered for the tender evaluation purpose)**. The successful installation & commissioning date along with the date to be reckoned for start of the warranty period needs to be certified by the vendor & the user scientist. The supplier should however, quote separately for comprehensive/non-comprehensive/Annual Maintenance for three successive years after the completion of one year's comprehensive warranty. **This Annual Maintenance Charges for three years as quoted would not be the basis of evaluation and selection for deciding the technically suitable lowest quoting bid.**

The warranty offered should be unconditional and the seller should agree to replace or repair the equipment at his cost. The spare parts for the warranty repair have to be provided by the vendor.

45. In case a foreign bidder who does not have an agent in India quotes then the foreign principal shall have to furnish a certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period. In case the foreign suppliers themselves would provide service during warranty then their service visit plan for mandatory visits and for breakdown visits may be provided.

46. **Delivery Period** :

- a) In case of **foreign suppliers** firm delivery period (in weeks) after opening irrevocable Letter of Credit (LC) must be given in Techno-commercial Bid. No part shipment is permitted. Transshipment is permitted in case of International flights only.
- b) In case of **Indigenous suppliers** the firm delivery period (in weeks) after issue of Purchase Order must be given in the Technical Bid. Delivery is to be made at NML Stores, Jamshedpur. Delivery must be on FREIGHT PAID BASIS for despatch by Road. NML will issue the certificate/declaration in lieu of Road Permit to effect Delivery.

47. **Payment:**

- a) **For Indian Suppliers and Manufacturers - 70%** payment to be released on receipt of material at CSIR-NML in good condition duly certified by the user Scientists. **30%** payment would be released after satisfactory installation & commissioning as certified by the user Scientists subject to submission of Performance Bank Guarantee (PBG) for 10% of the purchase order value covering the period of warranty + 60 days.
- b) All the vendors / bidders are required to furnish the following details for making payment by e-mode.
 - i) 11 digit core Banking Account Number
 - ii) Type of Account (Saving / Current)
 - iii) Name of Account Holder
 - iv) Name of Bank & Branch
 - v) IFSC Code Number
 - vi) MICR Number

48. **Payment for Foreign Suppliers :**

- (a) **70%** payment by Irrevocable Foreign Letter of Credit subject to submission of Performance Bank Guarantee (PBG) by the vendor for 10% of the purchase order value covering the period of warranty + 60 days within 21 days of placement of purchase order and before opening Irrevocable Letter of Credit (LC). **30%** payment would be released after satisfactory installation & commissioning as certified by the user Scientists of CSIR-NML.
- (b) Documents must be negotiated within 15 days of shipment through the Bank and Forwarded to State Bank of India, Commercial Branch, Pratap Towers ,1st floor, 'J' Road, Bistupur, Jamshedpur 831001, India.
- (c) Agency Commission, if any, will be paid in India Rupees to the Indian Agent.

49. **Shipping, Document & Freight:** No Transshipment or Part-shipment is permitted.

50. **Validity of Prices :** The quoted prices must be valid for a minimum period of 6 months from the date of opening of the Bid failing which offers may be summarily rejected by NML.

51. **BIS / Internal Specifications:**

Applicable BIS / INTERNATIONAL standards (like ISO etc.,) may be provided Specification must be mentioned in the Technical Bid. Valid Certificate of Calibration traceable to International Standards must be indicated in the Technical Bid, if applicable.

52. **Inspection & Testing :**

All Inspection & Tests will be conducted by NML Scientists in the presence of Manufacturer's / Agents representative at NML, Jamshedpur, India.

53. **Penalty Clauses :**

- (a) Penalty (Liquidated Damages) @ 0.5% of basic price per week will be deducted from Manufacturer's/ Indian Agent's Bill for delay in Delivery & Despatch beyond Delivery dates (as extended by NML in Purchase Order and Letter of Credit Schedule). Maximum deduction for failing to deliver within NML's approved delivery period & extensions will be limited to 5% of Ex-works Value (equivalent in Indian Rupees) for non-fulfilment of delivery deadlines and any other contractual obligations as per Purchase Order. Once the maximum is reached, NML may consider termination of the Contract.
- (b) Delay in Installation & Commissioning beyond contractual deadline will result in forfeiture of Performance Bank Guarantee.

54. **Assignment :**

The supplier shall not assign in whole or in part their obligation to perform under the contract, except with the Purchasers prior written consent. Purchase of equipment shall be made directly from manufacturers or their authorised agents in India. The authorized agents should not sublet the contract to sub-agents.

55. **Basis of Evaluation :**

(I) The factors that would be taken into consideration would include compliance to original tendered technical specifications, ability to furnish technical brochures in support of quoted technical specifications, ability to technically demonstrate the system, prior sale of such system in any CSIR Lab./Government Institutions, acceptance of our payment schedule, final landing cost of technically responsive lowest bid, delivery time & the warranty period. All the above factors would be taken into consideration while awarding the contract.

56. **Patent Rights & IPR Laws :**

The supplier shall indemnify the purchaser against all third party claims of infringement of Patent, Trademark or Industrial Design Rights arising from the use of Goods or any part thereof in the Purchaser's country. The vendor should be sure about his claim on the ownership of technology and total compensation in the event of a claim should be paid to the buyer in case of patent infringement.

57. **Right to information Act 2005 :**

The tenderer may indicate if any information in his tender includes information of commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of your company.

58. **Applicable Laws**

The contract shall be interpreted in accordance with Laws applicable in India and any dispute would be resolved by the court in Jamshedpur, Jharkhand India.

59. **Compliance Statement**

- (a) All Manufacturers / Agents must submit the Compliance Statement (Format as given below) along with the technical bid.

FORMAT FOR COMPLIANCE STATEMENT

(1) NML's Enquiry Specifications	(2) Specification of Equipment (offered by Manufacturer)	(3) Compliance to NML's Technical Specifications YES or NO	(4) Details of Deviation, if any, as per NML's Specifications

Date :

Signature of Manufacturer / Agent

- (b) Please give the following details, if you have supplied similar or identical equipment in India, particularly to any other CSIR Laboratory / Institutes in the last three years.

- Name of the equipment with brief specifications, model etc.,
- Name & Contact Address of the user.
- Purchase Order of CSIR Lab / Institutes with P.O. No. and Date if supplied to CSIR.
- Price finally paid.
- Any other relevant information.

60. **Taxes, Duties and Levies**

- a) The suppliers shall be solely responsible for all Taxes, Duties, Levies including Octroi, Local Levies, Sales Tax, Excise Duties incurred as per extant laws in India. No Concessional Sales Tax Form 'C' or 'D' will be issued by this Laboratory. It should be clearly mentioned in the quote whether the prices include taxes & duties. In case the price is inclusive of taxes and a variation of tax element is sought, then the quote should mention the base level of taxes built into the price.

b) **Customs & Excise Duty Exemption**

This Laboratory is registered with Department of Science & Industrial Research, Government of India and thus is exempted from Excise Duty vide GOI notification No.10/97 Central Excise dated 1st March 1997 and is eligible for Concessional Customs Duty as per GOI Notification No.51/96 Customs dt.23/07/1996 – amended from time to time.

61. Adoption of Integrity Pact in major Government Procurement Activities:

As per directives with the equipments manufactures where ordered equipment value exceeds Rs.3 (Three) crores of CVC all organisations including CSIR labs/institutes have to adopt an integrity pact (IP) to ensure transparency, equity and competitiveness in major Public procurement activities. The integrity pact envisages an agreement between the prospective bidders/vendors with the buyer committing the persons/officials of both the parties with the aim not be exercise any corrupt influence on any aspect of the contract. Only those bidders/vendors who have entered in to such an integrity pact with the buyer i.e., CSIR or its Labs/Institutes, would be competent to participate in the bidding. The integrity pact would be applicable for any single purchase where estimated value of purchase exceed Rs.3 (Three) crores on each occasion.

62. Extension of Time:

Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser. If at any time during performance of the Contract the supplier should encounter conditions impeding timely delivery of the Goods and performance of Services, the supplier shall promptly notify the Purchaser in writing of the fact of the delay, it's likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract. Except as provided under the Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalty pursuant to Penalty Clause unless an extension of time is agreed upon pursuant to above clause without the application of penalty clause.

63. The firms registered with DGS&D, NSIC, Govt. Public Undertakings, and Central Autonomous Bodies and with the CSIR Labs/Instts, if any, are exempted from payment of BS provided such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.
64. The Bid Security furnished by all unsuccessful bidders should be returned to them without any interest whatsoever, at the earliest but not later than 30 days after conclusion of the contract. The Bid Security of the successful bidders should be returned without any interest whatsoever, after receipt of performance security as per the contract/purchase order.
65. While Bid Security (EMD) is a requirement, the Sanctioning Authority may grant exemption of Bid security to some specific parties having sound credentials and are of national/international repute. The reasons are to be recorded by the Sanctioning Authority while approving such decision for grant exemption.
66. **Eligibility Criteria** – should have executed a job of similar nature or a supply of similar equipment of approximately the same value. To prove their technical capability firms need to enclose the copies of past projects / executed purchase orders of similar technical specifications. In case the Technical Committee of the Institute does not find technical brochures or suitable technical explanations from firms then the firms concerned who fail prove technical capability would stand rejected on technical grounds.

67. Provision for settlement of disputes through arbitration indicating clearly that the resultant contract will be interpreted under Indian Laws in case of Purchase from Indian suppliers and / or United Nations Commission on International Trade Laws (UNCITRAL) in the case of foreign suppliers. The venue of arbitration shall be the place from where the contract has been issued.
68. Non-conformities between the figures and words of the quoted price.
69. Any discrepancy between quoted prices in figures and that in words, if noted, will be sorted out in the following manner.
- If there is a discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the Purchase Committee / Technical & Purchase Committee there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.
 - If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.
 - If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to above.
 - If there is such discrepancy in a bid, the same is to be conveyed to the bidder with target date on the above lines and if the bidder does not agree to the observation of the Purchaser the tender is liable to be ignored.

70. **Negotiations:**

There should not be any negotiations. Negotiations if at all shall be an exception and only in the case of proprietary items or in the case of items with limited source of supply. Negotiations if at all required shall be held with the lowest (L-1) evaluated responsive bidder with the cogent reasons to be recorded.

71. Director, CSIR-NML reserves the right to seek past purchase orders of similar equipment supplied in order to assess the price of the equipment earlier supplied to any of the CSIR laboratory/other government R&D laboratory/educational institutions. In such cases the copies of past purchase orders provided would be kept completely confidential and would be used to facilitate the purchase process.

72. In order to assess the financial solvency of a firm Director, CSIR-NML may seek a report from the bankers of the technically evaluated lowest quoting firm in order to assess if the firm is financially capable of executing the purchase order/work successfully.

73. **Termination :**

CSIR-NML may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part.

- a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the NML.
- b) If the Supplier fails to perform any other obligation(s) under the Contract.

74. Debarring the firms from business:

The process of debarring the firm would be initiated in the below mentioned cases subject to the recommendation of the decision making committee and Director, CSIR-NML. The conditions for debarring the firm are:

- i) Not supplying the materials as per the technical specifications of CSIR-NML as mentioned in the Purchase Order.
- ii) Not fulfilling the contractual obligations as per the terms & conditions of the Purchase Order.
- iii) Not able to provide the required spares for the time period 15 (fifteen) years / period as specified in the vendors quotation "or" in the tender enquiry "or" Purchase Order of the buyer.
- iv) Repeated failures during installation, commissioning & trial run.
- v) Inadequate service back-up in terms of spares & manpower being repeatedly observed in a number of occasions and recorded by CSIR-NML during warranty and even afterwards (during the life cycle of the equipment).
- vi) In case it is proved that the Purchase Order of CSIR-NML has been sub-letted to some other vendor.

75. Arbitration :

All disputes will be referred to Director General, Council of Scientific & Industrial Research (CSIR), New Delhi for arbitration. The decision of Director General, CSIR will be final and binding on both supplier and customer (NML).

- a) NML and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- b) If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then NML or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
- c) In case of Dispute or difference arising between NML and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director General, Council of Scientific & Industrial Research and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- d) The venue of the arbitration shall be the place from where the purchase order or contract is issued.
- e) Applicable Law: The contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be resolved within Jamshedpur, Jharkhand jurisdiction only.

76. The following are some of the points, for which a tender may be declared as unresponsive.

- i) The Bid is unsigned.
- ii) The Bidder has quoted for goods manufactured by different firm without the required authority letter from the proposed manufacturer.
- iii) Bidder has not agreed to give the required performance security.
- iv) The goods quoted are sub-standard, not meeting the required specifications.
- v) Against the schedule of Requirement (incorporated in the tender enquiry), the tenderer has not quoted for the entire requirement as specified in that schedule.
- vi) The tenderer has not agreed to some essential condition(s) incorporated in the tender enquiry.

77. **Force Majeure:-**

(a) In case of an event or situation beyond the control of the supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the supplier. Such events like wars, revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes may be considered as not foreseeable and unavoidable by the supplier and thus the vendor in case of a loss the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof within 21 days of its occurrence. The purchaser in such cases would accept the postponement in delivery period but the damage to goods due to such natural calamity needs to be replaced free of cost by the seller. Unless otherwise directed by the purchaser in writing the supplier shall continue to perform its obligation under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

(b) If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, the purchaser may at its option terminate the contract without any financial repercussions on either side. In case the payment has been transacted by the purchaser in favour of the seller then the seller is bound to remit the payment in whole before closure of the Contract.

78. Notwithstanding the above, Director, CSIR-National Metallurgical Laboratory, Jamshedpur, Jharkhand, India reserves the right to "accept / reject" any Bid at any time received against this Open Tender without assigning any reason.


Stores & Purchase Officer
CSIR-National Metallurgical Laboratory
Jamshedpur, 831 007 (Jharkhand)

Fax : 0657 – 2345131 / 2345213

Tel : 0657 – 2345129 / 2345132

Email : spo@nmlindia.org

Specimen

BID SECURITY FORM

Whereas¹ (hereinafter called "the tenderer") has submitted their offer dated for the supply of (hereinafter called "the tender"). Against the NML's tender enquiry No..... KNOW ALL MEN by these presents that WE of having our registered office atare bound unto Hereinafter called the NML, Jamshedpur.

In the sum of for which payment will and truly to be made to the said, NML the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this ... day of20.....

THE CONDITIONS OF THIS OBLIGATION ARE:

- (1) If the tenderer withdraws or amends, impairs or derogates from the Tender in any respect within the period of validity of this tender.
- (2) If the tenderer having been notified of the acceptance of his tender by the NML during the period of its validity:-
- (3) If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
- (4) Fails or refuses to accept/execute the contract.

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 shall remain in force up to and including forty five (45) days after the period of the tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)
Name and designation of the officer
Seal, Name & address of the bank and address of the Branch