Date: 16-10-2019

## Addendum 03

The Pre – Bid Meeting was held on 01/10/2019 at 3.30 p.m. in the Board Room, NITK Surathkal for the purchase of "High Velocity Air Fuel (HVAF) convertible to High Velocity Oxy Fuel (HVOF) Coating Facility with Complete Turnkey Systems" (Tender Notification No.: NITK/CRF/HVAF/04 Dated: 28/08/2019). The following queries were discussed & the Reply/Clarification given to the prospective bidders.

## **Queries & Reply/Clarification**

SI. No.	NITK Tendered Specifications	Questions asked by the vendor	Reply/Clarification	Changes to tender
1	COMMERCIAL	FOR MAIN HVOF/HVAF EQUIOMENT, we will quote the prices in US dollars on CIF AIR Bangalore.	Yes it possible. Shifting from Bangalore to NITK is bidder's resposbility	As per tender documents
2	COMMERCIAL	NITK shall open confirmed irrevocable ELCEE for CIF AMOUNT in USD on our principal KERMETICO USA	Yes we can allow opening LC in USD/ Indian vendor has to quote in Rs.	As per tender documents
3	COMMERCIAL	On arrival of goods at Benguluru airport NITK will custom clear the goods under prevailing custom duty charges/exemption	NITK will complete the customs clearance through its agent	As per tender documents
4	COMMERCIAL	Upon customs clearance of goods, by NIT K or its nominated clearing house, spray met will take care of transporting custom cleared equipment from Bangalore to NITK in special vehicle.	Yes	As per tender documents

5	COMMERCIAL	However NIT K will provide road transport insurance for transport from Bangalore to NIT K Suratkal (NIT K can used their blanket insurance policy to cover the insurance.)	No. It is on Spraymet.	As per tender documents
6	COMMERCIAL	Exchange rate (USD vs. INR) fluctuation during the period of supply and execution period and also during ELCEE period will be to the account of NIT K .Period for ELCEE shall be for 6 months	LC will be made only after the submission of PBG favouring original equipment manufacturer	As per tender documents
7	COMMERCIAL Payment terms:	90% of ELCEE amount payable on the presentation of invoice and air way bill. 10% after the equipment reaches NIT K.	100% Payment will be made after the shipment arrives at Bangalore Airport through LC	As per tender documents
8	COMMERCIAL	Warranty period for the imported equipment shall be as per international norms as 12 months.	Cannot be. It has to be 3 years or 36 months	As per tender documents
9	TECHNICAL Point no 3	HVAF gun shall be of 200 KW nominal power and not above 200 KW	NO CHANGE	As per tender documents
10	TECHNICAL Point no 7	Indian LPG has 40 % propane and about 60% butane. In "LPG" – specify: 40% propane – 60% butane LPG. (Everything between 10 and 90 % butane is considered LPG) Hydrogen and Butane can be injected to main fuel gas of LPG": Remove Butane!!!! (The line is controlled by MFC – single gas = H2). Write "Hydrogen can be injected into the gun for fine regulation of spray particle temperature	NO CHANGE	As per tender documents
11	Point no 8	Supersonic velocities up to 1200 m/sec" replace with "supersonic velocities	Noted	Under Tender Document, Annexure  – H, Detailed Technical Specification, Under PART A-I:

		in excess of 1000 m/sec" (because at 1200 m/sec there will be no deposition of coatings!!!)  Heating particles up to 1800-2200 deg. C." replace "up to 1800-2000 deg. C" (not sure, if the Air-cooled gun would withstand 2200 deg. C!!!!)		Convertible High Velocity Air Fuel & Oxy Fuel Spray Facility:, Point no 8:  Committee decided to modify the "supersonic velocities up to 1200m/s" by "supersonic velocities atleast up to 1000m/sec".  Committee decided to modify the temperature "1800-2200 °C" to "1800-2000 °C"
12	Point no 14	Remove "microprocessor-based weight loss metering system Include: Certified as "pressure vessel". (This certification is needed for such size of canister, 5L or higher, working above 90 PSI !!!)	Noted	Under Tender Document, Annexure  — H, Detailed Technical Specification, Under PART A-II: High Veolocity Air — Fuel supply items:, Under Point no 14:  "Powder feeder of gravimetric design with a microprocessor — based weight system" may be read as "Powder feeder of gravimetric design with a pressure vessel (5L 90 PSI) — based weight system".
13	Point no 15	Add "propane-60% butane".	NO CHANGE	As per tender documents
14	Point no 16	Replace powder feeder by Powder/grit feeder	Noted	Under Tender Document, Annexure  – H, Detailed Technical Specification, Under PART A-II: High Veolocity Air – Fuel supply items:, Under Point no 16:  Committee decided to modify "powder feeder for grit blasting" as "Powder/grit feeder for grit blasting"

15	Point no 17	Liquid fuel pump for LPG is also available from INDIA.	No comments	As per tender documents
16	Annexure A-III	Demonstration /Acceptance criteria of HVAF spray system is possible at KERMETICO USA or after commissioning of the equipment at NITK	It should be done at NITK.	As per tender documents
17	Annexure A –IV	HVAF equipment for ARCI (Govt of India) is under dispatch/installation, other 4 equipments are under operation in INDIA	No comments	As per tender documents
18	INDEGENIOUS EQUIPMENTS	1) ROBOT TECHNICAL ABB ROBOT OR EQUIVALENT MAKE (MOTOMAN OR FANUC) . 3.5 – Agree Except Noise level will Be Max 69 dB(A)	Noted	Under Tender Document, Annexure  – H, Detailed Technical Specification, Under PART – B, Cluase No. 3: Robotic manipulator to be integrated with HVOF/HVAF coating facility:, Under Point no 3.5:  Committee decided to modify "Noise level must be less than 68dBA" as  "Noise level value be max 69 dBA"
19	COMMERCIAL PAYMENT TERMS:	30% ADVANCE, 60% AGAINST DISPATCH DOCUMENTS, 10% AFTER INSTALLATION	As per the tender document	As per the tender document
20	WARRANTY PERIOD	ONE YEAR IN PLACE OF 3 YEARS AND IS VALID ONLY FOR THE FIRST INSTALLATION ONLY.	Not acceptable	As per the tender document
21	GENERAL ITEMS AND CONDITIONS APPLICABLE PART A AND B	AMC AND ADDITIONAL SPARE PARTS REQUIRED DURING WARRANTY PERIOD SHALL BE EXTRA AND ON CHARGEABLE BASIS. PERIOD TRAINING PER YEAR SHALL BE DONE WITH ADDITIONAL CHARGES /COST.	Noted	Quote it as optional

## Following points to be included in the Addendum 03:

• Under Tender Document, Annexure – H, Detailed Technical Specification, Under Part – B, Page No. 35/36, Under Cluase No. 5: Turn table to coat cylindrical or inclined jobs:

"Height of the table should be 11000-12000 mm" may be read as "Height of the table should be 1100-1200 mm"

It is decided to extend the Bid submission date by four weeks after displaying Addendum 03

Last date for request tender document : 13/11/2019, before 3.00 p. m. Last date for Bid submission : 13/11/2019, before 4.00 p. m. Bid opening date(tentative) : 19/11/2019 @ 3.30 p.m.

Sd/-Buyer (Dr. Sudhakar C Jambagi) Sd/-Chairman Central Research Facility NITK, Surathkal