Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

SINGLE TENDER

Single Tender No: IITH/CLEANZ_COE/NARASIMHAM/2026/S/T018 **Date: 19.11.2026**

Indian Institute of Technology Hyderabad invites online bids (e-tender) in Two Bid (Technical + Financial) System for of the following item:

Item Description	Qty	Tender fee (GST 18%)	EMD (in Rs.)
Integrated Coal Processing Pilor plant comprising Froth Flotation Coloumn, conditioning system (150 L & 300 L), Ultrasonic Reactor (4x1000 W), Nanoporex Nanobubble System, Denver-Type Floatation cell (XFD-12), Pressure Nutsch Filter, PLC-based Automation & Instrumentation	01	**₹ 2360/-**	**₹ 1,38,500 /-**

The Tender Document can be downloaded from https://eprocure.gov.in/eprocure/app OR Institute website- https://iith.ac.in/tenders

The bid is to be submitted online only through the E-procurement portal of https://eprocure.gov.in/eprocure/app up to the last date and time of submission of tender.

Schedule of Dates

Sr. No	Particulars	Date	Time
1	Date of Online Publication/Download of Tender	19.11.2026	03.00 PM
2	Bid Submission Start Date	19.11.2026	03.30 PM
3	Bid Submission Close Date	09.12.2026	11.00 AM
4	Opening of Bids	10.12.2026	11.30 AM

No manual bids will be accepted. All quotation should be submitted online through CPP Portal only (https://eprocure.gov.in/eprocure/app)

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact details of the helpdesk are +91 0120-4711 508, +91 0120-4200462, +91 0120-4001002, +91 0120-4001005 and support-eproc@nic.in

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

REGISTRATION

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "**Online bidder Enrollment**" on the CPP Portal which is free of charge.
2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or ''Other Important Documents'' area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: *My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.*

SUBMISSION OF BIDS

1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open

it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact details of the helpdesk are +91 0120-4711 508, +91 0120-4200462, +91 0120-4001002, +91 0120-4001005 and support-eproc@nic.in .

TERMS & CONDITIONS

It may kindly be noted that your bid should:

(a) Two Bid (Technical + Financial)

The acceptance of the quotation will rest with the competent authority, who does not bind himself to accept the lowest quotation and reserves the right to himself to reject, or partially accept any or all the quotations received without assigning any reason.

Price quoted should be as per the BoQ and valid for a minimum period of **90 days** from the date of opening of the quotation. The rate quoted should be free delivery at IITH Stores, Kandi 502285.

Complete specification with manufacturer's name and address should be given while quoting. Literature/Pamphlets should also be enclosed wherever applicable

In cases of agents quoting on behalf of the manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:

i) The manufacturer directly or through one agent on his behalf; or

ii) Agent on behalf of only one principal.

In case the items in the enquiry are covered by any rate contract or running contract finalized by any other state or central Government, it should be specified in your quotation and accepted contract rates should also be mentioned.

Delivery period: 3 months from the date of acceptance of order.

Liquidated Damages Clause for delays: The applicable rate is 0.5% per week and maximum deduction is 10% of the contract price.

If the deliveries are not maintained and due to that account the purchaser is forced to buy the material at your risk and cost from elsewhere, the loss or damage that may be sustained there by will be recovered from the defaulting supplier.

Payment: - 90% payement after delivery of equipment at site and 10% payment after successful installation and commissioning.

90% payment will be made on successful completion of delivery/installation to the satisfaction of the Institute/Professor and the balance 10% payment will be released after submission of performance bank guarantee (PBG) for the value of 3% of the total order value, valid for a period of warranty plus 60 days

IIT Hyd is registered with Dept. of Scientific & Industrial Research, Govt. of India and concessional customs duty is livable vide notification No.51/96-Customs dated 23.07.1996.

Warranty & Maintenance contract: **3 years Comprehensive warranty.**

You are requested to submit the duly filled and signed Annexure-K along with the technical bid, confirming compliance with the 2-year Preventive Maintenance Annual Maintenance Contract (AMC) for the 4th and 5th years, including both on-site and remote support.

Installation & Testing: The installation shall be completed within a week from the date of intimation regarding the arrival of the equipment in the institute. The installed system shall be performance tested at our premises in accordance with the manufacturer's/supplier's recommendation/specifications. Tests shall demonstrate the proper operation of the instrument and all components.

All supplies are subject to inspection and approval before acceptance. Manufacturer warranty certificates and manufacturer/Government approved lab test certificate shall be furnished along with the supply, wherever applicable.

Kindly furnish your PAN & GST Number etc. in your quotation for our records.

Conditional tenders will not be accepted.

Requirement of registration: Vide Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

i. Any bidder from a country sharing a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department for Promotion of Industry and Internal Trade (DPIIT).

ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

iii. "Bidder from a country which shares a land border with India" for the purpose of this Order means:
iv. An entity incorporated, established or registered in such a country; or
v. A subsidiary of an entity incorporated, established or registered in such a country; or
vi. An entity substantially controlled through entities incorporated, established or registered in such a country; or
vii. An entity whose beneficial owner is situated in such a country; or
viii. An Indian (or other) agent of such an entity; or
ix. A natural person who is a citizen of such a country; or

x. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

For details about registration procedures please visit the above-mentioned OM. Mandatory documentary evidence regarding the bidder's registration with DPIIT is to be submitted along with the tender, failing which the tender shall be liable for rejection. Bidders are also requested to submit the Model Certificates as **per Annexure** for this tender as mentioned in the Ministry of Finance OM No. 6/18/2019-PPD dated 23rd July 2020.

Public Procurement (Preference to Make in India), Order 2017:

a. IIT Hyd shall compare all substantially responsive bids to determine the lowest valuated bid. This Institute is following and abide with the Public Procurement (Preference to Make in India), Order 2017, DIPP, MoCI Order No. P-45021/2/2017-B.E.II dated 15th June 2017 and its subsequent amendments. Accordingly, preference will be given to the Make in India products while evaluating the bids, however, it is the sole responsibility of the bidder(s) to specify the product quoted by them is of Make in India product along with respective documentary evidence as stipulated in the aforesaid order in the technical bid itself.
b. As per the above order and its subsequent amendments "Local Content" means the amount of value added in India which shall be value of the item procured (excluding net domestic indirect taxes) minus the value of the imported content in the item (including all the custom duties) as a proportion of the total value, in percent. Accordingly, the suppliers will be classified in following categories.

i) Class I local Supplier – has local content minimum 50%
ii) Class II local Supplier – has local content minimum 20%

c. **Verification of Local Content**: The Class I Local Supplier /Class II Local Supplier at the time of bidding shall be required to indicate the percentage of local content and provide self-certification as per Annexure D that the items offered meet the local content requirement. The details of the location(s) at which the local value addition is made also needs to be specified.
d. **The bidders can be debarred for a period up to two years as, per Rule 151(iii) of GFR 2017, in case of false declaration.**

Complaint Redressal Mechanism:

In case any complaint received by the procuring agency or the concerned Ministry/Department against the claim of a bidder regarding local content/domestic value addition in a product, the same shall be referred to competent authority at IITH or the relevant Ministry.

The bidder against whom the complaint is received shall be required to furnish the necessary documentation in support of the domestic value addition claimed in the product to authority. If no information is furnished by the bidder, such laboratories may take further necessary action, to establish the bonafides of the claim

A complaint fee of Rs. 2 lakh or 1% of the value of the domestically manufactured products being procured (subject to a maximum of Rs.5 lakh), whichever is higher, to be paid by Demand Draft to be deposited with Procuring Institute. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

False declarations will be in breach of the Code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

ARBITRATION:

e. Unless otherwise specified, in all cases of disputes which cannot be settled by mutual negotiations, the disputes or differences shall finally be settled and binding on both parties by arbitration in conformity with the rules of Indian Arbitration Act, 1940. All disputes or differences what so ever arising between the parties out of relating to the construction, meaning and operation or effect of the general terms and conditions including the Purchase Order or the breach thereof shall be settled by Arbitration Act, 1940 and the award made in pursuance thereof shall be binding on the parties.

f. Performance of the purchase order shall continue during arbitration and any subsequent proceedings.

g. The Jurisdiction and Venue of arbitration shall be Hyderabad. The Arbitrator will be the Director, IIT Hyderabad, or his nominee.

Note for MSME/NSIC Bidder: If in the view of bidder, any exemption /preference/ relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

All disputes shall be settled in the courts of Hyderabad/Sangareddy only.

The Director, IIT Hyd reserves the right to accept the offer in full or in parts or reject summarily or partly and also reserves the right to cancel the tender at any stage without assigning reasons.

24. ***Tender Fees :*** Tender Fees of **Rs. 2360/- (including 18% GST)** in the form of Demand Draft/Bankers cheque in the name of Director IIT Hyd, should be submitted. The Demand Draft/Bankers Cheque in original should be posted/couriered/given in person to the Stores & Purchase Section of IIT Hyd , before the last date of Opening of Technical Bid.

In case of non-receipt of original document before the due date of opening of technical bid, the uploaded bid will be summarily rejected.

25. Earnest Money Deposit (EMD)

a. **EMD fee Rs. 1,38,500/-**
b. **The original document (other than MSME/NSIC) should be posted/couriered/given in person to the Stores & Purchase Section of IIT Hyd on or before opening of Technical Bid. In case of non-receipt of original document before the due date of opening of technical bid, the uploaded bid will be summarily rejected.**

Note: If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/Guidelines/ Directives with a copy of such notification. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted along with the Technical Bid.

For Online Payment of EMD /& Tender Fees : The EMD/Tender Fees can be also be paid online , the bank details are as follows:

Name of the Bank & IIT Hyderabad	Account Number	IFSC CODE	Branch code
Canara Bank	110171129768	CNRB0003458	3458

The Online payment proof needs to be uploaded along with the Technical Bid.

All bidders are requested to submit the duly filled-in and signed annexures, as prescribed in the tender document, along with their bid submissions.

Technical Specifications / Requirements

Integrated Fine Coal Processing Pilot Plant

The following are the major process equipment designed to perform a specific function in the conditioning, treatment, and beneficiation of fine coal in the Integrated Fine Coal Processing Pilot Plant. The technical descriptions of the individual equipment are provided below.

1. Froth Flotation Column (150 mm ID × 5 m)

Description

An automated pilot-scale column flotation unit with a 6-inch diameter, designed for the beneficiation of fine coal by separating hydrophobic coal particles from high-ash/hydrophilic gangue present in low-grade feed coal. The flotation column features a tall, vertical design equipped with a sparger, generating fine bubbles in the 8–10 µm size range.

Parameter	Specification
Column Diameter	150 mm internal diameter
Column Height	5.0 m SS-304 + 1 m acrylic top + 1 m acrylic bottom visualization section
Material of Construction	SS-304 (2.5–3 mm wall thickness); polished internal surface Ra < 0.8 µm; ASTM A380 passivation
Top Section	1 m cast acrylic pipe for froth visualization
Bottom Section	Transparent acrylic pipe at 1.0 m height for visual observation
Sparging System	High-efficiency sintered SS sparger; bubble size 8-10 µm
Wash Water Distributor	SS-304 ring with micro-orifices
Froth Launder	Weir for controlled overflow collection
Tailings Outlet	SS-304 cone + 2" ball valve
Structural Mounting	Rigid Epoxy Painted MS support frame
Instrumentation	4-20 mA DP transmitter (liquid head), airflow rotameter 0-200 LPM, wash-water flow meter, pressure gauge 0-2 bar; (conductivity & pH as optional upgrade - not part of the offer)
Automation	PLC-based full-automatic control (Siemens/Delta)
Pump	2,000 L/h slurry pump
Nanobubble Compatibility	Nanoporex™ injection manifold integrated at with conditioning tank.
Standards	ASME Section VIII (pressure components); Hydrostatic test at 1.5 × design pressure; SS-304 MTC provided
Total Internal Volume	Approximately 88-90 L

Working Volume	75-85 L
Operating Mode	Continuous operation
Feed Solids Concentration	5 - 30 wt.%
Feed Size	5-500 µm
Target Recovery Size	<150 µm
Feed entry/ Feed pressure/wash water pressure/wash water flow rate	Tangential or radial feed inlet/ 0-2 bar/ 1-3 bar/ 0-5 L/min
Air holdup	10 -25%
Superficial gas velocity	0.5 - 2.5 cm/sec
Residence time	5 - 20 minutes
Flotation Throughput	50-500 kg solids/day (pilot-scale)
Bubble Rise Velocity	Approximately 0.2-0.5 m/s
Overall height/ footprint/ support frame height/ empty weight/ operating weight	6800 - 7200 mm/ 800 x 800 mm/ 1200- 1500 mm/ 300 - 450 kg/ 450 - 650 kg

1. Conditioning System - Tank I (150 L) + Tank II (300 L)

Description

The conditioning system consisting of two agitated tanks of 150 L (Tank I) and 300 L (Tank II) capacities, designed to provide controlled pre-treatment of coal slurry prior to ultrasonic processing and flotation. Tank I is equipped with a VFD-controlled impeller and has ports for ultrasonic probes and nanobubble injection. Tank II provides extended residence time for multi-stage conditioning and nanobubble dosing via a recirculation loop. Together they ensure uniform slurry homogenization.

Common Specifications for both tanks

Slurry Density	Up to 50 wt.% solids
Recommended Particle Size	10-2000 µm
Slurry pH Range	2-12
Operating Temperature	5-60°C
Design Temperature	80°C
Operating Pressure	Atmospheric
Design Pressure	Atmospheric / 0.5 bar(g)
Hydrostatic Test Pressure	1.5 × design pressure (if applicable)
Corrosion Protection	Pickled and passivated stainless steel
Agitator Type	Top-entry mechanical agitator
Impeller Type	Marine / Pitched blade

Tank I - 150 L

Parameter	Specification
Material & Construction	SS-304 cylindrical, 3 mm shell; dished bottom + 2" drain valve
Agitator	1 HP, 100-1500 RPM, 3-blade SS impeller; VFD controlled

Ultrasonic Port	SS-304 flange for probe insertion
Nanobubble Inlet	Dedicated inlet nozzle
Instrumentation	Motor ON/OFF feedback
Gross Capacity	Approximately 170-180 L
Tank Diameter	550-650 mm
Straight Height	700-900 mm
Overall Height	1300-1600 mm
Shell Thickness	3 mm SS-304
Shaft Material	SS-304
Shaft Diameter	25-35 mm

Tank II - 300 L

Parameter	Specification
Construction	Similar to Tank I; higher residence time for multi-stage conditioning
Nanobubble Dosing	Y-type recirculation loop for nanobubble dosing
Purpose	Reagent conditioning, particle dispersion, slurry homogenization, nanobubble injection prior to flotation
Gross Capacity	Approximately 340-360 L
Tank Diameter	700-850 mm
Straight Height	900-1200 mm
Overall Height	1600-1900 mm
Shell Thickness	3-4 mm SS-304

2. Rusonic™ Ultrasonic Reactor – 4 × 1000 W

Description

An ultrasonic reactor to modify particle surfaces and improve reagent adsorption on fine coal. The reactor is equipped with four 1kW ultrasonic transducers operating at a nominal frequency of 25 kHz, generating controlled acoustic cavitation within the coal slurry. It's effective across +38 µm and -10 µm particle fractions, addressing surface oxidation and slime coatings common in low-grade feeds.

Parameter	Specification
Tank Volume/ Reactor Shape	100 L working capacity (125 L gross) / Cylindrical vertical vessel
Material	SS-304, 3 mm wall thickness
Ultrasonic Probes/Probe material/Probe diameter	4 probes × 1,000 W each; 25 kHz cavitation frequency/ Titanium Alloy (Ti-6Al-4V)/ 40-60 mm
Generator	4 kW ultrasonic generator with digital control panel
Amplitude Control	Digital amplitude & duty cycle adjustment module

Agitator	1 HP with SS impeller
Cooling/cooling medium	Cooling jacket (single wall or double wall) (optional)/ Water or glycol
Particle Size Range	Effective for +38 µm and −10 µm particles
Proprietary Status	Rusonic™ – Proprietary design & registered trademark of Diva Envitec Pvt. Ltd.
Ultrasonic Frequency Stability	±0.5 kHz
Frequency Range	20-30 kHz (25 kHz nominal)
Acoustic Intensity	10-50 W/cm² (probe dependent)
Generator type/efficiency	Digital solid-state/>90%
Agitator Type	Top-entry mechanical agitator
Agitator Speed	100-1000 RPM (VFD controlled)
Agitator Material	SS-304
Impeller Type	Pitched blade or marine impeller
Internal/External surface finish	Ra ≤0.8 µm/ Matte or polished
Output Control	10-100% continuously adjustable
Working/Design/Hydrostatic pressure	Atmospheric (1 bar)/2-3 bar/ 1.5 times design pressure
Maximum/operating temperature	80 °C/ 10-60 °C
Slurry solids concentration/ particle size/slurry pH	5-50 wt.%/ 10-500 µm/1-14
Overall height/vessel diameter/footprint/empty weight/operating weight	1600-1900 mm/ 500-650 mm/ 800 x 800 mm/ 180-300 kg/ 280-450 kg

3. Nanoporex™ Nanobubble System – 1000 L/h

Description

This nanobubble generator designed to produce stable nanobubbles of **80-120 nm** size using a hybrid cavitation and venturi-based gas dissolution process. It is specifically designed to match the flotation column's sparger geometry. The stable, long-suspended nanobubbles are documented to improve recovery by 10-25% for micron-scale coal particles.

Parameter	Specification
Flow Rate	1,000 L/h
Mounting	Skid-mounted SS-304
Generation Mechanism	Hybrid Cavitation + Venturi micro-dissolution geometry
Bubble Size Distribution/Bubbles Concentration/ Bubble size uniformity/Bubble surface charge	80–120 nm/ 10^7–10^9 bubbles/mL/±15%/-15 to -40 mV
Dissolved Oxygen Output	Up to 25-35 mg/L
Automation	PLC-ready
Scope of Supply	Pumps, piping, control panel, instrumentation

Suspension Stability	Nanobubbles remain suspended for several hours
Recovery Improvement	Documented improvement of 10-25% for micron-scale ores
Proprietary Status	Nanoporex™ – Proprietary design & registered trademark of Diva Envitec Pvt. Ltd.; Hybrid cavitation chamber geometry and injector configuration constitute proprietary intellectual property
Non-Interchangeability	Nanobubble injection manifold dimensionally and hydraulically matched to flotation column base and sparger pore geometry; third-party substitution invalidates hydrodynamic calibration
Gas Dissolution Efficiency/Gas Holdup	85-98%/2-8% by volume
Oxygen Transfer Efficiency	70-95% (depending on operating conditions)
Hydraulic Residence Time	5-30 seconds
Operating/Design pressure/Hydrostatic test pressure	2-6/8-10 bar/1.5 times design pressure
Maximum operating/Design/Ambient operating room temperature	50 °C/80 °C/5-45 °C
Pressure Drop	0.5-1.5 bar
Maximum Suspended Solids	<100 ppm (recommended)
Filtration Requirement	50-100 µm pre-filter recommended
Motor Efficiency/Protection/Insulation/standard	IE2or3/IP55/Class F/IEC 60034
Length/width/height/dry weight/operating weight	900-1400 mm/ 600-800 mm/ 1200-1600 mm/ 120-220 kg/180-300 kg
Quality management	ISO 9001 manufacturing
Material Certification	EN 10204 3.1 MTC
Surface passivation	ASTM A380/A967
Electrical compliance	IEC 60204-1

4. Denver-Type Flotation Cell - XFD-12

Description

A laboratory-scale batch flotation unit with six tank sizes (0.5-8 L) and three impeller options for flexible bench-scale testing. Self-induced aeration through a high-speed impeller eliminates the need for an external air supply while enabling controlled flotation experiments.

Parameter	Specification
Configuration	Denver / Eq D12 laboratory flotation machine with VFD
Tank Volumes	0.5 L, 0.75 L, 1 L, 2 L, 4 L, 8 L (six tanks supplied)
Tank Material	Clear acrylic with SS-304 wetted parts
Impeller Sizes	φ54 mm / φ73 mm / φ95 mm (three interchangeable impellers)

Impeller Speed/Impeller Type	700-2,000 RPM; VFD controlled/ Radial-flow Denver
Aeration	Self-induced via high-speed impeller; no external air supply required
Motor/Motor Insulation Class/Motor Protection Rating	250 W, single-phase, 220 V AC, 50 Hz/Class F/IP 54 or IP 55
Instrumentation	Digital RPM display, airflow control valve
Construction	Corrosion-resistant SS-304 shaft and impeller; heavy-duty base frame
Packed Dimensions	700 × 680 × 1010 mm; Gross weight ~105 kg
Scope of Supply	Complete machine with VFD, 6 acrylic tanks, 3 impellers, aeration assembly, toolkit, user manual
Tank Shape	Cylindrical with conical bottom
Speed Accuracy	±1% of set speed
Speed Resolution	10 RPM increments (typical)
Slurry Density Range	10-60 wt.% solids
Maximum Particle Size	Typically, <2 mm
Recommended Feed Size	75-300 µm for laboratory flotation
Operating Temperature	5-50°C
Storage Temperature	-10 to 60°C
Relative Humidity	Up to 90% non-condensing
Ore types	Sulfide ores, oxide ores, coal, phosphate, iron ore, lithium minerals
Reagents	Collectors, frothers, depressants, activators
Pulp pH range	1-14
Slurry viscosity	Low-high
Standards	ASTM/ISO mineral processing test procedures
Overall height/width/depth/weight	950-1050 mm/ 500-700 mm/ 450-600 mm/ 85-95 kg

5. Pressure Nutsch Filter - 10-12 L Cake Capacity

Description

A pressure-driven filtration system designed for efficient solid-liquid separation and dewatering of fine coal flotation products using a 5-layer sintered SS filter medium. The system features an integrated 50 L stainless steel pressure reservoir, top slurry charging, bottom cake discharges and is enabled for operation without external nitrogen source. It also includes a pressure gauge, pressure relief valve, safety interlocks, and sight glass for safe and reliable process monitoring.

Parameter	Specification
Filter Plate Diameter	300 mm, SS-304
Filtration Area	Approx. 0.07 m^2

Cake Capacity/Cake thickness	10-12 L slurry equivalent/20-80 mm
Operating Pressure/Design Pressure	5 bar/6-7.5 bar
Construction	SS-304 with gasketed airtight lid
Filter Media	1-100 µm multi-plate SS sintered (5-layer vacuum fused)
Charging Mode	Top charging; bottom discharge valve for cake removal
Monitoring	Sight glass for filtration observation; spray-wash provision (optional)
Integrated Pressure Vessel	50 L SS pressure reservoir (top-mounted); enables operation without external nitrogen source
Safety Features	Pressure relief valve, safety interlocks, pressure gauge, regulated outlet
Hydrostatic Test	1.5 × design pressure; SS-304 MTC provided
Filter Plate Thickness/Filter Efficiency	8-12 mm/ up to 99% particle retention
Operating Temperature/Design Temperature	120 °C/150 °C
Cake Moisture after Dewatering	15-35% (depends on slurry characteristics)
Vacuum Capability	Full vacuum (-1 bar) if designed accordingly
Pressure gauge range/Pressure Relief Valve Setting	0-10 bar/5-5.5 bar
Pneumatic Leak Test	1.1× design pressure (optional)
Dead Volume	<2% of vessel volume (typical)
Fabrication Standard	ASME Section VIII / IS 2825 (if pressure vessel certified)
Welding Standard	TIG welded, argon purged
Surface Passivation	Nitric/Citric passivated
Material Certification	EN 10204 3.1 / MTC
Solid Recovery	≥ 99.99%
Overall height/width/length/empty weight	1100-1400 mm/ 500-700 mm/ 600-800 mm/ 70-120 kg

6. Automation Architecture

A PLC-based semi-automatic control philosophy (Siemens/Delta) that ties together sensors (DP transmitters, flow/level meters, motor feedback) and actuators (VFDs, valves, dosing pumps) across all units. An optional HMI provides trending of column DP, froth height, and conditioning timers for research use. Real-time data logging supports process visualization for academic study of fine coal processing behavior. The system is designed for a 10-year service life with locally available spares.

Parameter	Specification

Control Philosophy	PLC-based semi-automatic system (Siemens/Delta); single OEM PLC control architecture
Inputs	DP transmitter, flow meters, level sensors, motor feedback, ultrasonic generator signals
Outputs	Agitator VFD, airflow control valve, wash-water solenoid valve, nanobubble dosing pump, alarm beacons
HMI (Optional)	Column DP trending, froth height indication, slurry conditioning timer
Data Logging	Real-time research-focused process visualization and logging
Life Expectancy	10 years from date of purchase; spares readily available
Origin	Designed, integrated, and assembled at our facility in Mumbai, India

Additional requirements:

Warranty and CMC:

A comprehensive warranty for this integrated fine coal flotation system should be offered for THREE years from the date of installation. The breakdown period will not be counted as a warranty period and must be extended after the expiry of the initial warranty.

The offer should also include two years of comprehensive maintenance contract (CMC) after completion of the warranty period in Annexure K with the technical bid.

Life of equipment: The supplier must ensure that the life of the equipment is minimum of 10 years or more. All essential spares should be available for minimum 10 years or more.

Installation requirements:

Installation and training:

The supplier must provide installation, commission, and multiple training sessions (first training session during installation, second training session within one year from the date of installation) of minimum 3 days or more each for group of users from operating the all instruments to complete analysis, general maintenance at site without any additional cost with supply of all the relevant manuals and documents in printed format and electronic version as well.

List of Users, Purchase order and performance certificate:

The supplier must produce detailed lists with contact details of Indian users (a complete or partial list of items) including Central Govt Universities, Govt Research Organization/Institutes, NITs and IITs/IISC/IISER/CSIR/PSU etc. with the technical bid.

The supplier should submit relevant documents as proof (e.g., Purchase Order with price information) that they have supplied at least 3 systems of similar ones in the last 3 years in India. The performance certificate from Indian users including PSU/Govt research and academic organizations (at least 3) should be attached along with the technical bid.

Services:

The supplier must demonstrate that they have appropriate set-up and capability to provide after-sales service effectively in India for prompt service support along with number of service engineers specially trained on the offered system. The supplier should ensure that service engineer will be available to attain the service call within 72 Hrs of intimation to avoid longer downtime of the instrument.

Pre-installation requirements:

Necessary pre-installation advice and site preparation requirements including footprint of the equipment should be sent along with the technical bid. Any furniture or special power connections required for all these equipment should be included.

For any technical query related to enquiry you may to contact
Prof. Narasimha Mangadoddy, Professor, Department of Chemical Engineering
Email: narasimha@che.iith.ac.in

For Commercial query
Mr. Venkatesh M - Senior Assistant Registrar, Email : ar.purchase@iith.ac.in
Mr. K. Ramesh Kumar - Assistant Registrar, Email : ar.stores@iith.ac.in
Ms. D Chanchala Devi- Deputy Registrar, Email : hos.snp@iith.ac.in

With CC: office.stores@iith.ac.in

Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

ANNEXURE - A

UNPRICED TECHNICAL BID

(Bidder should provide the following details on Letter head)

Quotation No: Date:

Name of the Bidder _____ GeM bid No._____

Sr.No	Item Description	Country of Origin	Make & Model	HSN Code	GST %	Qty
1						
2						
3						
n						

Other Terms & Conditions

1	Payment terms	:
2	Delivery Period from the date of Issue of PO	:
3	Warranty	:
4	Any other additional terms	:

ANNEXURE - B

MANUFACTURER'S AUTHORIZATION & WARRANTY SUPPORT DECLARATION

(ON OEMs Letter head)

Date:

Tender No / GeM bid no:

To
The Director,
Indian Institute of Technology Hyderabad,
Kandi, Hyderabad - 502 284

We,_____ [name of Manufacturer], who are official manufacturers of [Insert type of goods manufactured] having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following goods, manufactured by us [insert name and or brief description of the goods], and to subsequently negotiate and sign the contract.

We hereby extend our full guarantee, warranty, availability of spare parts and AMC support in accordance with the Terms and Conditions of Contract with respect to the Goods offered by the above firm.

Authorized representative of the Manufacturer	Authorized representative Bidder
Signature:	Signature:
Name:	Name:
Address:	Address:
Mobile No:	Mobile No:
Email ID:	Email ID:

ANNEXURE - C

PREVIOUS SUPPLY ORDER LIST FORMAT

Order placed by *{Full address of Purchaser]*	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of completion of delivery as per contract	Date of actual completion of delivery	Remarks indicating reasons for late delivery, if any and justification for price difference of their supply order & those quoted to us.	Has the equipment been installed satisfactorily? *(Attach a certificate from the Purchaser/ Consigner]*	Contact Person along with Telephone no., Fax no. and e-mail address.

Signature and Seal of the Manufacturer/ bidder .....

Place:

Date:

Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

ANNEXURE - D

BIDDER INFORMATION FORM

Company Name : _____

Registration Number : _____

Registered Address : _____

_____

Name of Partners /Director:_____

_____

City : _____

Postal Code :_____

Company's Establishment Year :_____

Company's Nature of Business :_____

Company's Legal Status (tick on appropriate option)

1) Limited Company
2) Undertaking
3) Joint Venture
4) Partnership
5) Others (In case of Others please specify)

Company Category

1) Micro Unit as per MSME
2) Small Unit as per MSME
3) Medium Unit as per MSME
4) Ancillary Unit
5) SSI
6) Others (In case of Others please specify)

CONTACT DETAILS

Contact Name :_____

Email Id :_____

Designation :_____

Phone No :(_____) _____

Mobile No :_____

BANK DETAILS

Name of Beneficiary : _____

A/c. No. CC/CD/SB/OD: _____

Name of Bank : _____

IFSC NO. (Bank) : _____

Branch Address and Branch Code: _____

_____

Other Details

Vendor's PAN No. _____

Vendor's GST _____

Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

ANNEXURE - E

DECLARATION REGARDING CLEAN TRACK/NO LEGAL ACTION

(to be provided on letter head of the firm)

I hereby certify that the above firm namely _____ is neither blacklisted by any Central/State Government/Public Undertaking/Institute nor any criminal case registered / pending against the firm or its owner / partners anywhere in India.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

Date:

Place:

Authorized Signatory

Name:

Designation:

Contact No.:

ANNEXURE - F

ACCEPTANCE OF TENDER TERMS
(To be given on Company Letter Head)

Date: DD/MM/YYYY

To,
The Director
Indian Institute of Technology Hyderabad
Kandi – 502 285.Telangana, India

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: -

Dear Sir,

1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender' from the web site(s) namely _____as per your advertisement, given in the above mentioned website(s).

2. I / We hereby certify that I / we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc .,), which form part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses contained therein.

3. The corrigendum(s) issued from time to time by your department/ organisation too have also been taken into consideration, while submitting this acceptance letter.

4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.

5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organisation shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

ANNEXURE - G

NO RELATIONSHIP CERTIFICATE

(On Company Letterhead)

1. I/We hereby certify that I/We* am/are* related/not related(*) to any officer of IIT Hyderabad. (If Related provide the details of the employee)

2. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.

3. I//We also note that, non-submission of this certificate will render my / our tender liable for rejection.

Date:

Place:

Authorized Signatory
Name:

Designation:

Contact No.:

ANNEXURE - H

Declaration for Local Content (on OEM's Letter Head)

(To be given on Company Letter Head - For tender value below Rs.10 Crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 Crores)

Date: _____

To,
The Director,
Indian Institute of Technology Hyderabad, Kandi, Sangareddy 502284

Sub: Declaration of Local content

Tender Reference No: _____

Name of Tender / Work: - _____

1. Country of Origin of Goods being offered: _____

2. We hereby declare that items offered has____% local content **(Please provide exact %)**.

3. Details of location at which local value addition will be made / made: (Complete address to be mentioned) _____

_____

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.
*"*False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law."*

Yours Faithfully,

(Signature of the Bidder/OEM, with Official Seal)

Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

ANNEXURE - I

FORMAT OF COMPLIANCE STATEMENT OF SPECIFICATIONS

1	2	3	4	5	6
S. N.	Name of specifications/part / Accessories of tender enquiry As per Annexure A of the Tender Document.	Specifications of quoted Model/ Item	Compliance Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguous terms	Whether the compliance / deviation is clearly mentioned in technical leaflet/ literature
1					
2					
3					
4					

NOTE: The bidder should also submit the Brochure with technical details of the product supporting the compliance statement.

Indian Institute of Technology Hyderabad
Kandi, Sangareddy - 502 284, Telangana, India
Phone: 040-23016071:
Website: www.iith.ac.in, Email: office.stores@iith.ac.in

ANNEXURE - J

FORMAT FOR PERFORMANCE BANK GUARANTEE

To
Indian Institute of Technology Hyderabad.
Kandi, Sangareddy 502285

Dear Sirs,

In consideration of the Indian Institute of Technology Hyderabad (hereinafter referred to as the "Buyer" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors administrators and assigns) having issued to …….. (Name of the seller) with its Registered / Head Office at …….. (hereinafter referred to as the "Seller" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) an order bearing Purchase Order No. …….. dated …….. and the same having been unequivocally accepted by the seller resulting into a Contract between the buyer and the seller for supply of ……., more fully described in the said Purchase Order and the buyer in terms of one of the provisions of the said Purchase Order and whereas the Seller has undertaken to produce a Bank Guarantee amounting to Rs. _____ , which is **5%** of the Contract value in aggregate for Performance and Warranty to the Buyers.

We, the _____ bank hereby expressly, irrevocably and unreservedly undertake the guarantee as Principal obligators on behalf of the SELLER that, in the event that the BUYER declares to us that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the BUYER by reason of breach/failure to perform by the said SELLER of any of the terms and conditions in the contract related to the Performance and Warranty clauses, we will pay you, on demand and without demur, all and any sum up to (**5%** of the contract value) Rs. _____ only at any one instance under this Guarantee. Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said contract. We shall not be entitled to ask you to establish your claim or claims under this guarantee but will pay the same forthwith without any protest or demur. We undertake to effect the payment upon receipt of such written demand.

We shall not be discharged or released from the undertaking and guarantee by any arrangements, variations made between you and the SELLER, indulgence to the SELLER by you, or by any alterations in the obligations of the SELLER or by any forbearance whether as to payment, time performance or otherwise.

We further agree that any such demand made by the BUYER on the Bank shall be conclusive, binding, absolute and unequivocal notwithstanding any difference or dispute or controversy that may exist or arise between you and the Seller or any other person.

In no case shall the amount of this guarantee be increased.

This Performance-cum-Warranty guarantee shall remain valid for a period until 60 days beyond the warranty period i.e. upto _____

Subject to the terms of this Bank Guarantee, the issuing bank hereby irrevocably authorizes the beneficiary to draw the amount upto Rs. _____ (5% of the total contract value) for breach/failure

to perform by the Seller of any of the terms and conditions of the contract related to performance and warranty clause. Notwithstanding anything mentioned herein, the total drawings under the Guarantee by the buyer shall not exceed 5% of the total contract value. Partial drawing and multiple drawings under this Bank Guarantee are allowed within the cumulative amount and subject to each such drawing not exceeding 5% of the contract value.

This guarantee shall be a continuing guarantee and shall not be discharged by any change in the constitution of the Bank or in the constitution of M/s. _____. We undertake not to revoke this guarantee during the currency except with previous consent of BUYER in writing.

Notwithstanding anything contained herein above:

a) Our liability under this Guarantee shall not exceed Rs. _____ (Rupees_____only (in words)
b) This Bank Guarantee shall remain valid until 2 months from the date of expiry of warranty period of the contact i.e. upto _____ (mention the date) which is 2 months after expiry of the warranty period and the BG shall cease to be valid after _____ irrespective whether the Original Bank Guarantee is returned to us nor not.
c) We are liable to pay guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written demand or a claim in writing on or before _____ (Expiry Date)

Dated the _____ day of _____ (month and year)

Place

Signed and delivered by _____ (name of the bank)
Through its authorized signatory

ANNEXURE - K

ANNUAL MAINTENANCE CONTRACT

We hereby certify that the price quoted is inclusive of 3 years free warranty. The price for the 4th and 5th year AMC cost Rs._____

We also certify that the spares for the equipment will be available for the equipment for _____years.

Date:

Authorized Signatory
Name:

Place:

Designation:

Contact No.:

ANNEXURE – L

FORMAT FOR ADVANCE PAYMENT GUARANTEE

To
Indian Institute of Technology Hyderabad.
Kandi,
Sangareddy 502284

Dear Sirs,

In consideration of the Indian Institute of Technology Hyderbad (hereinafter referred to as the "Buyer" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors administrators and assigns) having issued to …….. (Name of the seller) with its Registered / Head Office at …….. (hereinafter referred to as the "Seller" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) an order bearing Purchase Order No. …….. dated …….. and the same having been unequivocally accepted by the seller resulting into a Contract between the buyer and the seller for supply of ……., more fully described in the said Purchase Order and the buyer in terms of one of the provisions of the said Purchase Order having agreed to make an advance payment to the seller for performance of the above Contract amounting to Rs. …….. (amount in figures) (Rupees …….. Only) as an Advance against submission of a Bank Guarantee by the seller for equivalent amount.

We, ……. (Name of the Bank and its branch) having its Head Office at …….. (hereinafter referred to as the "Bank" which expression shall unless excluded by or repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay to the buyer merely on demand any and all monies payable by the seller to the extent of Rs. …….. (amount in figures) (Rupees …….. Only) as aforesaid at any time up to …… without any demur, reservation, contest, recourse or protest and / or without any reference to the seller. Any such demand made by the buyer on the Bank shall be conclusive and binding notwithstanding any difference between the buyer and the seller or any difference or dispute pending before any Court, Tribunal, arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during the currency without previous consent of the buyer and further agrees that the guarantee herein contained shall continue to be enforceable till the buyer discharges this guarantee. The buyer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from time to time to vary the advance or to extend the time for performance of the contract by the seller.

The buyer shall also have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any power vested in them or of any right which they might have against the seller, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, expressly contained or implied, in the contract between the buyer and the seller or any other course or remedy or security available to the buyer.

The Bank shall not be released of its obligations under these presents by any exercise by the buyer of its liberty with reference to the matters as aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the buyer or any other indulgence shown by the buyer or by any other matter or thing whatsoever which under law would, but for this provision, have the effect of relieving the Bank.

The Bank also agrees that the buyer at its option shall be entitled to enforce this guarantee against the Bank as principal debtor, in the first instance without proceeding against the seller and notwithstanding any security or other guarantee that the buyer may have in relation to the seller's liabilities.

Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs. ……. (Rupees …….. only) and it shall remain in force up to and including …….. And shall be extended from time to time for such period, as may be desired by …… (name of the seller) on whose behalf this guarantee has been given.

Notwithstanding anything contained hereinabove, the liability of the Guarantor under this Guarantee is restricted to Rs…… ……(Rupees…… …) and that this Guarantee shall remain in force until its expiry on the ……(date), unless a suit or action to enforce a Claim under this Guarantee is made against the Guarantor within six months from the aforesaid date of expiry , all the rights of the beneficiary under the said Guarantee shall be forfeited and the Guarantor shall be release and discharged from all liabilities hereof .

Dated this day of , 20 at

WITNESS
Singature Name
Authorised Signatories
Office Address
Designation and Bank

Signature of Bank's

with Code No., Name

Stamp.

Digitally signed by M VENKATESH
Date: 2026.11.19 14:23:44 IST
Location: eProcure-EPROC