Indian Institute of Technology Kharagpur
Kharagpur – 721302

Tender Ref No: IIT/ME/FDY/SKP/Equip/Tend/2019-20 Date: 16/10/2019

Sub: Supply, installation and commissioning of Computerized Bottom Pouring Type Stir Casting Machine with Vacuum, Squeeze, Rotary and Ultrasonic Casting Attachments along with Essential Accessories in the Department of Mechanical Engineering at IIT KHARAGPUR

Indian Institute of Technology, Kharagpur, invites sealed bids from reputed manufacturer or their authorized Distributor/Dealer (foreign firms or their Indian Representative company) who have adequate credential for supply, installation and commissioning of "**Computerized bottom pouring type stir casting machine with vacuum, squeeze, rotary and ultrasonic casting attachments along with essential accessories",** required for extensive use of undergraduate and post-graduate laboratory experiments on vacuum die casting, centrifugal casting and squeeze casting of aluminium alloys and magnesium alloys, as per Annexure–I in the Department of Mechanical Engineering, Indian Institute of Technology, Kharagpur, India. Also, this machine with all its attachments will be used to carry out laboratory-scale research experiments for developing different aluminium and magnesium alloys and their metal matrix composites (MMCs), and study of castability.

Interested parties may submit their sealed bids under **Two-Bid system** as per Technical Specifications given at Annexure I, and General Terms & Conditions and Special instructions given at Annexure II and Annexure III. Bidders are required to submit their Details in the format given at Annexure IV along with their technical bids. They are also required to submit a signed Declaration in format given at Annexure V. **A Checklist and Compliance statement** against each item of Annexure-I thereon severally and individually shall also be submitted. Kindly refer to the Institute website www.iitkgp.ac.in [link: Tenders] for complete tender details. The same is also available in the CPP Portal [https://eprocure.gov.in/eprocure/app]. If there is any corrigendum/addendum, it shall only be published on Institute's Website and Central Public Procurement Portal.

The tender is to be sent in a sealed packet, containing two separate sealed envelopes (one each for Technical Bid and Price Bid) along with prescribed tender fee and EMD and superscripted with Tender Notice No. IIT/ME/FDY/SKP/Equip/Tend/2019-20 Date: 16/10/19 to Prof. Sushanta Kumar Panda, Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India.

For any query pertaining to this bid document, communication can be addressed to Prof. Sushanta Kumar Panda, Department of Mechanical Engineering, Indian Institute of Technology, Kharagpur-721302 [Email: sushanta.panda@mech.iitkgp.ac.in or sushanta.panda@mech.iitkgp.ernet.in] The technical bid will be evaluated first and price bids will be opened only in respect of those OEMs/ Vendors, who are found technically qualified after evaluation of Technical bids. The Technical bids will be opened on 11.11.2019 at 3.00 p.m. in the Department of Mechanical Engineering, Indian Institute of Technology, Kharagpur. Date for opening price bids will be intimated later.

Tender fee: Non-refundable amount of Rs. 1000/- (One thousand Rupees only), and Earnest Money Deposit (EMD): An amount of **Rs. 50,000/-**(Rupees fifty thousand only) in the form of Demand Draft from any Nationalized Bank/Commercial Bank and paid in favor of "Indian Institute Technology Kharagpur", payable at Kharagpur.

16/10/19

Head of the Department,
Department of Mechanical Engineering,
IIT Kharagpur.

विभागाध्यक्ष/Head
यांत्रिकी अभियांत्रिकी विभाग
Mechanical Engineering Department
भा.प्रौ.सं., खड़गपुर/I.I.T., Kharagpur

Copy to :-
1. Head, Institute Information Cell
2. Chairman Purchase Committee
3. Joint Registrar (Store and Purchase)
4. Notice Board
5. CPP Portal
6. Institute Website

Important elements

Tender Reference	IIT/ME/FDY/SKP/Equip/Tend/2019-20
Tender fee (non-refundable	Rs.1000/- (By way of Demand draft from any Nationalized Bank /Commercial Bank and paid in favour of “Indian Institute of Technology Kharagpur”, payable at Kharagpur)
Earnest Money Deposit (EMD)	Rs. 50,000/- (By way of Demand draft from any Nationalized Bank /Commercial Bank and paid in favour of “Indian Institute of Technology Kharagpur”, payable at Kharagpur)
Last Date and Time for submitting the tender Document	11.11.2019(Monday) up to 2.00 pm
Time and Date of Opening of Technical Bids	11.11.2019(Monday) at 3.00 pm
Place of Opening tender offers	Office of Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India.
Address of Communication	Prof. Sushanta Kumar Panda, Department of Mechanical Engineering, Indian Institute of Technology Kharagpur, P.O. Kharagpur Technology, PIN 721302, West Bengal, India.
Contact Telephone Numbers	91-03222- 282910, 281585, 281566
E-mail:	sushanta.panda@mech.iitkgp.ac.in, sushanta.panda@mech.iitkgp.ernet.in

ANNEXURE – I

TECHNICAL SPECIFICATION OF COMPUTERIZED BOTTOM POURING TYPE STIR CASTING MACHINE WITH VACUUM, SQUEEZE, ROTARY AND ULTRASONIC CASTING ATTACHMENTS ALONG WITH ESSENTIAL ACCESSORIES

NOTE: Supplier MUST provide the model number of their product in the cover letter which complies with the tender specifications and an original printed manual of the same shall be submitted with the bid. Bidders should highlight the features in the printed manual using colour text liner/ manually mark which complies with the tendered specifications. Vendors are strongly advised not to submit any other manual in their bid. The following compliance sheets to be filled-up correctly or completely. Otherwise, it may lead to cancellation of their bid without any communication from IIT Kharagpur.

Specification for Computerized Bottom Pouring Type Stir Casting Machine with Vacuum, Squeeze, Rotary and Ultrasonic Casting Attachments along with Essential Accessories

SN	Specification	Technical Compliance (Yes/No)
1.	**Bottom Pouring Type Stir Casting Machine (1 no.)**	
	I. Furnace Type: Bottom Pouring	
	II. Retort & Bottom Pouring System:	
a)	**Retort Material:** Should be made of stainless steel 310 grade which should be highly corrosive and heat resistant	
b)	**Protective Sleeve:** A replaceable mild steel sleeve should be provided inside the S.S Retort to protect it from wear and tear while stirring at high temperature	
c)	**Non-Stick Coating:** High temperature non-stick coating (graphite based) should be provided along with the machine. This will be applied to the walls of the protective sleeve.	
d)	**Capacity:** 700 gms (min) to 2 Kg (max) of Aluminium or Magnesium	
	III. Heating System:	
a)	Maximum Temperature: **1000 ^{0}C**	
b)	Heating Element: **KANTHAL APM Coils**	
c)	Heating Chamber: Should be made of high temperature muffle constructed with high temperature withstanding refractory	
d)	Insulation: High density ceramic fiber	
	IV. Bottom Pouring:	
a)	Gate valve should be controlled by electric motor	
b)	Gate valve should have auto stop at OPEN & CLOSE position	
c)	LED light should be provided in the panel to indicate the position of the gate valve	
	V. Outer Shell	
a)	**Shape:** Cylindrical made of thick gauge mild steel sheet	
b)	**Powder Coated** to have a streamlined look	
	VI. Stirrer Arrangement:	
a)	**Type:** Twin Fin blade, removable	
b)	**Material:** Stainless Steel 310 grade	
c)	**Speed**: Variable from 100 to 1500 RPM	
d)	Motor: **AC/DC Motor**	
e)	Speed control: Using DC Drive with 4 to 20 mA control	
	VII. Stirrer Lift:	
a)	`Type: Motorized Lift	
b)	Auto cut off at extreme TOP & BOTTOM.	
	VIII. Pre-heating furnace for reinforcement (Powders):	
a)	Should be fixed on top of the crucible so as to push down the reinforcements (in powder form) directly into the melt.	
b)	The outer body should be made of high grade polished stainless steel, which should be heat and corrosive resistance.	

c)	Gate valve should be provided to control the flow of reinforcement into the melt.	
d)	Maximum Temperature: **800 ^{0}C**	
e)	Heating Element: **Kanthal Heating Coil**	
f)	Heating Chamber: Made of high alumina tube constructed with high temperature withstanding refractory	
g)	Insulation: High density ceramic fiber	
	IX. Pre-heater for Mould	
a)	Immersion type mould/die preheater should be provided along with the machine	
b)	Portable, light weight and easy to handle	
c)	Necessary temperature sensor (K type thermocouple) should be provided along with the setup.	
d)	Max. Temperature: 350 ^{0}C	
	X. Inert & Gas Mixing System	
a)	**Ar** gas should be provided as input for maintaining Inert Gas Atmosphere	
b)	**SF6** should be provided as input for maintaining the temperature in case if the temperature shoots up because of firing of Mg or any flammable materials added in the melt.	
c)	Separate **S.S gas storage tank** should be provided to store the input gases at the set pressure	
d)	**Digital gas mixing controller** should be provided to mix the input two gases to required ratio (0 to 100%).	
e)	The mixed gas should be sent into the crucible which holds the melt.	
f)	Digital mass flow controller should be provided to control the flow of gas into the crucible. Range 0 to 10 LPM.	
g)	The above mixed gas should be fed into the bottom pouring gas shield. This should be activated when the melt was poured into the die to avoid contact of melt with the external atmosphere. This should avoid flashing/burning of molten Magnesium while pouring into the die.	
	2. Vacuum Die Casting attachment (1 no.)	
a)	Vacuum die casting attachment should consist of v**acuum pump, vacuum storage tank, die holding chamber & die, and vacuum control and indication mechanism.** Vacuum should be created when the melt is poured into the die.	
b)	Approx. power consumption: 1 kW	
c)	**Stainless steel** vacuum chamber	
d)	**Stainless steel** vacuum tank	
e)	Vacuum: **700mmHg**	
f)	Rotary Vacuum Pump	
	3. <u>Rotary Centrifugal Casting attachment (1 no.)</u>	
a)	Rotary mould should be rotated in the required speed set by the user and the mould should be rotating when the melt flows into it.	
b)	AC/DC motor to drive the rotary die at **3000 RPM**	
c)	Variable Frequency Drive is used to adjust the speed	
d)	Digital RPM indicator	
e)	Die preheater with digital temperature indication cum control should be provided to preheat the die for 350 ^{0}C before casting	
	4. <u>Squeeze Die Casting attachment (1. No)</u>	
a)	Required load should be applied immediately after pouring the melt into the die.	
b)	Approx. power consumption: 6.5 kW	
c)	Maximum pressure of hydraulic press: **100 tons**	
d)	Maximum load that can be applied on the cast: **40 tons**	
e)	Runway L type tube should be provided, which should be connected in the bottom pouring tube of the furnace	
f)	Runway L type tube should have a heater to avoid solidification. Maximum attainable temperature of this heater should be 800 ^{0}C.	
g)	Power control to the heater should be controlled by SSR	

h)	Digital squeeze pressure indicator and controller should be incorporated in the furnace Human Machine Interface	
5. <u>Control Panel: Human Machine Interface (HMI)</u>		
a)	**Display &Control:** The entire machine should be controlled in real time from the customized software (HMI) of this machine installed in a computer. Provision should be available to record all the parameters of the trial in the HMI software, and export it in Microsoft Excel Format.	
b)	**Interface:** Computer & the machine should be connected through wireless interface.	
c)	**Software Indication, Control & Recorded Parameters**	
d)	Furnace or Heaters: Actual Melt Temperature, Reinforcement Temperature, Mold Temperature	
e)	**Stirrer:** Speed indication & control +/- 10 RPM , Stirrer vertical height control with auto cut off at extreme top & bottom and stirrer position indication.	
f)	**Bottom Pouring Gate Valve Control (OPEN/CLOSE)**	
g)	**Gas Mixing Control:** SF6 & Ar gas mixing percent (0 to 100%), Gas Pressure Control, Gas Flow Control: 0 to 10 LPM	
h)	**Parameters for attachments:** • Vacuum Die Casting- Vacuum Pump ON/OFF • Squeeze Die Casting- Squeeze pressure indication & control (0 to 40 Tons), Hydraulic pump control, Runway temperature indication and control • Rotary Centrifugal Casting- Rotor speed indication & control +/- 10 RPM, • Ultrasonic lift vertical height control and position indication with auto cutoff at maximum top and bottom levels.	
i)	**Temperature Sensors Used:** Temperature must be sensed for all parameters with K Type S.S sheathed and grounded thermocouples	
j)	Heater Temperature Control Logic: All heaters temperature should be controlled by the HMI with PID based logic to attain a great control accuracy of +/- 1 ^{0}C. The power supplied to the heaters must be controlled with solid state relays.	
k)	Other control Accessories: • Digital VAF meter should be provided to indicate the power, current and voltage consumed by the machine. • Power control through Solid State Relays • Necessary HRC Fuse should be provided	
6. <u>Ultrasonic Vibrator Horn (1 no)</u>		
a)	Ultrasonic vibrator will be immersed into the melt and operated to segregate the particles into the melt. Note: Either Stirrer or Ultrasonic Horn can be used at a single instance.	
b)	**Ultrasonic Power** : 2500 Watts with power adjustment of 60%, 70%, 90% & 100%.	
c)	**Ultrasonic Frequency** : 20 KHz	
d)	**Horn Diameter** : 15 mm	
e)	Inclusive of Convertor, Booster and Titanium tipped probe with full wavelength horn nearly of 250 mm for equal particle dispersion in molten Aluminium & Magnesium	
f)	Motorized lifting arrangement for Horn with Auto cut OFF at extreme TOP & BOTTOM.	
g)	Forced air cooling arrangement should be provided to cool the ultrasonic horn	
h)	Water Cooling arrangement should be provided to cool the ultrasonic horn	
i)	A portable trolley with rigid frame structure should be provided to move this setup for dipping the ultrasonic probe into the stir casting machine.	
7. <u>Essential Accessories & Spares that should be supplied along with the machine</u>		
a)	Tool Box with necessary tools- 1 no	
b)	Machine Cleaning Tool Kit- 1 set	
c)	Desktop PC with monitor, keyboard, mouse and original operating system, 1 set - Configuration of CPU: i3 processor, 4 GB RAM & 1 TB HDD	

	- Brand: HP or Dell - HMI software should be installed on this PC with lifetime license	
d)	UPS for the Desktop PC, 1 no	
e)	Spare: Melt Thermocouple (K type, Stainless Steel Sheathed & L Shaped)- 1 no	
e)	High temperature nonstick coating, 750 gms- 01 no	
f)	Spare S.S Stirrer Blade- 5 nos	
g)	Gravity & Vacuum Die Casting Moulds Die-1: Split type die to obtain a flat specimen: 300 x 100 x 15mm (1 no) Die-2: Split type die to obtain a cylindrical specimen: 30mm OD x 300mm long, 2 rods (1 no) Die-3: Split type die to obtain a standard round tensile specimen and the geometry as shown in Figure 1 (1 no)	
h)	Die/Mould for Squeeze Die Casting: Split type mould to obtain cast of 50mm dia x 250mm long. (1 no), and chrome plated hardened piston (1 no)	
i)	HYRO 68 Grade Hydraulic Oil (Make: Servo), 80 liters for hydraulic power pack of squeeze casting machine	
j)	Die/Mould for Rotary Centrifugal Die Casting: Split type mould to obtain cast in tube form of 150mm OD x 200mm Long(1 no)	
k)	Spares for inert gas system - Gas Cylinder (47 liters) filled with ultra high purity Argon gas (2 nos) - Gas Cylinder (5 Kg) filled with SF6 gas (2 nos) - Stainless Steel 304 grade double stage gas pressure regulator with dual gas gauges, 2 nos (1 for Argon Cylinder and another for SF6 gas)	

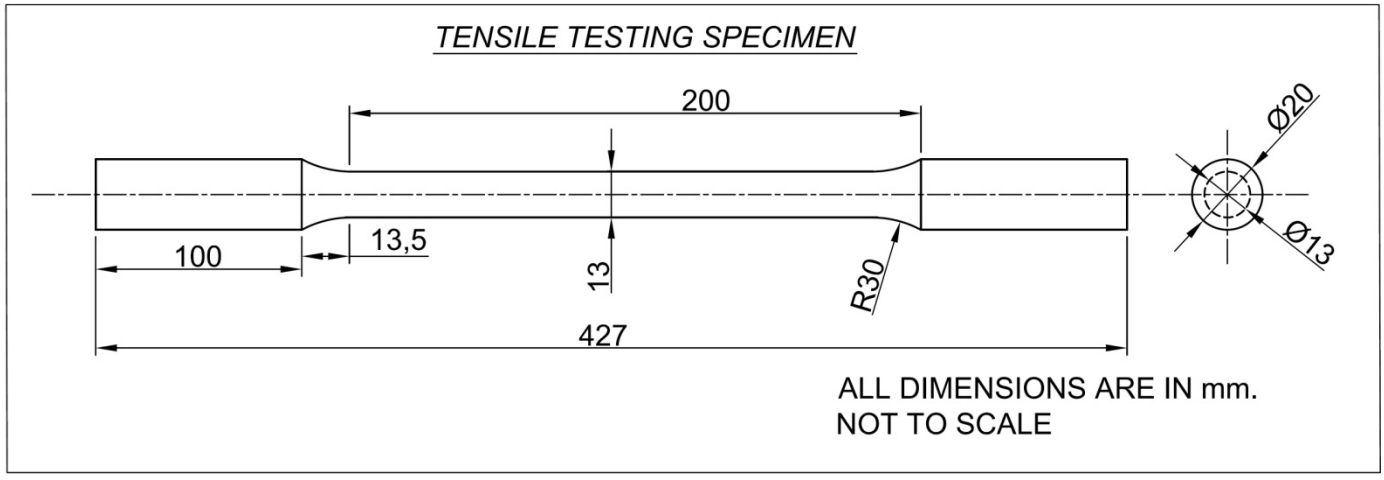

Figure 1. Geometry of the standard round tensile specimen for which the die/mould should be supplied for vacuum die casting.

Technical Terms and Conditions:

1. The system must be completed in all respects and the manufacturer or representative must ensure complete integration of all sub-system with cables, connectors as required and take responsibility of service and supply spares.
2. The equipment should be provided with a **COMPREHENSIVE WARRANTY period of 2 years** from the date of Installation & Commissioning and date of acceptance against all manufacturing defects and faulty workmanship. Also, the additional cost for 3 years of extended warranty should be quoted separately.
3. Training of the machine and demonstration of castings should be provided without any additional cost.
4. Spare parts and optional accessories if any, apart from the above mentioned specification should be quoted separately.
5. Compliance of all the listed specifications/terms and conditions sheet should be indicated on a separate sheet
6. Firm must have an India based service support structure.

ANNEXURE – II

GENERAL TERMS AND CONDITIONS

1) Last Date of Submission of Sealed Bids (both technical and price bids, separately):11.11.2019 (Monday) up to 2.00 pm**.**
Date for opening Technical bids will be at 3.00 pm**,** 11.11.2019 (Monday)
Date for opening price bids will be intimated later.

2) Payment Terms & Performance Bank Guarantee (PBG):

For Indian supplier:

90% payment shall be made after successful installation and commissioning duly certified by the concerned Head of the Department. Balance 10% may be released against submission of Performance Bank Guarantee to the tune of 10% of the total purchase order. The Performance Bank Guarantee shall be issued from any Nationalized Bank/Commercial Bank, validity of which shall be warranty period plus 60 days drawn on any commercial Bank.

For foreign supplier:

Payment term shall be LC. Kindly inform in quotation, the payment terms as "90% payment will be released against submission of shipping documents and balance 10% shall be released by wire transfer on successful installation, commissioning and submission of Performance Bank Guarantee for warranty period. Shipping term: FCA. Other details such as Name & country of port of shipment, Country of origin, and Warranty period.

No advance/mobilization support, is payable against supply of stores.

In the event of failure to deliver the stores beyond the specified date, liquidated damages@ 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.

3) Warranty / Guarantee & On-site skill support: 2 years onsite comprehensive OEM warranty from the date of successful installation and commissioning. The firm has to guarantee supply of spares for a minimum period of 10 years. The OEMs/Authorized Distributors and Dealers must attach certificate about their after sales and service facilities with Technical Bids, escalation support for on-call service or station engineer etc.

4) Earnest Money Deposit (EMD): An amount of **Rs. 50,000/- (**Rupees fifty thousand only) in the form of Demand Draft drawn in favor of "Indian Institute Technology Kharagpur", payable at Kharagpur.

E.M.D. should be enclosed separately in an envelope and stapled with the Technical Bid document superscribing EMD. The validity of the EMD should be 6 (six) months from the date of issue. Any bid without EMD will summarily be rejected. No interest is payable on EMD. EMD will be refunded to the unsuccessful bidder after finalization of the tender process. No interest is payable on Security Deposit. Security Deposit shall be forfeited if the selected vendor after award of contract fails to execute the same.

Note: Exemption of submission of Earnest Money Deposit (EMD) will be considered as per Government of India rule.

5) Delivery of Stores: The store items are to be supplied within **50 days** from the date of receipt of the Purchase Order or from opening of LC.

6) Price:

PRICE may be quoted either in INR or in foreign currency.

Where tenderer intends to quote in Indian Rupees (INR), the price should be quoted "FOR IIT Kharagpur "basis. The price should be all inclusive including GST.

Indian institute of Technology Kharagpur is a public Funded Academic & Research institute under the minister of Human Resource Development and is eligible for GST @5% vide Notification No.47/2017 dated:14.11.2017 and 10/2018- Integrated Tax (Rate) dated:25.01.2018 by the Ministry of Finance, Department of Revenue. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder. Where, tenderer intends to quote in foreign currency FCA / FOB source port price by Air/Sea to be quoted. In case of comparison between FOR IIT Kharagpur (quoted in INR) and FCA/FOB price (quoted in foreign currency) 20% will be added on FOB/FCA price after conversion to INR.

IIT Kharagpur is registered DSIR, Govt. of India and eligible for exemption for payment of Customs Duties in Terms of Government of India Notification No.51/96-Customs dated 23.07.96. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder.

(i) Agency Commission, if any will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances.
(ii) The unit prices should be for the same unit as indicated in the Schedule to tender enquiry and not for any other unit.
(iii) Prices quoted should be for supply, installation, commissioning, training and demonstration at I.I.T. Kharagpur.
(iv) Discount, if any, should be indicated separately/ prominently.
(v) Offers should normally be on fixed and firm price basis. Any clause making price variation will not be acceptable.

7) Bid: Technical Bid and Price Bid should be submitted in two separate sealed envelopes quoting reference number on the top of the envelope. EMD should be enclosed with the Technical Bid documents, in separate sealed envelopes, stapled with the packet containing Technical Bid documents. The OEMs may either bid directly or Country/ Regional/ State Distributors / Dealers/ Vendors, to quote authorized with valid authorization certificate, capability to sale and service of the products.

8) Acceptance of Tender: The Authority of IIT Kharagpur does not bind itself to accept the lowest priced bid and reserves the right to reject any or the entire tender bids received without assigning any reason thereof.

9) The addendum/corrigendum if any shall be published on Institute's Website i.e. www.iitkgp.ac.in and on CPP Portal.

10) The Bidders are requested to submit the bids after issue of clarifications only considering the changes made if any. Bidders are totally responsible for incorporating/ complying the changes/ amendments issued if any, in their bid.

11) Extra Features: If the bidder provides any other extra features on the Hardware or Software which are not mentioned in the tender product specifications, then that shall be highlighted in clear terms, with documentary evidence/ literature.

12) Compliance List: The proposal should be properly indexed and a compliance list against the technical specifications should be provided.

13) Service: Response to ensure quality of services, the deputed Engineer from the OEM/Vendor shall have a minimum of 2 years of experience in the relevant field and must be in the payroll of the OEM/ Vendor. The service engineer should preferably have his office in Kolkata. He would be obliged to inspect and troubleshoot the machine in Kharagpur within 48 hours of receiving the service request call or email.

14) Installation, Commissioning and Demonstration: Free of cost at IIT, Kharagpur. The OEM must ensure timely installation of **Computerized Bottom Pouring Type Stir Casting Machine with Vacuum, Squeeze, Rotary and Ultrasonic Casting Attachments along with Essential Accessories** with necessary support to the indenters, as per details and lists to be made available by the Stores & Purchase Section or the indenting Departments/ Centers/ Schools.

15) Validity of licenses: Software's licensing price or policy (if any) shall be clearly mentioned.

16) The OEM should preferably be an ISO certified company with due credits to energy conservation and green earth compliance.

17) Relevant documents of the OEM shall be enclosed, along with the Technical Bid. Any explanation on this account shall be supported with documentary evidence from the principals.

18) Conditional Offer will not be accepted.

19) Period of Validity: Bids shall remain valid for acceptance for a period of **180 days** from the date of opening of the price bid.

20) The benefit of any downward price revision (revision on account of budget/financial policy, tax revision, EPZ etc) is to be given to IIT Kharagpur by the selected OEM/ vendor.

21) Past Performance of the Vendors will be judged at the time of Technical Evaluation.

22) The Institute does not bind itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.

23) Bidders should enclose the following documents:

(i) Certificate of Registration / Trade License
(ii) Attested copy of PAN card and GST registration papers
(iii) Authorized Distributors/Vendors must submit two separate appropriate authorization certificates and letters from their OEMs, for (i) participation in the said tender and (ii) to submit the bids in favour of OEM (to be attached with technical bids)
(iv) Name and address of past satisfactory supplies to whom such items/stores have been supplied should be mentioned in the technical bid. The POs and satisfactory certificates from at least two of these clients should be provided. If more number of POs and satisfactory certificates will be submitted then better it will be.
(v) Copy of product literature, for which the prices have been quoted, should be attached.
(vi) Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration should be provided.
(vii) Documents of income tax returns of last three years should be provided.
(viii) Proforma Price Bid (without mentioning the price rate) may be attached with technical bids
(ix) Port of Shipment and Country of origin: Should be mentioned in the quotation.
(x) Purchase order to be placed on: Should be mentioned in the quotation with full address.
(xi) The OEMs/Vendors need to submit a certificate that they are not currently debarred or blacklisted in IIT Kharagpur or in any national organization or educational institute / university for any supplies, products or services,

24) All tenders are to be handed over in a sealed cover to Prof. Sushanta Kumar Panda, Department of Mechanical Engineering, IIT Kharagpur-721302. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future. For speed post, the Postal Address is “Prof. Sushanta Kumar Panda, Department of Mechanical Engineering, IIT Kharagpur-721302, PO Kharagpur Technology, West Bengal, India”

25) Opening of Price Bids: The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened and the same will be opened before the technically qualified vendor(s). The date for opening of price bids will be notified separately.

26) Tenderer or his/her authorized representative (with proper authorization letter for attending opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.

27) IMPORTANT

I. Director may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/ upgrade the criteria/ drop any item or part thereof at any time before placing the Purchase Order.

II. A bid submitted with false information will not only be rejected but also the OEM/ vendor will be debarred from participation in future tendering process.

III. In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.

IV. For any query pertaining to this bid document, correspondence is to be addressed to the End user:

Prof. Sushanta Kumar Panda
Department of Mechanical Engineering,
Indian Institute of Technology
Kharagpur- 721302, West Bengal, India
[Ph:+91-03222- 282910, 281585, 281566]
Email :- sushanta.panda@mech.iitkgp.ac.in, sushanta.panda@mech.iitkgp.ernet.in

V. In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.

ANNEXURE-III

INSTRUCTIONS & SPECIAL CONDITIONS

(To be returned by Tenderer along with the Tender duly signed)

1. GENERAL: Tenderer(s), who are Indian Agents of OEMs should furnish a clear declaration as follows: We declare that I am/we are Accredited Agents of the suppliers aboard. DGS&D enlistment certificate needs to be attached (applicable only for the Indian Agents)

2. DEVIATION FROM SPECIFICATIONS: It is in the interest of the tenderer to study the specifications in the tender schedule thoroughly before quoting so that, if the tenderer makes any deviations, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements. Otherwise, your tender will not be considered at all.

3. TENDERERS SHALL SUBMIT ALONG WITH THEIR TENDER:

I. Complete address and tele links for contact persons of principals and Indian agent offices dealing with this purchase.
II. Name and full address of the OEM's Banker and their swift code.
III. Port of shipment and Country of origin is to be provided for each item.
IV. Purchase order to be placed on: Should be mentioned in the quotation with full address

4. PERFORMANCE BANK GUARANTEE: On behalf of the Principal, Indian Agent must be able to provide Performance Bank Guarantee of the amount equivalent to the 10% of the cost of equipment from any Nationalized Bank. The Performance Bank Guarantee is required for the entire period of Warranty. Performance Bank Guarantee must remain valid for a period sixty days beyond the expiry of the Warranty Period. Bid security will be refunded back on submission of performance Security.

5. GUARANTEE: The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications.

6. JURISDICTION: All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued i.e. Jurisdiction of KOLKATA HIGH COURT. Acceptance to this effect is also necessary at the time of opening of Technical Bid.

7. ACKNOWLEDMENT: It is hereby acknowledged that we have gone through all the points listed under "Instructions & Special Conditions" outlined above, and those in the accompanying note on "Important Conditions", and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.

8. Interested vendors must be able to supply adequate spares and consumable during two years of comprehensive warranty. Vendor should also ensure trouble free service and performance for another eight years beyond two years Comprehensive Warranty Period with adequate spares and accessories.

ANNEXURE – IV

TECHNICAL BID DOCUMENT

FORMAT TO BE FILLED BY THE MANUFACTURERS/ INDIAN AGENTS (ON BEHALF OF THEIR FOREIGN PRINCIPALS) OR THEIR AUTHORIZED COUNTRY DISTRIBUTORS/ REPRESENTING DEALERS/ REGIONAL AGENCIES, SUBMITTING TENDER FOR SUPPLY, INSTALLATION AND COMMISSIONING OF COMPUTERIZED BOTTOM POURING TYPE STIR CASTING MACHINE WITH VACUUM, SQUEEZE, ROTARY AND ULTRASONIC CASTING ATTACHMENTS ALONG WITH ESSENTIAL ACCESSORIES FOR IIT KHARAGPUR (DEPARTMENT OF MECHANICAL ENGINEERING)

1. Name of the Tenderer :	
2. Status of the Tenderer: (attach documents, if registered company/partnership/ proprietyship)	
3. Whether OEM/ representing foreign principle: (attach copy of certificate/ authorization)	
4. Details of key top official/ authorized official: (attach details)	
5. Details of tie-ups for supply/ services, if any: (Attach details, agreements, escalation matrix)	
6. Income Tax returns of previous three assessment year (copy) :	
7. Name of the vendor's clients, to whom similar products and services were extended & attach POs and satisfactory certificates from at least two clients :	
8. Income Tax Permanent A/c No.(attach copy):	
9. GST registration No.(attach copy):	
10. Details of EMD:	
11. Copy of the product literature for which the price has been quoted:	
12. Signed copy of the tender document, with company seal, agreeing to the terms & conditions.	
13. Declaration should be provided (Annexure V)	
14. Proforma Price Bid (without mentioning the price rate) may be attached with technical bids	
15. The OEMs/Vendors need to submit a certificate that they are not currently debarred or blacklisted	

Certified that all above information are correct to the best of my/our information, knowledge and belief.

----------Dated

Signature & Seal of the Authorized person of OEM/Vendor

NOTE: This is to be submitted in a separate sealed envelope super scribing “TECHNICAL BID”, Notice inviting Tender No. IIT/ME/FDY/SKP/Equip/Tend/2019-20, Date: 16.10.2019 and name of the bidder. All technical documents like literature, catalogues etc., are to be put in the same envelope. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed.

Annexure V

DECLARATION

1. I, ----------Son /Daughter of Shri ----------

----------Proprietor/Partner/CEO/MD/Director/ Authorized Signatory of M/s.----------

----------am competent to sign this declaration and execute this tender document.

2. I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.

4. I/we am/are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

5. Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.

---------- Signature of the Authorized

Person Date: ---------- Full Name: ----------

Place: ---------- Company Seal: ----------