

OPEN e-TENDER DOCUMENT

FOR

Supply, Installation, Commissioning, Integration and Demonstration of the functionality of 6+2 axis Robotic workstation to be synchronized with existing automatic Fronius TPS 3200 Cold Metal Transfer (CMT) welding System as per the Technical Specifications, Terms & Conditions.

International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI),

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A R C I - H y d e r a b a d

P a g e 1 | 70

International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI),

Balapur P.O., Hyderabad - 500 005

OPEN e-TENDER for 6+2 AXIS ROBOTIC WORKSTATION TO BE SYNCHRONIZED WITH EXISTING AUTOMATIC FRONIUS TPS 3200 COLD METAL TRANSFER (CMT) WELDING SYSTEM

Tender Schedule

(Bid documents can be accessed and to be submitted through https://eprocure.gov.in/eprocure/app.)

1. Name of Purchaser with address	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Balapur P.O., Hyderabad – 500 005
2. Place of delivery (Final Destination)	International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Balapur P.O., Hyderabad – 500 005
3. Estimated value	INR. 47,00,000/- (Forty-seven lakhs only. The estimate is a rough guide)
4. Tender Processing Fees	INR 1000.00 + Rs.180.00 (GST @18%) = Rs.1180.00 (INR One thousand one hundred and eighty only) or USD 25 (USD Twenty five only)
5. EMD (Earnest Money Deposit / Bid Security)	INR 1,17,500 (INR One Lakh Seventeen Thousand and Five Hundred only) or USD 1600 (USD One thousand six hundred only.
6. E-tender document publication date	16.03.2020
 Date for submission of pre- bid queries in prescribed pre-bid format 	16.03.2020 to 26.03.2020 IST : 1630 Hrs
8. Start and end date and time for submission of bid document	31.03.2020 to 21.04.2020 IST: 1530HRS
9. Online bids Opening Date and Time	23.04.2020 IST:1100 Hrs

10.For v	vant o	of any	stores@arci.res.in and anirban@arci.res.in for
clarificati	ons,	please	commercial clarifications and phani@arci.res.in
contact on the e-mails only.		nails only.	for technical clarifications

Chapter	Subject	Page No.
1	Notice Inviting open e-tender	5
2	List of Abbreviations and their Acronyms	9
3	Qualification Criteria	10
4	Technical Specification	12
5	Terms and Conditions	22
6	Guidelines for online bid submission	40
7	Prescribed Forms i) Bidder Information Form	46
	ii) Manufacturer's Authorisation Form	47
	iii) Performance Statement Form	48
	iv) Service Support Form	49
	v) Technical Compliance statement	50
	vi) Compliance statement of terms and conditions	53
	vii) Declaration Form	55
	viii) Tender Acceptance Form	56
	ix) Integrity Pact	58
	x) Bid Security Format	62
	xi) Pre-bid Query Format	64
	xii) Model Bank Guarantee for	65
	Performance security	00
	xiii) Final Acceptance Certificate	67
8	Tender Checklist of documents to be uploaded and submitted(Online & Offline)	69

TABLE OF CONTENTS

CHAPTER 1

NOTICE INVITING OPEN E-TENDER

International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) is an Autonomous Research and Development Centre of Department of Science and Technology (DST), Government of India with main campus at Hyderabad and with operations in Chennai and Gurugram (Delhi).

1. Director, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Balapur P.O, R.R. District, Hyderabad – 500 005, Telangana, India invites online open bids in three bid system on e-tendering website i.e., CPP Portal https://eprocure.gov.in/eprocure/appfrom reputed, interested and eligible original equipment manufacturers (Indian & Foreign) and their authorised Indian agents only, for purchase of items listed below as per the scope of supply and work elaborated in Chapter 4'Technical Specification'.

SI	Tender No	Description of	Quantity	Online	Tender Fee
No		items		Three bid	and EMD (Bid
					Security)
1	SC20190222/PO	Supply,	1 Set	Cover-1:	Tender
		Installation,		Tender fees	Processing
		Commissioning,		& EMD	Fee:
		Integration and		(online &	INR 1180/- or
		Demonstration of		offline)	USD 25.
		the functionality of		Cover-2:	
		6+2 axis Robot		Technical	EMD:
		workstation to be		Bid in cover-	INR 1,17,500/-
		synchronized with		2	(One Lakh
		existing automatic		(online &	Seventeen
		Fronius TPS 3200		offline)	Thousand Five
		Cold Metal		Cover-3:	Hundred only)
		Transfer (CMT)		Price Bid	or USD 1600
		welding system as		In cover-3	(USD Sixteen
		per the Technical		(only	Hundred only)
		Specifications,		online)	
		Terms &			
		Conditions			

 Interested and eligible (those fulfilling the listed qualification criteria detailed in Chapter 3) bidders can access open tender document and submit bids online through CPP Portal (Central Public Procurement Portal) websitehttps://eprocure.gov.in/eprocure/app on or before the prescribed due date. То the Electronic tender use portal https://eprocure.gov.in/eprocure/appthe bidders need to register on the portal as elaborated in Chapter 6 'Guidelines for online bid submission'.

- 3. The complete bidding process is online. Bidders are required to submit the bid documents electronically that are classified into three (3) covers namely Cover-1, Cover-2 and Cover-3 on the CPP portal on or before the prescribed due date using valid digital signature certificates. Tender Processing Fees and Earnest Money Deposit to be uploaded in Cover-1, Technical bid to be uploaded in Cover-2 and the Price bid to be uploaded in Cover-3. Bids without Tender Processing Fees and EMD will not be considered for further processing. Bid documents to be submitted in three (3) classified covers detailed at Point no 5 of Chapter 5, Terms and Conditions.
- 4. Apart from uploading the scanned documents of tender processing fees and EMD in cover-1, Original Proof of payment of tender processing fees and EMD to be submitted in a sealed envelope super scribed as COVER-1 with following information:
 - Tender Reference No. SC20190222/PO
 - Type of bid: TENDER FEES & EMD (COVER-1)
 - Tender Due Date & Time: 21.04.2020 IST:1530 Hrs
 - Tender Opening Date & Time:23.04.2020 IST:1100 Hrs
 - Bidder name and address with e-mail ID & contact details

and the same should reach the address International Advanced Research Centre for Powder Metallurgy and New Materials, Balapur Post, Hyderabad – 500 005, Telangana on or before the last/due date of submission of bids.

5. Technical bid shall not be opened if the bidder fails to submit Tender Processing Fees & Earnest Money Deposit in Cover-1 (online & off-line). Apart from uploading the Technical bid in cover-2, the original certified and signed copies of the uploaded documents to be submitted in a sealed envelope super scribed as COVER-2 with following information:

- Tender Reference No. SC20190222/PO
- Type of bid: TECHNICAL (COVER-2)
- Tender Due Date & Time: 21.04.2020 IST:1530 Hrs
- Tender Opening Date :23-04-2020 IST 1430 Hrs
- Bidder name and address with e-mail ID & contact details

and the same should reach the address International Advanced Research Centre for Powder Metallurgy and New Materials, Balapur Post, Hyderabad – 500 005, Telangana on or before the last/due date of submission of bids.

- 6. The bidder should ensure that all the documents submitted through online in covers 1 and 2 and original documents forwarded offline through courier or post are one and the same in all respects. Any ambiguity found in this connection, bid stands rejected. Kindly note that in case of any discrepancy regarding uploaded documents and physically submitted documents pertaining to covers 1 and 2, the uploaded documents shall be considered as final.
- 7. Price bid to be uploaded online only in COVER-3and no other mode of submission is acceptable.

Bidders for submitting price bid, shall download the Schedule of Quantities and Prices in the XLS Format and save it without changing the name of the file. Bidder shall quote the prices in the given format BOQ_XXXX in excel sheet for online submission of bids under cover-3. It is required to take utmost care while uploading Schedule of Quantities & Prices and any change/ modification of the price template shall render it unfit for bidding.

8. All prospective bidders are requested to submit pre-bid queries if any, in the prescribed pre-bid format shown in Chapter 7 of the Tender Document by e-mail only to the e-mail address <u>stores@arci.res.in</u>, <u>anirban@arci.res.in</u> and phani@arci.res.in so as to reach ARCI latest by 26-03-2020 with Subject line as "Pre-bid Queries for Tender No SC20190222/PO"). If any bidder wishes to visit ARCI before 26.03.2020 to see the CMT Welding facility can do so with prior intimation to ARCI. No request for clarification or query or visit to ARCI shall be normally entertained after the due date for submission of pre-bid queries i.e., 26-03-2020. Faxed, mailed and opened bids are liable to be rejected. Should ARCI deem it necessary to amend the bidding documents as a result of a clarification, it shall do so by hosting the clarifications and amendments on the website of

ARCI/CPP only for the benefit of other prospective bidders. Hence, prospective bidders are requested to follow the websites regularly.

IMPORTANT NOTE: Amendment, Addendum, Corrigendum if any to this tender document, WILL BE HOSTED ONLY IN ARCI WEBSITE (<u>www.arci.res.in</u>) and CPP Portal and no separate Press Notification will be issued. Bidders are advised to visit our website and CPP Portal regularly to know such details.

- **09.** The Director, International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad reserves the right to accept any or all tenders either in part or in full or to split the order or foreclose the procurement case at any stage without assigning any reasons thereof.
- **10.** Provisions in the tender document are consistent with General Financial Rules, 2017, Manual for Procurement of Goods 2017 and CVC Guidelines.

CHAPTER 2

LIST OF ABBREVIATIONS AND THEIR ACRONYMS

SHORT FORM	ACRONYM	
ARCI	International Advanced Research Centre for Powder Metallurgy and New Materials	
BG	Bank Guarantee	
CIF	Cost Insurance and Freight	
CIP	Carriage and Insurance Paid to	
CPP	Central Public Procurement	
CVC	Central Vigilance Commission	
DOE	Department of Expenditure	
EMD / BS	Earnest Money Deposit / Bid Security	
FAC	Final Acceptance Certificate	
FCA	Free Carrier Access	
FOB	Free on Board	
GFR	General Financial Rules, 2017	
MPG	Manual for Procurement of Goods 2017	
GMAW	Gas Metal Arc Welding	
CMT	Cold Metal Transfer	
GOI	Government of India	
GST	Goods & Services Tax	
ICC	International Chambers of Commerce	
INCOTERMS	International Commercial Terms	
INR	Indian National Rupee	
IOT	Internet of Things	
IST	Indian Standard Time	
IP	Integrity Pact	
LC/DC	Letter of Credit / Documentary Credit	
LD	Liquidated Damages	
MAF	Manufacturer Authorisation Form	
NEFT	National Electronic Fund Transfer	
NSIC	National Small Industries Corporation	
OEM	Original Equipment Manufacturer	
PO	Purchase Order	
PSF	Performance Statement Form	
RTGS	Real Time Gross Settlement	
SSF	Service Support Form	
TDS	Tax Deduction at Source	
UNCITRAL	United Nations Commission on International Trade Law	
USD	United States Dollars	

CHAPTER 3 QUALIFICATION CRITERIA

- 1. The bidder should be a reputed Original Equipment Manufacturer (OEM) / authorized representative who must have designed, manufactured, tested, supplied and demonstrated the functionality of 6+2 axis Robotic Arc Welding System as specified in the "Technical Specification "in Chapter 4. Such equipment should be of the latest series/models incorporating the latest improvements and technologies in design. The models should be in successful operation for at least one year as on date of bid opening. Bidder Information Form (BIF) as per the prescribed format in Chapter 7 must be submitted along with the bid. Articles of Incorporation or Certificate of Registration of bidder to be submitted along with BIF. Offers not complying with this condition are liable for rejection.
- 2. In case of authorized representative / Indian agent of OEM, a certificate of authorization from the OEM i.e., Manufacturer's Authorization Form (MAF) as per the prescribed format in **Chapter 7** must be submitted along with the bid. Offers not complying with this condition are liable for rejection.
- 3. In a tender, either the Indian agent on behalf of OEM or OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. If an Indian agent submits bid on behalf of an OEM, the same agent shall not submit a bid on behalf of another OEM in the same tender for the same item/product. OEM should not give consent to quote on their behalf to multiple vendors for the same tendering process, or at a later date on the above context, the bid shall stand rejected summarily and EMD of such bidders(s) stands forfeited.
- 4. The bidder should submit Performance Statement Form (PSF) as per the prescribed format in Chapter 7 on all past supplies of 6+2 axis Robotic Arc Welding System as specified in the "Technical specification "in Chapter 4. Bidders shall invariably submit documentary evidence (client's certificate) in support of the satisfactory operation of the equipment stated in the Performance Statement Form (PSF). Offers not complying with this condition are liable for rejection. The bidder should have supplied at least one such system i.e., 6+2 axis Robotic Arc Welding System as specified in the "Technical Specification" to industries and or research organizations preferably in the Purchaser's country i.e.,

India or elsewhere during the last three years. The bidder shall provide the contact details of earlier purchasers. The purchaser reserves the right to contact the earlier purchasers mentioned in the Performance Statement Form (PSF) for the performance feedback of the system. Bidders may submit copies of purchase orders executed by them in successful installation, commissioning & demonstration of **6+2 axis Robotic Arc Welding System**.

- 5. The bidder shall submit service support form (SSF) as per the prescribed format in Chapter 7 that consists of details of Service Centres and also details of the on-site service support agency preferably with OEM trained engineers including the service personnel details, training and infrastructure to support the spares, maintenance and calibration of the complete 6+2 axis Robotic Arc Welding System after commissioning, during and after the warranty period, either directly or through authorized service representative positioned in India. Offers not complying with this condition are liable to be rejected. The service support should be in existence in India for at least last three years before the bid due date.
- 6. The bidder shall furnish documentary evidence of their financial capability duly certified by their bank or any financial institution of repute such as M/s Dun and Bradstreet, M/s Moody's etc for previous 3 years and enclose a certificate of last three-year turnover.

CHAPTER 4 TECHNICAL SPECIFICATION

Functional Description:

The proposed **6+2 axis Robotic workstation** is meant for industrial use as a motion tool to be integrated and synchronized with existing Cold Metal Transfer Welding System (Fronius TPS 3200 CMT) for pursuing research work in the areas of similar and dissimilar materials (ferrous and non-ferrous) joining like Aluminium-Steel, Aluminium-Titanium etc., Weld Overlay, Wire Arc additive manufacturing (WAAM) etc.,

Scope of Supply and Work:

A floor mounted 6-axis Robot and a Dual axis positioner (Tilting & Rotating) with complete controls to be integrated and synchronized with existing Cold Metal Transfer Welding System (Fronius TPS 3200 CMT) shall be based on the latest available proven technology with international practices and standards, that includes:

SI.No	Description	Quantity
1	Floor mounted 6 axis robot with controller, teach pendant, safety interlocks and requisite accessories	1 Set
2	Floor mounted External Dual axis positioner (Tilting & Rotating)	1 No
3	Accessories for mechanical integration of Robot with CMT like mounting plate, Adaptor plate, etc	1 Set
4	Welding table	1 Set
5	Servo Voltage Stabiliser cum isolation transformer	1 No
6	Submission of test report after testing of the system at manufacturer's works for despatch clearance	For all the above stated items
7	Safe delivery, installation, commissioning, integration, demonstration and performance test at ARCI	Integrated 6+2 axis robotic CMT Welding System
8	Training of ARCI personnel	At least 3 Persons

9	Documentation	As stated in page
		20
10	Performance warranty certificate	Integrated 6+2 axis robotic system

Detailed Specification:

1. Floor mounted 6 axis industrial robot for welding based additive manufacturing applications:

- 1.1. The robot must be from one of the reputed manufacturers like KUKA or ABB or FANUC or MOTOMAN only.
- 1.2. Payload: 15 Kgs or more at fully stretched condition at maximum rated speed
- 1.3. Working radius / reach: 1500 mm or more in any direction
- 1.4. Position Repeatability at highest speed: ± 0.08 mm or better
- 1.5. Position detection: Absolute position sensing with encoders / resolvers
- 1.6. Path Repeatability at highest speed: ± 0.2mm or better
- 1.7. Motor: AC Servo Motor for all axis
- 1.8. Brakes: Electrical / Mechanical brakes in all axis
- 1.9. Linear Maximum Speed: ≥ 1.5 meters / second
- 1.10. Axis Range in degree and axis speed in degree per second (minimum)
 - a) Axis -1 (A1) +180 to -180 (130 to 220)
 - b) Axis 2 (A2) +30 to -150 (35 to 180)
 - c) Axis 3 (A3) +150 to -125 (130 to 220)
 - d) Axis 4 (A4) +325 to -325 (300 to 450)
 - e) Axis 5 (A5) +110 to -110 (300 to 450)
 - f) Axis 6 (A6) +325 to -325 (400 to 650)
- 1.11. Ambient conditions in Hyderabad Operating Temperature Range: +12 to +50 °C, Humidity: 30 90 %. (the maximum of temperature and humidity will not occur simultaneously)
- 1.12. Noise Level: Max 80 db
- 1.13. Industry 4.0 enabled (Internet of Things IOT)
- 1.14. Mounting position: In Floor
- 1.15. Arm Type: Articulated



2. Dual axis positioner (Tilting & Rotating):

- 2.1. Number of axis: 2
- 2.2. Payload: 250 Kgs or more
- 2.3. Rated torque: 350 Nm or more
- 2.4. Load moment during tilting: 700 Nm or above
- 2.5. Load moment during rotation: 650 Nm or above
- 2.6. Mounting position: In Floor
- 2.7. Turning range tilting axis: Between ± 85°
- 2.8. Turning range rotational axis: Between ± 180°
- 2.9. Rotational speed: 50°/s or more
- 2.10. Tilting speed: 50°/s or more
- 2.11. Positional Accuracy:<±0.08mm
- 2.12. Motor: AC Servo Motor for all axis
- 2.13. Brakes: Electrical / Mechanical brakes in all axis

3. Controller:

- 3.1. Cable length (from controller to robot): 7 meter and above
- 3.2. Number of controlled axis: 8 axis
- 3.3. Drive System: AC Servo Drive
- 3.4. Co-ordination: Synchronize with CMT Welding Power source
- 3.5. Processor: Multi processor system preferably with PCI bus
- 3.6. Operating System: Well proven real time operating system
- 3.7. Programming Language: User friendly programming through Teach pendant and Robot programming language
- 3.8. Program Memory capacity: Flash disk for mass memory at least 1 MB, expansion and additional back-up facility will be preferred
- 3.9. External Storage: PCMCIA card slot/RW CD/DVD drive
- 3.10. External Interfaces: Device net/Profibus/Interbus/Ethernet.
- 3.11. Number of I/O points: At least 128 digital inputs and 128 digital outputs (should be expandable), At least 2 Analog inputs and 2 Analog outputs
- 3.12. Communication Ports: RS 232/RS 485/Ethernet port
- 3.13. Input power supply: AC Single/Three phase with (230V/440V) \pm 10%, 50 Hz \pm 3%

3.14. Other Requirements: i) USB memory interface, ii) Energy back-up power failure handling, iii) Provision for connecting to external key board and external monitor display, iv) Tele-diagnostic service should be provided through International telephone lines along with required Hardware / Software.

4. Teach Pendent:

- 4.1. Hand held pendent for teaching & operating the robot
- 4.2. Cable length (from teach pendent to robot controller): 7 meter and above
- 4.3. Basic Switches: Lockable mushroom type Emergency, Reset, Power On/Off, Mode selector, and other functional keys as required, Joystick / 6D Mouse for robot axis movement
- **4.4.** Visual Display: At least 9 inch or larger colour screen with graphical user interface on Teach pendent

5. Equipment Protection:

Suitable Ingress Protection (IP) Classification for robot, controller, Teach Pendant etc., as required for welding based additive manufacturing applications to be provided. To specify relevant IP Nos applicable to the above stated systems.

6. Welding Table:

Four Leg supported modular welding table of size 1500mm x 100mm x 100mm required for placing welding jobs to perform robotic welding operations.

6.1 The welding table must be from one of the reputed manufacturers like Siegmund or Demmeler or Fixto only.

6.2 Welding table: High strength tool steel with Plasma nitriding or hard coated table of Length-1500mm, Width-1000mm, Height-100mm with Ø16 mm holes in a 50 mm or more grid pattern over it. 3-hole drilling pattern in the side plates - 01 No

6.3 Standard supporting Leg (high load bearing capacity) with pivoting foot: Size >= 650mm- 04 No's

6.4 Miniature worktable of size Ø 600mm and 25mm thick plate with grid pattern of 50mm or more for dual axis robot positioner- 01 No

6.5. Following clamps and fixtures to be provided for holding the components to be welded for controlling welding distortions:

S No	Description	Quantity,
		Nos
1	Universal angle and hydro-mechanical clamping with precise	1
	scaling: Length-200 mm or more	
2	Clamping and Locating angles or cast squares (height- 200mm	2
	or more)	
3	Clamping and Locating angles or squares (bores and oblong	8
	hole) - 90X90X12mm thick blackened/nitride steel	
4	Clamping and Locating angles or clamping squares small -	4
	90X90X12mm thick blackened/nitride steel	
5	Connecting bolt (Ø16mm) small	4
6	Connecting bolt (Ø16mm) small	4
7	Positioning bolt-04 Nos	4
8	Flush mount/ countersunk bolt short	5
9	Flush mount/ countersunk bolt Long	5
10	Fast Clamping/ ecoline bolt short	8
11	Universal/PC bolt Long	8
12	Universal stop (Blackened steel) length 150mm or more	
13	Blackened/burnished steel Prism / V block location (Ø50mm or	4
	more)	
14	Screw clamp	6
15	Screw clamp (Variable/Pipe)	6
16	Toggle Clamp	2
17	Toggle clamp connector	2
18	Table mount C Clamp	2
19	Clamp contact pieces	16
20	Spacer sleeves (Ø20mm or more)	10
21	Anti-Spatter spray with pump	2 Liters
22	Ground connection for cable cross section of size 70mm ² or more	1
23	Stone for welding table maintenance	1

24	Wire brush with splash guard	1
25	Lifting bracket/transport ring	1

7. Servo Voltage Stabiliser cum isolation transformer:

A suitable Air cooled servo-controlled voltage stabilizer cum isolation transformer from reputed manufacturers NEEL or SUVIK or Servomax or Automatic Electric or Dubas Power only of appropriate rating for the 6+2 axis robot, its drives, controls, Cold Metal Transfer Welding system etc. shall be supplied and connected to the integrated 6+2 axis robotic CMT Welding system. Typical power consumption of CMT Welding System is 12 kW. The bidder shall specify Make, Model, Rating & Input / Output Voltage, monitoring device with cut off facility for under/over output voltage, devices for load current measurement, MCCB at input for overload/short circuit protection.

8. Pre-Installation requirements:

Pre-installation requirements, like space (General Arrangement - GA) plan, power supply, water line, compressed air, Air conditioning, shielding gases like Argon, Helium, nitrogen or any other essential requirements which are to be kept ready / completed by ARCI before supply of equipment, must be listed by the bidder clearly in their bid to avoid any delay in Installation & Commissioning of equipment.

9. Installation & Commissioning:

The integrated robotic CMT welding system shall be installed and commissioned at the ARCI site and smooth operation of the system for the intended purpose shall be demonstrated as stated in the acceptance criteria

10. Integration of 6 +2 axis robotic work station with existing Cold Metal Transfer Welding System (Fronius TPS 3200 CMT):

10.1 CMT Welding Power source along with Robotic Torch (gun), Hose pack, Robacta Push-Pull unit, shock sensor shall be in the scope of ARCI.

10.2 Mounting plate for CMT Torch to be supplied.

10.3 Adaptor plate for CMT Buffer unit to be supplied.

10.4 Assembly of Robotic CMT welding system by Integrating, interfacing & synchronising Robot, Robot controller, existing Fronius TPS3200 CMT Welding power source, Robotic Welding Torch, Wire feeder drive unit, dual axis positioner (Tilting & Rotating)

10.5 Suitable data transmission, interfacing and synchronizing Robot to Fronius TPS3200 CMT Welding system for optimum performance.

10.6 For interfacing, integrating & synchronizing the robot with existing Fronius TPS3200 CMT Welding system, any necessary help if required from Fronius to be arranged by supplier.

10.7 Acquaintance of all required details for interfacing and integrating the CMT welding systems to Robotic system from ARCI is the responsibility of the supplier.

10.8 Cable layout, connection and communication between robot, controller, dual axis positioner, CMT Power Source.

10.9 Input / Output Configuration and testing.

10.10 CMT Welding power source retrofitting on the robot controller.

10.11 Program mode of CMT, Job no. of CMT and internal mode configuration.

10.12 Tool calibration, base calibration and mathematical coupling of external axis (positioner)

11. Safety Regulations:

Should fulfil one or more of the following standard industry applicable safety regulations like EN60204-1:2006, ISO 10218-1:2006, ANSI/RIA R 15.06, UL 1740

12. Software:

12.1 Welding technology software: Robot OEM's Arc welding technology package for multi pass, continuous welding (GMAW) to generate arc welding programs by defining process parameters such as Torch angle, work angle, Push/Drag and spin angles, seam and weave data, wire feed, velocity, speed, current, voltage etc.,

- 12.2 **Offline programming software**: Robot OEM's off-line programming license for generating the robot programs offline, which is then downloadable to the robot controller.
- 12.3 **Simulation software**: Motion simulation for robots, Should be able to do Collision detection, reach and cycle time studies, Robot OEM's simulation software license for work cell layout design and modelling.

13.Training of ARCI Personnel

13.1 Training at Supplier's site

Three persons in the areas of mechanical, electronics & instrumentation & maintenance are to be extensively trained at supplier's site for at least minimum period of one working week. The training should cover complete operation of robotic system, part programming, calibration, preventive maintenance, trouble shooting and software usage in all aspects of measurement and data analysis. A separate training program should be conducted for simulation, off-line programming software and welding technology software. The medium of training shall be English.

13.2 Training at ARCI site for Scientists and Technical Persons:

The training programme shall be covered for detailed operation and maintenance of 6+2 axis robot which shall cover the following:

- 13.2.1 After installation, commissioning, integration, interfacing & synchronising of 6+2 axis robot with Fronius 3200 CMT Welding System, one-week training.
- 13.2.2 Minimum of three persons shall be trained for operation & maintenance of the robotic CMT welding system with welding trials.
- 13.2.3 Usage of the navigator, archiving, motion, logic & creating programs
- 13.2.4 Work with automatic mode
- 13.2.5 The supplier shall train as per AWS QC19 Standard for AWS Certification of Robotic Arc Welding Operators and Technicians

14. Welding robot performance tests:

Welding robot programming and performance evaluation on test piece (weld coupon) shall be conducted as per the details given below:

S	Robotic Welding with	Criteria
no	positioner	
1	Robotic welding shall be	
	performed with positioner	Radiography test certificates for the plates and
	on standard groove weld	tubes shall be provided. The weld coupons
	positions (1G, 2G, 3G &	shall get qualified as per ASME Sec.IX & V.
	4G) for Tubes and Plates	
	made of Carbon steel,	
	Stainless steel, Nickel	
	based super alloy,	
	Aluminium in horizontal	
	and vertical fixed position	
2	Weld Overlay	Weld bead over bead shall be demonstrated on
		plates and tubes

15. Acceptance Criteria

Successful demonstration of welding/Overlay trials on plates and tubes made of Carbon steel, Stainless steel, Nickel based super alloy, Aluminium as stated in Welding robot performance tests. The required material would be supplied by ARCI.

16. Documentation

The following documents (hard copy 3 sets & soft copy in CD/Flash Drive / HDD) in English language to be provided to ARCI:

16.1 User manual and service manual (for mechanical, electrical and electronic hardware / circuits) of the entire system as well as sub-systems shall cover

detailed system configuration and administration with the help of sketches. The safety instructions, maintenance schedule, preventive maintenance schedule with possible errors and troubleshooting to be provided

- 16.2 Standard Operating Procedure (SOP), calibration, application software manual. All the data and results of testing and calibration (traceable to national / international standard) of the entire system at manufacturer's site as well as at ARCI shall be properly documented and supplied to ARCI.
- 16.3 Certificates for general compliance with standards, safety & protection

17. Warranty

The system must be guaranteed / warranted for a period of minimum one year (Unconditional warranty) from the date of its satisfactory installation, commissioning, integration and demonstration against all manufacturing defects. If the system is found to be defective during this period, the whole equipment or part thereof will have to be repaired/replaced by the supplier free of cost to ARCI (all and sundries). During the guarantee/warranty period, the downtime of the equipment will be recorded with the details of date and type of complaint/fault. The vendor should attend it and make the equipment fully operational within reasonable and stipulated time. The downtime more than the stipulated time after reporting the complaint/fault will be added to calculate cumulative downtime. The guarantee /warranty period will be extended automatically by this cumulative downtime. In case the supplier fails to rectify the defects and equipment is not put to proper function to our satisfaction, the supplier will replace the whole equipment to our satisfaction or whole money paid by ARCI on the account of purchase of the equipment will be refunded by supplier to ARCI. All the software updates during the warranty period shall be supplied, installed and trained to our personnel on real time basis at free of cost.

CHAPTER 5 TERMS AND CONDITIONS

1. Language of bid

The Bid shall be prepared by the bidder, as well as all correspondence and documents relating to the bid exchanged by the bidder and ARCI shall be written in British English and U.S English languages only.

2. Eligible bidders

Intending bidder is eligible to submit the bid provided, the bidder fulfills the "**Qualification Criteria**" enumerated in **Chapter 3** of the tender document. The Bidder shall be deemed to have examined all instructions, forms, terms, and specifications in the documents. Failure to furnish the information required in the tender document or submission of a bid not substantially responsive to the tender document in every respect will be at the bidder's risk and shall result in the rejection of the bid. No page of the tender document shall be removed and the set should be submitted as it is. Each page of the tender document form is to be signed by the bidder (a person / persons who has proper legal authority) and should bear the seal of the company / firm. Bids submitted with unsigned documents are liable for rejection. The first nine (9) prescribed forms of tender in **Chapter 7**are to be filled in completely. These forms must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested. Any interlineations, erasures or overwriting shall be valid only if they are initialed by the persons signing the bid.

3. Code of Integrity for Public Procurement

ARCI requires that the bidders observe the highest standard of conduct and ethics and should not indulge in the following prohibited practices, either directly or indirectly, at any stage during the procurement process or during execution of resultant contracts:

i) "Corrupt practice": making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution; ii) "Fraudulent practice": any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in execution of the contract;

iii) "**Anti-competitive practice**": any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act, 2002, between two or more bidders, with or without the knowledge of ARCI, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;

iv) "**Coercive practice**": harming or threatening to harm, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

V) "**Conflict of interest**": participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of ARCI who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the Procuring Entity with an intent to gain unfair advantage in the procurement process or for personal gain; and

vi) "**Obstructive practice**": materially impede ARCI's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding ARCI's rights of audit or access to information;

Any effort made by a bidder to influence ARCI in its decisions on bid evaluation, bid comparison or award of contract will result in rejection of the bidder's bid document. ARCI will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in above stated prohibited practices in competing for the bid.

4. Integrity Pact

As per directive of the Central Vigilance Commission all the government funded organizations have to adopt an Integrity pact (IP) to ensure transparency, equity and competitiveness in major Public procurement activities. The integrity pact envisages an agreement between the prospective bidders/vendors with the ARCI committing the persons/officials of both the parties i.e., ARCI and intending bidders with the aim not to exercise any corrupt practice and bring influence on any contractual aspects. Only those bidders/vendors who are willing to enter in to such an integrity pact with ARCI only have to compete in the bidding. The integrity Pact would be effective from the date of invitation of bids and continue to be in force till completion/satisfactory execution of the contract.

5. Bid documents to be submitted in following three (3) classified covers:

<u>a) COVER-1</u>

5.1 Bid should be accompanied by Tender Processing Fee of **INR 1180/- or 25 USD** in the form of Demand Draft drawn on in favour <u>of Director, International Advanced</u> <u>Research Centre, Payable at Hyderabad or payment online like</u> <u>RTGS/NEFT/ECS. Tender Fee is not refundable. Bids submitted without tender</u> <u>processing fee will not be considered for further processing.</u>

5.2 Bid should be accompanied by EMD of INR 1,17,500/- or 1600 USD from Indian or Foreign bidders in the form of Demand Draft or Banker's Cheque or Bank Guarantee from any of the Commercial banks in favour of <u>Director, International</u> <u>Advanced Research Centre, Payable at Hyderabad or payment online like</u> <u>RTGS/NEFT/ECS.</u>

Online Payment Account details are as follows:

Details of Account Holder

Name of the Institution	International Advanced Research Centre for Powder Metallurgy & New Materials
Name of Account Holder (As per Bank Record)	ARCI TECHNOLOGY PROGRAM FUND
Account Number of above account	1849101016974
Complete Contact Address	RCI Road, Balapur, Opposite Balapur Vilage, Hyderabad -500005
Telephone No	0091-040-24452361

Tender Document for 6+2 axis Robot meant for CMT Welding

Fax No	0091-040-24442699

Bank Account Details

Bank Name	CANARA BANK
Branch Name	Kanchanbagh
Complete Contact Address	Kanchanbagh, Hyderabad 5000059
Telephone No	040-23438704
9- Digit Code No of Bank & Branch	500015032
Account Number	1849101016974
Account Type (SB/Current/Cash/Credit/Etc)	Savings Account
IFSC Code No of Bank	CNRB0001849
PAN Number	AAAAI0324C
TIN Number	36980207289
Service Tax Number	AAAAI0324CST001
GSTIN Number	36AAAAI0324C1ZG
E.Mail	fao@arci.res.in

For Remittance in Indian Rupees

1	Name of the Bank	Canara Bank	
2	Branch	Kanchanbagh Branch	
3	IFSC Code	CNRB0001849	
4	Beneficiary's Name	ARCI Technology Program Fund	
5	Bank Account No	1849101016974	
6	Account Type	Savings Account	
7	MICR No	500015032	

For Remittance in Foreign Currency (US Dollar)

INTERMEDIARY INSTITUTION: JP MORGAN CHASE BANK

INTERMEDIARY INSTITUTION	JP MORGAN CHASE BANK
	NEW YORK NY
	SWIFT : CHASUS33
	ABA ROUTING NO : 021 000 021

ACCOUNT WITH INSTITUTION	A/C No.001-1395969
	CANARA BANK
	INTERNATIONAL DIVISION
	MUMBAI, INDIA
	SWIFT : CNRBINBBBID

The details of transaction for tender fee and EMD viz Name of Bidder firm, tender description, Transaction ID/No. of Transfer, Transaction date, Amount of Transaction, Name of Bank, Address of Bank shall be furnished by the **TENDERER ON THEIR LETTERHEAD SEPARATELY ENCLOSED IN COVER-1 (Online and Offline) ALONG WITH TENDER.**

5.3 No interest is payable on EMD.

5.4 The EMD shall be valid for a minimum period of three months from the date of closure of the bid.

5.5 Bidder registered with District Industries Centre or Khadi and Village Industries commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation (NSIC) or Directorate of Handicrafts and Handloom or Udyog Aadhar Memorandum or any other body specified by Ministry of Micro, Small and Medium Enterprises as MSMES or Startups as recognized by Department of Industrial Policy and Promotion (DIPP), Govt of India for **the tendered item** are exempted from payment of tender fee and Earnest Money Deposit (EMD) subject to submission of valid documentary evidences throughout the time of the contract. Copies of MSME, NSIC registration certificates and other supporting documents should be submitted both online and offline. Failure to submit the required documents in cover 1 both in online and offline shall lead to rejection of bid.

Refund of EMD:

EMD amount of the unsuccessful bidders will be returned, without any interest, within 30 days of the finalization of tender. EMD of the successful bidder gets converted into performance guarantee and balance if any is required to be submitted as per the tender norms be augmented by the bidder.

Forfeiture of EMD:

EMD of tenderer will be forfeited, if the tenderer withdraws or amends its tender or derogates from the tender in any respect within the period of validity of its tender. Further, if the successful tenderer fails to furnish the required performance security within the specified period, its EMD will be forfeited.

b) COVER-2

Technical bid (Price should not be mentioned anywhere in this document. If prices are mentioned anywhere in the bid other than in price bid, the bid shall be rejected.) Technical bids of those bidders who submitted required documents in COVER-1 shall be opened.

SI	Documents Constituting Technical bid	Page no's for
No		reference
1	Bidder Information Form supported by Articles of	46
	Incorporation or Registration of firm	
2	Manufacturer's Authorization Form	47
3	Performance Statement Form as per prescribed format	48
	submitted	
4	Service Support Form (SSF) as per prescribed format	49
	submitted	
5	Documentary evidence of financial capability of the	11
	bidder	
6	Technical Compliance Statement supported by latest	50
	Technical literature/catalogue in English	
7	Compliance statement of Terms & conditions	53
8	Declaration Form	55
9	Tender Acceptance Form	56
10	Integrity pact	58
11	Tender Check List	69

Following tabulated listed documents constitute Technical bid.

The above listed documents in Cover-2 should be submitted both online and offline. Failure to submit the required documents in COVER-2 shall lead to rejection of bid.

c) COVER-3

Price bid

Price Bid should be submitted online only in **COVER-3** and no other mode of submission is acceptable as per the following price schedule template. If the template of Schedule of Quantities & Prices file is found to be modified/ corrupted in the eventuality by the bidder, the bid will be rejected. The price bid shall be provided with break-up in accordance to the following price schedule template:





6. Validity of bid

The bids shall remain valid for a period of **120** days after the date of opening the bid. If the bid validity is shorter than the required period of 120 days, such quotations shall be rejected as incomplete, Longer validity is preferred. No upward changes in prices will be acceptable in any condition after opening of tender.

7. Compliance Statement

Bidders are required to furnish a compliance statement of each and every technical specification of our tender in an enclosed format of **''Technical compliance statement'** 'in **Chapter 7** supported by the technical literature/leaflet. The deviations, if any from the tendered specifications should be clearly brought out in

the statement. Similarly, the compliance of each of the required commercial terms and conditions of the tender also shall be stated in the form of a separate compliance statement in an enclosed format of **''compliance statement of terms and conditions'** 'in **Chapter 7** along with bid. Deviations if any, to be stated in separate column. The bidders are required to submit both the compliance statements essentially along with their bid, failing which their offer will be treated incomplete and will be ignored.

8. Price

Bid Currencies

Prices shall be quoted in Indian Rupees for offers submitted for supply within India and in freely convertible foreign currency in case of offers submitted for supply from foreign countries.

In case of Import of goods: -

Price shall be on Ex-Works/FOB/FCA/CIP basis up to nearest shipping Airport of the importing country. The airfreight and insurance shall be arranged by ARCI through its freight forwarder and paid directly by ARCI to the freight forwarder in Indian rupee.

The bank charges outside India will be to the account of supplier

The terms FOB, FCA etc shall be governed by the rules prescribed in the current edition of the Incoterms published by the International Chamber of Commerce, Paris.

In case of Indigenous Supplies: -

The prices should be FOR ARCI inclusive of packing, forwarding, installation and commissioning, freight and insurance charges. No charges other than those mentioned in the price bid will be paid.

The vague terms mentioned in the price bid like "packing, forwarding charges etc., extra" without mentioning the amounts of these charges will not be accepted. Price quoted by the bidder shall remain unchanged during the contract period and shall not vary on any account.

Fall Clause: -

The supplier shall certify that if the prices go downwards before execution of our order than the quoted prices, the benefit in this situation shall be passed on to ARCI by the supplier. The supplier shall certify that the equipment material shall not be supplied to anyone less than the contract price during the period of execution of ARCI order.

Hike Clause: - Not operational in this contract

9. Opening and Evaluation of bids

Bids of debarred/blacklisted firms will not be considered for evaluation. ARCI will evaluate the entire tenders, strictly on the basis of the terms & conditions incorporated in the tender document. During the evaluation / scrutiny of the tenders, at any stage, if it is found that any of the tenderer(s) terms and conditions are not in compliance with tender document, ARCI may seek the clarification within the specified time and if the tenderer fails to reply / or do not agree / accept the terms and conditions, their tender will be treated as unresponsive and it is liable for rejection. Technical bid uploaded under cover-2 shall be opened online on the date of the tender opening subject to submission of Tender Processing Fees and EMD in cover-1. Price bids of only those firms will be considered for opening whose technical bid would meet all tender requirements including fulfillment of qualification criteria, compliance to technical specifications and has passed all tender conditions.

Price bids will be scrutinized for Responsiveness of bids and Reasonable of Price

I. Responsiveness of bids:

Some important points on the basis of which a tender shall be declared as unresponsive and be ignored during the scrutiny are:

i) Price Bid should be submitted online only in **COVER-3** and no other mode of submission is acceptable as per the following price schedule template. If the template of Schedule of Quantities & Prices file is found to be modified/ corrupted in the eventuality by the bidder, the bid will be rejected.

ii) If a bidder quotes NIL charges / consideration, the bid shall be treated as unresponsive and will not be considered

iii) The vague terms mentioned in the price bid like "packing, forwarding charges etc., extra" without mentioning the amounts of these charges will not be accepted.

iv) Against a schedule in the list of requirements in the tender enquiry, the tenderer has not quoted for the entire requirement as specified in that schedule (example: in a schedule, it has been stipulated that the tenderer will supply the equipment, install and commission it and also train the purchaser's personnel for operating the equipment. The tenderer has, however, quoted only for supply of the equipment).

II. Reasonableness of Price:

- i) ARCI should satisfy itself that the price of bidders is reasonable with market prices and consistent with the quality required. Detailed technocommercial analysis, shall be done, wherein, the prices in price bid shall be co-related with the description of the store items indicated in tender document.
- If it is inferred that the tendered price bid has been worked out in an ii) unprofessional and perfunctory manner leading to unreasonable and abnormally low bid and if there are strong reasons to believe that abnormally low price is quoted at artificial, non-competitive levels to merely become lowest evaluated bid (L-1) resulting in difficulty in comparison of the technically compliant price bids on equitable basis, that amounts to "Anti-competitive practice" violating code of Integrity for Public Procurement (CIPP) and if acceptance of a price bid could lead to a situation of non-performance or failure of contract, ARCI shall reject the price bid. Comparative statement will be generated and determine the lowest evaluated responsive bid (L-1) on CPP portal on the basis of final landing cost as detailed below. Disqualified bidders will be given one-week time to represent the case from the date of uploading the Comparative statement. Non-representation within stipulated time, the tender will be processed further and no representation will be accepted thereafter.

(a)For Goods manufactured within India

i)	The price of the goods quoted FOR ARCI
ii)	GST, if any, shall be indicated

(b)For Goods manufactured abroad

i)	The price of the goods, quoted on Ex-Works, FCA(named Airport abroad)
	or FOB(name port of shipment), as specified in the price schedule form

All the quotes will be brought to a datum plane in Indian Rupees by adopting the prevailing exchange rate on the date of opening of Price bids.

ARCI shall correct arithmetical errors in price bids of technically qualified bidders on the following basis:

- i) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the ARCI, there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.
- ii) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- iii) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (i) and (ii) above. ARCI may request that a bidder may confirm the correctness of arithmetic errors as done by ARCI within a target date. In case, no reply is received then the bid submitted shall be ignored and its bid security shall be forfeited. `

In case, the day of bid opening is declared a holiday by the government, the bids will be opened online on the next working day at the same time. No separate intimation shall be sent to the bidders in this regard.

Conversion to Single Currency

To facilitate evaluation and comparison, ARCI will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to Indian Rupees at the selling exchange rate established by any bank in India as notified in the Newspapers or exchange rate notified in www.xe.com or www.rbi.org on the date of bid opening. In case aforesaid foreign currency conversion rate is not available on last date of bids submission, then exchange rate available as on next working day shall be taken for financial comparison/ evaluation of bids.

10. Modification and Withdrawal of bids:

A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal by e-mail is received by ARCI prior to deadline prescribed for submission of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the specified period of bid validity.

11.Late / Delayed bids

Any bid received by ARCI after the deadline for submission will be rejected. Such tenders shall be marked as late/delayed and not considered for further evaluation. They shall not be opened at all and be returned to the bidders in their original envelope without opening.

12. Period of Delivery

Delivery Period for supply of the system shall be **18** weeks from the effective date of the Purchase order. Please note that the Purchase Order can be cancelled unilaterally by ARCI, in case the system is not received within the agreed delivery period. Extension of delivery period with / without LD clause will be at the sole discretion of Director, ARCI.

13. Payment Terms: - (No advance payment will be made to any supplier)

TDS as per Income Tax Rules will be deducted and a certificate to that effect will be issued wherever applicable

13.1. For import:

An irrevocable Letter of Credit [L/C] for 100% of the order value will be established by the purchaser in favour of the supplier, through purchaser's bank in India once the following condition is met:

Receipt of order acknowledgement and acceptance of the order.

The actual payment to supplier will however be released in two stages in the

following manner:

- Payment for 90% of the order value will be made upon shipment of the equipment and negotiation of the following shipping documents through L/C:
- A) Signed Commercial Invoice Original + 5 Copies
- B) Airway Bill/Bill of lading Original + 5 Copies.
- C) Packing List -Original + 5 Copies
- D) Certificate of conformity from the supplier that stores/equipment has been tested by the supplier and the same meet the technical specification -Original + 3 Copies.
- E) Supplier's Certificate to the effect that the contents in each package are not less than those entered in the Invoice and the Packing List - Original + 3 Copies.

Balance 10% of the order value will be released through L/C upon submission of the following documents:

- A) Commercial Invoice for 10% order value.
- B) Final Acceptance Certificate [FAC] issued by authorised representative of ARCI in original against satisfactory installation, commissioning and demonstration of the functionality of the system at ARCI Site.
- C) Bank Guarantee Equivalent to 10% of total order value covering warranty period of the equipment issued or counter guaranteed by an Indian Bank clearly mentioning the relation with OEM if submitted by Indian Agent.
- D) If the above-mentioned performance bank guarantee is not provided, 10% of the order value (i.e. second stage payment) will be released only after the expiry of the warranty period from the date of FAC.

13.2. Domestic purchase:

Subject to deduction of taxes at source, if any,

90% of the goods cost + 100% taxes will be paid after receipt of the goods at our site subject to inspection & acceptance of the goods/works/commissioning by ARCI authorities.

Balance 10% will be paid against submission of Performance Bank Guarantee issued / counter guaranteed (i.e. 10% of the total order value excluding taxes etc.) by a Nationalized /Scheduled Bank in India valid till the expiry of the warranty period OR after completion of warranty period from the date of successful installation, commissioning and demonstration of the functionality of the system at ARCI Site.

14. Packing

The goods should be packed by standard packing material and standard export such as air/sea worthy and withstand when subjected to multiple handlings. The Supplier shall provide such packing to the Goods as is required to prevent damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, multiple handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit. In order to maintain safety of the equipment, we prefer to have wooden crating with adequate cushion inside for transportation of any goods. The material has to be dispatched with International standard packing to withstand rigors, and to avoid any transit damages.

Packing Instructions:

Each package will be marked on three sides with proper paint/indelible ink, the following:

- i. Purchaser Name & Address
- ii. Item Nomenclature
- iii. Order/Contract No.
- iv. Country of Origin of Goods
- v. Packing list reference number

15. Force Majeure

Neither of the Parties i.e., ARCI and the successful bidder hereto shall be liable for damage or have the right to cancel for any delay or default in performing it's control including but not limited to Fire, Storm, Floods, Earthquakes, acts of God, Government restriction, continuing domestic or international problems (such as

wars, rebellion, insurrections, strikes, riots, work stoppages, labour dispute) or delay as to ancillary materials, which affect the dates of fulfillment of any obligations as per the Purchase Order. Such dates will be respectively postponed for the period of continuance of such force majeure circumstances and the other party can suspend the performance of it's obligations correlated to the postponed obligation of the effected party. The obligation thus postponed shall be resumed after the force majeure circumstances have ceased. At the beginning, during and at the previsible end of the force majeure circumstances the parties shall promptly consult with each other about appropriate counter measures to be taken. If the performance of obligations of any party should be delayed more than six (06) months by reasons of force majeure circumstances mentioned above, the parties shall mutually consult about subsequent performance of obligations

16. Patent Rights

The prices stated in the purchase order (PO) shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other Industrial Property Rights. The Supplier shall indemnify ARCI against all third-party claims at any time on account of infringement of patent, trademark or industrial design rights, copy rights arising from use of the Goods or any part thereof in India.

17. Award of Contract

Normally, there shall not be any negotiation. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive bidder.

ARCI reserves the right at the time of contract award to increase or decrease the quantity of goods and services originally specified in the "Technical Specification" without any change in unit price or other terms and conditions.

ARCI reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders.

Prior to the expiration of the period of bid validity, ARCI will notify the successful bidder that the bid has been accepted and a copy of the purchase order will be uploaded in CPP portal.
18. Order Acceptance

The successful bidder, on award of contract/order, must send the contract/order acceptance in writing, within 15 days of award of contract.

19. Liquidated Damages (LD) / Penalty

Time is the essence of contract and the material against an order arising out of the enquiry must be delivered by the supplier according to delivery schedules indicated in the Purchase Order. In case of any change, the supplier should inform ARCI in advance and obtain its approval to the revised delivery schedule. Should the supplier fail to deliver the material or part thereof as per the delivery schedule, or any extension thereof, ARCI shall be entitled at an option either to recover from the supplier, as penalty, a sum equivalent to 0.5% per week for first four weeks and 1% per week thereafter for such delay or part thereof subject to a maximum of 10% of the contract price of the item delayed, or terminate the contract in respect of the balance supply so delayed and purchase materials elsewhere at the risk and cost of the defaulting supplier.

20. Interpretation of the clauses in the Tender Document/Contract Document:

In case of any ambiguity/dispute in the interpretation of any of the clauses in this Tender Document, Director, ARCI's interpretation of the clauses shall be final and binding on all parties.

21. Arbitration for settlement of disputes

ARCI and supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract. If, after twenty-one (21) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either ARCI or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.

The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

- (a) In case of dispute or difference arising between ARCI and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, ARCI and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
- (b) In the case of a dispute between ARCI and a Foreign Supplier, the dispute shall be settled by arbitration in accordance with provision of sub-clause (a) above. But if this is not acceptable to the supplier then the dispute shall be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.

The venue of the arbitration shall be the place from where the purchase order or contract is issued.

Notwithstanding any reference to arbitration herein,

- (a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- (b) ARCI shall pay the Supplier any monies due to the Supplier.

22.Outsourced items:

All bought-out sub-systems and components if any should be of reputed make conforming to international standards. Make and detailed terms & conditions between yourselves of all bought-out sub-systems and components shall be specified. If any major sub-assembly of the system are being outsourced, the same shall be indicated along with their terms and then explore the possibility of forming a consortium to deliver the integrated system.

23. High Sea Sale Basis:

ARCI is ready to purchase the goods on "High Sea Sale Basis" agreement. In this, ARCI will provide all assistance to supplier and supplier will import the goods on behalf of ARCI, Hyderabad and payment will be done in Rupees against delivery like Indigenous purchase subject to submission of following documents:

- High Seas Sale Agreement
- Seller Letter
- Supplier Invoice
- Supplier Delivery Note
- Supplier Packing List
- Sale Invoice
- Transport Document (Airway bill / Bill of lading) whichever is applicable
- Product Brochure

24. Final Acceptance Certificate (FAC)

ARCI shall issue Final Acceptance Certificate after successful Installation, Commissioning, Integration and Demonstration of functionality of **6+2 axis Robot workstation synchronized with existing automatic Fronius TPS 3200 Cold Metal Transfer (CMT) welding system** as per the Technical specification in the enclosed format at page no.67

CHAPTER 6

GUIDELINES FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app). 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: http://eprocure.gov.in/eprocure/app.

1. Registration

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enrol". Enrolment on the CPP Portal 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 II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/TCS/nCode/eMudhra etc.), with their profile.
- 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 DSCs 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/eToken.

2.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.

3.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 shall lead to rejection of the bid.
- 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 formats. Bid documents may be scanned with 100 dpi with black and white option.

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" 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.

4.Submission of Bids

- Bidder should log into the site well in advance for bid submission so that he/she 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 submitted the Tender Processing Fee and EMD as per mentioned in document conditions Chapter 5 point 5.
- 4. A standard BoQ format has been provided with the tender document to be filled by all the bidders.

Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. 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.

5. 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.

- 6. 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.
- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bids, 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.
- 9. Kindly add scanned PDF of all relevant documents in a single PDF file.

5.Assistance to Bidders

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority through e-mail only at stores@arci.res.in and <u>anirban@arci.res.in</u>for commercial clarifications and <u>phani@arci.res.in</u>for technical clarifications.
- 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 number for the helpdesk is 1800 233 7315

6. General Instructions to the Bidders

- 1. The tenders will be received online through portal http://eprocure.gov.in/eprocure/app. In the Technical Bids, the bidders are required to upload all the eligibility criteria documents in .pdf format.
- 2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are

available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".

 Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

CHAPTER 7 PRESCRIBED FORMS

SI. No.	Name
i)	Bidder Information Form
ii)	Manufacturers' Authorization Form
iii)	Performance Statement Form
iv)	Service Support Form
v)	Technical Compliance Statement
vi)	Compliance statement of Terms and Conditions
vii)	Declaration form
viii)	Tender Acceptance Form
ix)	Integrity pact
x)	Bid Security Format
xi)	Pre-bid Query Format
xii)	Model Bank Guarantee for Performance Security
xiii)	Final Acceptance Certificate

I. BIDDER INFORMATION FORM (BIF)

 (a) [The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted. This should be done on the letter head of the firm]

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for bids]

Page 1 of _____ pages

01	Bidder's Legal Name [insert Bidder's legal name]
02	In case of JV, legal name of each party: [insert legal name of each
	party in JV]
03	Bidder's actual or intended Country of Registration: [insert actual or
	intended Country of Registration]
04	Bidder's Year of Registration: [insert Bidder's year of registration]
05	Bidder's Legal Address in Country of Registration: [insert Bidder's
	legal address in country of registration]
06	Bidder's Authorized Representative Information
	Name: [insert Authorized Representative's name]
	Address: [insert Authorized Representative's Address]
	Telephone/Fax numbers: [insert Authorized Representative's
	telephone/fax numbers]
	Email Address: [insert Authorized Representative's email address]
07	Attached are copies of original documents of Articles of Incorporation
	or Registration of firm named in 1, above.

Signature of Bidder _____

Name _____

Business Address _____

II.MANUFACTURERS' AUTHORIZATION FORM (MAF)

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for Bids]

To: [insert complete name and address of Purchaser]

WHEREAS

We [insert complete 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 and warranty in accordance with warranty Clause of the Terms and Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on ______ day of ______, ____ [insert date of signing]

III.PERFORMANCE STATEMENT FORM (PSF)

Details of 6+2 axis Robotic Arc Welding Systems supplied and installed during past 3 years in India and Abroad.

Order Placed by (full address of Purchas er)	Ord er No. and date	Descripti on and quantity of ordered equipme nt	Valu e of order	Date of completi on of delivery as per contract	Date of actual complet ion of delivery	Remar ks indicati ng reason s for late deliver y, if any	Has equipment been installed satisfactorily? (Attach a certificate from purchaser)	Name of Contact person along with Telephone No., FAX No. and e- mail address

Signature and Seal of the manufacturer/Bidder

.....

Place :

Date :

IV.SERVICE SUPPORT FORM (SSF)

SI. No.	List of 6+2 axis	Nature of service	Address, Telephone
	Robotic Arc Welding	provided	Nos. , Fax Nos and e-
	Systems serviced in		mail address of the
	the past 3 years		buyer

Signature and Seal of the

manufacturer/Bidder.....

Place:

Date:

V.TECHNICAL COMPLIANCE STATEMENT

The following are the particulars of offered Technical Specification supported by latest technical catalogues w.r.t the requirements of the tender specifications along with deviations, if any. Name of the manufacturer, model number must be indicated clearly, failing which the same shall be liable for rejection. The offered specification should reflect on technical catalogue and also on manufacturer's website:

SI. No	Name of Specifications / Parts / Accessories of Tender Enquiry	Offered Technical Specification of Quote Model / Part / Accessory	Compliance Whether Yes or No	Deviation, if any to be indicated in unambiguous terms (The compliance / Deviation should be supported by relevant Technical Literature)	Technical Justification for the Deviation, if any. If specification is superior / inferior than asked for in the enquiry, it should be clearly brought out in the justification
1	6 axis Industrial Robot				
1.01					
1.02					
1.03					
1.04					
1.05					
1.06					
1.07					
1.08					
1.09					
1.10					
1.11					
1.12					
1.13					
1.14					
1.15					
2	Dual axis Positioner				
2.01					
2.02					
2.03					
2.04					
2.05					

		1	r	Γ	
2.06					
2.07					
2.08					
2.09					
2.10					
2.11					
2.12					
2.13					
3	Controller				
3.01					
3.02					
3.03					
3.04					
3.05					
3.06					
3.07					
3.08					
3.09					
3.10					
3.11					
3.12					
3.13					
3.14					
4.	Teach Pendent				
4.01					
4.02					
4.03					
4.04					
5	Equipment				
Ŭ	Protection				
6	Welding Table				
6.1					
6.2					
6.3					
6.4					
6.5					
7	Servo Voltage				
'	Stabilizer cum				
	isolation				
	transformer				
8	Pre-Installation				
Ŭ	requirements				
9	Installation &				
Ĩ	Commissioning				
10	Integration of				
	robot with CMT				
10.01					<u> </u>
10.01					
10.02					

10.03			
10.04			
10.05			
10.06			
10.07			
10.08			
10.09			
10.10			
10.11			
10.12			
11	Safety		
	Regulations		
12	Software		
12.1			
12.2			
12.3			
13	Training of ARCI		
	Personnel		
13.1			
13.2			
14	Welding robot		
	performance tests		
15	Acceptance		
	Criteria		
16	Documentation		
17	Warranty		

Signature of Bidder

- If the bidder offers more than one model, then the Compliance Statement must be enclosed for each and every model separately.
- ✓ The technical deviations should be indicated separately.
- If the bidder fails to enclose the compliance statement, his bid is likely to be rejected.

Place:

Date:

Signature and seal of the

Manufacturer/Bidder

NOTE:

1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

VI.COMPLIANCE STATEMENT OF TERMS AND CONDITIONS

SI	Commercial Tender Terms and Conditions	Whether	Deviation from tender
No	(Please refer Chapter 5 above)	acceptable	Terms, if any
		or not	
1	Language of bid		
2	Eligible bidders		
3	Fraud and Corruption		
4	Integrity Pact		
5	Bid documents to be submitted in 3 classified covers		
6	Validity of bid		
7	Compliance Statement		
8	Price		
9	Opening and Evaluation of bids		
10	Modification and Withdrawal of bids		
11	Late / Delayed bids		
12	Period of Delivery		
13	Payment Terms		
14	Packing		
15	Force Majeure		
16	Patent Rights		
17	Award of Contract		
18	Order Acceptance		
19	Liquidated Damages (LD) / Penalty		
20	Interpretation of the clauses in the Tender		
	Document / Contract Document		
21	Arbitration for settlement of disputes		
22	Outsourced items		
23	High Sea Sale Basis		
24	Final Acceptance Certificate (FAC)		

 If the bidder fails to enclose the compliance statement, his bid is likely to be rejected.

Place:

Date:

Signature and seal of the

Manufacturer/Bidder

NOTE:

1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

VII.DECLARATION FORM

(to be provided in the following format in the letter head of bidder)

It is hereby declared that I/We the undersigned, have read and examined all the terms and conditions etc. of the tender document for which I/We have signed and submitted the tender under proper legal authorization. It is also certified that all the terms and conditions of the tender document are fully acceptable to me/us and I/We will abide by the conditions of the tender. We have not given any printed conditions beyond the scope of this tender. It is also certified that I/We/our firm has no objection in signing the contract if the opportunity for the work against this tender is given to me/us.

Date: Signature: Name: Address: Designation: On behalf of:

VIII. TENDER ACCEPTANCE FORM

(to be provided in the following format in the letter head of bidder)

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: -----Name of Tender: ------

Dear Sir,

То

- I / We have downloaded / obtained the tender documents for the above mentioned tender from the website(s) namely: ------ as per your advertisement, given in the above mentioned website(s).
- I / We hereby certify that I/We have read the entire terms and conditions of the tender documents from page No: ------ to ------ and I / we shall abide hereby by the terms and conditions contained therein.
- 3. The corrigendum(s) issued from time to time by ARCI 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 the totality / entirety.
- 5. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Government Department/Public sector Undertaking.
- 6. I / we have agreed to hold this offer open until ------ days
- 7. I / We agreed to supply /install/commission/demonstrate the functionality of the equipment and complete the whole work and handover to the ARCI within the stipulated period after receipt of purchase order.
- I / We agree that in case, if we fail to deliver the goods/complete the work within the specified period, then ARCI shall be liable to claim liquidated damages from me/us.

9. I / We certify that all the information furnished by our firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then ARCI 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.

Yours faithfully

(Signature of the bidder, with official seal)

IX. INTEGRITY PACT

Between

International Advanced Research Centre for Powder Metallurgy and New Materials hereinafter referred to as "ARCI".

And

.....herein referred to as "The Bidder/ Contractor."

Preamble

In order to achieve these goals, the ARCI will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above

Section 1 – Commitments of the ARCI

- (1) The ARCI commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - (a) No employee of the ARCI, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - (b) The ARCI will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) The ARCI will exclude from the process all known prejudiced persons.

(2) If the ARCI obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, it will be brought to the notice of the Chief Vigilance Officer and in addition can initiate disciplinary action.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

(1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The Bidder(s)/Contractor(s) will not, directly or through any other Person or firm, offer, promise or give to any of the ARCI's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any Undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, Certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the ARCI as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)//Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. All the payments made to the Indian agent/representative have to be in Indian Rupees only.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

(2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future Contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as to put his reliability or credibility in question, the ARCI is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or debar the firm from business.

Section 4 – Compensation for Damages

(1) If the ARCI has disqualified the Bidder(s) from the tender process prior to the award, the ARCI is entitled to demand and recover the damages equivalent to Earnest Money Deposit.

Section 5 – Equal treatment of all Bidders / Contractors/ Subcontractors

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all Subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the ARCI before contract signing.
- (2) The ARCI will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- (3) The ARCI will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 6 – Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and Jurisdiction is the Registered Office of the ARCI i.e. Hyderabad
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of Bidder/Contractor)
(Office Seal)

X. BID SECURITY FORMAT

Where	eas
(herei	nafter called the tenderer")
has si	ubmitted their offer dated
for the	e supply of
(herei	nafter called the tender")
Again	st the purchaser's tender enquiry No
	V ALL MEN by these presents that WE of
at	having our registered office are bound unto (hereinafter the "Purchaser")
In the	sum of
itself,	hich payment will and truly to be made to the said Purchaser, the Bank binds its successors and assigns by these presents. Sealed with the Common Seal of aid Bank thisday of20
THE (CONDITIONS OF THIS OBLIGATION ARE:
(1)	If the tenderer withdraws or amends or modifies or impairs or derogates from the Tender in any respect within the period of validity of this tender.
(2)	If the tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity: -
(3)	If the tenderer fails to furnish the Performance Security for the due Performance of the contract.
(4)	Fails or refuses to accept/execute the contract.
	WE undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

Note: Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

XI. PRE-BID Query Format

SI.	Reference of the	Query/Clarification/ deviation sought	Clarification/Response from ARCI
No	clause No. of the Tender document	deviation sought	from ARCI

XII. MODEL BANK GUARANTEE FORMAT FOR PERFORMANCE SECURITY

To,

WHEREAS

(name and address of the supplier) (hereinafter called "the supplier") has undertaken, in pursuance of contract no. datedto supply (description of goods and services) (herein after called "the contract").

AND WHEREAS

it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS

we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until the day of, 20.....

(Signature of the authorized officer of the Bank)

Name and designation of the officer

.....

Seal, name & address of the Bank and address of the Branch

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the ARCI with a covering letter to compare with the original BG for the correctness, genuineness, etc.

		C	Dated
_			
	Sub: Certificate of commissioning of equip	ment	
٦	This is to certify that the system as detailed below	/ has/have t	been received in
-	good condition along with all the standard and spe		ories. The same
ł			
	has been supplied, installed, commissioned and de	monstrated	the functionality
C	of the equipment		
C F	of the equipment Purchase Order No.	Date	9
C F C	of the equipment Purchase Order No Description of the System	Date	e
C F C N	of the equipment Purchase Order No Description of the System Name of the consignee	Date	9
C F C N	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A	Date	<u> </u>
G F N S J	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI	Date)
с Г Г Я Я	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI Scheduled date for completion of installation/comm	ARCI	>
с F Г S Я Я Я	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI Scheduled date for completion of installation/comm Training Starting Date	ARCI	9
ר ה א ר ר ר	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI Scheduled date for completion of installation/comm Training Starting Date Training Completion Date	ARCI)
с F Г S Я Я Я Г Т	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI Scheduled date for completion of installation/comm Training Starting Date Training Completion Date Names of People Trained	ARCI	<pre></pre>
с F F S F F F F F F F	of the equipment Purchase Order No Description of the System Name of the consignee Scheduled date of delivery of the consignment to A Actual date of receipt of consignment by ARCI Scheduled date for completion of installation/comm Training Starting Date Training Completion Date	Date	<pre></pre>

Details of accessories/items not yet supplied and recoveries to be made on that account:

<u>SI. No.</u>

Description <u>Amount to be recovered</u>

2. The acceptance test has been done to our entire satisfaction. The supplier has fulfilled his contractual obligations satisfactorily

or

The supplier has failed to fulfill his contractual obligations with regard to the following:

(d)

The amount of recovery on account of failure of the supplier to meet his contractual obligations.

For Supplier	For Purchaser
Signature	Signature
Name	Name
Designation	Designation
Name of the firm	Name of the Lab./Instt
Date	Date

CHAPTER 8 TENDER CHECK LIST

BIDDER HAS TO FILL IN THE CHECK LIST GIVEN BELOW

(Documents pertaining to Technical bid are to be uploaded online (scanned copies) on CPP portal and physical submission of original documents at ARCI, Hyderabad. Price bid (duly filled in BoQ) is required to be uploaded online only on CPP portal. Bidders are requested to state Yes / No against each column)

SI. No.	Description	Online Submission	Physical submission of Original Documents (Offline)
1.	Whether Proof of payment of tender fee and EMD submitted in COVER-1 (online & offline)		
2.	Whether following documents constituting Technical (online & offline)	bid in COVER-2	submitted
	 a) Bidder Information Form (BIF) as per prescribed format supported by Articles of Incorporation or Registration of firm 		
	 b) If bidder is not an original equipment manufacturer, Manufacturer's Authorization Form (MAF) as per prescribed format 		
	 c) Performance Statement Form (PSF) as per prescribed format along with client's certificate 		
	 d) Service Support Form (SSF) as per prescribed format 		
	 e) Documentary evidence of financial capability of the bidder 		

	f) Technical Compliance statement supported	
	by latest Technical literature/catalogue in	
	English	
	g) Compliance statement of Terms & Conditions	
	h) Declaration Form	
	i) Tender Acceptance Form	
	j) Integrity pact	
	Whether Duly filled in Price BoQ Submitted in	 No Offline
3.	COVER-3(Kindly note that no physical submission	submission.
э.	of duly filled in BoQ is required and it is to be	Only online
	uploaded only on e-tendering website)	 submission
4.	PAN / GSTIN certificates from concerned	
4.	authorities, if applicable	
5.	This Checklist (Scanned Copy by online and	
0.	original by offline)	

<u>NOTE</u>: Bid must be prepared in such a way that answer to all points of the tender Check list is ÝES' only. Incomplete offers are liable to be rejected.

<u>IMPORTANT NOTE</u>: Tenderers must ensure that all the required documents indicated in the Tender documents are submitted without fail. Tenders received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected at the initial stage itself.