

# Indian Institute of Science Bangalore

# The Chairperson

Department of Civil Engineering Indian Institute of Science (IISc) Bangalore 560012, Karnataka, India

Email: <a href="mailto:chair.civil@iisc.ac.in">chair.civil@iisc.ac.in</a>

(Attn: Dr. Satyavati Komaragiri; skomaragiri@iisc.ac.in)

Date: 07 November 2025

Ref: CiE/2025-2026/SK/Tenders/Global/PAV-1

# Global Tender Notification for the Procurement of a Pressure Aging Vessel for Aging of Bitumen

This is a Request for Quote (RFQ) from the Indian Institute of Science (IISc), Bangalore, for the supply and installation of a "Pressure Aging Vessel" at the Civil Engineering department, IISc Bangalore.

# **Contents:**

1	Section 1	Bid Schedule		
2	Section 2	Eligibility Criteria	As specified by IISc	
3	Section 3	Terms and Conditions	As specified by IISc	
4	Section 4	Technical Specifications	Technical specifications	
5	Section 5	Technical Bid		
5.1			Annexure 1: Bidder Details	
5.2			Annexure 2: Declaration regarding	
			experience of bidder	
5.3			Annexure 3: Declaration regarding track	
			record of the bidder	
5.4			Annexure 4: Declaration of acceptance of	
			tender	
5.5			Annexure 5: Terms and conditions. Details	
			of item quoted.	
			Technical specifications of the Equipment	
6	Section 6	Commercial Bid	Quotation with Price, Technical	
			specifications of the Equipment	
7	Section 7	Checklist		

# 1 Section 1: Bid Schedule

1	Tender No.	CiE/2025-2026/SK/Tenders/Global/PAV-1		
2	Tender Date	07 November 2025		
3	Item Description	Pressure Aging Vessel		
4	Tender Type	Two bid system		
		(i) Technical Bid (Part A)		
		(ii) Commercial Bid (Part B)		
5	Place of tender submission	Chairperson's Office		
		C/O-The Chairperson,		
		Department of Civil Engineering Indian		
		Institute of Science,		
		CV Raman Road,		
		Bangalore, Karnataka 560012, India		
6	Last date and time for submission of tender	07 December 2025, 4:00 PM		
7	For further clarification	Dr. Satyavati Komaragiri		
		Room No. 107, Annex Building,		
		Department of Civil Engineering		
		Indian Institute of Science,		
		Bangalore, Karnataka 560012, India		
		Phone no.: +91 80 2293 2814		
		Email: skomaragiri@iisc.ac.in		

# 2 Section 2: Eligibility Criteria

Prequalification criteria:

- The Bidder's firm should have existence for a minimum of 3 years. (Enclose Company Registration Certificate)
- 2) The Bidder should have qualified technical service personnel for the instrument(s) based in India.
- 3) If the Bidder is a local distributor/dealer/Agent, it is mandatory to attach an authorization certificate along with the technical bid from the original equipment manufacturer.
- 4) The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4 in Section 5.
- 5) The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect must be given as per Annexure 3 in Section 5.
- 6) The order will be placed only on the bidder who participated in the bid.

#### 3 Section 3: Terms and Conditions

#### 3.1 Submission of Tender

- 1. All documentations in the tender should be in English.
- 2. The quote should come only from Foreign/ International Original Equipment Manufacturer (OEM) or their Indian authorized distributor.
- 3. The tender should be submitted in two envelopes (two bid system). The tenderer should submit the technical and financial bids separately in sealed envelopes superscribing the envelopes as 'Technical bid' and 'Financial bid'.
  - a. Technical Bid (Part A): Technical bid consisting of all technical details and check list for conformance to technical specifications. The technical proposal should contain a technical compliance table with 5 columns:
    - The first column must list the technical requirements, in the order that they
      are given in the technical requirement below.
    - ii. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible.
    - iii. The third column should describe your compliance with a "Yes" or "No" only. Ensure that the entries in column two (2) and column three (3) are consistent.
    - iv. The fourth column should state the reasons/explanations/context for deviations, if any.
    - v. The fifth column can contain additional remarks. Vendors can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details. Vendors can also use this opportunity to compare your solution with that of your competitors or provide details as requested in the technical requirements table below.
  - b. Commercial Bid (Part-B) Indicating item wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions.
  - c. Both these envelopes must be put into a single envelope, superscribed 'TENDER FOR: PRESSURE AGING VESSEL". This should reach the following address by 4 PM on 7th December 2025:

Chairperson's Office, C/O The Chairperson, Page 4 of 20 Department of Civil Engineering, Indian Institute of Science, Bengaluru, Karnataka - 560 012 Contact: +91(80)2293 2323

chair.civil@iisc.ac.in

Attn: Dr. Satyavati Komaragiri

4. The technical bid and price bid should each be placed in separate sealed covers,

superscripting on both the envelopes the tender no. and the due date. Both these sealed

covers are to be placed in a bigger cover which should also be sealed and duly

superscripted with the Tender No., Tender Description and Due Date.

5. The SEALED COVER superscripting tender number (CiE/2025-2026/SK/Tenders/Global/PAV-1) and

due date should reach Chairperson's Office, Department of Civil Engineering, Indian

Institute of Science, Bangalore - 560012, India on or before due date mentioned in the

tender notice. In case the due date happens to be a holiday the tender will be accepted and

opened on the next working day. If the quotation cover is not sealed, it will be rejected.

6. All queries are to be addressed to the person identified in "Section 1 – Bid Schedule" of the

tender notice.

7. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention

GST Registration and PAN in the tender document (Indian Bidders only).

8. If price is not quoted in Commercial Bid as per the format provided in tender document the

bid is liable to be rejected.

9. The Institute reserves the right to accept or reject any bid and to annul the bidding process

and reject all bids at any time prior to the award of contract, without thereby incurring any

liability to the affected bidder or bidders or any obligation to inform the affected bidder or

bidders.

10. Incomplete bids will be summarily rejected.

3.2 Cancellation of the Tender

Notwithstanding anything specified in this tender document, the purchase committee, IISc

Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves

the rights:

a. To accept OR reject lowest tender or any other tender or all the tenders.

b. To accept any tender in full or in part.

c. To reject the tender, offer not confirming to the tender terms.

Page 5 of 20

#### 3.3 Validity of the Offer

The offer shall be valid for 90 days from the date of opening of the commercial bid.

#### 3.4 Evaluation of the Offer

- 1. The technical bid (Part A) will be opened first and evaluated.
- 2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
- 3. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.
- 4. The award of the contract will be subject to acceptance of the terms and conditions stated in this tender.
- 5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
  - a. Non-submission of complete offers.
  - b. Receipt of bids after the due date and time and or by email / fax (unless specified otherwise).
  - c. Receipt of bids in open conditions.
- In case any bidder is silent on any clauses mentioned in these tender documents, IISc
  Bangalore shall construe that the bidder had accepted the clauses as of the tender and no
  further claim will be entertained.
- 7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
- 8. The lowest bid will be calculated based on the total price of all items tendered for basic equipment along with accessories selected for installation, operation, preprocessing and post processing, selected optional items, recommended spares, and the selected extended warranty or annual maintenance contract, as chosen by the institute.

#### 3.5 Prerequisites

The bidder will provide the equipment's prerequisite installation requirement and the technical bid. This will include the site preparation guide.

#### 3.6 Warranty

The Pressure Aging Vessel is to be under warranty period of a minimum of three (3) years including free supply of: spare parts, data analysis software, computer and faulty consumables from the date of functional installation. If any portion of the system is found to be defective, the defective system has to be replaced or rectified at the cost of the successful bidder within 45 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

# 3.7 Extended Warranty and Annual Maintenance Contract

- 1. The cost per year for an additional two (2) years of warranty after the initial three (3) year warranty period has ended must be mentioned as an **optional add-on** in the quotation.
- 2. The cost per year for an annual maintenance contract after the initial three (3) year warranty period has ended must be mentioned as an **optional add-on** in the quotation.
- 3. The tenderer should clarify if periodic (preventive) maintenance be done by a trained on-site engineer or requires a specialist from the OEM.
- 4. The vendor should have qualified technical service personnel for the equipment based in India and must assure a response time of less than 3 business days after receiving a service request.

#### 3.8 Purchase Order

- 1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms and conditions mentioned in the tender document.
- 2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.
- 3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

### 3.9 Delivery, Installation and Training

- 1. The successful bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order.
- 2. The system should be delivered, installed and made functional within 90 days from the date of receipt of the purchase order.
- 3. The validity of the quotation shall be 90 days.
- 4. The supply of the items will be considered as effective only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of the entire system by the IISc, Bangalore, shall be taken as the start of the warranty period.
- 5. No partial shipment is allowed.
- 6. The bidder should also arrange for technical training for the local facility technologists and users.
- 7. No additional fee for installation and training will be paid. All such costs are to be considered in the base price.
- 8. The successful bidder must conduct post-installation acceptance tests. The successful bidder is required to carry out full testing and demonstration of the equipment's performance at Indian Institute of Science, along with training the representative(s) from the institute on the operation and some sample testing for acceptance. All guaranteed specifications will have to be demonstrated, upon request, in an active installation. Failure to demonstrate any promised specifications will be deemed as technical non-compliance. The tests can be recorded in the presence of representatives of the OEM. Inability to pass these tests will be counted as technical failure and breach of contract.
  - The successful bidder should demonstrate and perform tests on bitumen samples according to ASTM D6521.
  - b. The successful bidder shall demonstrate the data acquisition process and export of the data.

#### 3.10 Payment Terms

The payments to non-domestic vendors will be made through a Letter of Credit and milestone of the payment will be determined after the mutual discussions with the successful bidder. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is

provided.

## 3.11 Statutory Variation:

Any statutory increase in the taxes and duties after the bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

#### 3.12 Disputes and Jurisdiction:

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

#### 3.13 General

- All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension of the bid due date/time shall be considered on account of the delay in receipt of any document(s) by mail.
- 2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is, however, advised not to provide superfluous information.
- 3. The bidder may visit the installation site before submission of tender, with prior intimation.
- 4. All items should be quoted in Indian Rupees.
- 5. The decision of the purchase committee is final.
- 6. If any information furnished by the bidder is found to be incorrect, either immediately or later, it would render the bidder liable to be debarred from tendering and/or taking up of work in IISc, Bangalore.
- 7. The bidder should have a track record of supplying and installing similar equipment to at least two organizations in India within the last three years, preferably at Indian Institute of Technologies (IITs), National Institute of Technologies (NITs), Indian Institute of Science (IISc), or national labs.
  - a. Relevant documents including user testimonial on product performance, and service and maintenance should be furnished. If similar equipment has been

- supplied to IISc, user testimonial on the product performance, and service and maintenance from the user at IISc should be furnished.
- b. The timeline of supply of the equipment to the organizations in India shall also be furnished.
- c. The turnaround time for services, if any were performed at the two organizations listed, shall also be provided.
- 8. The institute reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all the above conditions without assigning any reason.

### 4 Section 4: Technical Specifications

1. Conforming to:

The equipment shall conform to the following standards: ASTM D6521 and AASHTO R28

2. Frame and internal chamber:

All-stainless steel vertical vessel with hinged lid; designed, manufactured, tested & stamped in accordance with ASME Boiler & Pressure Vessel Code, Section VIII, Division 1 for 2.40 MPa at 150°C; it should be a benchtop unit with oven design; easy to open with a rest position for the vessel cover

3. Temperature range:

Fully programmable temperature range from ambient to 130°C or better; temperature precision of 0.1 °C or better; Test temperature uniformity of 0.5 °C or better; Fast preheating mode up to 80°C

4. Pressure range:

0.00 MPa to 2.10 MPa or better; resolution of minimum 0.01 MPa; accuracy of minimum 0.01 MPa; real-time pressure monitoring by pressure transducer

5. Aging time:

Up to 99 hours

6. Data logging:

Acquisition of temperature, pressure, elapsed time, temperature error time, pressure error time, and power consumption during the aging process. Capable of data download & software update through USB port; USB port provision must be there to collect the data; data must be in a downloadable format to a PC

7. Safety features:

Over-pressure release valve for protection against excess pressure build-up; Over-temperature limit switch to prevent overheating.

#### **Mandatory Accessories**

- 1. All essentials required for the functioning and operation of the PAV must be provided with the equipment.
- 2. Complete set of stainless-steel PAV pans (10 Nos.).
- 3. Rack for holding PAV pans (1 No.).
- 4. Handle for PAV pan rack (1 No.).
- 5. Software for process data download (1 No.).
- 6. A branded computer system compatible with the PAV software shall be provided by the bidder for controlling the equipment as well as data acquisition. Computer specs: Intel i5 Processor, 1 TB HDD, 8GB RAM, Keyboard, Optical Mouse, 6 USB Ports, 19" TFT Screen, UPS.
- 7. UPS: UPS must be provided with the equipment which will provide a power backup of a minimum of 30 minutes.
- 8. All the necessary accessories to calibrate the equipment must be provided along with a calibration certificate.
- 9. Stabilizer and spike arrester must be provided with the equipment.

# 5 Section 5: Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this Section 5 and be submitted to:

Chairperson's Office, C/O
The Chairperson,
Department of Civil Engineering,
Indian Institute of Science, Bengaluru,
Karnataka-560012 Contact:
+91(80)2293 2323
chair.civil@iisc.ac.in

Attn: Dr. Satyavati Komaragiri

Soft copies of the technical documentation, in addition to the hard copies in the sealed envelope, may be emailed to: Dr. Satyavati Komaragiri, <a href="mailto:skomaragiri@iisc.ac.in">skomaragiri@iisc.ac.in</a>

# 5.1 Annexure 1: Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

# **Details of the Bidder**

Sl. No.	Items	Details
1	Name of the Bidder	
2	Nature of Bidder (Attach attested copy of	
	Certificate of Incorporation / Partnership	
	Deed)	
3	Registration No/ Trade License, (attach	
	attested copy)	
4	Registered Office Address	
5	Address for communication	
6	Contact person-Name and Designation	
7	Telephone No	
8	EmailID	
9	Website	
10	PAN No. (attach copy)	
11	GST No. (attach copy)	

(Signature of the Bidder)	
(Name)	
(Designation and Seal)	(Date)

5.2 Annexure 2: Declaration Regarding Experience
To,
The Chairperson,
Department of Civil Engineering
Indian Institute of Science
Bengaluru – 560012, India
Ref: Tender No: CiE/2025-2026/SK/Tenders/Global/PAV-1
Dated: 7 <sup>th</sup> November 2025
Subject: Supply and installation of a Pressure Aging Vessel at the Department of Civil Engineering,
IISc, Bangalore.
Sir,
$I've\ carefully\ gone\ through\ the\ Terms\ \&\ Conditions\ contained\ in\ the\ above\ referred\ tender.\ I\ hereby$
declare that my company / firm hasyears of experience in supplying and installing Pressure
Aging Vessel.
(Signature of the Bidder)

(Printed Name)

(Designation, Seal)

(Date)

# 5.3 Annexure 3: Declaration Regarding Track Record

To,
The Chairperson,
Department of Civil Engineering
Indian Institute of Science
Bengaluru – 560012, India

Ref: Tender No: CiE/2025-2026/SK/Tenders/Global/PAV-1

Dated: 7<sup>th</sup> November 2025

Subject: Supply and installation of a Pressure Aging Vessel at the Department of Civil Engineering, IISc, Bangalore.

Sir,

I've carefully gone through the Terms & Conditions contained in the above-mentioned tender. I hereby declare that my company/firm is not currently debarred/blacklisted by any Government/Semi-Government organization/institution in India or abroad. I further certify that I'm a competent officer in my company/firm to make this declaration.

(Or)

I declare the following:

Sl. No.	Country in	Blacklisted/debarredby	Reason	Since when
	whichthe	Government / Semi		and for how
	companyis	Government/Organizations		long
	Debarred	/Institutions		
	/blacklisted /			
	case is Pending			

(NOTE: In case the company / firm was blacklisted previously, please provide details regarding period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully,	
(Signature of the Bidder)	
(Name)	
(Designation, Seal)	(Date)

5.4	Annexure 4: Declaration for Acce	eptance of Terms and Conditions
-----	----------------------------------	---------------------------------

7. America Decidation of Acceptance of Te	illio alla Collattiolio
To, The Chairperson, Department of Civil Engineering Indian Institute of Science Bengaluru – 560012, India	
Ref: Tender No: CiE/2025-2026/SK/Tenders/Global/PAV-1 Dated: 7 <sup>th</sup> November 2025	
Subject: Supply and installation of a Pressure Aging Ve Bangalore.	ssel at the Department of Civil Engineering, IISc,
Sir,	
I've carefully gone through the Terms & Conditions document. I declare that all the provisions of this tend further certify that I'm an authorized signatory of my cothis declaration.	der document are acceptable to my company. I
Yours faithfully,	
(Signature of the Bidder)	
(Name)	
(Designation, Seal)	(Date)

# 5.5 Annexure 5: Details of Items Quoted

Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part/Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks

#### Instructions to bidders:

- 1. Bidder should provide technical specifications of the quoted product(s) in detail.
- 2. Bidder should attach product brochures along with technical bid.
- 3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document. The technical proposal should contain a technical compliance table with 5 columns:
  - i. The first column must list the technical requirements, in the order that they are given in the technical requirements.
  - ii. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible.
  - iii. The third column should describe your compliance with a "Yes" or "No" only. Ensure that the entries in column two (2) and column three (3) are consistent.
  - iv. The fourth column should state the reasons/explanations/context for deviations, if any.
  - v. The fifth column can contain additional remarks. Vendors can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details. Vendors can also use this opportunity to compare your solution with that of your competitors or provide details as requested in the technical requirements.

# 6 Section 6: Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as shown below:

Sl.	Description	Cat.	Quantity	Unit	Subtotal
No.		Number		Price	
1.	Essential items noted in technical				
	specification				
1. a	(details of essential items, e.g.				
	Pressure Aging Vessel)				
1. b					
2.	Optional items noted in the technical				
	specification				
2. a	(details of optional items)				
2. b					
3.	Accessories for operation and				
	installation				
4.	All items, consumables, spares and				
	software to be supplied locally				
5.	Warranty (3 years)				
6.	Extended warranty after initial 3 years (2				
	years; cost per year should be the unit				
	price and number of years should be the				
	quantity)				
7.	AMC after expiry of initial 3-year warranty				
	period (2 years; cost per year should be				
	the unit price and number of years				
	should be the quantity)				
					<u>                                      </u>

8.	Cost of insurance and airfreight		

# Any additional items:

Sl.	Description	Cat.	Quantity	Unit	Subtotal
No.		Number		Price	
9.					

Addressed to: The Chairperson, Department of Civil Engineering Indian Institute of Science (IISc), Bengaluru - 560012, Karnataka

#### 7 Section 7: Checklist

(This should be enclosed with technical bid-Part A)

The following items must be checked before the Bid is submitted.

# [1] Sealed Envelope "Part A": Technical Bid

- 1. Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:
  - a. Annexure 1: Bidders details
  - b. Annexure 2: Declaration regarding experience
  - c. Annexure 3: Declaration regarding track record
  - d. Annexure 4: Declaration for acceptance of terms and conditions
  - e. Annexure 5: Details of items quoted
- 2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

# [2] Sealed Envelope "Part B": Commercial Bid

1. Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender No. and due date and both in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description and DueDate.