

NATIONAL INSTITUTE OF OCEAN TECHNOLOGY

NOTICE INVITING TENDER (NIT)

Form No.

NIOT/S&P/NIT



निविदा संख्या/ Tender No.		<u> </u>	NIOT/S&P/SnG	GH/100200/2025-26		
ने नावरा २००. कोजारी			, ,	· · · · · · · · · · · · · · · · · · ·		
Issued To			Fabrication a	nd supply of endcap	s for enclosures	
निविदाप्रणाली/Tende	er Mode		GeM (BOQ Bi	GeM (BOQ Bid)- Single Tender Single Bid		
निविदाजारी Tender Issue			* (ONLY THE	M/s. TINI INDUSTRIES * (ONLY THE SPECIFIED BIDDER IS ALLOWED TO BID. THE OTHER BIDS SHALL BE TECHNICALLY NOT ACCEPTED) 15.10.2025		
Tender Closing Date and Time			11.11.2025 a	11.11.2025 at 11.00 A.M.		
Tender Opening Date and Time			11.11.2025 a	11.11.2025 at 11.30 A.M.		
बोली का प्रकार एवं निविदा प्रस्तुतिकरण Bidding Type & Tender submission विविदा प्रलेख उपलब्धता स्थानTender Documents available place			Single Part Tender of Technical Bid and Price Bid should b submitted electronically through GeM portal https://gem.gov.in Bidders may download the help documents. Helpdesk number: Number: 1800-419-3436			
		E-Mail: helpdesk-gem@gov.in For any issues / clarifications relating to the tender(s) published kindly contact the respective Tender Inviting Authority.				
Send your quer the email IDs		Jp to Tender inalizations	gopalakrishnaa vaidehi.niot@go purchase@niot.	ov.in		

राष्ट्रीय समुद्र प्रौद्योगिकी संस्थान NATIONAL INSTITUTE OF OCEAN TECHNOLOGY वेलचेरी ताम्बरम मेन रोड VELACHERY TAMBARAM MAIN ROAD नारायण प्रम, चेन्नै 600 100 NARAYANPURAM, CHENNAI 600 100

रा.स.प्रौ.सं. वेबसाइट/NIOT Website : https://www.niot.res.in/tenders index.php

Commercial Terms Compliance sheet (format should not be altered)

SI. No	Particulars	Yes	No	offer Page Ref
1	Whether every page of the tender document is signed for acceptance of tender and uploaded along with the offer?			
2	Whether Taxes and duties are shown separately in the quote. (Registration numbers for claiming the same to be strictly indicated)			
3	Whether accepted to submit the order acceptance within 7 days from the date of order?			
4	Whether Quote is valid for 90 days from the due date of tender or time specified in the tender document whichever is later?			
5	Whether payment terms of the tender is complied with?			
6	Whether the bidder satisfies the Pre- qualification criteria			
	 a. a copy of your GST Registration certificates and PAN details are attached (Mandatory qualifying condition) 			
	 Supplier should have previous experience in supply of similar items to recognized institutions (Mandatory qualifying condition) 			
7.	a. The Goods / items quoted are manufactured in India and not imported from any country.			
	 Make in India Clause: If the item/goods are partially imported, specify your category: 			
	1. CLASS I Category: Supplier or service provider, whose goods, services or works offered for procurement, has local content greater than or equal to 50%.			
	2. CLASS II Category: Supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%.			
	Only Class I and II categories of vendors are eligible to quote.			
8	Whether self certification form is enclosed (For Class I & Class II supplier only)?			
9	Whether price is FOR NIOT, Chennai?			
10	Whether the freight cost is included, if not included whether the freight cost is indicated separately?			
11	Whether the authorization letter exclusively for this tender, from the original manufacturer is enclosed?			
	a) Whether warranty period accepted as per tender?			
12	b) Whether submission of warranty certificate in the prescribed format is acceptable?			
13	Whether the delivery period is clearly indicated, and is as per tender?			
14	Whether the cost of installation / inspection / testing explicitly mentioned in the quote?			
15	Whether Past track record of quality and service is enclosed?			
16	Whether submission of PS is acceptable if the value exceeds Rs. 25,00,000/-			
17	Whether submission of PBG is acceptable if the value exceeds Rs. 25,00,000/-			
18	Whether list of deliverables attached and comply as per tender?			

19	Whether liquidated damage clause is acceptable in case of delayed supply?			
20	Whether the tender is fully complying with tender specification/Adjustment if no, list out deviations very clearly along with the appropriate reason for the deviation?			
21	1 Whether item-wise price is quoted as per price bid and quoted price is realistic?			
22	Whether technical specification has been duly filled in and submitted with the tender document is uploaded along with the quotation.			
23	Whether HSN code of the product has been indicated?			
24	Whether your firm is registered under MSME/ NSIC/DIC/UAM? If yes enclose copy of registration			

ANNEXURE-M

Format for Self Certification under Preference to "MAKE IN INDIA" Policy (Refer Clause No. 2.8 & 3.4.4 of ITT)

CERTIFICATE

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt.
15.06.2017, as amended from time to time and as applicable on the date of submission of
tender, we hereby certify that we M/s
(supplier name) are local supplier meeting the requirement of minimum Local Content
No
Details of location at which local value addition will be made is as follows:
We also understand, false declarations will be in breach of the Code of Integrity under Rule

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

Seal and Signature of Authorized Signatory

PRICE BID FORMAT:

Fabrication and supply of endcaps for enclosures:

S.No.	Description	Qty	Unit	Unit rate	Amount	
1.	Material Procurement with EN10204 3.2 certifications and approved by DNV.	1	Lumpsum			
2.	Fabrication, testing, inspection and supply of PDE endcaps – 1 with DNV certificate	2	Numbers			
3.	Fabrication, testing, inspection and supply of PDE endcaps – 2 with DNV certificate	2	Numbers			
4.	Fabrication, testing, inspection and supply of IDE endcaps – 1 with DNV certificate	2	Numbers			
5.	Fabrication, testing, inspection and supply of IDE endcaps – 2 with DNV certificate	2	Numbers			
	Total Amount					
(Amou	(Amount in words.					

Bidder should ensure the total price (Inclusive GST) arrived above should match with the GeM "Offer Price total" showing before "encrypt and save button"

The goods items quoted are manufactured in India and not imported from any country.

Note:

- The total cost should include all the charges for delivery of the item to NIOT without incurring any additional expenditure to NIOT.
- Cost includes: Pressure test dummy plugs, jigs, O-rings, machining, post weld heat treatment if required, documents in SCC and all inspection, lab tests and pressure tests etc., as per DNV approved ITP.
- DNV charges towards fabrication of pressure casings: Drawing / reports review and approval, inspection visits, product approval and travel/ accommodation etc., shall be paid by NIOT directly to DNV. However, the cost towards arranging/conducting tests and preparing reports as per approved ITP/QAP in order to comply DNV rules shall be included in the cost quoted.
- Submission of documents, drawings, testing, inspection, load testing and product approval
 etc., is as per DNV rules and it is the responsibility of the identified bidder. NIOT shall submit
 the documents/drawings for DNV approval. Approval should get completed within two
 revisions. Beyond two revisions, charges shall be debited in the set stage payment at actual
 payable to DNV.

For Supply and Service

- 1. GST shall be paid extra as applicable.
- 2. Deduction of Indian Income Tax Deduction at Source: Deductable for all the services rendered for India as per avoidance of double taxation treaty between your Country and Govt. of India. Without Tax Residency Certificate / Tax Identification No. at your country of residency, tax deduction at source will be @20% and with Tax Residency Certificate / Tax Identification No.at your country of residency, tax deduction at source will be @ 10% as per DTAA rate. However, the applicable taxes at the time of actual utilization of service, etc. will be deducted.

NIOT has enrolled under GST in the category "Tax Deductor". The bidders are requested to update their database regarding NIOT's Registration under GST-Tax Deductor. (See clause No.51 II (c))

TDS @ 2% on the order value towards GST will be deducted on payments made to the supplier in respect of goods and/or services, supplied/provided if the value exceeds Rs. 2.5 lakhs

- 1. The copy of the GST registration certificate to be attached.
- 2. The duly filled technical and commercial compliance sheets should be submitted along with quotation/offer.
- 3. The above item to be delivered within **2 months** from the date of receipt of order.
- 4. All the supplies to be warranted for **12 months** from the date of supply and acceptance. Warranty certificate should be provided as per the prescribed format of NIOT.
- **5. Payment: 100%** Payment will be made after supply and acceptance of the materials.
- **6. Part Supply:** Not allowed. All the items should be delivered in a single lot within the stipulated time.
- 7. Delivery Site: National Institute of Ocean Technology, Pallikaranai, Chennai 600100, India.
- 8. **Liquidated damage**: If the Contractor shall fail to deliver the systems/components within the time specified in the Contract, NIOT shall recover from the Contractor as liquidated damages a sum of 0.5% (1/2 percent) of the contract price of the undelivered systems /components for each week of delay (or) part thereof. The total liquidated damages shall not exceed 5% (5 percent) of the contract price of the unit or units so delayed. Systems / components will be deemed to have been delivered only when all essential components parts are also delivered. If any essential components are not delivered in time, the entire system / components will be considered as delayed until such time the missing parts are delivered.

We agree to all applicable terms and conditions listed in the tender document

Company's Signature with Seal

Annexure to NIT

Single tender

Technical Specification and Special Conditions of Contract (SCC)

for

Fabrication and supply of endcaps for enclosures

(Only M/s TiNi Industries is allowed to quote other bids shall not be considered)

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1. Introduction

National Institute of Ocean Technology (NIOT) is an autonomous institute under the Ministry of Earth Sciences (MoES), Government of India, Chennai. The institute is involved in developing and promoting technology for ocean energy, resource exploration from deep oceans, ocean observation, and oceanographic applications.

For further information refer to the website www.niot.res.in

As a part of the program envisaged by the Ministry of Earth Sciences, Government of India, NIOT is interested in realizing **Endcaps for enclosures** for a human-occupied vehicle (manned submersible) using aluminium alloy for the following applications.

- 1. Carryingout exploration for deep ocean mineral and energy resources.
- 2. To support scientific investigation and sampling from deep ocean basins.
- 3. Provide engineering support for the developmental projects in deep waters.
- 4. Search and recovery operations.

To achieve the above, NIOT invites quotations from potential bidders for carrying out the fabrication, testing, and supply of **Endcaps for enclosures** for a manned submersible. Interested companies/agencies/institutes having sufficient experience, expertise, and capabilities and also satisfying the pre-qualification conditions given in the subsequent paragraphs shall submit a proposal as per the instructions in the tender.

2. Scope of supply

The scope of work under this tender covers fabrication as per approved drawings, inspection, and load testing as per *DNV Underwater Technology Rules for manned submersibles* and supply the complete system to NIOT, Chennai. All stage inspections shall be reviewed/witnessed by both NIOT and classification society (DNV) for the endcaps as per approved Inspection Test Plan(ITP) / Quality Assurance Program(QAP).

Table.1. Scope of supply

S. No	Component name	Material	Quantity	Estimated weight/endcap
1.	Image and data enclosure Endcap-1	AA6061-T6 (EN10204 3.2 certified)	2 numbers (As per DNV approved drawing)	~30 kg
2.	Image and data enclosure Endcap-2	AA6061-T6 (EN10204 3.2 certified)	2 numbers (As per DNV approved drawing)	~ 30 kg
3.	Power distribution enclosure Endcap-1	AA6061-T6 (EN10204 3.2 certified)	2 numbers (As per DNV approved drawing)	~ 24 kg
4.	Power distribution enclosure Endcap-2	AA6061-T6 (EN10204 3.2 certified)	2 numbers (As per DNV approved drawing)	~ 24 kg

3. Technical requirement

3.1. Description of endcap requirements

The endcaps shall have the following features.

- 1. The endcaps shall be built according to DNV rules for Underwater Technology.
- 2. Depth of operation is 6000 m.
- 3. The endcaps must be made of aluminium alloy (AA6061-T6).
- All stage inspections and their report shall be reviewed/witnessed by both NIOT and classification society (DNV) as per DNVapproved Inspection Test Plan(ITP) / Quality Assurance Program(QAP).
- 5. The endcaps shall be fabricated in accordance with required dimensional and geometrical tolerances.

3.2. Material

- **1.** Endcap material: AA6061-T6.
- 2. Material properties should satisfy DNV rules requirements.
- **3.** All aluminium alloy materials have to be procured as per EN10204 3.2 certification.
- **4.** Material inspection and testing should be carried out as per DNV rule requirements.

- The material used for the manufacturing shall be new and conform to DNV rules and shall be certified by DNV.
- **6.** All material shall be procured from the reputed manufacturer only.
- **7.** All material procurement shall be subject to inspection as per Quality Assurance Plan and certified by both NIOT and DNV.

3.3. Fabrication

- **1.** All workmanship shall be of high-grade quality and in accordance with the best approved methods of manufacture.
- **2.** Machining, non-destructive testing, etc., should be done as per DNV rules for Underwater Technology.
- 3. All fabrication shall be carried out in accordance with standard/code/rules.
- **4.** The fabrication shall be carried out as per DNV approved drawings.
- **5.** Weld joints are not allowed in the endcaps. Endcaps have to be machined from a thick plate/block.
- **6.** The NIOT reserves the right to make minor changes in the drawing and such changes shall be within the scope of the specified work and not considered as extra.
- **7.** All scales, oxide, oil, chips and other foreign material shall be completely removed. Adequate precautions, such as fitting of temporary covers, shall be taken to ensure that this state of cleanliness is maintained throughout the completion of all work.
- **8.** Any scratches, or marks which occur during fabrication or shipment, if any, shall be repaired to the satisfaction of NIOT. No permanent marking or stamping shall be permitted.
- 9. Great care shall be taken at all stages of manufacture, testing, inspection, and shipping, if any, in the handling of the endcaps. All precautions necessary shall be taken to protect all surfaces from any damage. Permanent deformation as a result of handling methods will be the cause for rejection by NIOT.

3.4. Inspection, examination, and testing

- a) Supplier shall submit a detailed Inspection Test Plan/Quality Assurance Plan to NIOT and DNV for approval.
- b) Inspection and testing shall be carried out in a manner satisfactory to NIOT and DNV and as per the tender specification, design and fabrication drawings.
- c) Supplier is responsible for replacing parts found unsatisfactory in terms of workmanship and/or material at no cost. Defects that may appear during fabrication shall be repaired/replaced in a manner acceptable to both NIOT and DNV.
- d) The supplier shall maintain records of all inspections and tests and these records shall be made freely available to NIOT.

- e) Supplier shall intimate NIOT well in advance to enable NIOT and DNV to inspecton on time.
- f) In the event of any failure of any parts to meet an inspection or test requirement specified herein, the supplier shall notify NIOT. The supplier must obtain permission from NIOT before the repair is undertaken. If repairs, including redesign, are likely to affect the results of tests or work previously completed, appropriate re-inspection and re-testing shall be carried out. The quality control procedures are to be followed to ensure satisfactory repair subject to the approval of NIOT.
- g) Besides other non-destructive examinations, the visual examination will be carried out on all the parts at various stages of inspection for checking the dimensions, tolerances, distortions, fit-ups, alignment, workmanship, etc.,
- h) DNV rules for Underwater Technology, must be followed in all stages of inspection.
- i) All intermediate tests shall be followed by test reports.

3.5. Pressure testing

The pressure testing have to be carried out as per DNV approved Inspection Test Plan(ITP)/Quality Assurance Plan (QAP).

- 1. Nominal diving pressure is 50.50 bar.
- 2. Design and analysis are carried out for an collapse diving pressure of 96.66 bar.
- 3. Test diving pressure is 1.2 times the nominal diving pressure(60.60 bar).
- 4. Under pressure(Tightness) test has to be conducted before conducting the external pressure test. Vacuum test(-0.2 bar underpressure) of the assembled endcaps has to be performed using external compressor.
- **5.** Pressure test as per the DNV-GL rules complying with DNV-GL test protocol.
- **6.** Only the hyperbaric testing facilities / arrangements shall be provided by NIOT. It is the responsibility of the supplier to prove that the endcaps are withstanding the external test pressure.

3.6. Quality standards

All stage inspections and approvals are as per DNV approved quality assurance plan/inspection test plan. Classification society (DNV) needs to approve all stages of work from raw material to commissioning and testing of the endcaps. Hence, the successful bidder should follow DNV certified quality protocol from material procurement (raw material data, manufacturing process, etc.,) to packing and delivery of the product.

3.7. Certification and classification

Certification and classification shall be as per the latest class documents of DNV rules for Classification, **Underwater Technology rules**. Any deviation from the class requirements is to be addressed to the classification society with the necessary documentation and will be permitted only after obtaining written approval from the classification society and NIOT.

3.8. Documents to be supplied

- 1. A brief manufacturer's data report on raw material, raw material testing, fabrication methodology, NDT methodologies, post welding heat treatment methods, if any, load testing procedure, quality assurance procedure/ inspection test plan, quality standards that will be followed in compliance with DNV rules shall be submitted.
- 2. Test reports at each stage as per the scope of works in accordance with DNV rules shall be submitted.
- **3.** Class-approved test reports/documents along with relevant certificates and as fitted/as built drawings.

4. Scope of work / Deliverables

The successful bidder shall submit an indicative project execution plan covering the following but not limited to

- 1. Submission of detailed Inspection Test Plan(ITP)/Quality Assurance Plan (QAP) to DNV for approval.
- **2.** Procurement of raw materials with EN10204 3.2 certifications by manufacturer and approved by DNV.
- **3.** Manufacturer's data report on raw material, raw material testing, fabrication methodology, quality control and assurance standards, inspection, and testing.
- **4.** Fabrication and supply of endcaps through machining (Weld joints are not allowed).
- **5.** Supply of bolts, nuts and washers of (SS316) for assembling the pressure cases shall be of high quality, standard and product of reputed manufacturer.
- **6.** Supply of O-rings for assembling the pressure cases shall be of high quality, standard and product of reputed manufacturer.
- 7. Integration of all sub-assemblies as per DNV approved fabrication drawings with stage inspections at each step by NIOT and class surveyor (DNV).
- 8. Non-destructive testing as per DNV approved NDT plan and drawing.
- 9. Pressure testing as per DNV approved pressure testing procedure and as per approved ITP.
- 10. Submission of test reports to DNV for certification and classification through NIOT.
- **11.** Delivery of endcaps at NIOT, Chennai.

5. Acceptance criteria

- 1. Completion of stages of development as per tender.
- 2. Acceptance criteria based on approved ITP/QAP and DNV rules.

6. General information

- 1. The documents shall include fabrication procedure, bill of materials, Quality Assurance Programme, NDT procedures, Load testing procedure etc.,
- 2. The supplier shall provide the raw materials manufacturer test certificate (3.2), and mechanical and chemical composition test of material, fabrication stage wise inspection report, NDT, dimension report, pressure test report to be submitted to NIOT for review. The successful bidder shall proceed with the fabrication process after obtaining the DNV approved drawing from NIOT. All stage inspection and test reports have to be certified by DNV surveyor.
- 3. On receipt of the confirmed order, a tentative execution plan along with a schedule to be made and submitted to NIOT in one week time.
- 4. The fabricator shall submit a detailed weekly progress report along with drawings/reports/photos during fabrication/inspection/testing.
- **5.** During the technical evaluation of the proposal, the supplier may be invited for a detailed presentation/discussion for further clarifications, if any, (only if it is deemed necessary) before opening the commercial proposal.
- **6.** An agreement detailing all the aspects of the project, responsibilities, scope of work, administrative procedures, schedule, and commercial aspects of the projects shall be effected between NIOT and the selected supplier before embarking on the execution part of it.
- 7. It is the full responsibility of the supplier to fabricate and supply endcaps as per the requirement for the intended purpose within the stipulated time period.
- 8. All transportation shall be the supplier's scope.
- 9. All other terms and conditions as per our tender enquiry.
- 10. **Delivery period**: 2 months from the date of issue of purchase order and DNV approved pressure casing drawings.
- 11. **Delivery site:** National Institute of Ocean Technology, Pallikaranai, Chennai, India.

	of one year warra		e of receipt and	acceptance at N
Warrenty certification	ate as per annexur	e(NIOT format).		

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7. Technical compliance sheet

Single Tender (Only M/s TiNi Industries is allowed to quote other bids shall not be considered) Compliance **Description** S.No **Remarks** (Yes/No) Supply of Endcaps with test reports, stage inspection reports, pressure testing, surveyor report / certificate by DNV etc as per scope of work. Welded structures are Fabrication DNV process as per 2. standard/codes/rules. not allowed. Inspection, review/witness and material properties testing Delivery period not exceeding period 2 months from the date of purchase mentioned in the tender

order.

Date:	Signature and seal of vendor
Place:	

Annexure - 1: Technical bid format

Technical bid (PART A)

The technical part (PART A) should contain the following

- 1. Technical and commercial compliance sheet in the company letter head duly filled and signed by the authorized signatory.
- 2. Signed financial bid in blank format (without cost).

Annexure – 2: Drawings

(Refer attachement for the detailed pressure casing drawings)

S. No	Drawing	Description
1	141-561-002	IDE, Endcap-1
2	141-561-003	IDE, Endcap-2
3	141-542-002	PDE, Endcap-1
4	141-542-003	PDE, Endcap-2

+MANDATORY DOCUMENTS:

- 1. GST Registration Certification
- 2. PAN details
- 3. Cancelled cheque Leaf / Bank details
- 4. Copy of NIT documents affixing company seal and signed in all the pages.
- 5. Duly filled commercial compliance sheet and Technical Compliance sheets
- 6. Any other documents sought in the NIT
- 7. Valid Authorisation Letter from OEM
- 8. MSME Certificate, if any
- 9. Self Certification under Preference to "MAKE IN INDIA" Policy (format attached)

We agree to all applicable terms and conditions listed in the tender document

Company's Signature with Seal