



National Technology Centre for Ports, Waterways & Coasts.

(NTPWC)

Door no.606, 6<sup>th</sup> floor New academic complex

IIT Madras -Chennai -600036- PHONE:22578915.

Ref: No. PROJECT NO. OEC/18-19/155/MOSH/SASA.

DATE:21.01.2019

Tender ref no. NTPWC/USCFT/SASA/008

**Item Description: Under water six component force transducer -1no. (as per specification attached)**

**Due date : 07.2.2019 at 3.00 P.M.**

Dear Sir,

1. Quotations/Tender with compliance sheet are invited in duplicate for the various items shown below/overleaf/**enclosed list**.
2. The quotations are to be **in two parts as Technical Offer and as Commercial offer**:  
The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. Fax and Email quotation are not acceptable.
4. Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. Warranty clause will be as said in the specification.
5. Imported supplies should be quoted **for CIP chennai basis indicating mode of shipment**.
6. Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges and collected back at the supplier's expenses. Compliancy certificate is to be provided indicating conformity to the technical specifications
8. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
12. The Guarantee period of the item may be indicated clearly.
13. No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). (IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty and GST for 5%. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
14. **Acceptance and Rejection:-** I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
15. **All tender amendments will be uploaded on the website only.** Bidders should keep themselves updated & conditions mentioned in the specification needs to be strictly followed  
**Tenders to be addressed to :** The project co-ordinator,NTPWC, room no.606, 6<sup>th</sup> floor new academic complex, IIT Madras, chennai- 600036

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## Annexure I

Ref: OEC/18-19/155/MOSH/SASA

Date: 21.01.2019

Due Date: 07.02.2019

**Quotation required for the supply of Underwater Six Component Force Transducer - 1 No.**

### Technical Specifications

1. Force transducer shall be underwater type to be used for dynamic force measurements (continuously working underwater for a minimum of two weeks till completion of a set of experiments).
2. Dead/Self weight of our experimental setup to be mounted on the transducer ranges from 10 kg to 250 kg depending on our application.
3. In addition to the Dead/Self weight of our experimental setup, maximum loads on all the three axes of the transducer will be 2 KN and maximum moment will be 2 KN-m.
4. Point of application of the load varies from 20 cm to 100 cm from the transducer.
5. Horizontal Force ( $F_x$ ), Vertical Force ( $F_z$ ) & Moment about horizontal axis ( $M_y$ ) are most important for measurements out of the six components. Forces and moments in other axes are of secondary importance.
6. Transducer dimensions preferred is 50cm x 50 cm x 10cm (Length x Width x Height). Approval of any other dimension shall be at our discretion.
7. Our experimental setup will be mounted on the transducer and so it is preferred to have as many fixing arrangements as possible for flexibility to fix the experimental setup of varying sizes.
8. Operating temperatures: Minimum temperature 15° C and Maximum temperature 50° C.
9. Warranty period: One year required
10. Relevant certificates to be provided along with supply of the transducer.

For any technical query please contact –

S. Karthik Ramnarayan, Mobile - +91 99620 33959, Email: skarthikramnarayan@gmail.com

*Karthik*

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