राष्ट्रीय अंटार्काटक एवं समुद्री अनुसंधान केन्द्र पृथ्वी विज्ञात मंत्रालय भारत सरकार) हेड लैण्ड सडा, वास्को डा गामा

गोवा- ४०३ ८०४ भारत



NATIONAL CENTRE FOR ANTARCTIC & OCEAN RESEARCH

Ministry of Earth Sciences Government of India) Headland Sada, Vasco da Gama Goa - 403 804 - INDIA

> <u>Telefax NO.: +91 832 2525573</u> Email:warlu62@ncaor.gov.in

PROCUREMENT SECTION

FOREIGN ENQUIRY

M/s.

Ref. No.:

SOCP-008

Date:

26.03.2015

Due Date:

20.04.2015

Dear Sir,

You are requested to send your offer for the following items as per the terms and conditions mentioned below.

SL.	DESCRIPTION	Quantity
NO.		
1.	Glass floats 17" diameter with Polyethylene hard hats;	60
	Operational depth of 6000 m;	
	Glass Spheres and Hard Hats should be assembled and	
	supplied as one unit.	
2.	GI Bow Shackles	60 pairs

Your offer should contain the following information:

- 1. Submit your quotation on FOB/C.I.F basis.
- 2. Delivery Period:
- 3. Validity of quotation:
- 4. Quantity/Trade discounts, if any.:
- 5. Guarantee/Warranty of the product:
- 6. Taxes applicable (VAT if any):
- 7. Enclose brochure/leaflet Specification:
- 8. No advance payment will be made. Payment by irrevocable letter of credit after supply and acceptance of the equipment by NCAOR. The payment will be authorized after submission of a Bank Guarantee for 10% value of the order towards warranty guarantee. The performance Bank Guarantee should be furnished within 15 days from the date of placement of order from a reputed bank (scheduled bank in India or foreign bank operating in India) valid till 60 days after the warranty period.
- 9. Overwriting and corrections should be attested properly. The quotation should be complete in all respects and should be duly signed. Incomplete and unsigned quotation will not be considered at all. Quotation should be submitted as per NCAOR terms and conditions.
- 10. All relevant technical literature pertain to items quoted with full specifications (Drawing, if any), information about the products quoted, including brochures if any should accompany the quotation.
- 11. A list of **reputed clients** to whom the firm has supplied similar items to be furnished alongwith the quotation.

- 12. Quotation should be **valid for a period of 90 days** and the period of delivery required should also be clearly indicated. If the supplier fails to deliver the goods within the time to be agreed upon, for delayed deliveries and for delays in installation (wherever applicable) NCAOR reserves the right to **levy liquidated damages** at the rate of 0.5% per week or part their of upto maximum of 5%.
- 13. Warranty shall commence from the date of installation and acceptance of the complete equipment supplied under the Purchase Order / Contract. The warranty period and the kind of post-warranty support should be indicated.
- 14. Please **specify the Make/Brand** and Name of the Manufacturer with address, country of origin and currency in which rates are quoted.
- 15. Both **FOB and CIF prices upto Indian port of entry** namely <u>Goa</u> should be indicated. However quotation should contain item-wise prices including total ex-works price and cost of packing forwarding, approx. cost of air-freight charges for delivery up to Goa, India.
- 16. A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.
- 17. Suppliers should clearly define the mechanisms of **post-warranty** maintenance or support. Supplier should undertake to support the product for a minimum period of 5 years (post-warranty).
- 18. Two sets of operational, service/troubleshooting manuals and diagrams to be supplied.

Please enclose documentary proof such as latest purchase order copies etc., to substantiate the reasonability of price. Also confirm that the "the rates quoted by you are reasonable and lowest charged to any of your customer".

NOTE: Please enclose a copy of valid certificate to substantiate as Authorized Dealer, Agent, Stockist or Trader, to consider your quotation.

Director, NCAOR reserves the right to reject any quotation received without assigning any reasons.

Yours faithfully

Executive (Procurement)
For and on behalf of Director, NCAOR

TENDER ACCEPTANCE UNDERTAKING

То

Seal

The Director, NCAOR, Headland Sada, Vasco – Goa.
Having examined the tender document for SUPPLY OF GLASS FLOAT WITH ACCESSORIES , we the undersigned hereby offer to supply the equipment in conformity with all specifications and conditions set out in the tender document.
We enclosed all the relevant documents as per the tender.
We understand that you are not bound to accept the lowest or any tender received.
Date:
(Signature of Bidder)
Name :
Designation :

SPECIFICATION FOR SUPPLY OF GLASS FLOAT WITH ACCESSORIES ARE GIVEN BELOW.

1.0 Introduction

The buoy systems are moored at deep sea using different types of ropes and mooring hardwares. Among the different mooring components, Glass floats will be used in the depth range of 3000m to full ocean depth and needs to withstand the expected hydrostatic pressure on the depth range and pop up upon release. The specification details the requirement s of the deep sea glass floats to be used in our buoy mooring systems.

2.0 Technical Specifications

The Glass floats consist of glass spheres and hard hats and it should meet the following requirements.

2.1 Glass Spheres

Material : Low expansion borosilicate

Outside Diameter : approx. 430 mm
Inside Diameter : approx. 400 mm
Specific gravity : around 2.2
Net Buoyancy : approx. 25 kg
Working depth : minimum of 6000 m

Young's Modulus : 60 GPa

Weight in Air : approx. 18 kg

- Glass floats should be of lightweight, high corrosion resistant, non-polluting, strong and easy to handle
- Manufacturer/supplied should adopt suitable manufacturing processes to ensure high quality and long life of the floats.
- It should withstand the expected pressure at the rated depth.

2.2 Hard Hats

Material : Polyethylene Weight in Air : approx. 4 kg

Color : Bright Yellow/Orange

- It should be of two flanged units bolted together with stainless steel hardware. The openings of the hard hats should facilitate the housing of 17" glass float.
- Flanges should have provisions to attach it with the mooring line.
- Hard Hats should protect, store and facilitate the easy handling of glass spheres.
- It should have ribbed surfaces as shown in the drawing and should be able to withstand the aforesaid pressure range.
- The dimensions given in the drawing are indicative only and the minor variations (± 20 mm) are acceptable.

3.0 Testing and Inspections

- All the Glass spheres should be tested for Material conformity and hydrostatic pressure to the working depth range and the documentary proof for the same should be provided.
- Glass spheres and Hard Hats should be free from manufacturing defects.

4.0 Required Quantity:

The following numbers of Glass Spheres and hard hats needs to be supplied.

Glass Spheres : 60 Nos

Hard Hats : 60 pairs.

GI Bow shackles : 60 pairs (make: Crossby/Gunnebo) (GI Bow shackles should match with 13 mm GI long link chain)

5.0 Supply Requirements:

The glass spheres should be kept inside the Hard Hats and fastened with the Stainless steel hardwares. It should be readily usable in field without any initial preparations.

6.0 Delivery

The materials should be delivered within eight to ten from the date of issue of purchase order.

7.0 Payment:

As per NCAOR terms and conditions

8.0 Warranty

The warranty is to be for Twelve months from the date of supply and acceptance by NCAOR

9.0 Supplier Selection Criteria:

- OEM/supplier or Buoy manufactures can submit their quote.
- OEM/supplier should have supplied similar kind of products for deep sea mooring applications.

TECHNICAL COMPLIANCE SHEET

S.No	S	pecification	Yes/No	Remarks, if any
1	Item Name: Glass Sph	neres		
2.	Material : 1	Low expansion Borosilicate		
	Outside diameter :	430 mm		
	Inner diameter :	400 mm		
	Specific Gravity :	around 2.2		
	Nominal Buoyancy:	approx. 25 kg		
	Weight in air :	18 kg		
3	Depth Rating :			
4	Test Certificates:			
	 Material confo 	rmity		
	 Pressure range 	2		
5	Item Name :	Hard Hats		
6	Material :	Polyethylene		
	Weight in air :	4 kg		
7	Assembly Requirement	nts:		
	Glass Spheres and Ha	ard Hats should be assembled		
	and supplied as one u	ınit.		
8	Item Name: GI Bow Si	hackles (GI Bow Shackles		
	should match with 13	mm GI long link chain)		

TECHNICAL COMPLIANCE STATEMENT FOR GLASS FLOAT WITH ACCESSORIES

Sr. No.	Description	COMPLIED/ NOT COMPLIED	EXTRA FEATURES
	TECHNICAL COMPLIANCE FOR "GLASS FLOAT WITH ACCESSORIES.		
	1.0 Introduction		
	The buoy systems are moored at deep sea using different types of ropes and mooring hardwares. Among the different mooring components, Glass floats will be used in the depth range of 3000m		
	to full ocean depth and needs to withstand the expected hydrostatic pressure on the depth range and pop up upon release. The		
	specification details the requirement s of the deep sea glass floats to be used in our buoy mooring systems.		
	2.0 Technical Specifications The Glass floats consist of glass spheres and hard hats and it should		
	meet the following requirements.		
	2.1 Glass Spheres		
	Material : Low expansion borosilicate		
	Outside Diameter : approx. 430 mm		
	Inside Diameter : approx. 400 mm		
	Specific gravity : around 2.2		
	Net Buoyancy : approx. 25 kg		
	Working depth : minimum of 6000 m		
	Young's Modulus : 60 GPa		
	Weight in Air : approx. 18 kg		
	 Glass floats should be of lightweight, high corrosion resistant, non-polluting, strong and easy to handle 		
	 Manufacturer/supplied should adopt suitable manufacturing processes to ensure high quality and long life of the floats. 		
	• It should withstand the expected pressure at the rated depth.		
	2.2 Hard Hats Material : Polyethylene		
	Weight in Air : approx. 4 kg Color : Bright Yellow/Orange		
	It should be of two flanged units bolted together with stainless		
	steel hardware. The openings of the hard hats should facilitate the housing of 17" glass float.		
	 Flanges should have provisions to attach it with the mooring line. 		
	 Hard Hats should protect, store and facilitate the easy handling of glass spheres. 		
	 It should have ribbed surfaces as shown in the drawing and should be able to withstand the aforesaid pressure range. 		
	 The dimensions given in the drawing are indicative only and the minor variations (± 20 mm) are acceptable. 		
	3.0Testing and Inspections		
	 All the Glass spheres should be tested for Material conformity and hydrostatic pressure to the working depth range and the documentary proof for the same should be provided. 		
	Glass spheres and Hard Hats should be free from manufacturing defects.		

4.0 Required Quantity:		
The following numbers of G	ass Spheres and hard hats needs to be	
supplied.		
Glass Spheres	: 60 Nos	
Hard Hats	: 60 pairs.	
GI Bow shackles	: 60 pairs (make:	
	Crossby/Gunnebo)	
(GI Bow shackles should ma	atch with 13 mm GI long link chain)	
5.0 Supply Requiremen	ts:	
The glass spheres should be	kept inside the Hard Hats and fastened	
with the Stainless steel hard	lwares. It should be readily usable in	
field without any initial prep	parations.	
6.0 Delivery		
The materials should be del	ivered within eight to ten from the date of	
issue of purchase order.		
7.0 Payment:		
As per NCAOR terms and co	onditions	
8.0 Warranty		
The warranty is to be for Tw	relve months from the date of supply and	
acceptance by NCAOR		
9.0 Supplier Selection (Criteria:	
 OEM/supplier or Bud 	by manufactures can submit their quote.	
 OEM/supplier should 	l have supplied similar kind of products	
for deep sea mooring	applications.	

TECHNICAL COMPLIANCE SHEET

S.No	Specification	Yes/No	Remarks , if any	
1	Item Name: Glass Spheres			
2.	Material : Low expansion Borosilicate			
	Outside diameter : 430 mm			
	Inner diameter : 400 mm			
	Specific Gravity : around 2.2			
	Nominal Buoyancy: approx. 25 kg			
	Weight in air : 18 kg			
3	Depth Rating : 6000 m			
4	Test Certificates:			
	Material conformity			
	Pressure range			
5	Item Name : Hard Hats			
6	Material : Polyethylene			
	Weight in air : 4 kg			
7	Assembly Requirements:			
	Glass Spheres and Hard Hats should be			
	assembled and supplied as one unit.			
8	Item Name: GI Bow Shackles (GI Bow Shackles			
	should match with 13 mm GI long link chain)			

COMMERCIAL COMPLIANCE STATEMENT FOR "GLASS FLOAT WITH ACCESSORIES

Sr. No.	COMMERCIAL COMPLIANCE FOR "GLASS FLOAT WITH ACCESSORIES	COMPLIED/ NOT COMPLIED	EXTRA FEATURES
1	A list of reputed clients to whom the firm has supplied similar items to be furnished along-with the quotation.		
2	In the Bid, the Bidder should furnish the Name and address of the Purchasers placed orders on similar equipment with order No, date, Description and quantity, Date of Supply alongwith Contact person Telephone No, Fax No, and e mail address of Purchaser.		
3	The Bidder should enclose copies of Purchase Orders.		
4	Quotation should be valid for a period of 90 days from the date of tender opening.		
5	The warranty period and the kind of post-warranty support should be indicated. Warranty shall commence from the date of installation and acceptance of the complete equipment supplied under the Purchase Order / Contract.		
6	Please specify country of origin and currency in which rates are quoted.		
7	The order acknowledgement should be from the principals and if the Indian Agent is empowered to quote and to furnish order acknowledgement, a copy of agreement entered by you with the Indian Agent to be furnished.		
8	Compliance Statement: Equipments point-by-point comparison/compliance statement with technical specification , should be enclosed along with your tender as well as any other extra features of the equipment be shown separately therein and also compliance statement for all commercial terms .		
9	To avail duty concessions i.e. Excise Duty as per Govt. notification 10/97 & Custom Duty as per Govt. notification 51/96, NCAOR will provide exemption certificates. Hence, the rates should be split into basic cost and Excise Duty if any.		
10	Bid should contain all details and specifications of the equipment offered, delivery schedule, warranty, payment term, installation, training, post-warranty, user-list, service support and details of the price(s) of the item(s) quoted in the bid.		
11	In case of imported stores both FOB and CIF prices upto Indian port of entry namely Goa should be indicated. However tender should contain item-wise prices including total ex-works price, overall weight & dimensions of the equipment and cost of packing forwarding, approx. cost of air-freight charges for delivery up to Goa, India.		
12	A technical Committee constituted by the Director will assess the product supplied/installed for their quality and their conformity to the specifications provided by the firm in their quotations. Any item(s) identified by the Committee to be not as per the specifications or are found to be of inferior quality will be rejected, and the bills towards the supply will not be processed for payment till proper replacements are provided.		
13	No advance payment will be made. Payment by irrevocable letter of credit and on submission of Performance Bank Guarantee for 10%value of Order value towards warranty guarantee.		
14	Tender acceptance undertaking as per our enquiry submitted		
15	Two sets of operational, service/troubleshooting manuals and diagrams to be supplied with GLASS FLOAT WITH ACCESSORIES		
16	The submission of tender shall be deemed to be an admission on the part of the tenderer, had fully acquainted with the specifications, drawings etc. and no claim other than what stated in the tender shall be paid in the event of award of Purchase Order.		

17	Acceptance of this tender form and submission of the quote	
	within the stipulated time would be treated as:	
	The tenderer has understood all requirements as	
	described in our Tender document.	
	Acceptance to provide/establish all the facilities	
	mentioned in our tender without any price escalation, if	
	the tenderer finds it necessary to add any hardware or	
	software or any other materials during implementation.	
	Agreeing to execute order to the satisfaction of NCAOR or	
	its authorized representatives within the stipulated time.	

Signature with seal