

NATIONAL CENTRE FOR SUSTAINABLE COASTAL MANAGEMENT

Ministry of Environment and Forests (MoEF)
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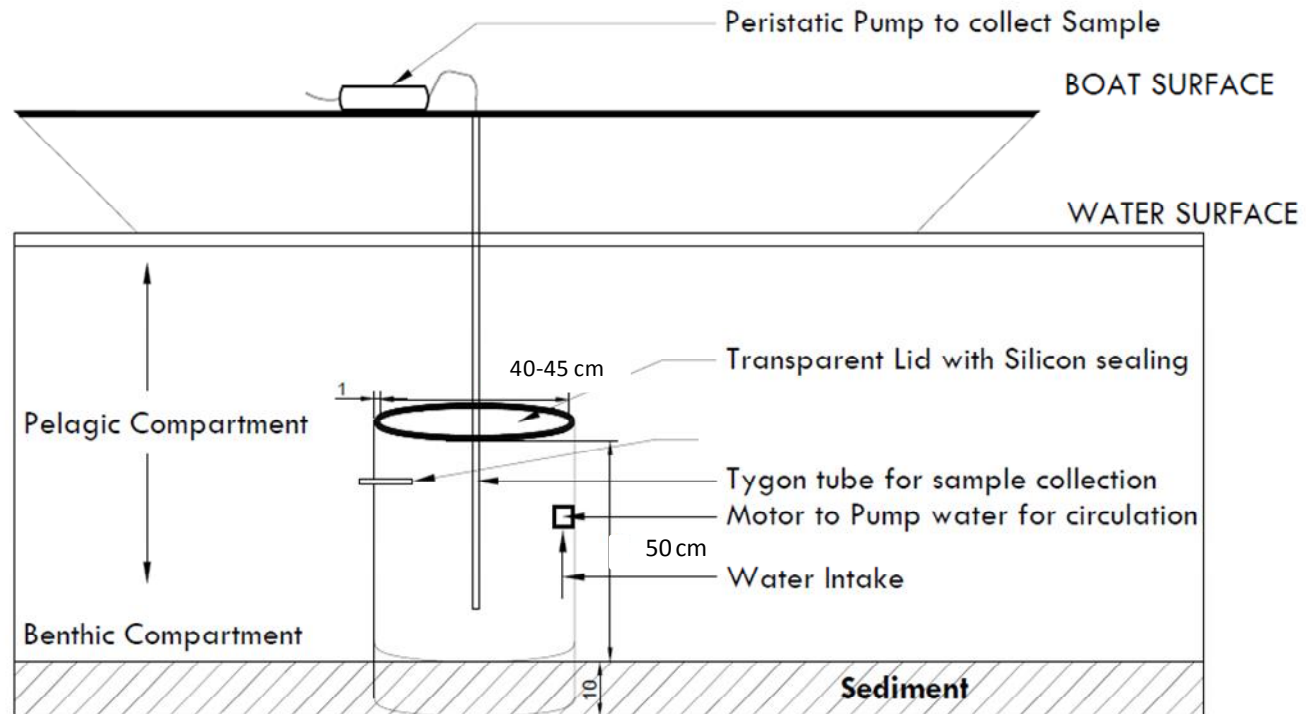
Technical Specifications for Benthic Chamber (Quantity required 3 Nos)

Quote for preparing Benthic Chamber (two transparent, one dark.): The following details are the quote for Design, fabricate, supply and demonstrate benthic chamber (poly acrylic material) as per the following specifications.

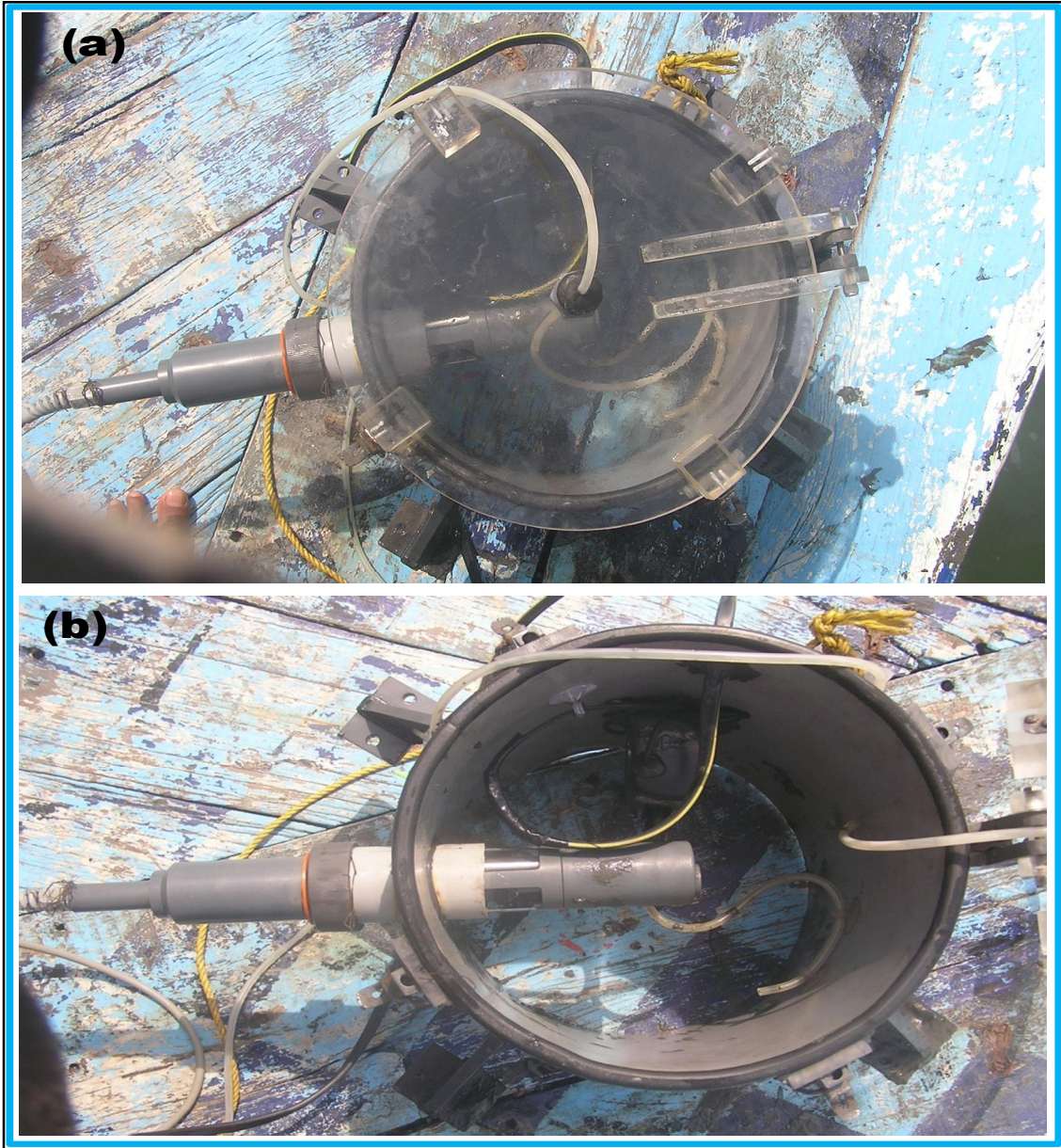
Annexure 1.

Sl.No	Description	Dimension	Quantity
1	Height of the Benthic chamber above benthic sediment	~ 50 cm	1No
2	Height of the Benthic chamber below sediment	~ 10 cm	
3	Diameter of the Benthic chamber	40-45 cm	
4	Thickness of the Benthic chamber	~1.0 cm	
5	Flanges (with equidistant holes) will be attached to two opposite outer walls of the chamber in order to restrict excessive penetration of the chamber into the sediment during placement.		
6	Rim of the Benthic chamber bottom will be prepared in sharp enough to penetrate the chamber into the sediment during placement.		
7	Once in every 30 min chamber water will be gently mix mechanically by a motor fixed inside the chamber, to create effective mixing inside the chamber during incubations.		
8	A provision (one-way valve) should be provided in the chamber for replacing the withdrawn sample volume from surrounding water through a side port. A provision a slot should be provided in the side wall of benthic chamber (Water proof) for incretion of Water Quality probe		
9	Variable Speed Peristaltic Pump with Speed Controller for water Withdrawal from benthic chamber.~ Flow rate: 0.5 to 1000 ml/min		1No
10	Aquarium water pump Small (water circulation devices for freshwater and saltwater aquariums) with control device for gentle mixing of chamber water periodically. Name:Aquarium Water Pumps Flow rate: 2- 5 l/m		1 No
11	Inverter (~650 VA) without battery AC for field applications of benthic chamber		1No

	(Peristaltic Pump, Aquarium water pump and lap top)		
12	Tygon Tubing		10 m



Schematic diagram of the Benthic Chamber used for measuring Benthic Fluxes.



Photograph of the benthic chamber for *in situ* incubations (a) closed view (b) open view.