

Box Corer Model 80.750

Manual



Research Equipment Limnology • Oceanography • Hydrobiology

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Manual for Box Corer

Model no. 80.750



This box corer is very dangerous in unskilled hands and serious precautions must be taken to avoid accidents.

KC-Denmark A/S is not, and cannot be held, responsible for any damage(s) made to equipment or to operators who ignore safety precautions or because of misuse or wrong operation.

Never walk under the box corer, when lifted by the winch.



Preparation:

Attach the lifting hook from the winch and secure to the upper part of the box corer.



Caution Insert the safety pawl, and it is very important, that the lever arm (1) will lock correctly.

Before each deployment: Inspect the talurites and the steel wires very thoroughly to detect wear and corrosion damages. If both wires fail, you will leave the main rack on the sea floor!



2

3	Force the arms, A/B, into vertical position, secure them by means of a rope or similar. Caution Take care that no body parts are getting jammed.	B
4	Lift the outer shovel and place it on the trolley, see below.	
5	The trolley for the outer shovel.	
6	Align the sample tube to the middle of the outer shovel. The inspection holes must point towards the rear of the box corer.	

7	Before moving the trolley make sure, the sample tube has been secured with the brackets.	
8	The sample tube has been aligned and secured to the trolley.	
9	The guiding rails, 1 and 2, for the sample tube.	
10	Push the sample tube into the guiding rails, 1 and 2.	

11	The box corer has 2 arms for fastening the outer shovel, align item 1 and 2.	1)2
12	Caution The locking clamps are pushed downwards so they will cover the notches. The bolts 3 and 4 must be tightened firmly to avoid loss of the outer shovel.	3 4
13	Unlock the clamps and remove the trolley.	
14	Insert 2 locking clamps to secure the sample tube.	

15	The sample tube has been secured.	
16	Correct insertion of 2 securing clamps.	
17	Adding lead weights.	
18	Add the desired amount of lead weights and secure with the brackets. You must add an equal number of weights at both sides. The box corer is shown with 6 lead weights, each 50 kg.	

While pushing "2" upwards into vertical position and slowly hoisting the box corer with the winch, "2" is forced into the notch "3", hold "2" until the main wire from the winch is taut.

19



During the hoisting you must keep a safe distance to "2 and 3" to avoid any injury.



Now "2" and "3" are locked together so you must ensure that "2" is in vertical position and the main wire is taut.

20



During the hoisting you must keep a safe distance to "2 and 3" to avoid any injury.

The box corer is now loaded, ready for deployment to the sea.



	Deployment	
21	Caution Remove the security pawl (preferable when the box corer is outside the bulwarks to avoid injury by an unattended release).	T500cm² Box Core Two tent R7 Two
22	The box corer is ready for deployment. The lowering is done by a controlled, reasonable speed. Reaching the seabed the releaser is activated, see item 23 for a brief description.	
23	PR 9	The Box Corer is on its way up to the ship with the secured sample inside the tube The main cable is drawn, and the closing rab goes into position beneath the corer tube

	Maintenance
24	All parts of the box corer can be rinsed using salt water or fresh water. Regular cleaning with fresh water is recommended and all moveable parts must be moved individually to ensure all dirt has been removed. Before storing all parts are rinsed thoroughly with fresh water.
	Safety information
25	All maintenance, inspection and repairs must only be done by an expert maintenance technician fully familiar with the attendant hazards. Persons charged with working on the winch and the accessories must be trained specially for the purpose with special abilities and experience in this area as well as being equipped with the appropriate tools and individual safety equipment. Failure to meet these requirements constitutes a risk to personal health and safety and economic damages. When working on the unit in areas, which are difficult to access or hazardous, ensure that adequate safety precautions have been taken for the operator and others in compliance with the provisions of law on health and safety at work. Replace worn component with original spare parts.

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