

13.570

Small Free Fall Corer

Manual



Research Equipment Limnology • Oceanography • Hydrobiology

Small Free Fall Corer



The Free Fall Corer can be very dangerous in unskilled hands, and you must take serious precautions 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.

Item	Preparation	
1	Place the upper part of the corer in horizontally position and insert the stainless steel tube in the upper part. To prevent losing the sample tube, attach the snap hook to the ring at end of the sample tube.	
2	Fasten the tube by turning the handle "A" clockwise.	
3	If the upper layer of the sediment must remain undisturbed, you can leave out the liner and the orange peel system.	

4	To prevent the sample from exiting, you can add the orange peel closing system. It consists of the following parts: A – Carver B - Orange Peel C – Liner 4 – Steel tube	
5	Insert the orange peel into the liner.	
6	The orange peel is now located into the liner.	
7	Fasten the carver by hand to secure the orange peel.	

8	When sampling half-hard or clayey sediments, attach the carver and you can leave out the orange peel system.You can use the steel tube with no liner for sampling, but due to the steel tube's locking ring at the top, see photo, you cannot use the piston rod for ejecting the sample.If you intend to use the liner without the orange peel system, you must insert a steering ring (13.527) to centre the liner in the tube.	
9	Adjust the number of lead weights for your purpose and secure all bolts. Always use the same qty. on each fin to keep the balance of the corer. The corer has room for a maximum of 24 pcs lead weights, each 2 kg.	
10	Ensure the lid will close firmly to the top of the tube and no sediment will disturb the closing function.	

11 Lower the free fall corer at a reasonable speed to take the sample.	
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	Ejecting the sample	
12	After raising the corer, dismount the carver and the orange peel system. Take out the internal acrylic or PP tube. For later analysis, you can secure the samples with rubber bungs or caps at the tube's end(s). For ejecting the sample into smaller parts, adjust the small crossbar accordingly. Due to small variations in the inside diameter of the pipe, it may be necessary to adjust the nut at the end of the piston. Check regularly that the nut does not come loose, so the steel bar may fall off.	
13	Using the fraction tray demands that the sample tube is positioned in vertical position. Add the fraction tray on top of the tube and secure with the wing nut on the black part of the tray. The small plate can slice off the visible sample.	

Storing and maintenance

Before storing, rinse the sampler thoroughly using fresh water. Store in open position, so the inner parts will become dry.



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Do not use alcohol for cleaning acrylic parts.

Items, like PP/PVC/acrylic tubes, rubber seals, motor houses with or without Fluorinert, etc., and a long exposure to direct sunlight or lack of clean up for salt water might affect the durability and stability of the products and will remain uncovered by the warranty.

Replace worn component with original spare parts.

Safety Regulations

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. An expert technician fully familiar with the attendant hazards must only do all maintenance and repairs.

When working with the unit in areas, which are difficult to access or hazardous, ensure to take adequate safety precautions 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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