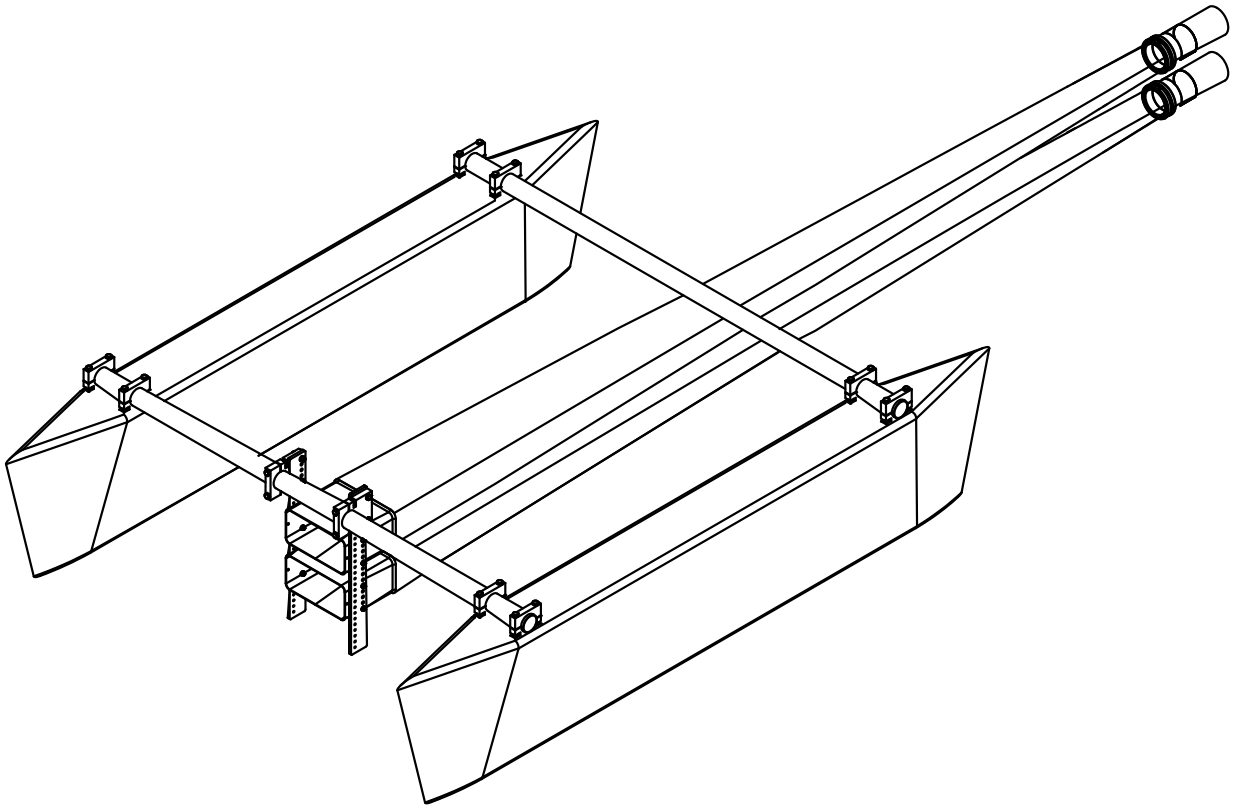


NEUSTON NET acc. to David / Hempel

OPERATION MANUAL

Product ID 438 210

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GENERAL DESCRIPTION

The Neuston Net acc. to David / Hempel Model 300 has been designed for accurate epineuston and hyponeuston sampling. An additional current field of application is e. g. microplastic sampling.

The Neuston Net consists of a slender catamaran swimmer body of aluminium with relative high draft, caring for a stable position even under choppy conditions at sea with towing speeds of up to 4 knots.

The vertically adjustable double net frame receives the rectangular surface and sub-surface net bags.

For easy retrieval the sample is concentrated inside two removable soft net buckets with side window (covered with sieve gauze).

A bridle with one adjustable leg is used to operate the net from starboard, portside or stern.

TECHNICAL DATA

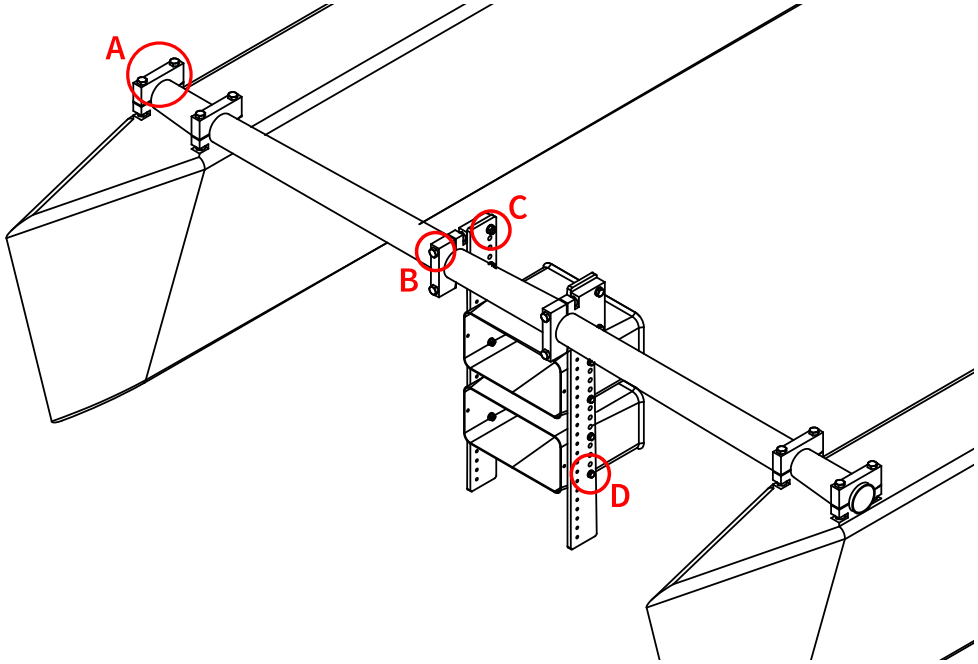
Length:	300 cm (Catamaran)
Overall length (from bridle to net bucket)	app. 700 cm
Width:	220 cm (Catamaran)
Height:	60 cm
Opening area:	30 x 15 cm (0.045 m^2) ea.
Weight on air:	95 kg
Material of frame:	anodized aluminium
Material of net bag:	MOnyl
Standard mesh size:	300 µm

STANDARD EQUIPMENT

1. Catamaran swimmer body with 2 distance tubes
   dimensions: 220 x 60 x 300 cm (w x h x l)
2. 2 Adjustable net holding racks
3. 2 Net frames
4. 2 Nylon webbings with zip fastener
5. 2 Hose clamps for nylon webbings
6. 2 Net bags of synthetic material with zip fastener, length 400 cm
7. 2 Fixing rings for soft net buckets
8. 2 Soft net buckets
   with side window, covered with sieve gauze
9. 1 Bridle
10. 2 Shackles Ø 10 mm
11. 1 Chain Ø 6 mm, 26 links, ca. 1.1 m
12. 2 Shackles Ø 6 mm
13. 1 Hexagon socket screw key 8 mm
14. 1 Box spanner 8 mm
15. 2 Wrench 10 mm
16. 1 Wrench 17 mm
17. 2 Wrench 19 mm
18. 8 Hexagon head screws M6x25 DIN 933
19. 8 Hexagon nuts M6 DIN 934
20. 16 Washers 6.4 DIN 125

ASSEMBLY INSTRUCTION

1. Connect the swimmer bodies by means of the distance tubes.
   Tool: A: 2 x wrench 19 mm
2. Mount the holding racks to the distance tubes and the net frames to the holding racks.
   Tools: B: 2 x wrench 19 mm
   C: hexagon socket screw key 5 mm
   D: hexagon socket screw key 8 mm and wrench 17 mm



3. Pull the nylon webbing over the net frame and fix it with the hose clamp.
   Tool: box spanner 8 mm

As it should be done with all offshore equipment the user should regularly check all screwing.

4. Connect net bags to nylon webbings by means of the zippers.
5. Fit the fixing rings for the soft net buckets to the end of the net bags.
6. Mount the soft net buckets to the fixing rings.
7. Fix the bridle with the shackles at the front holes of the swimmer bodies.

When the Neuston Net is to be towed on the starboard side of the ship the link of the chain (of the bridle) has to be fixed on the starboard side of the catamaran swimmer body. In order to avoid collisions of the Neuston Net with the ship the bridle is mounted asymmetrically by shackling in a link of the chain. Thus the swimmer body runs free from the ship's side.

If the Neuston Net is to be towed from the port side the above applies in mirrored arrangement.

If operating the Neuston Net from the stern the bridle is to be mounted symmetrically.