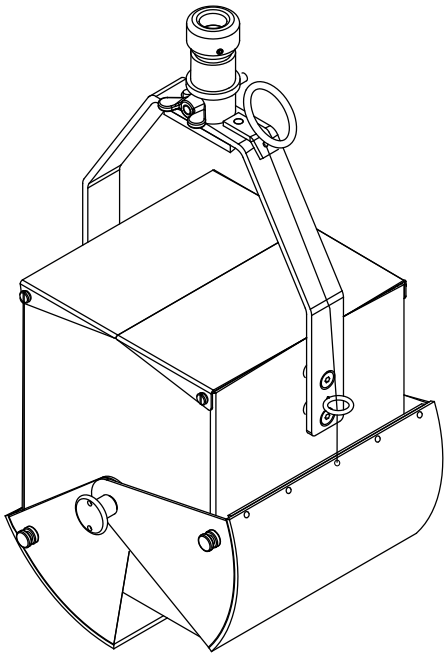
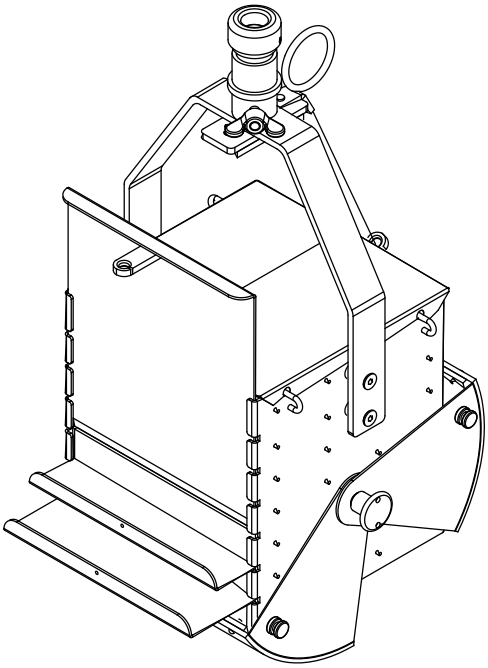




Bottom Sampler acc. to EKMAN-BIRGE

Bottom Sampler acc. to LENZ

OPERATION MANUAL

Product ID 437 200 / 437 310

Edition 01/25

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NOTICE



Please read this manual carefully before operating or performing maintenance on the instrument. Pay special attention to all danger, warning and caution statements. Failure to do so could result in serious injury and/or damage to the instrument. Keep manual available at all times.

LAYOUT AND MEANING OF WARNINGS

All safety instructions found in this operation manual are composed in accordance with the following pattern (signal words):

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.
NOTICE may also indicate a situation which, if not avoided, may cause damage to equipment.

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GENERAL DESCRIPTION

EKMAN

The bottom sampler acc. to **Ekman-Birge** is a quantitative sampler with precise sampling area to achieve nearly undisturbed samples in soft grounds. It consist of a sturdy-walled metal cabinet equipped with two spring-loaded jaws witch are released by a messenger. Two light plates cover the top opening of the sampler to prevent the sample from being washed out during ascent.

Technical data:	
Height [cm]:	20
Grasping area:	15 x 15 cm = 225 cm^2
Material of frame:	powder-coated brass

Versions:	**Weight on air [kg]:**	**Product ID:**
Standard	3.5	437 200
Additional lead weight	7.5	437 210
Additional perforated steel plate	3.6	437 201

EKMAN STAINLESS STEEL

Versions:	Product ID.:	Height [cm]:	Grasping area [cm^2]:	Weight on air [kg]:	Material:
Standard	437 212	20	15 x 15 cm = 225 cm^2	3.5	stainless steel
Standard lead weight	437 213	20	15 x 15 cm = 225 cm^2	7.5	stainless steel
Big model	437 214	35	20 x 20 cm = 400 cm^2	7	stainless steel
Big model lead weight	437 215	35	20 x 20 cm = 400 cm^2	11	stainless steel

LENZ

The bottom sampler acc. to **Lenz** is a modified version. This precise quantitative sampler is equipped with dividing sheets to separate the sample into five layers of 20 mm thickness. These layers can then be removed separately for individual examination.

Technical data:	
Height [cm]:	20
Grasping area:	15 x 15 cm = 225 cm^2
Material of frame:	powder-coated brass, nickel-plated brass

Versions:	**Weight on air [kg]:**	**Product ID:**
Standard	5	437 310
Additional lead weight	9	437 315

DEPLOYMENT

In order to lower the bottom sampler a steel rope of 2-3 mm or a Nylon rope of 5-6 mm dia. is required. The loop of the rope is fastened inside the release tube (1) by means of a wing screw (2) and must not jut out of the tube.

The closure jaws are held open by two wires (3) which are to be fastened to the release holding pins (4) at the top of the framework.

CAUTION

PINCH POINT!
Keep hands and fingers clear from the closure jaws when open. Sudden release of the jaws may result in injury.

Now the Bottom Sampler can be lowered into the water. Upon penetrating into the sediment the messenger is dropped down the rope. When it strikes the release tube of the bottom sampler the closure jaws shut.

The cover plates loosely hinged at the top of the box prevent the sample from being washed out while the bottom sampler is being heaved out of the water.

