

## HAND-OPERATED BAILER BORING EQUIPMENT

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## P1.02

In less-cohesive soils, below the groundwater level, a bailer and synthetic casing tubes can be used.



For ergonomic reasons a casing tube platform is used.



- Perfect kit for all not too stony soils
- Works above and below water level
- For well installation as well as samplings
- Extremely durable, sturdy light weight casings
  Bailing-platform allows pushing casings down
- Special bailers allow bailing stony sand layers
- Non-contaminating components

For drilling into the ground and taking soil samples, both above and below the groundwater level, you can use the carefully thought-out hand-operated bailer boring auger set. The set consists of separate smaller units, this considerably increases the mobility in areas where access is difficult. There are no parts in the set that contain oil or petrol, so they are also suitable for use in nature reserves or water catchment areas.

### 01.12.SA Hand-operated bailer boring auger set for heterogeneous soils

The standard bailer boring auger set is suitable for augerings to a depth of about 7 meter. The set is very suitable for - in addition to exploratory soil augering and sampling - inserting monitoring well pipes for groundwater level measurements and for sampling. This compact set can be carried easily in a station car and is easy to use in the field. It can be used by one person. The set contents include: various types of soil augers to reach the groundwater level, augers for the extraction of less-disturbed soil samples,

extension rods, synthetic casing tubes with steel screw thread sockets, tube clamps with adjustable quick fastener for driving in and withdrawing the casing tubes, bailers with steel and synthetic valves, casing tube platforms for more ergonomic working, spare parts and various accessories. The set is delivered in two aluminium transport cases.

The bailer, an essential part of the set, is a stainless steel tube with a stainless steel or synthetic valve on the lower part. By moving the bailer rapidly up and down loose material will collect in the bailer.



Hand-operated bailer boring auger set

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In principle, this takes place below the tube where space is available. This allows the casing tubes to be pushed deeper into the ground. When turning in the casing tubes, the casing shoe with the slotted notches protects the lower tube and simplifies the turning in of the casing tubes. In order to protect the top tube a steel casing head is provided. For the protection of the screw thread during transport special thread protectors are supplied.

The casing tube platforms are used in combination with the tube clamp. Bailing and driving in the casing tubes can be done in a more ergonomical way.

#### **Advantages**

- A very complete set. The right type of auger is always to hand, even when the soil profile is completely unknown.
- The complete set enables you to reach the required depth more quickly, and the chance that you will reach the required depth is considerably greater.

- □ Facilities for precise sampling.
- For non-cohesive soils below the groundwater level (e.g. sand) the set includes a casing for the support of the borehole.
- Impact-resistant synthetic casing tubes made of so called ABS.
- The casing tubes fitted with steel screw thread sockets with left hand, coarse, round, inside screw thread closes in 2<sup>1</sup>/<sub>4</sub> turns. An O-ring on the screw thread socket seals it for fine sand.
- For pre-drilling, when placing casing tubes, large diameter (10 cm) soil augers are included.
- Through-the-casing drilling is possible with a smaller diameter (7 cm) auger; e.g. for drilling through a layer of clay or loam.
- For sampling soil layers below the groundwater level a piston sampler (sand) and a gouge auger are included in the set.
   Limited investment.

Limitation: the set is not usable in hard soils with a high content of stones or gravel.



#### P1.02

When in operation the bailer creates a void below the casing tube, that allows the casing tube to be driven further into

the ground.





Edelman and Riverside augers, stony soil augers, spiral auger and stone catcher



Casing tubes and accessories Ø 90 mm



Casing tube with tube clamp







## P1.02

When in operation the bailer creates space below the casing tube, allowing the tubes to be driven further into the soil.



Using the casing tube clamps the casing tubes can be unscrewed and taken apart.



# Casing tubes and accessories

- Extremely sturdy ABS plastic casing body
- Steel ends for professional durability
- Smooth at the in and the outside
- Super rapid coupling by special threading

# HAND-OPERATED BAILER BORING EQUIPMENT

#### Casing tubes and accessories

For soil drilling and sampling under the groundwater level or in non-cohesive soils casing tubes are used to avoid collapsing of the borehole. Casing tubes are also used when placing monitoring wells or groundwater sampling tubes, or when drilling wells.

## In the program of Eijkelkamp Agrisearch Equipment various casing tubes have been included. The casing tubes have been fitted standard with left hand screw thread. Drilling is usually a clockwise action, the casing tube threading must therefore be anti-clockwise as otherwise the auger would loosen the casing tubes as soon as it gets stuck, which would then cause the loss of the casing tube or the casing shoe.

The casing shoes are provided in two designs: one with slotted notches in particular for use in clay and with welded notches for other types of soil. The casing shoe with welded notches cuts an oversize hole causing less shaft friction on the tube. If worn new notches can be welded on.

## 25.09 Synthetic casing tubes and accessories, diameter 90 mm

All synthetic casing tubes have been manufactured of impact-resistant plastic (so called ABS) and have been fitted with steel screw thread sockets. The length is 1 m. They have been fitted with left hand, coarse, round, inside screw thread. The screw thread closes in 21/4 turns. An O-ring on the screw thread socket seals it for fine sand. In order to protect the screw thread during transport special thread protectors are available. When turning in the casing tubes, the casing shoe with the slotted notches protects the lower tube and simplifies the turning in of the casing tubes. In order to protect the top tube a steel casing head can be provided. Casing tube clamps with adjustable guick fastener are available for turningin and extracting the casing tubes.



Casing tubes and accessories diameter 90 mm

# HAND-OPERATED BAILER BORING EQUIPMENT

25.16

## 25.12 Synthetic casing tubes and accessories, diameter 125 mm

The casing tubes with a 125 mm diameter and a length of 1 meter are supplied with steel lifting caps. These casing tubes too have left hand, coarse, round, screw thread and closes in 2<sup>1</sup>/<sub>4</sub> turn.

For this diameter casing tubes various accessories are available too, such as synthetic thread protectors, steel casing heads, and a lifting cap used to extract the casing tubes in combination with a tripod. The casing shoe (length 10 cm) with a diameter of 125 mm is fitted with welded notches. The steel casing tube clamps have been fitted with a closure using a threaded spindle.

## Synthetic casing tubes and accessories, diameter 160 mm

The casing tubes with a 160 mm diameter and a length of 1 meter are supplied with similar accessories. The tube clamp comes as an extra heavy design with two swiveling arms for shaking and 2 bars for clamping.

On request tubes with other diameters and accessories can be delivered.



P1.02

Using a heavy design casing tube clamp the casing tubes are turned into the soil.



Eijkelkamp Agrisearch Equipment www.eijkelkamp.com



# PARTS LIST

Art.no.	-	)ty. n set	Art.no.		ty. set
P1.02	Hand-operated bailer boring			and an o-ring seals it for fine sand, weight 4.1 kg	
	equipment Hand operated bailer boring equipment is supplied as one carefully though-out standard		**25.09.31.51	Thread protector, synthetic (ABS for casing tube 90 mm, for left hand, coarse, round inside screw thread	
	set. The set includes a casing tube set of 90 mm. Other casin tubes sets can be supplied for customer made bailer boring	g	**25.09.31.52	Thread protector, synthetic (ABS for casing tube 90 mm, for left hand, coarse, round outside screw thread	), 7
01 13 54	auger sets		**25.09.31.54	Casing shoe, steel, for casing tube 90 mm, with left hand, coarse round screw thread,	1
01.12.SA	Hand-operated bailer boring a set for heterogeneous soils,	uger		length 10 cm, with notches	
	standard set for augering to a depth of 7 m. With unpainted augers for environmental resea	arch	**25.09.31.56	Casing head, steel, for casing tube 90 mm, with left hand, coarse, round inside screw thread	1
**01.10.17.B	Handle, normal, 60 cm, with all synthetic, detachable grip (incl. coupling sleeve), bay.	1	**01.12.09	Casing tube platform, for 2casing tubes Ø 90 mm, to be used on the casing tube	2
**01.10.18.B	Handle, long, 100 cm, with all synthetic, detachable grip (incl. coupling sleeve), bay.	1	**01.12.20	clamp or on the ground level, to stabilise the casing tube Casing tube clamp, Ø 90 mm,	2
**01.02.01.07.B	Edelman auger, bottom part, clay type, bay., Ø 7 cm	1	**01.12.07.01.B	with adjustable quick fastener Bailer, Ø 63 mm, stainless steel,	1
**01.02.01.10.B	Edelman auger, bottom part, clay type, bay., Ø 10 cm	1		with bailer shoe (stainless steel valve), operational length 75 cm	I,
**01.02.02.07.B	Edelman auger, bottom part, comb.type, bay., Ø 7 cm	1	**01.12.0.702	bayonet Bailer shoe with steel valve, Ø 63 mm	1
**01.02.02.10.B **01.02.03.07.B	Edelman auger, bottom part, comb.type, bay., Ø 10 cm Edelman auger, bottom part,	1	**01.12.07.03	<ul> <li>Ø 63 mm</li> <li>Bailer shoe with synthetic valve,</li> <li>Ø 63 mm</li> </ul>	1
**01.02.03.10.B	sand type, bay., Ø 7 cm Edelman auger, bottom part,	1	**01.12.07.05.B	Bailer, Ø 63 mm, stainless steel, with bailer shoe (synthetic	1
**01.02.04.07.B	sand type, bay., Ø 10 cm Edelman auger, bottom part,	1		valve), operational length 75 cm bayonet	
**01.02.04.10.B	coarse sand type, bay., Ø 7 cm Edelman auger, bottom part, coarse sand type, bay., Ø 10 cm	1	**01.12.17.05.B	Bailer, Ø 50 mm, stainless steel, with bailer shoe (synthetic valve), operational length 75 cm	1 I,
**01.04.00.07.B	Riverside auger, bottom part, bay., Ø 7 cm	1	**01.10.09B	bayonet Coupling sleeve	2
**01.04.00.10.B	Riverside auger, bottom part, bay., Ø 10 cm	1	**11.01.01.17	Sounding device, Ø 17 mm, with eye	1
**01.06.00.07.B	Auger for stony soil, bottom part, bay., Ø 7 cm	1	**11.01.02.02	Measuring tape, glass fibre, with hook for sounding device,	1
**01.06.00.10.B	Auger for stony soil, bottom part, bay., Ø 10 cm	1	**01.11.04	length 5 m Field data registration set	1
**01.08.00.04.B	Spiral auger, bottom part, bay., Ø 4 cm	1	**01.11.03	Work gloves, pair, oil- and greas resistant, sturdy, with short sleev	/e
**01.09.01.B	Piston sampler (incl. transport tube), bottom part, operational	1	**01.11.01 **01.12.22	Maintenance kit (brush, oilpad, vaseline) Funnel for filter sand, pvc, for	1
**01.09.00.02	length 75 cm, bay. Ropes (2), stretch-proof, with noose, length 5 m. Polyester	1	01.12.22	use with casing tube Ø 90 mm, funnel opening 125 mm	
	covering, strong stretch-proof of material for accurate operation of pistons in core samplers.	ı	**01.12.23 **01.15.01	Casing tube cleaner, Ø 90 mm Utility probe with cone Ø 19 mm fibre glass, length 105 cm, Ø sha	aft
**01.12.14.07.B	Complete with one carabine ho Stone catcher, bottom part, bay., Ø 7 cm	ook 1		12.5 mm. For safely checking the substratum for cables, tubes and pipes	
**04.02.01.30.B	Gouge auger, bottom part, op. length 50 cm, bay., Ø 30 m	1 m	**01.12.08	Aluminium transport case, dim. 112x39x32 cm (outsid	
**04.05.01.20 **01.10.07.B	Bent spatula, breadth 20 mm Extension rod, 100 cm (incl. coupling sleeve) bay.	1 6	**01.11.02.01	Padlock Optional bailers to be used	2
**01.10.08 **25.09.31.10	Push-/pull handle, Ø 22.2 mm Casing tube, synthetic (ABS)	1 7		with 01.12.SA auger set:	
	with steel screw thread sockets Ø 90x76 mm, length 1 m, left hand, coarse round screw threa Screw thread closes in 2.25 turn	ad.	01.12.07.01.C	Bailer, Ø 63 mm, stainless steel, with bailer shoe (stainless steel valve), operational length 75 cm conical screw thread	I,

# PARTS LIST



Art.no.	•	Qty. n set	Art.no.	Description	Qty. in set
01.12.07.05.C	Bailer, Ø 63 mm, stainless steel, with bailer shoe (synthetic valve), operational length 75 cm, conical screw thread Bailer, Ø 50 mm, stainless steel, with bailer shoe (synthetic valve), operational length 75 cm, bayonet		25.09.31.56	with notches Casing head, steel, for casing tube 90 mm, with left hand, coarse,	
01.12.17.05.B			25.09.31.57	round inside screw three Lifting cap, steel, for ca 90 mm, with left hand, round inside screw three incl. swivel eye	osing tube coarse,
01.12.17.06	Bailer shoe with synthetic valve Ø 50 mm	e,	25.09.00.53	Sealing ring, polyureth for casing tube Ø 90 m	
	Accessories to extract casing		01.12.20	Casing tube clamp, Ø 9 with adjustable quick f	0 mm,
	tubes from the soil (two optio Lifting jack with lever and trip with winch		25.12	Synthetic casing tubes accessories, Ø 125 mm:	
05.07.03 05.07.14 02.01.01 02.02.06	Steel lifting jack Lever with chain, length 100 cr Aluminium tripod, each leg in parts, incl. pulley, bearing capacity 6.5 kN (650 kgf) Hand-operated winch for tripo	3	25.12.31.10	Casing tube, synthetic ( with steel screw thread Ø 125x108 mm, length hand, coarse round scre Screw thread closes in 2 and an o-ring seals it fo	sockets, 1 m, left w thread. 2.25 turns
	(02.01.01), equipped with a load-brake of max. 5 kN (500 k excl. cable, weight 15 kg	5	25.12.31.51	weight 6.7 kg Thread protector, synth for casing tube 125 mm	n, for left
02.02.99.01	Synthetic cable, Ø 8 mm x 15 n incl. fasteners	n,	25.12.31.52	hand, coarse, round ins thread Thread protector, synth	
	Accessories for undisturbed soil sampling with 01.12.SA auger set:			for casing tube 125 mm left hand, coarse, round screw thread	n, for d outside
St tc	Van der Horst core sampler. Standard set for sampling to a depth of 7 m.		25.12.31.54	Casing shoe, steel, for o tube 125 mm, with left coarse round screw thre length 10 cm, with not	hand, ead, ches
	Accessories for transport of 01.12.SA auger set in the field	:	25.12.31.56	Casing head, steel, for tube 125 mm, with left coarse, round inside scr thread	hand,
99.14	Fieldcart, aluminium, collapsib package measurements 120x56 collapsed dimensions 107x27x5 max. loading weight 150 kg,	5 cm,	25.12.31.57	Lifting cap, steel, for ca tube 125 mm, with left coarse, round inside scr thread, incl. swivel eye	hand,
	weight 15 kg		25.12.00.53	Sealing ring, polyureth for casing tube Ø 125 n	nm
	Casing tubes are supplied in three (standard) diameters: - 90 mm (90x76 mm)		02.04.09	Casing tube clamp, stee Ø 125 mm, fastened by of screw-thread spindle	means
	- 125 mm (125x108 mm) - 160 mm (160x140 mm)		25.16	Synthetic casing tubes accessories, Ø 160 mm:	
25.09	Synthetic casing tubes and accessories, Ø 90 mm:		25.16.31.10	Casing tube, synthetic ( with steel screw thread	
25.09.31.10	Casing tube, synthetic(ABS) with steel screw thread sockets Ø 90x76 mm, length 1 m, left hand, coarse round screw threa Screw thread closes in 2.25 tur	ad.	25 46 24 54	Ø 160x140 mm, length hand, coarse round scre Screw thread closes in 2 and an o-ring seals it fo sand, weight 10.2 kg	1 m, left ew thread. 2.25 turns or fine
25.09.31.51	and an o-ring seals it for fine sand, weight 4.1 kg Thread protector, synthetic (AE for casing tube 90 mm, for left	t	25.16.31.51	Thread protector, synth for casing tube 160 mm hand, coarse, round ins thread	n, for left ide screw
25.09.31.52	hand, coarse, round inside scre thread Thread protector, synthetic (AE for casing tube 90 mm, for lef	3S),	25.16.31.52	Thread protector, synth for casing tube 160 mm hand, coarse, round ou screw thread	n, for left
25.09.31.54	hand, coarse, round outside screw thread Casing shoe, steel, for casing to		25.16.31.55	Casing shoe, steel, for o tube 160 mm, with left coarse, round outside s	hand,
	90 mm, with left hand, coarse round screw thread, length 10			thread, length 10 cm, v welded notches	





# PARTS LIST

Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
25.16.31.56	Casing head, steel, for casing tube 160 mm, with left hand coarse, round inside screw thread	,			
25.16.31.57	Lifting cap, steel, for casing tube 160 mm, with left hand coarse, round inside screw thread, incl. swivel eye	,			
25.16.00.53	Sealing ring, polyurethane, for casing tube Ø 160 mm				
15.05.46	Casing tube clamp, steel, Ø 160 mm, extra heavy design, with 2 swiveling arms for shaking the casing tube and 2 swiveling bars for clamping				