

P1 SOIL You will return to this page by clicking the pictogram

CONTENTS

### Soil drilling and sampling

Son unning and sampling	
P1.01Hand auger equipment	7
P1.02Hand-operated bailer boring equipment	20
P1.03Lifting sets for drilling equipment	27
P1.04Soil core samplers	32
P1.07 Soil classification	38
P1.08Sampling building materials	42
P1.09Soil column cylinder auger	45
P1.10Lost cone drilling method	48
P1.20Soil auger set with two-stroke engine	51
P1.21Percussion drilling sets	55
P1.22Drilling sets for shallow wells	67

#### Soil- and sediment sampling

P1.30Undisturbed soil sampling	77
P1.31Soil sample ring kits	83
P1.32Plant root sampling	90
P1.33Deep core samplers	95
P1.40Undisturbed sediment core sampling	98
P1.41Cable operated sediment samplers	104
P1.42Samplers for suspended sediment	107
P1.43Semi-disturbed sediment sampling	112
P1.48Visibility measurements	115

### In situ soil physical research

P1.50Hand penetrometer Eijkelkamp	118
P1.51Penetrograph	121
P1.52Penetrologger	124
P1.53 Surface penetrometers	129
P1.54Shear stress measurement	132
P1.60In situ hydraulic conductivity tests	135
P1.61Water infiltration measurements	141
P1.62Soil salinity/conductivity meters	144
P1.63 Tensiometers	151
P1.64Soil moisture meters	158
P1.65Soil moisture sampling	171
P1.66Soil gas analyses	
P1.67Soil analysis	

#### CLICK HERE TO RETURN TO THE GENERAL CONTENTS



### Soil physical research in the laboratory

P1.80 pF-curve determination (sandbox method)	188
P1.81pF-curve determination (ceramic plates)	194
P1.82Pipette equipment	197
P1.83Particle size distribution	200
P1.84Aggregate stability	205
P1.85Calcimeter	207
P1.86Air pycnometer	209
P1.87Soil water permeability test	212
P1.88Soil air permeability test	215

#### Various

P1.96 General laboratory equipment2	18
P1.97General field equipment2	21

You will return to the contents of P1 SOIL by clicking the pictogram

Hand auger equipment is extremely suitable for soil research. As almost any type of soil sets its own demands where it concerns the model of the auger to be applied.

In the course of the years many models have been developed. Years of experience and many contacts with soil researchers at home and abroad made it possible to achieve the optimum design for various types.

By applying extension rods with a bayonet- or a conical threaded connection augering to greater depths is possible. With hand auger equipment a depth of 8-10 meter can realistically be achieved. The maximum boring depth strongly depends on various factors such as: depth of the groundwater, the soil profile, the characteristics of the material the auger has to pass through.

As with any tool or equipment, hand auger equipment too has to meet certain requirements. The most important requirements are:

- **The equipment should be efficient, i.e. it** should be such that, depending on the type of soil research and the requirements the research should meet, this research can be executed as fast and accurate as possible.
- **The equipment should be solid and strong.**
- □ As in general little manpower is available for soil research in the field, and sometimes long distances have to be covered carrying the equipment, it is an important condition that the equipment should be light and easy to handle.
- The augers have been made of a high grade non-toxic steel and a carefully selected hardening treatment contributes to achieve a wear resistant and solid design.

P1.01

For augering heterogeneous soils it is practical if various auger types are available. With the auger set for heterogeneous soils the right auger type is always at hand.









(Card)

Stim.

### Hand auger equipment

- High tensile strength forged auger bodies
- Perfect auger body shapes for optimal drilling
- Non toxic steel for all types of analyses
- Rapid connectible extension rods



7



Hand auger set for heterogeneous soils (bayonet connection)



You will return to the contents of P SOIL by clicking the pictogram

P1.01

To remove the sample from the Edelman auger, it is placed with its tip down on the surface, after which it is turned 180°.



The stony soil auger is used for soils with a large gravel content.



#### Description of various auger types

#### **Edelman augers**

This type of soil auger is by far the most used auger. The typical design of the Edelman auger allows for a minimum of friction during penetration into the soil, and the extraction of the auger from the soil, which means less physical effort. To achieve optimal results, the auger type should be chosen in respect of the soil type in question. There are 4 types: the clay-, sand-, coarse sand- as well as a combination type.

- Clay soils are very cohesive. Therefore the blades of the clay auger can be narrow, having the advantage that they meet with little resistance.
- Sandy soils are not cohesive. To keep the sample inside the auger, this type has broad blades.
- Coarse sand soils and extremely dry sand soils have little or no cohesion at all. The blades of this auger are extended with extra wings, thus forming an almost closed auger.

The combination auger type gets a reasonably good hold of sandy material while clayey material can be fairly easily removed from the auger body.

#### **Riverside auger**

This design is very suitable for augerings in hard, stiff soils, mixed with fine gravel both above and below the ground water level. The very sharp extremities of the auger bits point at an angle downwards. This design makes the auger go through the soil easily.

#### Stony soil auger

For soils with a large gravel content. The auger body for stony soils consists of a heavy steel strip, vaulted all along, which is bent double by forging. The pointed cutting bits of the strip are bent outward, thus creating a hole some-what wider than the average body diameter. The stony soil auger is used when the Riverside auger is not yielding adequate results in coarse gravel soils.



Edelman augers: clay, combination, sand and coarse sand type





**Riverside auger** 

Stony soil auger

You will return to the contents of P1 SOIL by clicking the pictogram



#### Spiral auger

The spiral auger operates similar to a corkscrew and does not cut off the soil. The auger is usually applied when hard layers need to be penetrated. The spiral auger has a negative end, i.e. the centre of the auger end is whetted away. For profile research (soil mapping) the spiral auger is seldom used. Its use is confined to augering through very hard layers, e.g. boreore, brick layers, chalk and lime profiles in combination with other auger types. The single spiral auger is standard equiped with a contact for electrodes.

#### Stone catcher

This auger type is used to remove loose stones from the auger hole.

#### Soft soil auger

This special type of Edelman auger has an extended auger body (sensitive to torsion) and is suitable only for sampling very soft (clay) soils.

#### Gouge auger

The gouge auger can be used for sampling with a minimal disturbance of more or less soft, cohesive layers e.g. wet clay, peat.

#### **Piston sampler**

The piston sampler differs completely in design and application from the augers described before and is very suitable for sampling less cohesive soil layers (sand) below the groundwater table. The piston sampler is also suitable for sampling sediments with a sand content. Essential differences between the other augers and the piston sampler are:

- The piston sampler can only be applied below the water table and in moderately cohesive soils like sand, weak soil layers, etc.
- The piston sampler can take almost undisturbed samples.
- The piston sampler takes samples of 50, 100, 150 and 200 cm, while the other Edelman handaugers have a maximum sample length of about 15 cm.

P1.01

The gouge auger with the smallest diameter is used for the deepest sample.



By means of a stone catcher a stone is removed from the auger hole.



#### **Piston sampler**

- Perfect profile description in one minute
- No hassle with casings and coring tubes
- View up till 2 m of saturated sandy soil
- Also for water bottoms



www.eijkelkamp.com



Soft soil auger

Gouge auger and piston sampler

9



You will return to the contents of P1 SOIL by clicking the pictogram

P1.01

#### Handles and extension rods

The connection is locked by pushing a coupling sleeve over both parts.



sampling depth can not be reached with a single or standard bi-partite auger. By placing extension rods between the handle and the bottom part of the auger, it is possible to auger to a greater depth. There are two types of connection: the bayonet connection and the conical threaded connection.

Extension rods can be applied when the augering /

#### **Bayonet connection**

The advantage of the bayonet connection is that it is a very fast coupling with little weight.

A slight disadvantage is that it is not free of play. The bayonet connection is considered as the standard connection.

#### Conical screw thread connection

This connection is based on the male and female threads on the parts to be coupled. Bij firmly tightening the connection with the aid of spanners, a rigid construction is made.

#### **Ergonomic handle**

In view of the limited scientific knowledge burdening the body and the lack of proper regulations with regard to Ergonomics, the awareness of the importance of ergonomically sound ways of working mostly has to come from the business world itself.

The T-handle has been extended and its grip points for exerting the force have been put in a different place with the result that the user does not have to exert as much force on the handle.

The added ratchet system and the rounded ends to the handle puts the wrist of the user into a more neutral position while twisting and turning the auger. The force on the handle used for pushing and pulling from an ergonomic point of view is best exerted from a neutral wrist position.

A spanner is used to tighten the conical screw thread connection.





- Always works at the right height
- Less wear and tear for wrist, elbow, shoulders
- Less torque required by larger handles
- Ratchet system so no full turns necessary
- Turns clock and anti-clockwise





Conical screw thread connection



You will return to the contents of P1 SOIL by clicking the pictogram



P1.01

#### 01.11.SE Ergonomical auger set

The ergonomic hand auger set for heterogeneous soils is used to carry out manual drilling and sampling in a great variety of different soils in an ergonomically sound way. It is particularly suitable for general soil investigation (description of the layering, geology, archeaology) as well as taking samples for such activities as environmental research. It can carry out drillings to a depth of 5 metres, depending on the depth of the groundwater, the build-up of the soil and the nature of the material to be drilled into.

For every type of soil above or under the groundwater table there is an auger type that is specifically suited to that situation. During the drilling process changes can be made from one type of auger to another without any problems. Extensions can be added to the soil drilling system adding 50 cm with each additonal piece, which is also the difference in height of the working area.

#### The advantages

A list of the (ergonomic) advantages of the new ergonomic soil drilling system:

- The working height and the height setting have been improved.
- A so-called 'halt knob' has been added that acts as a 'stop' making it impossible to drill too low to the ground.
- The T-handle has been extended and its grip points for exerting the force have been put in a different place with the result that the user does not have to exert as much force on the handle.
- A ratchet system and rounded ends to the handle have been added. This puts the wrists of the user into a more neutral position while twisting and turning the auger.
- It allows drilling near other objects.
- The square tubing is easy to adjust and is therefore more comfortable for the user.
   Universal because to ensure the
- Universal bayonet connection.

The handle is supplied with a ratched system.



The ergonomical auger can be extended rapidly and easily in 50 cm stages using the halt-knob.



Drilling can be done in an ergonomical sound way.



www.eijkelkamp.com



Ergonomical auger set with bayonet connection



Auger set for heterogeneous soils

You will return to the contents of P1 SOIL by clicking the pictogram

01.11.50

P1.01

After a sample has been taken from the bottom of the

auger hole using the gouge auger (for instance in peat) it is pulled up with the push-pull handle.

Augerings and samplings in homegeneous soils (soils with an uniform soil profile), in almost all cases can be executed with one type of auger. For augerings in heterogeneous soils (soils with a layered soil profile), several different auger types will be applied. This led to the composition of an auger set for heterogeneous soils.

With the standard set it is possible to execute manual augering to a depth of 5 meter, without great physical effort.

The standard auger set comprises different auger types, diameter 7 cm, so that this set can be used successfully with augerings in layered soil profiles. The set can be used for augerings above the water table in all soils, and below the water table in cohesive soils.

The auger set (with bayonet connection), among other items, comprises: 4 types of Edelman augers (clay-, sand-, coarse sand and combination type), a Riverside auger, a stony soil auger, a spiral auger, a piston sampler and a gouge auger. The set additionally contains: extension rods, a fiberglass utility probe, a sounding device with measuring tape, a push-/pull handle, maintenance equipment and a field data registration set. The complete set is delivered in an aluminium transport case.

#### 01.11.SZ Auger set for heterogeneous soils

This auger set for heterogeneous soils is the same as the one mentioned above, but with a connection based on the male and female threads on the parts to be coupled: the conical screw thread connection.



# heterogeneous soils

- Range of auger bodies copes with all soils
- Includes piston sampler for saturated sands
- · Quick check water levels with level sounder
- Proven: Kit will serve tenths of years



Hand auger set with conical screw thread connection

You will return to the contents of P1 SOIL by clicking the pictogram



P1.01

01.16Prospecting kit for geological surveysEijkelkampAgrisearchEquipmentcomposeda prospecting kit for general geological surveys.

The kit can be used for augerings in heterogeneous soils (agricultural and environmental soil research), to improve the mobility it comprises less different auger types. In this way it can be transported in a carrying bag. All augers, handles and extension rods are packed in a backpack.

With this standard kit it is possible to execute manual augerings to a depth of 7 metres, without great physical effort.

The set is also used to drill shotholes by hand in areas with difficult access. Each seismic field crew should have a set available for scouting and drilling purposes. The backpack ensures quick mobilisation and quicker tracking in the bush. The prospecting kit includes:

4 types of Edelman augers (clay-, sand-, coarse sand- and combination type), a Riverside auger, a stony soil auger and a handle with extension rods. The augers and extension rods have bayonet connections; a very fast coupling with little weight.

#### Advantages

- Very complete, always the right type of auger available.
- □ Strong and solid equipment.
- Limited investment.
- Light weight (only 16.5 kg).
- The backpack allows for quick mobilisation and quicker tracking in the bush.
- Improvement of production of shotholes.
- Minimal training required.
- Reduction in medical care towards muscle pain.











Prospecting kit for geological surveys with bayonet connection



You will return to the contents of P' SOIL by clicking the pictogram

P1.01

#### .

# A sample is taken by means of a piston sampler.



#### **Bi-partite augers**

#### 01.02 Bi-partite Edelman augers

Bi-partite augers are manufactured with the standard bayonet connection or a conical screw thread connection. Available as clay-, sand-, coarse sand- and combination type.

#### 01.04 Bi-partite Riverside augers

This design is very suitable for augerings in hard, stiff soils, mixed with fine gravel both above and below the ground water level. Available with standard bayonet or conical screw thread connection.

#### 01.06 Bi-partite augers for stony soils

For soils with a large gravel content. Available with standard bayonet or conical screw thread connection.

#### 01.08 Bi-partite spiral auger

To penetrate hard layers at greater depths, available with standard bayonet or conical screw thread connection.

#### 01.09.SA Piston Sampler set 01.09.SB Dividable piston sampler set

The sets are very suitable for sampling less cohesive soil layers below the (ground) water table to a depth up to 5 metres. The samples show little disturbance and therefore are suitable for very accurate profile description.

With the set 01.09.SA one piston sampler is used with a sample gutter to empty the sampler in. The sampler with various accessories can be transported in the field in a carrying bag.

The 01.09.SB set with dividable piston sampler enables you to take samples of various lengths with sample tubes with 50, 100 and 150 cm length. This sampler is easier to clean and the samples can be transported in the tubes.







#### Bi-partite Edelman auger



01.09.SA Piston sampler set

**Bi-partite augers** 

Two strong yet light types of connections
Screw connection optimal for hammering
Bayonet couplings for optimal rapidity
A variety of additional tools can be connected



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
P1.01	Hand auger equipment			short sleeve	
	Hand auger equipment is supplied as four different types of complete standard sets: - Ergonomical auger set with		**08.09.08 **01.11.01.02 **01.11.01.03 **01.15.01	Flat brush, length 35 cm Oilpad Vaseline Utility probe with cone Ø 19 mm, fibre glass, length 105 cm, Ø shaft 12.5 mm. For	1 1 1 1
	<ul> <li>special ergonomic T-handle</li> <li>Basic hand auger set with bayonet connections</li> </ul>		**01.11.02.01	safely checking the substratur for cables, tubes and pipes Padlock	
	<ul> <li>Basic hand auger set with conical screw thread connections</li> </ul>		**01.11.02	Aluminium transport case, Ø 108x23x14 cm (outside) Carrying bag for ergonomical	1
	- Geological prospecting kit in carrying bag (backpack)			handle (01.10.20.BE) with adjustable carrying strap and storage bags for bottom parts	
)1.11.SE	Ergonomical auger set for heterogeneous soils, for ergonomical sound hand-		01.11.SO	(2x) and extension rods (2x).	-
	operated augerings to a depth of 5 m. With unpain- ted augers for environmen- tal research.			soils, standard set for auge- rings to a depth of 5 m. With unpainted augers for environ mental research	
**01.10.20.BE	Handle, ergonomical design, 1 (model protected), with	1	**01.10.17.B	Handle, normal, 60 cm, with all synthetic, detachable grip (incl. coupling sleeve), bay.	1
	ratchet (I+r), 25-50 cm slidable with insulated grips, bayonet connection (incl. coupling		**01.02.01.07.B	Edelman auger, bottom part, clay type, bay., Ø 7 cm	1
*01.02.01.07.BE	sleeve) Edelman auger, bottom part	1	**01.02.02.07.B	Edelman auger, bottom part, comb. type, bay., Ø 7 cm	1
	for ergonomical handle (01.10.20.BE), il clay type,		**01.02.03.07.B	Edelman auger, bottom part, sand type, bay., Ø 7 cm	1
*01.02.02.07.BE	bay., Ø 7 cm Edelman auger, bottom part for ergonomical handle	1	**01.02.04.07.B **01.04.00.07.B	Edelman auger, bottom part, coarse sand type, bay., Ø 7 cm Riverside auger, bottom part,	1 1 1
+04 02 02 07 05	(01.10.20.BE), combi type, bay., Ø 7 cm		**01.06.00.07.B	bay., Ø 7 cm Auger for stony soil, bottom part, bay., Ø 7 cm	1
*01.02.03.07.BE	Edelman auger, bottom part for ergonomical handle (01.10.20.BE), sand type,	1	**01.08.00.04.B	Spiral auger, bottom part, bay., Ø 4 cm	1
*01.02.04.07.BE	bay., Ø 7 cm Edelman auger, bottom part for ergonomical handle	1	**01.09.01.B	Piston sampler (incl. transport tube), bottom part, operational length 75 cm, bay	
*01 04 00 07 BF	(01.10.20.BE), coarse sand typ bay., Ø 7 cm Riverside auger, bottom part	e, 1	**01.09.00.02	Ropes (2), stretch-proof, with noose, length 5 m. Polyester covering, strong stretch-proof	
	for ergonomical handle (01.10.20.BE), bay., Ø 7 cm	1		core material for accurate operation of pistons in core samplers. Complete with one	
"01.00.00.07.BE	Auger for stony soil, bottom part for ergonomical handle (01.10.20.BE), bay., Ø 7 cm	I	**04.02.01.30.B	carabine hook Gouge auger, bottom part, op	o. 1
*01.08.00.04.BE	Spiral auger, bottom part for ergonomical handle (01.10.20.BE), bay., Ø 4 cm	1	**04.05.01.20 **01.10.07.B	length 50 cm, bay., Ø 30 mm Bent spatula, breadth 20 mm Extension rod, 100 cm	1
*04.02.01.30.B	Gouge auger, bottom part, o length 50 cm, bay., Ø30 mm	o. 1	**01.10.08	(incl. coupling sleeve) bay. Push-/pull handle, Ø 22.2 mm	1
*04.05.01.20 *01.10.07.B	Bent spatula, breadth 20 mm Extension rod, 100 cm. (incl. coupling sleeve) bay	1 4	**01.10.09.B **11.01.01.17	Coupling sleeve Sounding device, Ø 17 mm, with eye	2 1
*01.10.09.BE	Coupling sleeve for ergono- mical handle (01.10.20.BE)	1	**11.01.02.02	Measuring tape, glass fibre, with hook for sounding devic length 5 m	1 e,
*01.10.09.B *11.01.01.17	Coupling sleeve Sounding device, Ø 17 mm, with eye	1	**01.11.04 **01.11.03	Field data registration set Work gloves, pair, oil- and 1 grease resistant, sturdy, with	1
*11.01.02.02	Measuring tape, glass fibre, with hook for sounding devic length 5 m	1 e,	**08.09.08	grease resistant, sturdy, with short sleeve Flat brush, length 35 cm	1
**01.11.04 **01.11.03	Field data registration set Work gloves, pair, oil- and grease resistant, sturdy, with	1 1	**01.15.01	Utility probe with cone Ø 19 mm, fibre glass, length	1





Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
	105 cm, Ø shaft 12.5 mm. For safely checking the substratur			Incl. backpack	
**01.11.02	for cables, tubes and pipes Aluminium transport case,		**01.10.17.B	Handle, normal, 60 cm, with all synthetic, detachable grip	1
**01.11.02.01 **01.11.01.02	dim. 108x23x14 cm (outside) Padlock Oilpad	1 1	**01.02.01.07.B	(incl. coupling sleeve), bay. Edelman auger, bottom part, Clay type, bay., Ø 7 cm	1
	•		**01.02.02.07.B	Edelman auger, bottom part,	1
01.11.SZ	Auger set for heterogene ous soils, standard set for auge- rings to a depth of 5 m. With		**01.02.03.07.B	comb.type, bay., Ø 7 cm Edelman auger, bottom part, sand type, bay., Ø 7 cm	1
	unpainted augers for environ mental research. Augers with	-	**01.02.04.07.B	Edelman auger, bottom part, coarse sand type, bay., Ø 7 cm	1
	conical screw thread connecti		**01.04.00.07.B	Riverside auger, bottom part, bay., Ø 7 cm	
**01.10.10.C	Handle, normal, 60 cm, with all synthetic, detachable grip,	1	**01.06.00.07.B	Auger for stony soil, bottom part, bay., Ø 7 cm	1
**01.02.01.07.C	conical screw thread Edelman auger, bottom part,	1	**01.10.07.B	Extension rod, 100 cm (incl. coupling sleeve) bay.	6
**01.02.02.07.C	clay type, C.sc., Ø 7 cm Edelman auger, bottom part,	1	**01.10.09.B **01.14	Coupling sleeve Carrying bag for field	2
**01.02.03.07.C	comb.type, c.sc., Ø 7 cm Edelman auger, bottom part,	1		equipment, with two shoulde straps (backpack model),	r
**01.02.04.07.C	sand type, c.sc., Ø 7 cm Edelman auger, bottom part,	1		(inside) Ø 17x150 cm	
**01.04.00.07.C	coarse sand type, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 7 cm	1		Besides standard sets we also supply the augers as separate bi-partite augers in different	
**01.06.00.07.C	Auger for stony soil, bottom part, c.sc., Ø 7 cm	1		diameters and with standard bayonet connection or conica	
**01.08.00.04.C	Spiral auger, bottom part, c.sc., Ø 4 cm	1		screw thread connection.	•
**01.09.01.B	Piston sampler (incl. transport tube), bottom part, operation		01.02	Bi-partite Edelman augers.	
**01.10.99.08	length 75 cm, bay. Coupling part bay. (hole)- c.sc		01.02.01.07.B	Edelman auger, bottom part, clay type, bay., Ø 7 cm	
**01.09.00.02	(outside), incl. coupling sleeve Ropes (2), stretch-proof, with		01.02.01.08.B	Edelman auger, bottom part, clay type, bay., Ø 8 cm	
	noose, length 5 m. Polyester covering, strong stretch-proof	:	01.02.01.10.B	Edelman auger, bottom part, clay type, bay., Ø 10 cm	
	core material for accurate operation of pistons in core		01.02.02.04.B	Edelman auger, bottom part, comb.type, bay., Ø 4 cm	
	samplers. Complete with one carabine hook		01.02.02.45.B	Edelman auger, bottom part, comb. type, bay., Ø 45 mm	
**04.02.01.30.C	Gouge auger, bottom part, op length 50 cm, c.sc., Ø 30 mm	o. 1	01.02.02.05.B	Edelman auger, bottom part, comb.type, bay., Ø 5 cm	
**04.05.01.20 **01.10.12.C	Bent spatula, breadth 20 mm Extension rod, 100 cm, c.sc.	1 4	01.02.02.06.B	Edelman auger, bottom part, comb.type, bay., Ø 6 cm	
**01.10.15 **99.50.22	Push-/pull handle, Ø 25.4 mm Spanner 20x22 mm	1 2	01.02.02.07.B	Edelman auger, bottom part, comb.type, bay., Ø 7 cm	
**11.01.01.17	Sounding device, Ø 17 mm, with eye	1	01.02.02.07.HB	Edelman auger, bottom part, combination type, bayonet,	
**11.01.02.02	Measuring tape, glass fibre with hook for sounding devic	1 e.	01.02.02.08.B	Ø 7 cm, extra hardened Edelman auger, bottom part,	
**01.11.04	length 5 m Field data registration set	-, 1	01.02.02.10.B	comb.type, bay., Ø 8 cm Edelman auger, bottom part,	
**01.11.03	Work gloves, pair, oil- and grease resistant, sturdy, with	1	01.02.02.10.HB	comb.type, bay., Ø 10 cm Edelman auger, bottom part,	
**01.11.01	short sleeve Maintenance kit (brush,	1		combination type, bayonet, Ø 10 cm, extra hardened	
**01.15.01	oilpad, vaseline) Utility probe with cone Ø	1	01.02.02.12.B	Edelman auger, bottom part, comb.type, bay., Ø 12 cm	
	19 mm, fibre glass, length 1 05 cm, Ø shaft 12.5 mm. For		01.02.02.15.B	Edelman auger, bottom part, comb.type, bay., Ø 15 cm	
	safely checking the substratur for cables, tubes and pipes	n	01.02.02.20.B	Edelman auger, bottom part, comb.type, bay., Ø 20 cm	
**01.11.02	Aluminium transport case, dim. 108x23x14 cm (outside)	1	01.02.03.07.B	Edelman auger, bottom part, sand type, bay., Ø 7 cm	
**01.11.02.01	Padlock	1	01.02.03.10.B	Edelman auger, bottom part, sand type, bay., Ø 10 cm	
01.16	Prospecting kit for geological surveys, standard kit for		01.02.04.07.B	Edelman auger, bottom part, coarse sand type, bay., Ø 7 cm	ı
	augerings to a depth of 7 m.		01.02.04.10.B	Edelman auger, bottom part,	

	Description	Qty. in set	Art.no.	Description	Qt in
	coarse sand type, bay.,				
01.02.06.07.B	Ø 10 cm Edelman auger, counterclock-		01.08	Bi-partite spiral augers	
	wise turning, bottom part, combination type, bayonet,		01.08.00.03.B	Spiral auger, bottom part, bay., Ø 3 cm	
	Ø 7 cm		01.08.00.04.B	Spiral auger, bottom part,	
)1.02.01.07.C	Edelman auger, bottom part, clay type, C.sc., Ø 7 cm		01.08.00.04.C	bay., Ø 4 cm Spiral auger, bottom part,	
01.02.01.08.C	Edelman auger, bottom part,			c.sc., Ø 4 cm	
)1.02.01.10.C	clay type, c.sc., Ø 8 cm Edelman auger, bottom part,			Other auger types	
1.02.01.10.C	clay type, c.sc., Ø 10 cm			Other auger types: Piston samplers, bottom part	ts
01.02.02.04.C	Edelman auger, bottom part,			(extendable). To be used wit	h
01.02.02.45.C	comb.type, c.sc., Ø 4 cm Edelman auger, bottom part,			handles and extension rods (01.10range) (Only with	
1.02.02.15.0	comb. type, c.sc., Ø 45 mm			bayonet connection).	
01.02.02.05.C	Edelman auger, bottom part,		01 00 01 0	Distan semalar (in al Transac	
)1.02.02.06.C	comb.type, c.sc., Ø 5 cm Edelman auger, bottom part,		01.09.01.B	Piston sampler (incl. Transpor tube), bottom part, operation	
	comb.type, c.sc., Ø 6 cm			length 75 cm, bay.	
)1.02.02.07.C	Edelman auger, bottom part, comb.type, c.sc., Ø 7 cm		01.09.02.B	Piston sampler (incl. transpor tube and sampler gutter)	t
)1.02.02.08.C	Edelman auger, bottom part,			bottom part, op.length	
	comb.type, c.sc., Ø 8 cm			200 cm, bay.	
)1.02.02.10.C	Edelman auger, bottom part, comb.type, c.sc., Ø 10 cm		01.09.00.01 01.09.00.02	Piston for piston sampler Ropes (2), stretch-proof, with	h
01.02.02.12.C	Edelman auger, bottom part,		01.05.00.02	noose, length 5 m. Polyester	
	comb.type, c.sc., Ø 12 cm			covering, strong stretch-proo	of
01.02.02.15.C	Edelman auger, bottom part, comb.type, c.sc., Ø 15 cm			core material for accurate operation of pistons in core	
01.02.02.20.C	Edelman auger, bottom part,			samplers. Complete with one	ż
)1.02.03.07.C	comb.type, c.sc., Ø 20 cm Edelman auger, bottom part,			carabine hook	
1.02.03.07.C	sand type, c.sc., Ø 7 cm			Stone catchers, bottom parts	5
01.02.03.10.C	Edelman auger, bottom part,			(extendable). To be used wit	h
01.02.04.07.C	sand type, c.sc., Ø 10 cm Edelman auger, bottom part,			handles and extension rods (see 01.10range). With	
1.02.0 1.07.0	coarse sand type, c.sc., Ø 7 cm	ı		bayonet (B) and conical	
1.02.04.10.C	Edelman auger, bottom part,			threaded (C) connection.	
	coarse sand type, c.sc., Ø 10 c	m	01.12.14.07.B	Stone catcher, bottom part,	
)1.04	Bi-partite Riverside augers.			bay., Ø 7 cm	
01.04.00.05.B	Riverside auger, bottom part,		01.12.14.10.B	Stone catcher, bottom part, bay., Ø 10 cm	
71.04.00.05.0	bay., Ø 5 cm		01.12.14.07.C	Stone catcher, bottom part,	
01.04.00.07.B	Riverside auger, bottom part,			c.sc., Ø 7 cm	
)1.04.00.08.B	bay., Ø 7 cm Riverside auger, bottom part,		01.12.14.10.C	Stone catcher, bottom part, c.sc., Ø 10 cm	
	bay., Ø 8 cm				
A A A A A A A B	Riverside auger, bottom part,			Soft soil augers, bottom part	
01.04.00.10.B					
	bay., Ø 10 cm			(extendable). To be used with handles and extension rods	
01.04.00.05.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm			(extendable). To be used wit handles and extension rods (see 01.10 range). (Only wi	h
01.04.00.05.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part,			(extendable). To be used with handles and extension rods	h
01.04.00.05.C 01.04.00.07.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm		01.12.15.07.B	(extendable). To be used wit handles and extension rods (see 01.10 range). (Only wi	h ith
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm			(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection). Soft soil auger, bottom part, bay., Ø 7 cm	h
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm Riverside auger, bottom part,		01.12.15.07.B 01.12.15.10.B	<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part,</li> </ul>	h
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm Riverside auger, bottom part, c.sc., Ø 10 cm Riverside auger, bottom part,			(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection). Soft soil auger, bottom part, bay., Ø 7 cm	h
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm Riverside auger, bottom part, c.sc., Ø 10 cm			<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts</li> </ul>	'n
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm Riverside auger, bottom part, c.sc., Ø 10 cm Riverside auger, bottom part,			<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods</li> </ul>	'n
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C	bay., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 5 cm Riverside auger, bottom part, c.sc., Ø 7 cm Riverside auger, bottom part, c.sc., Ø 8 cm Riverside auger, bottom part, c.sc., Ø 10 cm Riverside auger, bottom part, c.sc., Ø 15 cm <b>Bi-partite augers for stony so</b>			<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods (see 01.10range). With</li> </ul>	'n
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C	<ul> <li>bay., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 5 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 7 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 8 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 15 cm</li> </ul> Bi-partite augers for stony so Auger for stony soil, bottom			<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods</li> </ul>	h ith
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C 01.06 01.06.00.07.B	<ul> <li>bay., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 5 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 7 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 8 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 15 cm</li> </ul> <b>Bi-partite augers for stony soi</b> Auger for stony soil, bottom part, bay., Ø 7 cm Auger for stony soil, bottom		01.12.15.10.B	<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods (see 01.10range). With bayonet (B) and conical threaded (C) connection</li> </ul>	h ith h
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C <b>01.06</b> 01.06.00.07.B 01.06.00.10.B	<ul> <li>bay., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 5 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 7 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 8 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 15 cm</li> <li><b>Bi-partite augers for stony so</b></li> <li>Auger for stony soil, bottom</li> <li>part, bay., Ø 7 cm</li> <li>Auger for stony soil, bottom</li> <li>part, bay., Ø 10 cm</li> </ul>			<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods (see 01.10range). With bayonet (B) and conical threaded (C) connection</li> <li>Gouge auger, bottom part, o</li> </ul>	h ith h
01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C <b>01.06</b> 01.06.00.07.B 01.06.00.10.B	<ul> <li>bay., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 5 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 7 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 8 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 15 cm</li> </ul> <b>Bi-partite augers for stony soi</b> Auger for stony soil, bottom part, bay., Ø 7 cm Auger for stony soil, bottom		01.12.15.10.B	<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods (see 01.10range). With bayonet (B) and conical threaded (C) connection</li> </ul>	h ith h
01.04.00.10.B 01.04.00.05.C 01.04.00.07.C 01.04.00.08.C 01.04.00.10.C 01.04.00.15.C 01.06.00.07.B 01.06.00.07.C 01.06.00.07.C 01.06.00.10.C	<ul> <li>bay., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 5 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 7 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 8 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 10 cm</li> <li>Riverside auger, bottom part,</li> <li>c.sc., Ø 15 cm</li> </ul> <b>Bi-partite augers for stony soi</b> Auger for stony soil, bottom part, bay., Ø 7 cm Auger for stony soil, bottom part, bay., Ø 10 cm Auger for stony soil, bottom part, bay., Ø 10 cm Auger for stony soil, bottom part, bay., Ø 10 cm Auger for stony soil, bottom part, bay., Ø 10 cm Auger for stony soil, bottom		01.12.15.10.B 04.02.01.20.B	<ul> <li>(extendable). To be used with handles and extension rods (see 01.10 range). (Only with bayonet connection).</li> <li>Soft soil auger, bottom part, bay., Ø 7 cm</li> <li>Soft soil auger, bottom part, bay., Ø 10 cm</li> <li>Gouge augers, bottom parts (extendable). To be used with handles and extension rods (see 01.10range). With bayonet (B) and conical threaded (C) connection</li> <li>Gouge auger, bottom part, o length 50 cm, bay., Ø 20mm</li> </ul>	h ith h pp.



Qty.

in set





Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set
04.02.03.20.B	length 50 cm, bay., Ø 60 r Gouge auger, bottom par		**01.10.17.B	Handle, normal, 60 cm, with all synthetic, detachable grip	1
04.02.03.30.B	length 100 cm, bay., Ø 20 Gouge auger, bottom par		**01.02.02.07.B	(incl. coupling sleeve), bay. Edelman auger, bottom part,	1
04.02.03.60.B	length 100 cm, bay., Ø 30 Gouge auger, bottom par		**01.09.02.B	comb.type, bay., Ø 7 cm Piston sampler (incl. transpor	t 1
04.02.01.20.C	length 100 cm, bay., Ø 60 Gouge auger, bottom par	mm		tube and sampler gutter) bottom part, op. length	
04.02.01.30.C	length 50 cm, c.sc. Ø 20m Gouge auger, bottom par	t, op.	**01.09.00.02	200 cm, bay. Ropes (2), stretch-proof, with	1
04.02.01.60.C	length 50 cm, c.sc., Ø 30 n Gouge auger, bottom par	t, op.		noose, length 5 m. Polyester covering, strong stretch-proo	f
04.02.03.20.C	length 50 cm, c.sc., Ø 60 n Gouge auger, bottom par	t, op.		core material for accurate operation of pistons in core	
04.02.03.30.C	length 100 cm, c.sc., Ø 20 Gouge auger, bottom par	t, op.		samplers. Complete with one carabine hook	
04.02.03.60.C	length 100 cm, c.sc., Ø 30 Gouge auger, bottom par length 100 cm, c.sc., Ø 60	t, op.	**01.10.07.B **01.09.00.01 **09.01.10	Extension rod, 100 cm (incl. coupling sleeve) bay. Piston for piston sampler Carrying bag for field	3 1 1
01.10	Handles and extension ro To be used with auger bo		09.01.10	equipment, Ø 15x120 cm	1
	parts. With bayonet (B) o conical threated (C) conne	r	01.09.SB	Dividable piston sampler set, for sampling to a depth of 5 with piston tubes 50, 100 and	m,
01.10.01.B	Handle, normal, 60 cm, ba (incl. coupling sleeve)	ay.		150 cm length	
01.10.02.B	Handle, short, 25 cm, (incl. coupling sleeve),bay		**01.10.17.B	Handle, normal, 60 cm, with all synthetic, detachable grip	1
01.10.06.B	Extension rod, 50 cm, (incl. coupling sleeve), bay	у.	**01.02.02.07.B	(incl. coupling sleeve), bay Edelman auger, bottom part,	1
01.10.07.B	Extension rod, 100 cm (incl. coupling sleeve) bay		**01.08.00.03.B	comb.type, bay., Ø 7 cm Spiral auger, bottom part,	1
01.10.08 01.10.09.B	Push-/pull handle, Ø 22.2 Coupling sleeve	mm	**01.10.07.B	bay., Ø 3 cm Extension rod, 100 cm	3
01.10.16.B	Handle, short, 25 cm, with			(incl. coupling sleeve) bay.	
	all synthetic, detachable g (incl. coupling sleeve), bay	y.	**01.09.03.B **01.09.04	Collar for piston tube, bay. Piston tube, stainless steel,	1 1
01.10.17.B	Handle, normal, 60 cm, w all synthetic, detachable g	grip	**01.09.05	Ø 40 mm, length 50 cm Piston tube, stainless steel,	1
01.10.18.B	(incl. coupling sleeve), bay Handle, long, 100 cm, wit	h	**01.09.06	Ø 40 mm, length 100 cm Piston tube, stainless steel,	1
	all synthetic, detachable g (incl. coupling sleeve), bay	y.	**01.09.08	Ø 40 mm, length 150 cm Piston rod for piston tube,	1
01.10.10.01.C 01.10.10.C	Handle, normal, 60 cm, c. Handle, normal, 60 cm, w	ith	**01.09.09	length 50 cm Piston rod for piston tube,	1
	all synthetic, detachable <u>c</u> conical screw thread		**01.09.10	length 100 cm Piston rod for piston tube,	1
01.10.11.C	Handle, short, 10 cm, with beating head, c.sc.	ו	**01.09.00.01	length 150 cm Piston for piston sampler	3
01.10.12.C	Extension rod, 100 cm, c.s		**01.09.00.02	Ropes (2), stretch-proof, with	1
01.10.13.C 01.10.15	Extension rod, 50 cm, c.sc. Push-/pull handle, Ø 25.4			noose, length 5 m. Polyester covering, strong stretch-proo	f
01.10.21	Steel brush (stainless)			core material for accurate	
99.50.22	Spanner 20x22 mm			operation of pistons in core	
01.10.99.08	Coupling part bay. (hole)- (outside), incl. coupling sl			samplers. Complete with one carabine hook	
01.10.99.11	Coupling part c.sc. (inside bay. (pin)	) -	**01.09.95	Brush with shaft, length 175 cm	1
	For sampling less cohesive	e soil	**10.01.52	Cap, natural PE, for pipes 40 mm, set of 25 pcs.	1
	layers (wet sandy soils) w supply two types of pisto	/e	**01.09.99	Carrying tube, length 150 cm	1
	sampler sets:		**99.60.07	Screw driver, 6.5 mm bit	1
	- standard set - dividable set		**09.01.10	Carrying bag for field equipment, Ø 15x120 cm Various accessories to be used	1
01.09.SA	Piston sampler, set for sampling to a depth of 5	m		Various accessories to be used with hand auger equipment.	ı
01.09.SA	Piston sampler, set for sampling to a depth of 5	m		Various accessoires to be use with hand auger equipment.	



Art.no.	Description	Qty. in set	Art.no.	Description	Qty. in set	
01.14	Carrying bag for field equipment, with two shoulde straps (backpack model), (inside) Ø 17x150 cm, 090110 Carrying bag for field					
07.00.00	equipment, Ø 15x120 cm Carrying bag for field equipment with handgrip, Ø 20x77 cm					
01.15.01	Utility probe with cone Ø 19 mm, fibre glass, length 105 cm, Ø shaft 12.5 mm. For safely checking the substratu for cables, tubes and pipes					
01.15.03	Utility probe with cone Ø 19 mm, fiberglass, length 150 cm, Ø shaft 12.5 mm,					
01.15.03.01	bi-partite design Extension rod, fiberglass, length 91 cm, for bi-partite utility probe					
99.14	Fieldcart, aluminium, collap- sible, package measurements 120x56 cm, collapsed dimen- sions 107x27x58 cm, max.					
	loading weight 150 kg, weigl 15 kg	ιτ				
						Eijkelkamp
						Agrisearch Equipment
-						19