# LIFTING SETS FOR DRILLING EQUIPMENT



Augering by hand (manpower) at greater depths is usually perceived as very strenuous as the augering gets deeper or the augers that are used have a larger diameter.

Yet, in order to use heavier soil augers and/or soil core sampling equipment as efficiently and ergonomically correct as possible, it is desirable to use all sorts of lifting tools.

Our program provides for this need by means of two complete sets of lifting equipment for soil drilling equipment. Both sets include a tripod, a winch, and mechanical jacks. It goes without saying that these lifting sets can also be used for other ends besides drilling activities.

In selecting a tripod, working height, weight, and maximum load capacity (= tensile force) are usually determinant factors.

The selection of the winch also depends strongly on

the purpose for which it is used. Furthermore, the type of tripod to which the winch is to be fixed is essential.

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15.08Light lifting setThe light lifting set is usually used in combinationwith the surveying set for shallow water wells,or with the hand-operated bailer boring sets.

If the removal of the casing tubes, particularly in deeper borings or in strongly cohesive soils, requires more than manpower alone, this light lifting set can provide the solution to your problems.

With a hand-operated winch and a light mechanical jack, the casing tubes are drawn out of the borehole.

The complete set includes: an aluminium tripod (4 kN) with a snatch block, an extra snatch block, a hand-operated winch (5 kN) with a load-brake and steel cable, and two mechanical jacks.

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Using the tripod and the handoperated winch, a pump is lifted from the sewer system.



The bailer is operated with the aid of the light lifting set.







Light lifting set



### P1.03

The casing tubes are pushed up with the aid of the mechanical jacks.



## LIFTING SETS FOR DRILLING EQUIPMENT

#### 15.09 Heavy lifting set

The heavy lifting set is usually used in combination with heavier (hand-operated) drilling equipment for water wells.

The tripod and the winch are used, among other things, for lowering and lifting drilling equipment (e.g. the bailer), or for removing the casing tubes.

The complete set includes: an aluminium tripod (18 kN) with snatch block, an extra snatch block, a set of step supports which are to be fixed to one of the legs of the tripod, a hand-operated winch (20 kN) for strenuous work with load-brake and free-fall facility, steel cable, and two mechanical jacks.

N.B.: The tripod and the winch are also available as separate items in the program of Eijkelkamp Agrisearch Equipment.

#### Advantages of the lifting sets

- Complete sets.
- □ Light-weight aluminium tripods.
- Easy to use.
- □ Easy to transport.
- **D** Require virtually no maintenance.
- More efficient use of manpower and equipment.

### Applications of the lifting sets

- As a tool in performing deeper hand drillings or for drilling with heavier drilling equipment.
- For removing casing tubes and lowering/lifting drilling equipment.
- For the installation of water wells and submersible pumps.
- General hoisting activities.



Heavy lifting set

The heavy lifting set is used, among other applications, for drilling water



# LIFTING SETS FOR DRILLING EQUIPMENT

#### 02.01 Tripods

A tripod is an essential part of a bailer boring set (cable tool drilling equipment). Also drillings at greater depths, or the application of heavier augering or soil core sample equipment require the use of a tripod.

In selecting a tripod, working height, weight, and maximum load capacity (= tensile force) are usually determinant factors.

However, the range of application is of such a magnitude, that the selection of the tripod depends strongly on the kind of work that may have to be performed with the selected tripod besides the performance of soil drillings.

Our program includes a lighter version (tensile force 4 kN) and a heavy version (tensile force 18 kN).

Each leg of the tripod consists of three parts. On top, a snatch block is fixed to both tripods, which is used as a guider for the cable of the hand-operated winch that is to be used with the tripod. At the bottom, the legs of the heavy version are provided with a point to prevent sliding. To increase the bearing capacity, particularly in soft soils, a separate baseplate is provided for each leg. The legs of the lighter one are provided with base plates.

The heavy tripod is provided with a frame to fix the heavy hand winch, and can be provided with 5 step supports.

The three-piece aluminium tripods meet the specific requirements which apply to light, easily operable tripods. These parts can be coupled very quickly, and are of limited length, making it very easy for the user to set them up very quickly. The high quality aluminium is very light weight and requires virtually no maintenance.

Because of the limited weight and length of the various parts, the tripods are easy to transport (even in a normal station wagon).



Tripod 18 kN



Snatch block 20 kN



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The tripod, which consists of several parts, can be transported in an normal station wagon.



The cable is guided through the snatch block.







Tripod 4 kN



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In heavy hoisting activities, the heavy winch is operated by two persons.



## LIFTING SETS FOR DRILLING EQUIPMENT

#### 02.02 Hand-operated winches

Winches are used for lifting and hoisting activities in the field. They are fixed to one of the legs or to the frame of a tripod.

In selecting the winch, the following factors play a role:

- □ The type of tripod.
- Utilization frequency.
- □ The desired tensile force.
- The nature of the work.
- □ The desired hoisting speed and working depth.

The program includes both a light hand winch (capacity 5 kN) and a heavy hand winch (20 kN).

The light hand winch is fixed to the light tripod with a single fixture.

The heavy hand winch is fixed to the frame of the heavy tripod with a double fixture.

In order to be able to drop the object (e.g. the bailer) fixed to the cable of the winch quickly, the heavy winch is provided with a so-called free-fall facility. This means that the cable drum can twist freely when the bailer is lowered (the band brake ensures that there is control).

The light hand winch is operated by one person. The heavy winch can be operated by either two persons or one person.

When it is operated by two persons, a crank is fixed to the cylinder shaft on either side of the winch.

In extremely heavy hoisting, the speed reduction is used which features on the heavy hand winch (however, in this situation, the winch is operated by one person only).

Various synthetic or steel cables are available for fixture on the hand winches.



Hand-operated winch 5 kN



Hand-operated winch 20 kN

Limited weight allows rapid installation
Simple maintenance, almost no rusting parts
Free fall winches for optimal drilling

Lifting sets

# **PARTS LIST P1.03**



Art.no.	Description Qty. in se	et	Art.no.	Description	Qty. in set
P1.03	Lifting sets for drilling equipment	lling equipment		Hand-operated win (02.01.01), equipped	ch for tripod d with a load-
	Our delivery program includes two standard lifting sets: - light lifting set. max. capacity		02.02.05	brake of max. 5 kN (500 kgf), excl. cable, weight 15 kg Hand-operated winch for tripod	
	4 kN. - heavy lifting set, max. capacity 15kN.			(02.01.04), capacity excl. cable, with fre Winch can be opera	20 kN (2000 kgf) e-fall facility. ted by two
15.08	Light lifting set, standard set for max. lifting height of 25 m			via reduction (1:7.5)	. Weight 39 kg
**02.01.01	Aluminium tripod, each leg in	1		Cables for hand wir	nches.
	3 parts, incl. pulley, bearing capacity 6.5 kN (650 kgf)	_	02.02.99.01	Synthetic cable, Ø 8 incl. fasteners	mm x 15 m,
**02.01.01.00 **02.02.06	Pulley for tripod, 6.5 kN Hand-operated winch for tripod	1 1	02.02.99.05	Synthetic cable, Ø 1 incl. fasteners	0 mm x 25 m,
	(02.01.01), equipped with a load- brake of max. 5 kN (500 kgf),		02.02.99.08	Synthetic cable, Ø 1 incl. fasteners	0 mm x 40 m,
**02.02.99.10	excl. cable, weight 15 kg Steel cable, Ø 6 mm x 230 m,	2	02.02.99.10	Steel cable, Ø 6 mm zinc plated, incl. fas	x 30 m, teners
**15.08.01	zinc plated, incl. Fasteners Mechanical jack capacity 15 kN	2	02.02.99.15	Steel cable, Ø 8 mm zinc plated, incl. fas	x 40 m., teners
	(1500 kgf), lifting height 35 cm per stroke				
15.09	Heavy lifting set, standard set for max. lifting height of 30 m				
**02.01.04	Aluminium tripod, each leg in 3 parts, incl. pulley, bearing capacity 20 kN (2000 kgf)	1			
**02.01.04.00	Pulley block with removable side cap 20 kN (2000 kgf)	1			
**02.01.04.02	Set of 5 stepsupports for tripod (02.01.04)	1			
**02.02.05	Hand-operated winch for tripod (02.01.04), capacity 20 kN (2000 kgf), excl. cable, with free- fall facility. Winch can be operated by two persons: direct on the drur (1:1) or via reduction (1:7.5). Weig	1 d n ht			
**02.02.99.15	39 kg Steel cable, Ø 8 mm x 40 m.,	2			
**15.09.01	zinc plated, incl. fasteners Mechanical jack capacity 50 kN (5000 kgf), lifting height 30 cm per stroke	2			
02.01	02.01 Tripods Tripods are supplied in two design - light tripod, 4 kN - heavy tripods, 15 kN	ıs:			
02.01.01	Aluminium tripod, each leg in 3 parts, incl. pulley, bearing				
02.01.01.00 02.01.04	Pulley for tripod, 6.5 kN Aluminium tripod, each leg in 3 parts, incl. pulley, bearing capacity 20 kN (2000 kgf)				
02.01.04.00	Pulley block with removable side, cap. 20 kN (2000 kgf)				
02.01.04.02	Set of 5 stepsupports for tripod (02.01.04)				
02.02	Hand operated winches Hand winches are supplied in two designs: - light hand-operated winch - heavy hand-operated winch				

#### nd winches.

Synthetic cable, Ø 8 mm x 15 m,
incl. fasteners
Synthetic cable, Ø 10 mm x 25 m,
incl. fasteners
Synthetic cable, Ø 10 mm x 40 m,
incl. fasteners
Steel cable, Ø 6 mm x 30 m,
zinc plated, incl. fasteners
Steel cable, Ø 8 mm x 40 m.,
zinc plated, incl. fasteners

