

SURVEYING EQUIPMENT



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For planning and execution of environmental research, agricultural-, civil-, and rural engineering projects, etc. it is often required that the area concerned is carefully studied and surveyed. Because of the importance of this research it is necessary that reliable surveying equipment is used.

Eijkelkamp Agrisearch Equipment included a great number of surveying instruments in its package.

This set of instruments varies between automatic level instruments including levelling rods and steel ranging poles, measuring wheels to various compasses, height- and clinometers and an aluminium ruler for planeness measurements.

In addition a navigation system for field use is included. The navigation is realized using satellite navigation (Global Positioning System, GPS).

17.05 Automatic level Nestor 730

A high-grade levelling instrument with automatic horizontal adjustment of the line of sight, erect image with a horizontal circle of 360° or 400 gon. The level has a large sight and a very short target range. The stable design guarantees accurate and reliable measurements.

The large ribbed control buttons simplify the adjustment of the instrument. The apparatus is watertight IP57 and vibration resistant (ISO 9022-33-5).

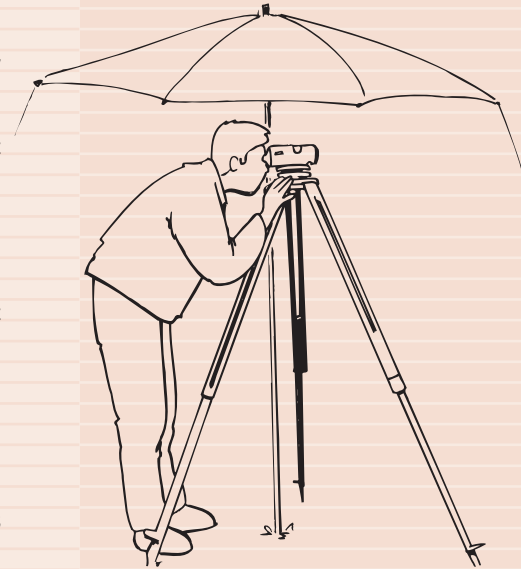
The automatic level has a magnification of 30, a focus to up to 0.8 m Accuracy per km is about 0.8 mm.

Accuracy single measurement with 30 m aim distance is about 1.2 mm.

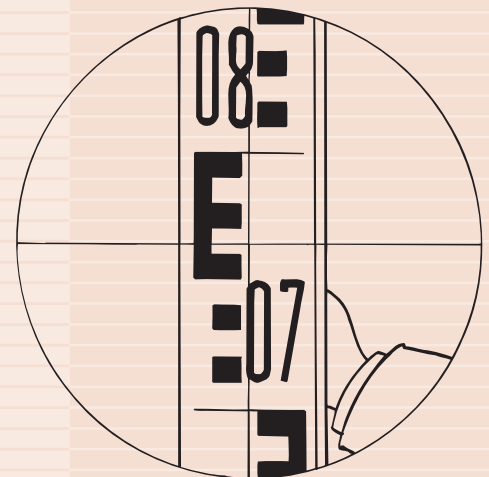
Adjustment with bubble level 10' / 2 mm.

The compensator is air damped. The meter is supplied in a case in which the instrument can be stored shock proof.

By using a field umbrella the obstructing glittering during levelling is avoided.



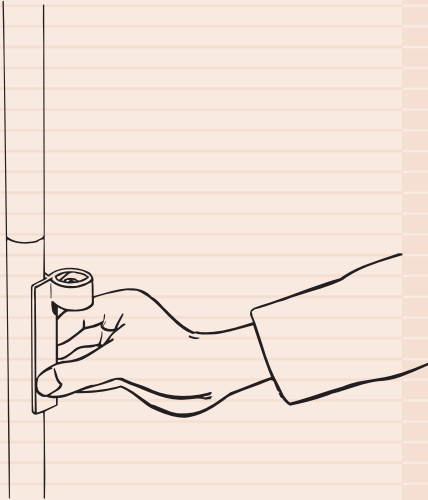
The sight provides a clear erect image.



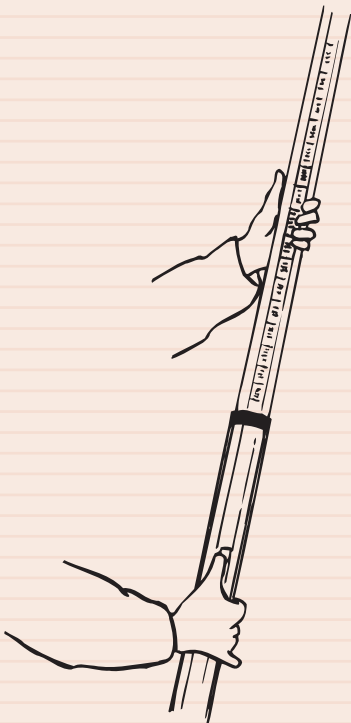
Surveying equipment

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The ranging pole is adjusted vertically with the hold-on staff bubble.



The telescopic levelling stave is extended.



17.06 Automatic level NAN-2020

Level with automatic horizontal adjustment of the line of sight, an erect figure and a horizontal circle of 0 - 360° or 0 - 400 gon. Stable design for accurate and reliable measurements.

The large ribbed control buttons simplify the adjustment of the instrument. The instrument is splashproof and vibration resistant.

The automatic level has a magnification of 20 and a 32 mm objective, a focus up to 0.6 m and a mm estimate up to about 60 m and a cm-estimate up to 250 m, the tolerance per km is about 2.5 mm. The compensator is magnet damped.

After the instrument has been set almost horizontal the line of sight is carefully levelled using the automatic compensation mechanism.

The instrument is supplied inclusive aluminium carrying case.

17.07 Levelling staves and accessories

The program includes two levelling staves, a folding levelling stave made of wood with a synthetic cover with E-graduation in cm and an overall length of 4 m, and a light telescopic aluminium levelling stave with a graduation in cm and an overall length of 5 m.

A light metal tripod with three extendable legs is optionally available for the levelling staves as well as a carrying bag for the telescopic levelling stave.

17.08 Ranging poles and accessories

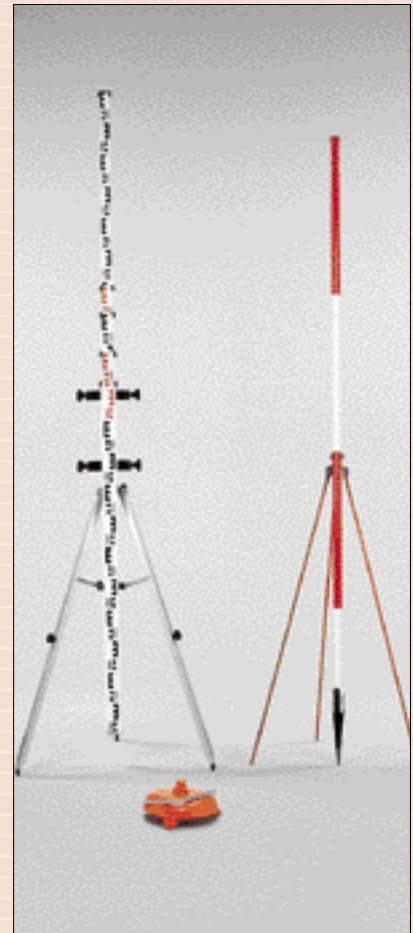
The program also contains various ranging poles with synthetic cover. The ranging poles are made of wood or steel and have a red and white color division every 50 cm and are fitted with a heavy steel point. Optionally available is a carrying bag for the dismountable ranging poles and a ranging pole tripod. The ranging pole is secured with a clamp strap and ball-and-socket joint. Vertical adjusting is done using a hold-on staff bubble.



Automatic level Nestor-730



Automatic level NAN-2020



Levelling stave, ranging pole, tripod

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17.10 Double pentagon prism

The pentagon prism square with two prisms of 90° and 180° and a large field of vision, base area mirrored for slope. See through location between both prisms with yellow filter.

17.11 Ground plate

Strikingly colored ground plates for stable positioning of the levelling staves.

17.12 Field umbrella

Umbrella for protecting of the level from obstructing light. Large diameter with carrying bag, dismantable poles and guy ropes.

17.20 Measuring tape

Measuring tape holder with synthetic or stainless steel measuring tapes for distance measuring are supplied in various lengths. All measuring tapes meet the EC-regulations class II regarding tolerance, with an accuracy of approximately 2 mm on 10 m.

17.21 Measuring wheel

Precision measuring wheel with folding grip for distance measuring in the field. The counting mechanism is shockproof and fitted over the measuring wheel.

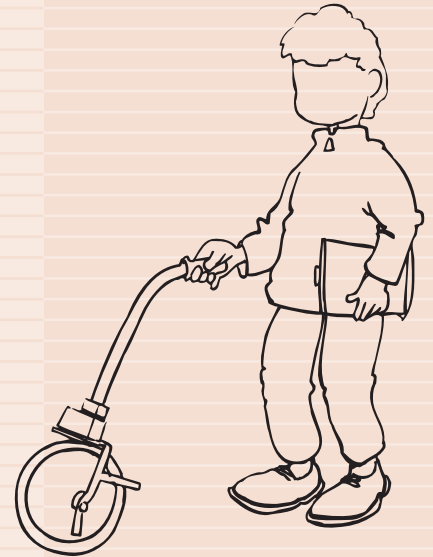
The meter can be calibrated and has a measuring range of 9999.99 m and can be read-out in cm. The tolerance is below 0.02%. The counting mechanism is driven without vibrations. The measuring wheel is supplied inclusive a case.

17.16 Tri-partite aluminium ruler

The aluminium ruler is used for accurate measuring in mm of the planeness of bare surfaces such as asphalt, concrete, gravel, floors of sports accommodations, etc.

The aluminium ruler comes in three parts and is supplied inclusive measuring wedges and carrying bag. The overall length measures 3 meter, the range is 1-20 mm and the accuracy is 0.3 mm.

The distance is measured using the measuring wheel.



Double pentagon prism



Measuring wheel

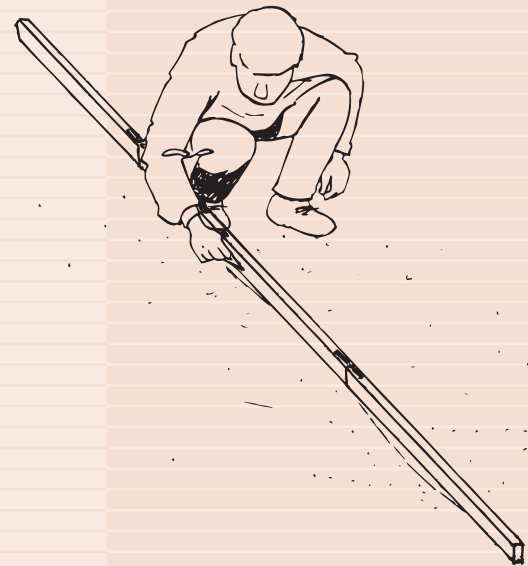


Measuring tape



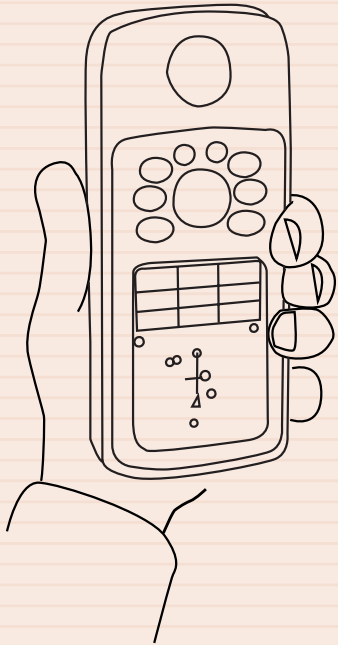
Tri-partite aluminium ruler

The planeness of the surface is accurately measured using the aluminium ruler.



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The GPS-system is fitted with a clearly readable screen.



17.95 Research-set for surveyors

A complete set for straightforward surveying measurements (height, distance, slope and direction).

17.25 Abney hand level

Hand level, arc divided to single degrees (+/- 90°) and in gradient scale, vernier reading 10 minutes.

17.27 Clinometer

Lightweight clinometer with an easily readable scale. The optical scales have a graduation from 0-90° and from 0-150°. Direct reading in 1° or 1% and estimate in 10 minutes or 1/5 of 1%.

17.32 Compass

Compass, usable for all 5 inclination zones, with a highly resistant case, which offers a strong protection to the capsule. With cm scale and sighting line of 11 cm when opened. The underlying mirror allows very simple sighting with a high accuracy of 1°. The needles are rotating on a sapphire bearings in antistatic fluid. With adjustable declination scale.

17.34 Height meter

Liquid damped height meter. Reading accuracy: at a distance of 15 m: measuring range 0-35 m, interval 0.25-0.5 m: at 20 meter: measuring range 0-50 meter, interval 0.25-1.0 m.

17.52 Global Positioning System, GPS 76

Accurate navigation in the field applying the Global Positioning System (GPS). A navigation system that uses satellite signals.

The GPS 76 is a manageable, lightweight, waterproof (and floating) instrument with a clearly readable LCD-screen. Navigation using up to 12 satellites, WAAS enabled (Wide Area Augmentation System = System of satellites and ground stations that provide GPS signal corrections), memory for up to 500 landmarks and 50 routes. With built-in database showing the location of towns and cities. Large user friendly control buttons and menu controlled software. Accuracy for position <15 meters. The accuracy of position can be increased to within 3 meters applying WAAS.



Research set for surveyors



Compass



Clinometer



Global Positioning System