

COMPLEMENTARY INFORMATION

10.04.30 DIRECT-WELL

What is a Direct-well ?

A Direct-well is a monitoring well pipe consisting of a perforated pipe with a length of 1 meter and an outside diameter of 32 mm, covered with filter gauze.

At the top of the filter pipe a synthetic adapter allows fitting a tubing 10x12 mm.

When installing the Direct-well, bentonite collars are slipped over the total length of the tubing. The bentonite collars will swell and plug the borehole and the penetrated impermeable layers.

The used materials allow using the Direct-well for groundwater research on all kinds of micro- and macro parameters.

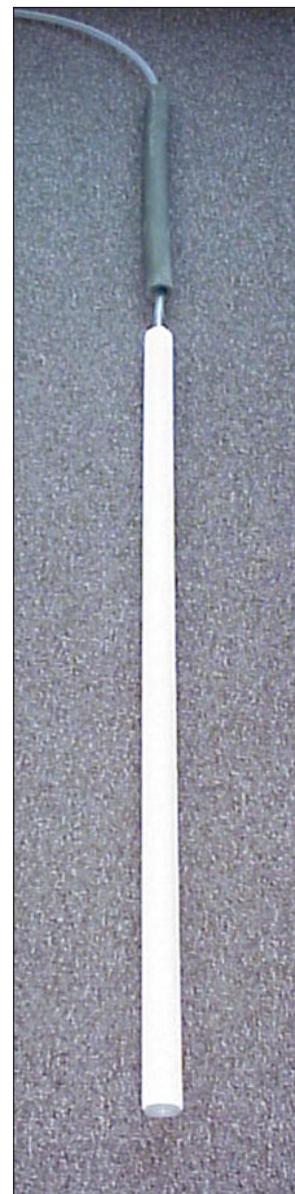
When to use a Direct-well ?

- In normal augered holes with a diameter between 45 and 70 mm.
- In ramcasings and sounding rods with an inside diameter from 40 mm on and an outside diameter of max. 70 mm.

When the Direct well is used for analysis of groundwater on hydrocarbons it is not allowed to grease the screw connections of the casings. It is however possible to grease the connections with a hydrocarbon free grease or a bentonite porridge.

Advantages of the Direct-well

- Suitable for groundwater level measurements as well as groundwater monitoring. Also suitable for monitoring or extraction of soil air.
- The bentonite collars ensure plugging penetrated impermeable layers, preventing cross-flow over different layers or surface water to run down to the filter pipe.
- The Direct-well fitted with bentonite collars respects standards in regard to plugging impermeable layers
- Easy installation.
- Very low purging volume before sampling.
- Easy sampling with peristaltic pump (till a watertable depth of 9 m) or foot valve pump diameter 9 mm (till a depth of approx. 25 m).
- Strongly reduced water/air contact surface, resulting in:
 - minimal stripping effects
 - minimal oxidation
- Water level can be measured with electronic sounding apparatus with electrode diameter of only 4.8 mm (art. no.: 11.03.18).
- Direct wells are clean and packed in a polyethylene bag.
- Can be used to large depths.
- Ideal monitoring well for use in gravel- and rubble layers; perfect and rapid installation through percussion, sonic and sounding techniques.
- Cheap basic materials and fast installation result in a low-cost technique.



The Direct-well; another revolutionary development of Eijkelkamp Agrisearch Equipment !