

# HAND AUGER EQUIPMENT

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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