

## EB 450 S

fragment detector for saw mills and timber industry

- High level of sensitivity
- Lightweight – robust – compact
- No inconvenient cable connections
- Simple to use
- Integrated setting device and loudspeaker



- Certified by the KWF (German Curatorium for Forestry Work & Technology), for professional users
- Timber quality assurance when harvesting trees
- Assists in rapid checking for ingrown metal parts prior to cutting of the trunk
- Safety assurance to forestry workers, avoidance of dangerous kickbacks, blunting of chains and other tools
- High level of sensitivity

### General

EBINGER splinter detectors have gained an excellent reputation in the Forestry Industry with a proven track record. The EB 450 S splinter detector forms part of the modern equipment for organisations.

Timber quality can be checked prior to selling or processing a tree with a simple scan of the cut trunk. Once the tree has been harvested, a check can guarantee the quality of the timber before it reaches the sawmill. The check of the timber ensures that there are no splinters within the trunk, therefore assuring the safety of the processing teams.

Still today, complete forests of mature trees remain affected by fragments from explosive ordnance from previous wars although appearing to be in good condition for processing. Metal splinters in tree trunks after harvesting pose a serious threat to chainsaws, axes, band-saws, gang-saws, veneer lathes and slicing machines. The presence of such metallic contamination in a trunk may have changed the fibre course or caused discoloration and decay, therefore the wood is often unsuitable for further processing. The EB 450 S detects all electrically conducting media, thin metal foil and small splinters of iron as well as non-ferrous or noble metals.

### Construction

The EB 450 S is a handheld metal detector with audio detection signal. It is easy to handle and thanks to its compact and modern modular tube-based design, is extremely robust. All functionally important components are accommodated inside the handle, this means that there are no critical, easily damaged cable connections which could hinder work when carrying out a rapid check! In noisy environments a single sided headset can be connected to the detector.

When the device is offered up to something that has been detected, the frequency of the audio signal, which is outputted via an integrated loudspeaker, changes. If there is a lot of ambient noise, a single sided headset can be connected to the detector. The stepless sensitivity switch can be easily set in an infinitely variable manner. Power is supplied via normal, commercially available, rechargeable or dry batteries, the capacity of which is sufficient for a full day's work. If the voltage decreases below the nominal value an audio signal is given.

The battery tube can be unscrewed for transportation if space is at a premium.

### Operation principle

The EB 450 S works in accordance with the highly sensitive damping principle that EBINGER developed for explosive ordnance disposal work more than 30 years ago. This revolutionized the technology of metal detectors in respect of their sensitivity, suppression of noise and detection depth.

The search head generates an alternating electromagnetic field with a relatively low field intensity and frequency. Metal items, which come within the reach of this field, bring about an effect on the detector's electronics and lead to an audio signal. Saltwater can lead to disrupting conductivity effects.

### Technical data

<b>Power supply</b>	6 alkaline dry batteries C cell type LR14 or rechargeable version 1,2V 4500 mAh
<b>Operation time</b>	approx. 200 h (LR14) or 100 h for rechargeable battery at 20°C
<b>Charging time</b>	approx. 5h
<b>Temperature range</b>	- 15° C bis + 55° C
<b>Dimensions</b>	Search head Ø 260 mm Length approx. 1110 – 1320 mm
<b>Transit case (option)</b>	390 x 400 x 810 mm
<b>Weight without case</b>	2,0 kg
<b>Weight complete</b>	5,0 kg
<b>Optional accessories</b>	Handgrip and armrest Headset/loudspeaker Rechargeable batteries Charger



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