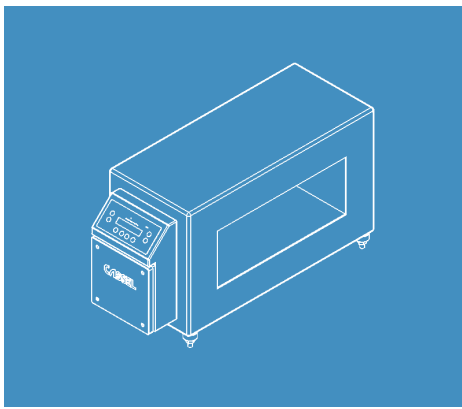


## METAL SHARK® BD

Conveyor metal detectors  
for packaged and loose products



### METAL SHARK® – The new generation in metal detecting technology

Introducing the METAL SHARK® presenting a completely new design in high sensitivity metal detectors. The METAL SHARK® provides outstanding sensitivity, accuracy, stability and precision product-effect-compensation.

The METAL SHARK® features the latest four channel DDS (direct digital synthesizer) and DSP (digital signal processor) technology. These technologies provide outstanding product-effect compensation. High processing speed, DDS and DSP makes the METAL SHARK® the leader in digital metal detection.

Digital balance control – levels temperature and humidity influences.

Auto calibration – fast and easy set-up.

Digital frequency & phase control avoid any drifts. Once calibrated keeps the set-up forever. No need for re-calibration.

Digital noise filters eliminate undesirable signals such as vibrations and shocks.

Multi-channel technology for the optimum recognition of all metals; ferrous, non-ferrous and stainless.

Power supply: Wide input 85-265 V AC works great even with unstable and poor power sources.

Auto self-control – possible functional defects of the device are displayed on a separate output contact.



### METAL SHARK® BD

Typically, the BD types are used in conveyor belts and provide highest performance in detecting magnetic and non-magnetic metals. Different methods are available to reject metal objects (pusher, belt stop + alarm etc).

### Industrial design

Sensor and control unit housing are made of sturdy stainless steel, appropriate for use in the food industry. With a maintenance free design and high quality construction, for reliable operation in the most challenging industrial environments.



### Easy handling

In practical use, settings of metal detectors often need to be checked quickly and reliably during production. Cassel attached great importance to user-friendliness: The software is self-explanatory: An interface-manager leads the user step by step through the menus that have to be adjusted. E.g. product teach is done with one-button-push.

### Intuitive operation

The display shows only the information that is really required. Reduction to the essential makes operation clear and transparent.

### Product library

The characteristics of 50 different products are stored and recalled here.

### Auto calibration

Provides simple and quick learning of product characteristics for product effect compensation. Pre-set product properties for DRY, WET, FROZEN, ALU FILM, VIBRATION and SHOCK makes new product setting exceptionally easy and reliable.

### Operation History

Events such as metal detections or parameter settings are stored in a log list, including date and time and can be read on the display or exported via serial or ethernet link.

### Performance validation

According to HACCP the metal detector is a critical control point and therefore, it must be checked regularly. The performance validation automatically prompts the operator to test the performance of the Metal Shark at pre-set intervals.

### Maintenance-free – Save your service budget

Maintenance-free – the METAL SHARK digitalized circuitry ensures many years of reliable performance. The electronics are 100% computer calibrated with every power on. A frequent calibration service is not required. The METAL SHARK® saves your service budget.



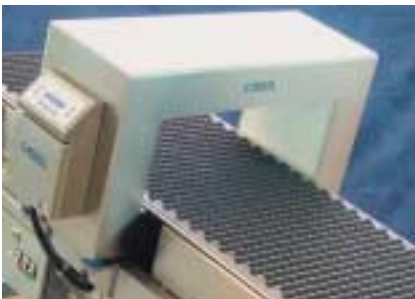
All electronic circuits are miniaturized thanks to the latest state-of-the-art SMD-technology. All components are mounted on one multi-layered board providing advantages in noise immunity and reliability. Just in case – board replacement can be done by most electricians.

### Sensor design without dirt traps

The tunnel aperture is encapsulated with Epoxy. This high-quality design assures a dry and hygienic sensor for many years. The epoxy is not only a sealing, it is a solid block.

### High pressure washdown option

The Shark electronics is installed inside a second SS enclosure. The aperture opening is longterm sealed and protected with a special coating. The unit is suitable for daily steam-hose cleaning with max. 1000 psi. This feature has been approved in sausage productions with many washdowns a day. Sensor head and control unit exceed Ip67 (Nema 4x).



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Product subject to change.

**CASSEL**  
**METAL SHARK**  
CE [www.cassel.de](http://www.cassel.de)