## Metal Detection, X-Ray and Weighing-Systems

















As a manufacturer Cassel is committed to highest quality standards. For more than ten years our goal has been to ensure the quality of your products. We have earned our reputation by protecting yours. We supply customers in different industries worldwide such as Foods, Plastics, Pharmaceuticals, Textile, Timber and Mining. Our headquarters and state of the art manufacturing facility are located near Hannover in the heart of Germany. Each year we manufacture and deliver over 1000 metal detection systems. Approximately 80% of the production is heading for export markets. We have a worldwide network of partners and representations. This way we ensure that you get the very best service and support no matter where you use one of our metal detectors.





# **METAL SHARK® 2** Controller

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METAL SHARK® 2 Controller

### **METAL SHARK® 2 Controller**

The controller METAL SHARK® 2 sets new standards regarding performance, usability and documentation. Improved performance is achieved due to the Four-Quadrant-Technology. This new technology adjusts the metal detector optimally to the product and enables the user to find metal even in "difficult" products. A 5.4 inch illuminated colour screen leads step by step through the menu and to the desired setting.

In the food industry it has been mandatory to document all relevant data since the introduction of the HACCP and International Food Standard. The METAL SHARK® 2 records adjustments of any kind and documents them fully automatic.

#### **Maximum Performance Easily Achieved**

■ On the 5.4" illuminated colour screen one always has everything at a glance. The main screen allows quick access to the most important functions: product list, test function, teach, optimize, menu.



- The *Teach-Assistant* enables even inexperienced users to optimally teach products within
- Help Texts (text marked yellow) lead the user through the menu and to the desired settings.

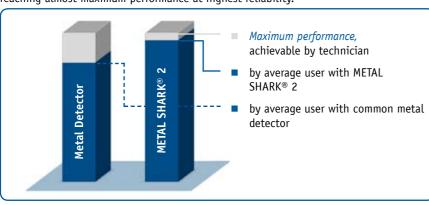


Histograms and diagrams show the signals of products and metal alerts having occured in the last hours. Hereby one can set up the metal detector even more precisely.



#### Maximum Performance, Highest Reliability

• Often, only experienced technicians can calibrate common metal detectors to reach highest performance. The METAL SHARK® 2 is different — Average users can easily set it up reaching almost maximum performance at highest reliability.



■ The Four-Quadrant-Technology adjusts the metal detector to the product like a tailor a new suit to the body of his customer. This way it detects smallest metal pieces even in difficult products like fish, meat and cheese.



#### Effectivity, Efficiency and Satisfaction

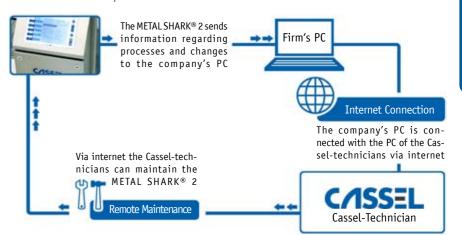
- Product List A list shows all taught-in between different products.
- his local or native tongue.
- Password Function Three password levels make it possible to give different rights to several users.
- Frequent Performance Control The operator can set up an automatic reminder reminding him to check the performance of the metal detector.
- PVS Test To make sure that the metal detector works according to all quality standards the METAL SHARK® 2 prompts the appropriate metal test ball size. All PVS tests are documented automatically.

#### Automatic and Detailed Documentation

- Detailed Documentation The METAL products. This way the user can quickly switch SHARK® 2 records adjustments of any kind and documents them fully automatic.
- Multi-Language One can easily set up IFS5- and HACCP-Report One can dis-

play and print complete reports for the quality control at the touch of a button.

■ USB-Port, Ethernet- and WLAN-Interface - Via optional interfaces it is possible to control the METAL SHARK® 2 from an external computer, as well as store all production related information in a database.



#### Compatibility

Our metal detectors consist of a controller and a sensor head.

The METAL SHARK® 2 Controller is compatible with various sensor heads:



Specifications	
Model	METAL SHARK® 2
Control Electronics	Digital signal processor, digital noise filter, digital balance control, digital frequency control with synthesizer, Power-Drive-Transmitter-Circuit, suitable with multi-frequency sensors, powerful graphics processing unit
Input Signals	8 free configurable, 24 V DC, e.g.: reject confirmation, air pressure monitor, conveyor belt control
Output Signals	2 potential free: Metal and Error
	8 free configurable, 24 V DC, e.g.: pusher magnetic valve, optic/acoustic alarm
Measuring Method	Inductive; multi channel operation, balanced receiver coils
Metal Detection	Ferrous, non-ferrous (e.g. aluminum or copper) and stainless steel
Product Compensation	120 storage spaces, compensation performed automatically, with Teach-Assistant
Protection Type	IP65; with Option LPW: IP66; with Option HPW: IP67
Ambience	Standard: temp10°C to +40°C, rel. humidity 30 to 85% not condensing; Options: -40°C or +55°C
Product Temperature	-30°C to +60°C, Option: -40°C to +120°C
Power Supply	Single-Phase 110 - 240 VAC, 50/60 Hz, fuse 10 A (slow), typ. power consumption 20W, max. 60W
Interfaces	RS232, USB, optional Ethernet and WLAN for HACCP- and IFS-documentation
Maintenance	Maintenance-free, sensor calibrates itself automatically and continuously
Diagnosis	Integrated diagnostic software, automatic selftest