

# CASSEL

## METAL SHARK® PH

Pharmaceutical  
Metal Detection System

### 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® PH

Typically, the PH types are used at the outlet of a tablet press and provide highest performance in detecting magnetic and non-magnetic metals. The tablets fall through the metal detector. With the reject flap smallest metal objects are separated out of the goods' stream promptly.

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.



### Product library

The characteristics of 125 different products are stored and recalled here.

### 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.

### IQ, OQ, PQ qualification templates

Cassel supplies the required qualification templates along with the METAL SHARK® PH metal detector.

### Performance validation

The performance validation automatically prompts the operator to test the performance of the Metal Shark at pre-set intervals.

### Infeed and Reject System

Chutes, moulded, for both infeed and reject, several chute aperture sizes available, throughput max. 10000 tablets per minute.  
Solenoid driven stainless steel reject diverter mechanism, mirror polished  
Variable infeed / outfeed height  
Quick demount design for easy cleaning

### Support Stand

Stainless steel support stand, mirror polished  
Mobile through castors and fixed feet  
Height adjustable

Document type:

IQ INSTALLATION QUALIFICATION

OQ OPERATION QUALIFICATION

PQ PERFORMANCE QUALIFICATION

Process / Equipment name:

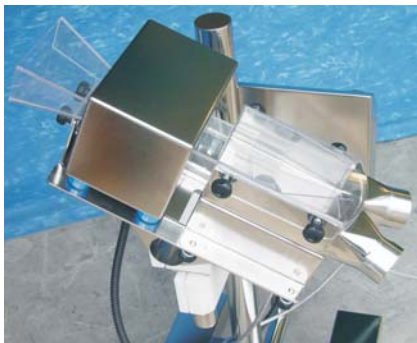
METAL DETECTOR  
METAL SHARK® PH

Unit number: \_\_\_\_\_

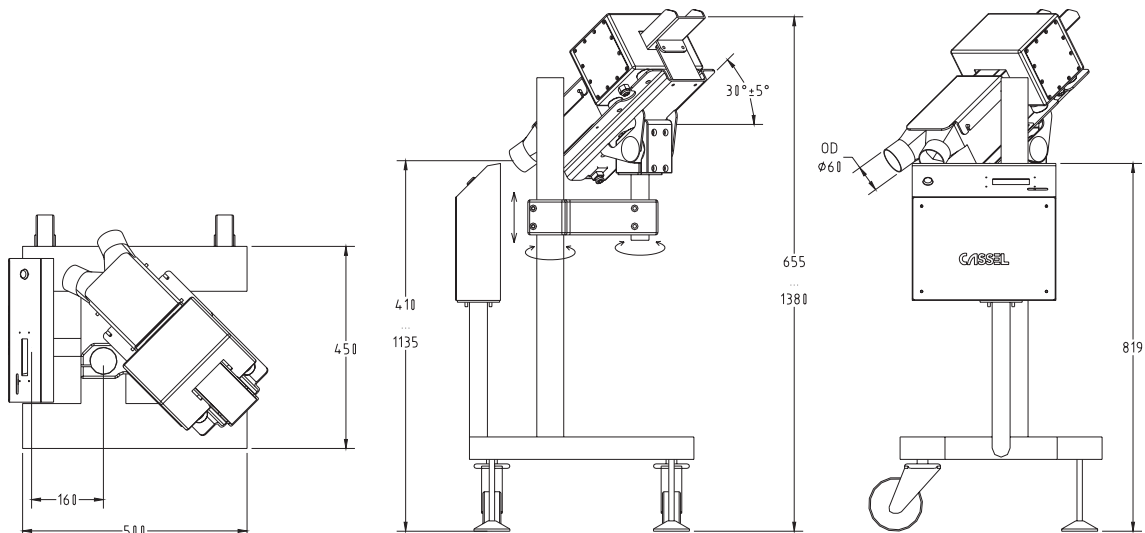
Machine name: \_\_\_\_\_

Template developed by:

Cassel Messtechnik GmbH, Germany



Sensor head and reject



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