CASSEL
INSPECTION

- ◼ Reliably detects metals in E2 boxes with frozen meat

- ◼ Highest sensitivity with 4-quadrant technology plus Multi-Phase and BOOST FACTOR (3D detection)

- ◼ Autocalibration and TeachAssistant for intuitive control and easy installation

- ◼ Maintenance-free due to automatic balance and calibration control

- Maximum detection performance with highest reliability in the entire detection area due to 4-quadrant technology

- Stable against temperature or product changes with 3D detection

- Simple setup with teach assistant

- Storage spaces for up to 250 products

- Easy to use with intuitive and multilingual menus

- 4-level password system, automatic log out after time lapse

- Documentation of all events and metal messages

- IFS5 and HACCP reports available on the display at the touch of a button

- Optional: Data transfer to USB interface or connection to the company network via SHARKNET® software

- Cyclical function monitoring with Performance Validation System (PVS)

- Available as a system solution with additional devices

METAL SHARK BD with HQ Conveyor for meat

Function:

Metal detector METAL SHARK® BD is used free-standing or combined with conveyor belts or chutes. Using 3D detection technology, it detects the smallest magnetic and non-magnetic metal contaminants (iron, stainless steel, aluminium etc.) precisely and reliably even under difficult conditions. The robust, closed stainless steel housing is easy to clean and therefore ideally suited to the food industry.

Scope of Delivery:

- Detection unit BD
- Controller METAL SHARK®
- HQ Conveyor

METAL SHARK BD with HQ Conveyor and Linear Pusher LP

Detection Systems:

METAL SHARK® BD-E2 can be integrated into existing production lines as a customized system solution including conveyor belt, signal unit and ejection unit

Accessories & Extras:

- Versions for hose cleaning (LPW) or cleaning with high-pressure cleaner (HPW) possible
- SHARKNET® connection for automatic documentation according to HACCP, IFS or BRC standard
- Alarm devices (optical/acoustic)
- Performance Verification Certificate (proof of functionality for audits) by CASSEL service technicians, e.g. during commissioning or maintenance

Application:

- monitoring of packed or unpacked meat in E2 boxes
- quality assurance for incoming goods, outgoing goods or during running production

METAL SHARK BD with HQ conveyor for unpacked frozen meat blocks

Specifications:

Electronics	Digital signal processor, noise filter, digital balance control, digital frequency control, PowerDrive circuit
Input	8 freely configurable 24 V DC signals, e.g. for reject confirmation or convyeor belt control
Output	2 potential-free: "Error" and "Metal 8 freely configurable 24 V DC signals, e.g. for optic/acoustic alarm or start conveyor belt
Measuring Method	inductive, multi channel operation, balanced receiver coils
Metal detection	ferrous, non-ferrous (e.g. aluminium or copper) und stainless steel
Product compensation	250 storage spaces, compensation performed automatically, with Teach-Assistant
Enclosure rating	IP65 (IEC 60529) IP66 possible with surcharge LPW-/HPW
Environmetal conditions	standard: -20° C bis +40° C, rel. humidity 30% up to 80% (non condensingd)
Maintenance	maintenance-free, selfcalibrating sensors
Diagnostics	integrated diagnostic software, automatic self-test
Frame	Stainless steel AISI 304 / ISO 1.4301 (CrNi 18/10), profiles closed on all sides, tubular frame of 40x40x2mm and 80x40x2mm, available with adjustable feet or castors
Running height	800 mm ± 100 mm other heights and designs possible
Belt speed	12 -24 m/min (variable speed with variant) others on request
Engine	SEW 0.37 kW
Belt control	Belt control with frequency converter for 230V
Product weight	50 kg
Power supply	220-240 VAC, 1ph, 50-60 Hz
Conformity	CE in standard, BRC possible

3D Detection:

CASSELs unique 4-Quadrant-Technology has evolved to the 3rd dimension. The MultiPhase and BOOST FACTOR technologies add multi-phase measurement and signal amplifying factors to this established technology and thus create 3-dimensional signal models of your products signatures - as unique as a fingerprint.

3D Detection
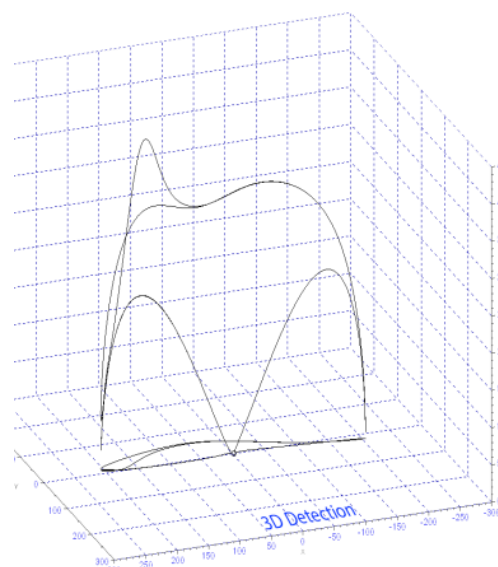
BOOST FACTOR:
Up to 50% more accuracy -SHARK detects stainless steel up to 1 mm smaller compared to conventional detectors.

MultiPhase:
Continuous adjustment to changing conditions for even more stability – SHARK can easily cope with frozen or heated products, changing product orientations or temperatures as well as cooled, heated or humid environments.

Special Designs & Extras:

3D Detection	Additional light barriers and update of the control software (BOOST factor) enable an exact signal evaluation over the detection period of each individual product (MultiPhase).
Multifrequency	Use of 4 different frequencies significantly increases the stability against product variations (density, position, temperature, etc.)
Temperature extension cold	Temperature range extended to -40°C, cold-elastic grouting material, insulation, switch cabinet heating and other measures
Temperature extension hot	Temperature range extended to +55° C, Adaptation of control cabinet, additional thermal insulation, replacement of filter fan, heat exchanger and/or active cooling units
High temperature extension for product	Product temperature up to max. +120°C, with this option, the sensor has protection class IP54
LPW/HPW	Increase of the IP protection class by adapting the sensor seal, installing additional seals and a double housing for the control electronics
SHARKNET®	The SHARKNET® software connects METAL SHARK® metal detectors to a central computer and offers central storage of all operating data as well as batch and alarm documentation for HACCP and IFS conformity.
Twinhead design	Special version for the detection of difficult contaminants: Magnetic chips can, for example, align themselves on the conveyor belt so that they run perfectly parallel to the magnetic field and thus remain undetected. Two magnetic fields offset against each other ensure metal detection even in such cases.

CASSEL quality promise:

As a manufacturer CASSEL is committed to highest standards of quality. For more than ten years our goal has been to ensure the quality of your products. Each year we manufacture and deliver over 1000 metal detection systems to customers in different industries worldwide.

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