

Metal detection for forestry and sawmills



Highlights

- Design optimized for the monitoring of entire timber logs
- Maintenance-free with automatic balance and calibration control
- Sturdy stainless steel design: extra rugged and with short metal-free zone
- Highest sensitivity with 4-quadrant technology
- Intuitive control and easy installation with automatic calibration and TeachAssistant

Features

- 4-Quadrant technology provides maximum detection performance with the highest available reliability in the detection space
- Simple setup with TeachAssistant
- Memory for up to 250 products
- Easy to use with intuitive and multilingual menus
- Password protection with permission management
- Documentation of all events and metal detection alerts
- Optional: data transfer to USB interface or connection to the company network via SHARKNET® software
- Cyclical function monitoring with Performance Validation System (PVS)
- Resilient to adverse environmental conditions such as high and low temperatures



Metal detection for forestry and sawmills



Overview

The METAL SHARK® OCTA was developed specifically for industrial use in forestry and sawmills. Its octagonal shape makes it ideal for monitoring logs for metal contamination caused by screws, nails or tools.

It is typically installed with troughed belt conveyors.

By means of the 4 quadrant technology it detects magnetic and non-magnetic metal contaminations (iron, stainless steel, aluminum etc.) accurately and reliably even in challenging conditions.

Application

- Protection of tools and machines from metal items such as nails or screws
- Monitoring of particularly large products, particularly timber logs
- Monitoring of bulky goods on troughed belt conveyors

Included

- OCTA detection unit (sensor)
- METAL SHARK® control unit in stainless steel housing

Accessories & Extras

- Xenon flashing lights
- Acoustic signal generator (horn)
- SHARKNET® access for perfect documentation and device monitoring from a PC
- Control unit can be mounted separately (e.g. wall mounting)

Industries

- Wood (forestry, sawmills)
- Plastics
- Recycling, reusable material processing
- Paper, cardboard







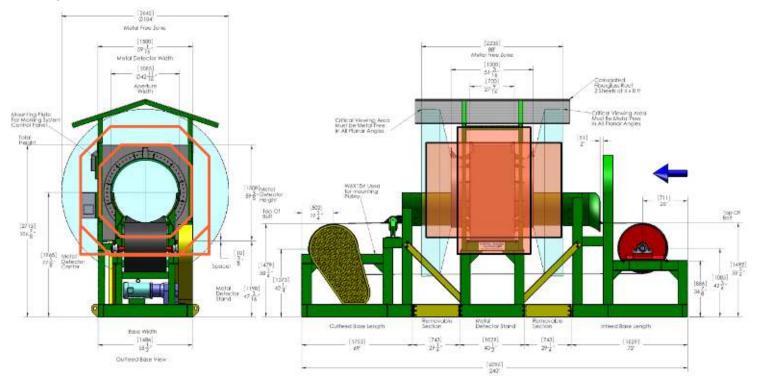
Metal detection for forestry and sawmills



Specifications

Electronics	Digital signal processor, digital frequency generation, digital balance control, automatic calibration, digital noise filters,			
Liectronics	integrated flexible control functions			
Input	2 analog 010 V DC (option: 4-20 mA)			
	8 freely configurable 24 V DC signals, e.g. for rotary encoders, product recognition, buttons			
Output	2 floating: "error" and "metal"			
	8 freely configurable 24 V DC signals			
Measuring method	High-frequency magnetic field, multi-channel operation, balanced receiver coils			
Metal detection	Ferrous, non-ferrous (e.g. tombac, brass, bronze, aluminium, lead, etc.) and stainless steel			
Product compensation	250 memory locations, TeachAssistant			
Enclosure rating	IP54			
Environmental conditions	Standard: -20°C to +40°C / -4°F to 104°F, rel. humidity 20% up to 90%, non-condensing			
	>95% rel. humidity (condensing) with controller casing closed			
Temperature of goods	Up to +70°C / +158°F			
inspected				
Power Supply	Single phase 110-240 V AC +/- 5%, typical consumption 20 W (60 W max.)			
Interface	RS232, LAN (optional, for SHARKNET®), USB (optional)			
Maintenance	Very low maintenance, self-calibrating sensors			
Diagnostics	Integrated diagnostic software, automatic self-test			

Example







Metal detection for forestry and sawmills

Sensitivities

Ø Tunnel (mm)	FE at edges (mm)	FE at center (mm)	FE at center with SPD booster (mm / nuts)
1,300 x 1,300	5	14	10-12
1,400 x 1,400	5	14	10-12
$1,500 \times 1,500$	6	15	11-13
1,600 x 1,600	7	17	13-15
1,700 x 1,700	7	18	13-15
1,800 x 1,800	8	20	M6-M8

Disclaimer: Sensitivities largely depend on ambient conditions as well as on the properties and conditions of the goods to be inspected. The dimensions listed above are provided for general indication only. Please note that these dimensions are not contractually guaranteed.



Optional extras & accessories

Material	Properties
SHARKNET®	The SHARKNET® software connects METAL SHARK® metal detectors with a
	central computer, providing centralized storage of all operating data plus batch and
	alert documentation as well as remote control via a PC.
Super Power	Improves metal detection by -0.5 to -1 mm in industrial environments that do not
Drive (SPD)	meet electromagnetic compatibility standards, optionally with different IP
	protection classes and ATEX zone 22.
Flashing light,	Very bright and eye-catching alarm light, 24 V DC, IP 65, RB 10-100 V, 2 W,
XENON	suitable for mounting on stand or wall mounting
Alarm horn	Alarm transmitter with very loud acoustic signal, 24 V/DC
	suitable for tripod or wall mounting
Flashing light +	Acoustic and visual alarm on stand, stainless steel,
horn on stand	with bright red Xenon flashing light and horn for conveyor mounting



CASSEL Messtechnik GmbH

In der Dehne 10 37127 Dransfeld Germany

Tel.: +49 (0) 5502 91150 **Fax:** +49 (0) 5502 911532 **Email:** info@cassel.de

Website: www.cassel-inspection.com

CASSEL Inspection US

2440 W Corporate Preserve Drive, Ste. 600 Oak Creek, WI 53154

USA

Phone: +1-414-574-4220

Email: us.sales@cassel-inspection.com, us.service@cassel-inspection.com
Website: www.cassel-inspection.com

