

# METAL SHARK<sup>®</sup> COMBI

Metal detector for textile and paper webs



### Features

- Maximum search performance with highest reliability in the entire detection area due to 4quadrant technology
- Simple setup with TeachAssistant
- Memory for up to 250 products
- Easy to use with intuitive and multilingual menus
- 4-level password system, automatic log out after time lapse
- Sensitivity: Detects iron from 0.5 mm and stainless steel from 0.9 mm

# Highlights

- Rotatable single sided sensor adapts perfectly to vertical or inclined product flow, available in widths up to 7 m / 23 ft.
- Overlapping multiple sensor heads allow for operators to identify contaminant position across the web width, potentially saving valuable material.
- Intuitive control and easy installation with autocalibration and Teach Assistant
- Automatic balance and calibration controls make the COMBI system essentially maintenance free.
- Documentation of all events and metal messages
- Optional: Data transfer to USB interface or connection to the company network via SHARKNET® software
- Cyclical function monitoring with Performance Validation System (PVS)
- The detectors design and dimensions will be customized to the production requirements.

## METAL SHARK<sup>®</sup> COMBI Metal detector for textile and paper webs

#### Overview

The METAL SHARK® COMBI is a swiveling flat plate sensor that is typically used over fiberwood/plastic boards or fabric-, nonwoven-, paper- or plastic-webs. It detects the smallest metal particles from 0.5 mm and localizes their position in defined segments across the web.

The METAL SHARK® COMBI is commonly available in widths up to 7.0 m/23 ft. It can also be operated in humid workplaces with ambient temperatures from  $-10^{\circ}$ C/14°F to  $+40^{\circ}$ C/104°F and product temperatures up to  $65^{\circ}$ C/149°F.

#### Included

- Detection unit consisting of a rotatable traverse with flat plate sensors and suspension
- Controller METAL SHARK®, PC with Windows Pro, I5" monitor and keyboard in control cabinet

### Customization

The METAL SHARK® COMBI will be customized exactly to the production requirements

- Freely selectable widths from 2 m /6.5 ft. To 7 m/ 23 ft. And more
- Freely selectable number of detection units
- Individual support construction in adapted height, optionally available with vertically lowerable crossbeam or with lifting arms

### Industries

- Paper
- Textile and fleece
- Wood processing (z.B. particle boards)

### Application

- Monitoring of flat products that are conveyed in webs or plates
- Quality assurance for incoming goods, outgoing goods or during running production
- Detection of broken needles and other metal parts
- Machine protection, e.g. in fleece or plate processing





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## Specifications

Electronics	Digital signal processory digital frequency generation digital balance control supervise calibration digital point fibers
Electronics	Digital signal processor, digital frequency generation, digital balance control, automatic calibration, digital noise filters,
	integrated flexible control functions
Input	24 V DC relay or optocoupler, e.g. for product speed (encoder or analog control signal), reset, metal, error, product
	light barrier, roll change
Output	Potential-free changeover contacts: e.g. error, metal, overtemperature warning, individual metal message per sensor
·	field
Inspection method	High-frequency magnetic field, multi-channel mode, 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	Control unit IP 54, sensors IP 65
Environmental conditions	Control unit -10°C / 14°F to +40°C/104°F, optionally up to +55°C / 131°F
Control unit	Control unit rel. humidity 20% to 90% non-condensing
Environmental conditions	-30°C / -22°F to +90°C / 194°F
sensor	
Temperature of goods	up to 90°C / 194°F
inspected	
Power supply	230V AC +/-5% 50/60Hz 4A (8 A max) oder
	400V AC +/-5% 50/60Hz 4A (10 A max)
Interface	LAN (optional, for SHARKNET®)
Maintenance	Maintenance-free, self-calibrating sensors
Diagnostics	Integrated diagnostic software, automatic self-test

#### Special version & optional extras

SHARKNET®	The SHARKNET® software connects METAL SHARK® metal detectors to a central computer, providing central storage of
	all operating data as well as batch and alert documentation and remote control and remote maintenance via a PC
Fast Power Drive (FPD)	Significantly improves metal detection capability and reliability in industrial environments that do not meet electromagnetic
	compatibility standards.
	Various IP protection classes available, ATEX Zone 22 possible.
Temperature extension	Temperature range extended to $-40^{\circ}$ C / $-40^{\circ}$ F
(cold)	Resin seals remain elastic at very low temperatures. Special insulation, heated enclosure and other features
Temperature extension	Temperature range extended to +55°C / +131°F
(hot)	Adapted enclosure, additional thermal insulation, heat exchanger and/or active cooling units
Flashing light, XENON	Very bright and eye-catching alarm light, 24 V DC, IP 65, RB 10-100 V, 2 W, suitable for mounting on stand or wall
	mounting
Alarm horn	Emits a very loud alarm sound, 24 V DC
	Suitable for mounting on stand or wall mounting
Flashing light + horn on	Acoustic and visual alarm on stand, stainless steel,
stand	with bright red Xenon flashing light and horn for conveyor mounting

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