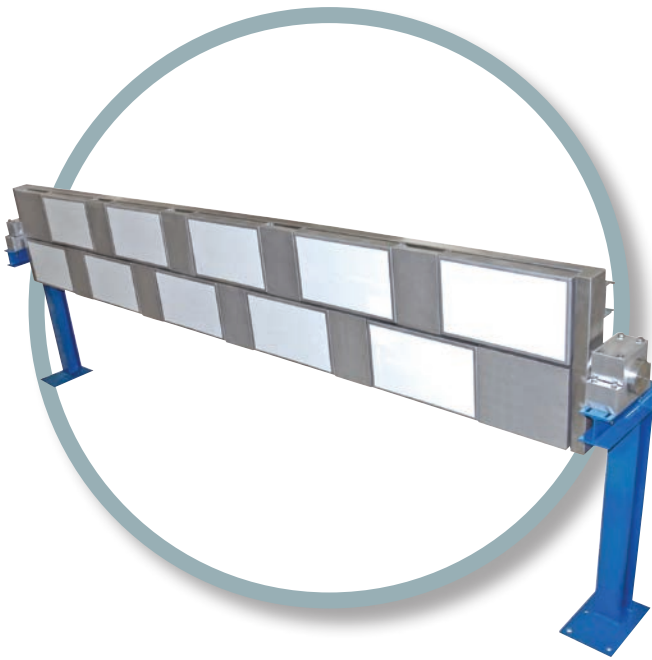
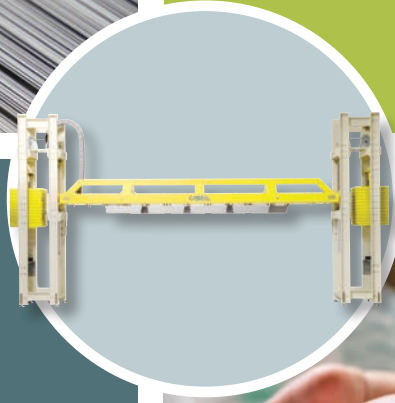


# METAL SHARK® COMBI

Metal Detector for Textile and Paper Webs



## 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 Assist
- Automatic balance and calibration controls make the COMBI system essentially maintenance free

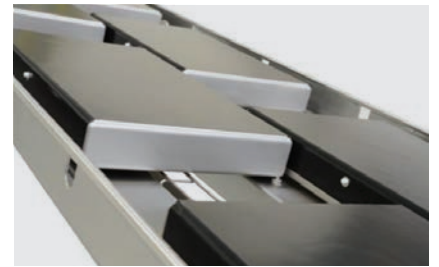
## Features

- Maximum search performance with highest reliability in the entire detection area due to 4-quadrant technology
- Simple setup with Teach Assist
- 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
- 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 detector's design and dimensions will be customized to the production requirements



# METAL SHARK® 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 m / 23 ft. It can also be operated in humid workplaces with ambient temperatures from -10 °C (+14 °F) to +40 °C (+104 °F) and product temperatures up to +65 °C (+149 °F).

## Included

- Detection unit consisting of a rotatable traverse with flat plate sensors and suspension
- Controller METAL SHARK®, PC with Windows Pro, 15" monitor and keyboard in control cabinet

## Customization

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

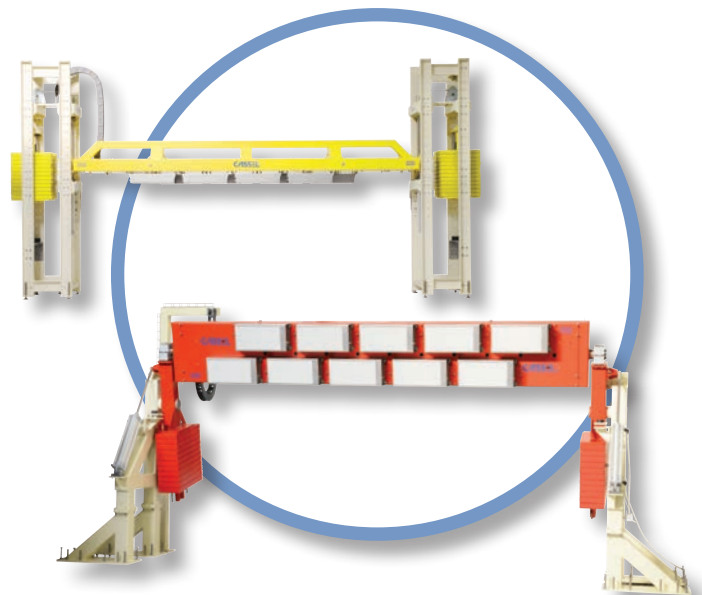
- Freely selectable widths from 2 m / 6.5 ft to 7 m / 23 ft and more
- Freely selectable number of detection units
- Individual support construction in adapted height, optionally available with vertically lowerable cross-beam or with lifting arms

## Industries

- Paper
- Textile and fleece
- Wood processing (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



**CASSEL**  
INSPECTION



# METAL SHARK® COMBI

Metal Detector for Textile and Paper Webs

## Specifications

<b>Electronics</b>	Digital signal processor, digital frequency generation, digital balance control, automatic calibration, digital noise filters, integrated flexible control functions
<b>Input</b>	24V DC relay or optocoupler, e.g. for product speed (encoder or analog control signal), reset, metal, error, product light barrier, roll change
<b>Output</b>	Potential-free changeover contacts: e.g. error, metal, overtemperature warning, individual metal message per sensor field
<b>Inspection Method</b>	High-frequency magnetic field, multi-channel mode, balanced receiver coils
<b>Metal Detection</b>	Ferrous, non-ferrous (e.g. tombac, brass, bronze, aluminium, lead etc.) and stainless steel
<b>Product Compensation</b>	250 memory locations, Teach Assist
<b>Enclosure Rating</b>	Control unit IP 54, sensors IP 65
<b>Environmental Conditions Control Unit</b>	Control unit -10 °C (+14 °F) to +40 °C (+104 °F), optionally up to +55 °C (+131 °F) Control unit rel. humidity 20 % to 90 % non-condensing
<b>Environmental Conditions Sensor</b>	-30 °C (-22 °F) to +90 °C (+194 °F)
<b>Temperature of Goods Inspected</b>	Up to +90 °C (+194 °F)
<b>Power Supply</b>	230V AC ±5 % 50 / 60 Hz 4A (8 A max) oder 400V AC ±5 % 50 / 60 Hz 4A (10 A max)
<b>Interface</b>	LAN (optional, for SHARKNET®)
<b>Maintenance</b>	Maintenance-free, self-calibrating sensors
<b>Diagnostics</b>	Integrated diagnostic software, automatic self-test
<b>Speed Range</b>	8 to 2200 meter per minute

## Special Version & Optional Extras

<b>SHARKNET®</b>	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
<b>Fast Power Drive (FPD)</b>	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
<b>Temperature Extension (Cold)</b>	Temperature range extended to -40 °C (-40 °F) Resin seals remain elastic at very low temperatures. Special insulation, heated enclosure and other features
<b>Temperature Extension (Hot)</b>	Temperature range extended to +55 °C (+131 °F) Adapted enclosure, additional thermal insulation, heat exchanger and / or active cooling units
<b>Flashing Light, XENON</b>	Very bright and eye-catching alarm light, 24V DC, IP 65, RB 10-100V, 2W, suitable for mounting on stand or wall mounting
<b>Alarm Horn</b>	Emits a very loud alarm sound, 24V DC Suitable for mounting on stand or wall mounting
<b>Flashing Light + Horn On Stand</b>	Acoustic and visual alarm on stand, stainless steel, with bright red Xenon flashing light and horn for conveyor mounting