mesutronic
DETECTING WHAT MATTERS



# Metal detection systems

## for the forestry industry

# Reliable, precise and user-friendly

## Metal detectors and separators from Mesutronic

### Why detect foreign bodies?

Despite all safety precautions, the contamination of timber materials with metals is unfortunately a problem in every manufacturing company. The effects are often dramatic if these are not reliably detected and removed from the production chain. Damage to sawing systems or planers, fire hazards or the loss of supplier contracts are often the result of inadequate control systems.

### Why Mesutronic?

For more than 30 years, we have been developing inspection systems with and for companies in the timber industry. These are used for inspecting round timber, beams, residual timber or chips. For decades they have provided reliable, low-maintenance protection for timber processing plants. For all those who need foreign body detection for their production facilities and value "Quality – made in Germany", Mesutronic is your experienced, solution-oriented, internationally active specialist and loyal partner.

We achieve this because everything from development to design and installation, up to service and maintenance is consistently geared towards individual industry and customer needs.



» **Machine protection and quality assurance - reliable and user-friendly.**

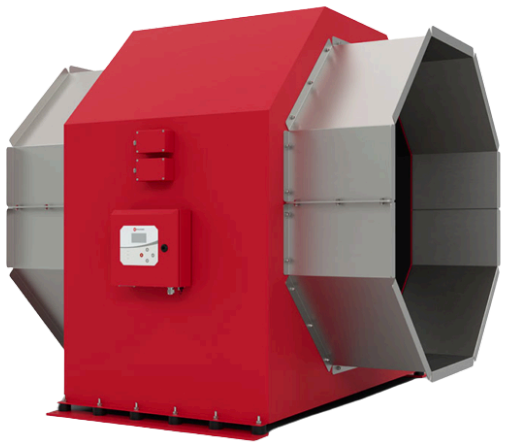
**Manufactured in Bavaria, used throughout the world.** «

**Christian Boxleitner**
**Managing Director**

# Tunnel style metal detection

**In log processing, metal detectors are used to protect downstream equipment such as saws, chippers, and hogs. Metal in processed product can have different origins introduced during the manufacturing process.**

The octagonal **METRON 05 CO** whole log metal detector helps maximize sawmill uptime by detecting metal contaminants before processing. Installed after the debarker for optimum detection performance, its robust stainless steel construction and sun protection make it ideal for outdoor use. Optional shielding extensions minimize electrical interference, while color marking devices pinpoint the exact location of detected metal.





The integration of METRON 05 CO is made even easier by purchasing a **TRANSTRON HL** belt conveyor system. This means that even tree trunks can be reliably examined when using high-speed debarkers.

The **METRON 05 D** divisible detector is ideal for higher deeper burden depths and greater detection accuracies. These systems reliably detect all types of metal, from ferrous to brass to stainless steel, even with large material heights. The divisible search coil allows easy installation in conveyor systems with an existing metal-free zone which varies by aperture size.





The **METRON 05 C** tunnel metal detector is designed to inspect logs before downstream processing equipment, helping protect valuable machinery from metal contamination. Its enclosed rectangular design provides reliable detection, even with large aperture sizes. Optional shielding extensions reduce electromagnetic interference, and the system can also be used to inspect processed wood products.

# Residual wood processing

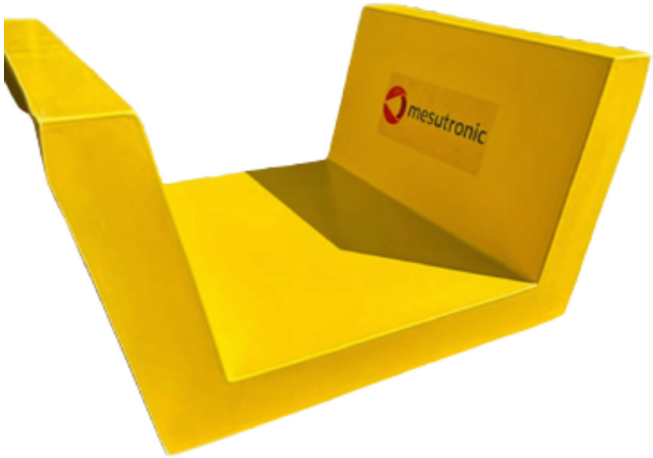
**Chippers and hogs for residual wood and bark are generally very robust. However, metal can wear and damage and may even pose a fire risk. Our systems have ensured reliable mill operation over decades.**



The **METRON 05 VT and METRON 05 ST** are a proven solution for your vibratory and belt conveyor and are ideal for low burden depths.

The **METRON 05 VT and METRON 05 ST** is the evolution of Mesutronic's trusted METRON 05 VT/ST. At only 24" long, the system's unique design allows for easy installation into the conveyor and can also be installed into an existing fiberglass section. The high-quality AMD 05 electronics learn vibrations in the conveyor, thereby achieving high detection accuracy.

With next-generation detection technology and an optimized design, it delivers even greater process reliability while safeguarding saws, chippers and downstream equipment from damaging metal contaminants. The result is maximum uptime and lower operating costs.






Vibratory and belt conveyors with an existing metal-free zone are suitable for the installation of a flat plate metal detector of the **METRON 05 S**.

This system is very easy to install and reliably detects metal up to a distance of about **10" from** the sensing surface.

# Wood chips and shavings

**Pre-shredded woods often need to be re-examined before further processing. For example, smaller metals should be detected in order to protect sensitive systems such as presses for plates or pellets. This is usually done in free fall, but examination in a pneumatic conveyor or on a conveyor belt is also possible.**

The **QUICKTRON 05 A** is used for the investigation of chips and wood chips in free fall. Depending on the type of application, in addition to round diameters of up to 400 mm, angular passages, for example of 1050 × 350 mm, are also available. The system reliably detects and separates even fine metal particles. The maximum grain size of the products should not exceed 10 mm.

The **QUICKTRON 05 B** metal separator can also be used to examine long-fibred or bulky wooden parts.

The downwardly directed separation flap prevents the jamming of problematic parts and ensures the reliable separation of metals.

Chip cakes in panel material production or veneer woods can be investigated using both tunnel and plate metal detectors. As the solution should always be tailored to the application, consultation with our application department is essential.



In order to reduce introduction barriers and ensure smooth, long-term operation, we recommend our **training programmes**. We offer a wide range of solutions, from simple operator training included with commissioning to multi-day events on our premises. As with our physical products, we strive to make training as efficient and economical as possible for our customers while still in the coordination phase. The content is recommended by us and then individually adapted to your needs according to the number of participants, their educational background or previous experience.



We are also happy to offer regular training courses at a reduced rate in connection with **maintenance contracts**. These courses are also designed to be customer-oriented. Frequently selected options include, for example, annual on-site maintenance or reduced prices for spare parts. It is also possible to flexibly add or remove devices from the scope of the contract.

Options for maintenance contracts and training in our systems are usually also available for indirect customers of our local partners or OEMs.



The cornerstone of our **after-sales service** is our motivated, trained and customer-oriented service staff. Our promise of "detecting what matters" includes accessibility without compromise and without additional costs, 24 hours a day, 365 days a year. This is supplemented by our cost-effective board exchange programme with reprocessed electronic components as well as the possibility to repair every system ever sold to the market.

# Customer-specific projects

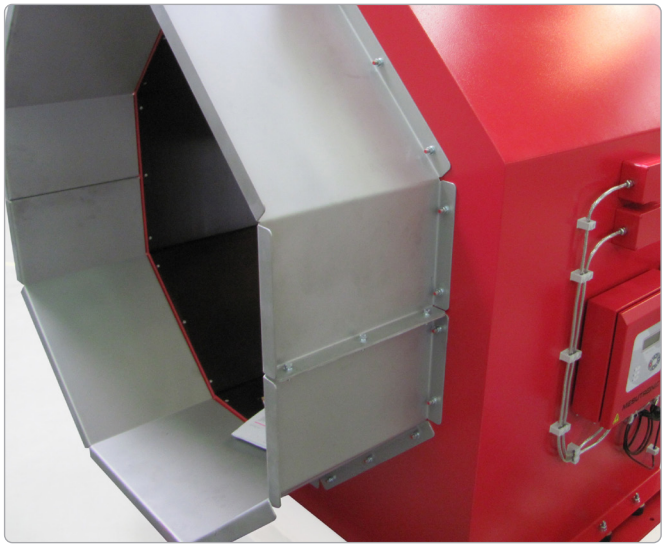
Special challenges may arise in particular when retrofitting inspection systems into an existing production environment. The development of solutions for these tasks is one of the core competencies of Mesutronic GmbH. The ways shown range from simple consultation on the deployment of a standard solution in an unusual way, through smaller and larger modifications, to the complete, customised customer system.

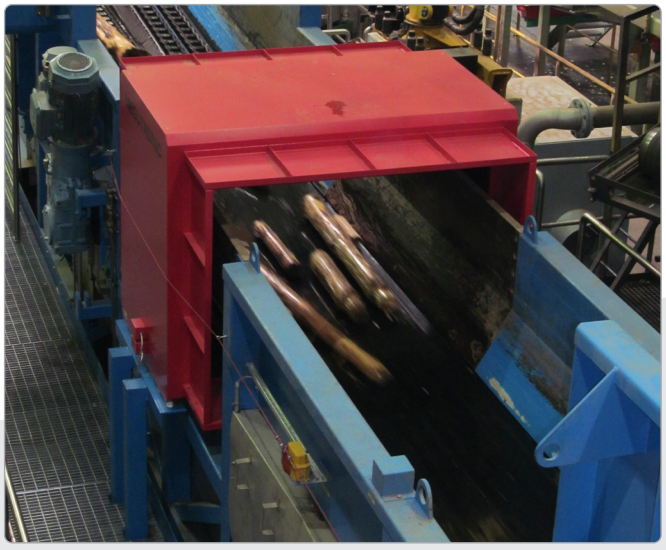
We focus on the permanent, reliable and economically optimal fulfilment of your requirements. This is made possible by our company's competent team of employees, who are trained in all relevant areas from sales to application, mechanical and electronic development, up to production and after-sales. They are supported by modern work equipment and a process world embedded in ISO 9001.

We make projects, which we see as a permanent dialogue, transparent for our customers at all times.

The way we see it, our work is not finished when products are delivered, but when production is again functioning smoothly after conversion.







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