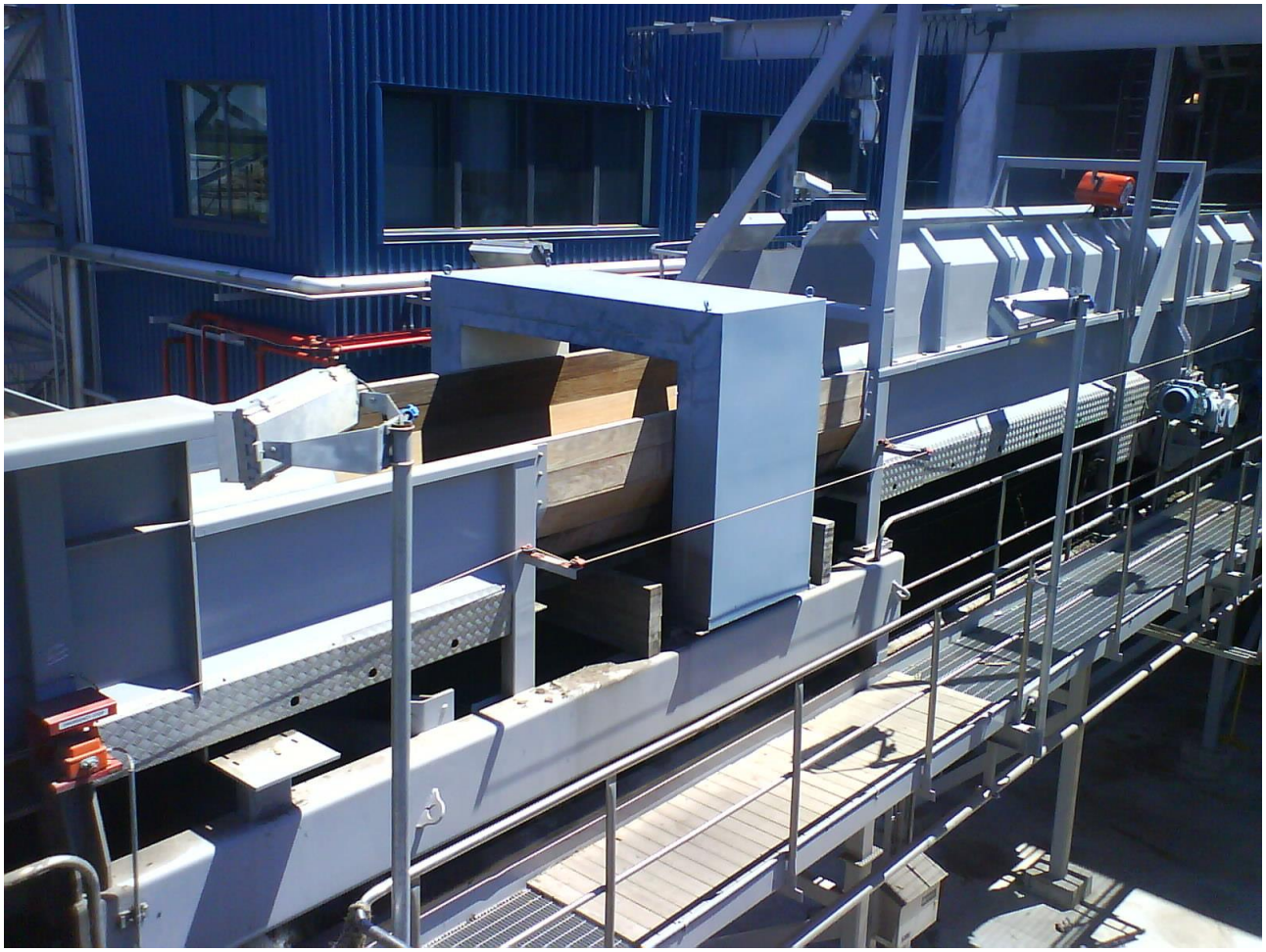
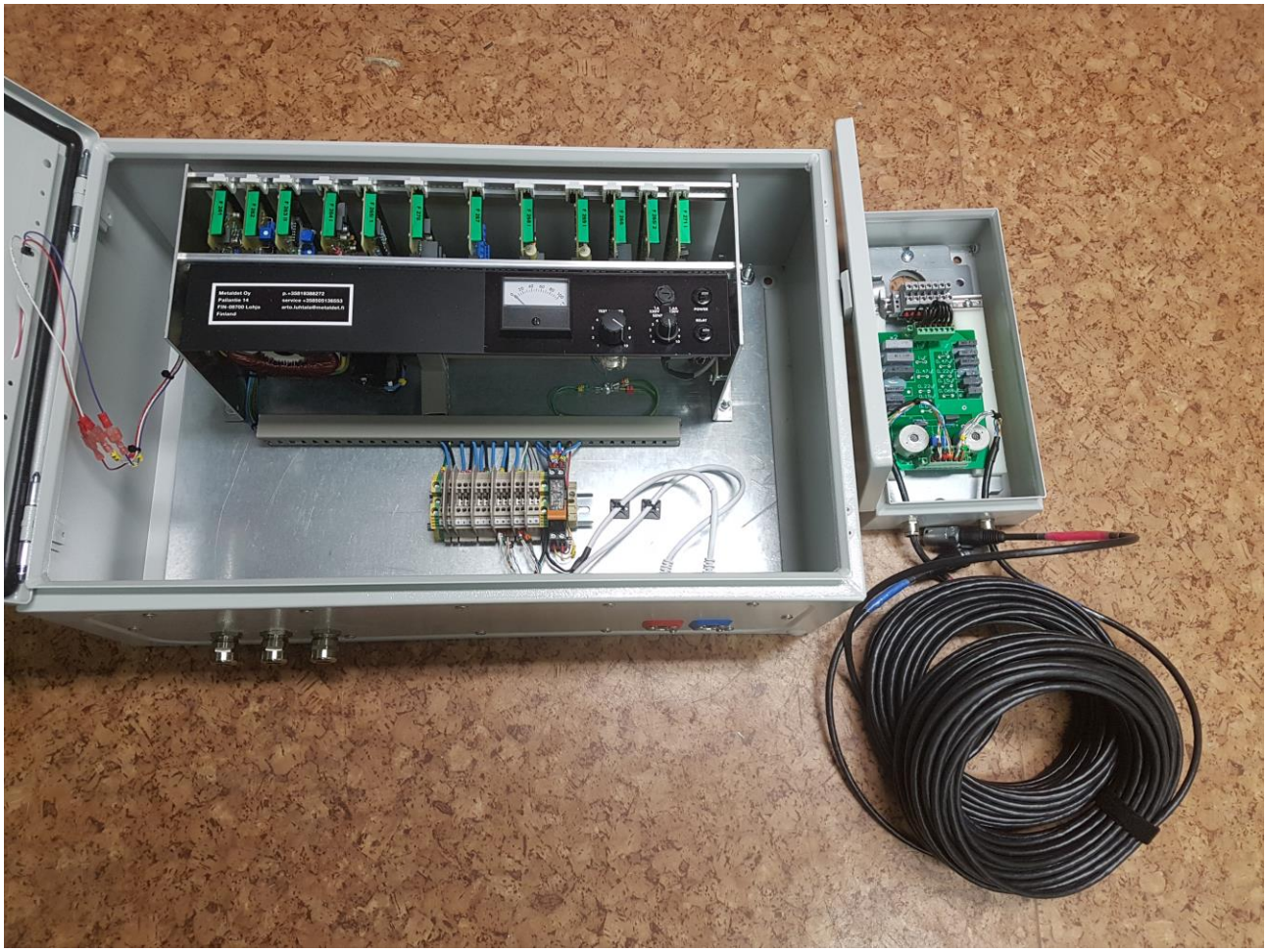


METAL DETECTOR MD500

MD500 METAL DETECTOR

MD500 metal detector can be used in any branch of industry where tramp metal has be detected and removed from raw materials or ready products. The MD500 technique is based on over 45 years experience of metal detectors.

Basic unit DB1



Here are some applications of the MD500:

- **wood processing industry**
- **sawmills**
- **textile industry**
- **chemical industry**
- **stone crushing plants**
- **power stations**
- **tobacco industry**
- **plastic industry**

MD500 METAL DETECTOR

The MD500 detects all metals, whether magnetic or not. This includes nails, bolts, screws, chips of metal, bottle caps etc. A metal detector is indispensable if you have expensive machinery or products to be protected from damage and costly breakdowns. The MD500 is fully automatic and easy to use.

The standart components of a complete MD500 are

- **a basic unit DB1**
- **a detector coil, which can be plate, rectangular, hexaconal or ring in shape**

In the basic unit DB1 there is green standart led and red detection led. When a metal object is detected, a control relay in the basic unit also operates. The relay can be connected to control an alarm bell or a hooter, a conveyor motor circuit, a rejector, a marking device etc. After detecting a metal object, the detector becomes operative again either automatically or by a reset button. Its sensitivity can be adjusted so that it only detects metal objects above a given size.

Design

In manufacturing of the MD500 has been used components of a high quality only. This ensures reliability and efficiency under the most extreme environmental conditions. Special attention has been paid to resist extreme temperatures. The detector can be used outdoors during most severe weather. Its reliability is increased by watertight aluminium casing, into which the cables pass through sealed parts. The MD500 has been thump and vibration tested according to international standards.

MD500 METAL DETECTOR

Detector coils

Several models and sizes are available according to needs:

- **plate coils**
- **rectangular coils**
- **ring coils**
- **hexaconal coils**
- **custom- designed coils**

A screened hexaconal coil DH80w

The design, dimensions, metal-free zones required and rated sensitivity of each model are shown in separate brochures. The screened aluminium construction of the coil effectively reduces the metal-free zones required and absorbs environmental interferences.

For added stability the detector coil includes an automatic compensation circuit which maintains accurate tuning despite variations of temperature and huminity. A stabilized power supply prevents disturbances caused by voltage fluctuation.

METAL DETECTOR MD500

2 pcs Screened plate coils DPT-serie mounted on pulpbale line

Maintenance

The entire device is extremely easy to service because all the components are readily accessible. To facilitate maintenance, the electronic circuits are divided between several plug-in units connected to the mounting chassis by high quality connectors. The plug-in units include monitoring circuits connected to a meter on front panel. The monitoring point required can be selected by means of a rotary switch. Any defective plug-in unit revealed can be replaced.

METAL DETECTOR MD500

Screened rectanqular coil DQ180120 before chipper

METAL DETECTOR MD500 TECHNICAL DATA

Basic Unit DB1

- power supply	**230/120VAC +- 15%, 50/60Hz, 60VA**
- operating temperature	**-40 C...+60 C**
-control relay	
contacts	**DPDT**
contact rating	**230VAC/4A, 120VAC/7A**
- cable ports	**M20 IP68 EN 60529/10.91**
- casing	**Rittal AE EMC, RAL 7032 UL,CSA,TÜV, Norske Veritas, Loyds Register of Shipping, VDE**
- class of protection	**IP55 EN 60529/10,91**
- outline dimensions	**600 x 300 x 210 mm**
- weight	**20 kg**
- indicator leds	**2 x 28-30 V leds**
- connection to the basic unit	**KJAAM 2 x (2+1) x 0,5mm2 MMJ 2x 1,5mm2**
-alternative	**etherCON cables with connectors**
- max. connecting distance (coil/DB1 unit)	**100m**

METAL DETECTOR MD500

Detector coils

- dimensions, metal-free zones and rated sensitivity according separate drawings.

- cables		**2x shielded KJAAM 2 x (2+1) x 0,5mm2 max.100m**
	or	**etherCON cables with connectors**

When ordering

Please specify the following

- **material and object to be scanned**
- **contruction and speed of the conveyor and width of the belt**
- **sensitivity required; minimum dimensions of objects to be detected**
- **power supply**

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