

ERIEZ METALARM

# 3000-3500 Series Metal Detectors



**The Eriez Metalarm range of Metal Detectors is in operation around the world protecting a wide range of machinery from damage by metal.**

## Applications

- Wood processing
- Plastics, rubber and packaging
- Quarrying and mining
- Minerals
- Textiles and clothing
- Glass
- Recycling
- Food
- Paper / Pulp

## Features

- Protects all types of machinery
- Detects all types of metals
- Easy to fit to belt and vibratory conveyors
- Signal monitoring and self-checking facility
- Audible and visual alarms (optional)
- Fully compliant with 'CE' EMC regulations. Also CSA compliant
- A range of control unit models and a wide selection of search coils mean a solution to almost any metal detection problem
- Custom made sensor coils to suit individual conveyor systems and optimise sensitivity



## Underbelt Search Coil - Model TR

The sensor is designed to match the conveyor belt profile determined by idler sets. Burden heights up to 300mm when locating typical tramp metal, such as bucket teeth, large nuts, bolts, etc.

A specialised series of coils is available for where idler spacing is unusually close.



## PL Plate Coil

For flat conveyor belts and/or mobile crusher applications.

## SF Plate Coil

For applications where there is a large amount of surrounding metal and/or a high level of electrical interference.

The unit replaces a section of the base conveyor over a length equal to the width of the conveyor.





### **Bridge Coil Model BR**

Transmitter/ Receiver Mode

Can be adjusted to ignore smaller pieces of metal. Suitable for detecting metal contamination in heavily mineralised materials.

### **Bridge Coil Model BR-10**

For applications with aperture heights up to 1000mm or more requiring high sensitivity.

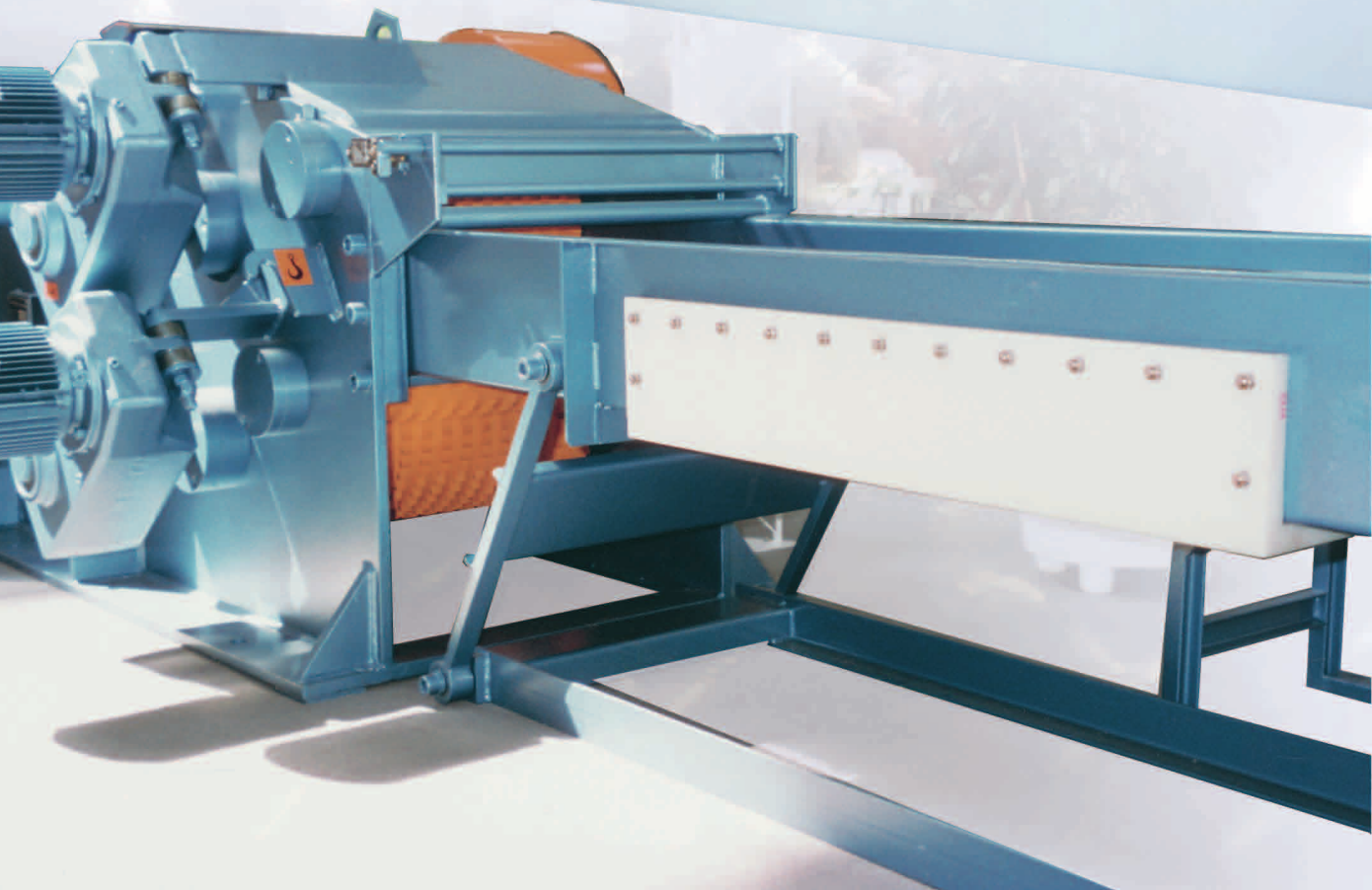
### **BR Swing Top Coil**

The BR Swing Top Coil features a suspended top for applications where unusually high burdens can arise.

The swing top coil is manufactured in high strength, lightweight fibreglass, lined with a stainless steel angle to protect the search coil from direct impact. This search coil is recommended for use where burden heights are variable.

### **Vibratory Trough Coil - Model VC**

Fitted to the base of vibratory conveyors or into the base of 'U' section conveyors.





## Control Unit Specifications

All the Metalarm Control Units employ Eriez's proven 'Pulse Induction' technology circuitry and are mounted on a single printed circuit board to give high reliability and enable easy access for servicing.

All controls other than the front door detect/reset button and power indicator are pcb mounted for the same reason.

All optional functions are switchable for ease of setting up and plug in connectors are used for all connections and ease of installation and servicing.

**Eriez** manufactures a wide range of search coils for use with the 3000/3500 Series control units which can be fitted to

- virtually any type of conveyor
- in ducts, slides, etc

All coils are manufactured in High Density Polyethylene and are fully screened to comply with EU 'EMC' regulations.

## Sensitivity

Sensitivity is determined by the adjustment of the electronics and is constrained by the width of the search coil, the height of the product and the type and size of the metal being detected.

Eriez can advise on sensitivity figures if required.

## Types of Metalarm Control Unit

MA 3000	Standard
MA 3500	High Power
QM 3000	Housed in stainless steel cabinet with integral anti-condensation heater
QM 3500	As above but fitted with the 3500 high power electronics
QM2 3000	This is as per the standard QM but has the capability to be used with metal belt clips
QM2 3500	As per QM2 3000 but fitted with the 3500 high power electronics

QM - Quarrymaster range.

## Mechanical

Housing	IP66 Steel paint finish RAL 7032 IP66 Stainless Steel (Quarrymaster Models)
Dimensions	400 x 300 x 150mm
Weight	10kg
Mounting	4 Corner - Wall mounting

## Electronics

115 or 230V AC, 50 or 60Hz single phase supply

24V DC (optional on all units)

Current consumption 0.5 Amp at 230V,  
1.0Amp at 115V

Output relay 4 changeover relay contacts rated 5 Amp at 30V DC or 250V AC

'Detect' and 'Power On' indicators as well as a 10 segment LED signal display supplied as standard.

## Interconnection Cables

The coil has a plug in connection and is linked to the control unit by coaxial cable.

Maximum cable length is 20metres.

Cable type Coaxial type URM 76 RG58

Standard length coils  
3 metres  
5 metres  
10 metres  
20 metres

## Optional Extras

- Exterior alarms (siren/beacon)
- Bag dropper
- Belt clip detector (QM2 models)
- Spymet Metal Locator Indicator
- Single and dual delay timers
- Coast counter
- 4 to 20 mA output
- Inkjet marker
- Hi-Pile Detector



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For advice on individual applications, contact Eriez engineers at address left.