

MODULOC

Control Systems



SERIES 370 PULSE INDUCTION INDUSTRIAL METAL DETECTOR

BELT DETECTOR FOR DETECTION TRAMP METAL ON BULK CONVEYORS

- **Mounts under-the-belt on the existing conveyor framework**
- **Not effected by changes in the wetness of the product**
- **Detects drill bits, digger tooth and similar tramp metal**
 - **High Burden Belts of all widths accommodated**
 - **Detects non ferrous and non-magnetic metal**

The Series 370 Belt Metal Detector is designed to protect bulk conveyor belts and downstream crushers operating by generating a pulsed flux via a profiled Coil mounted below the belt and monitoring its rate of collapse when the tramp metal in the material passes overhead. Even tramp metal on profiled belts with high burden material is detected by the underbelt Detector Coil.

All types of tramp metal are detected as the Series 370 Industrial Metal Detector detects ferrous, non-ferrous and the non-magnetic metal that magnetic extractors are unable to remove. Provides high sensitivity detection of small or large tramp metal regardless of variations in the bulk material nature and wetness. Ideal Metal Detectors for installing after suspended magnets to detect the smaller ferrous metal as well as the non-ferrous and non-magnetic tramp metal these magnets cannot detect.

The Detector coil is inserted below the belt and mounted on the existing conveyor framework. It is constructed from thick Polypropylene panels constructed and supported to match the conveyor belt profile and supporting framework. Changes in wetness of the bulk material do not influence operating range and sensitivity.

Detector coils provided in various belt widths with adjustment for belt profile. Various marking systems are available for identifying the tramp metal and it easy removal. Clip detectors allow metallic clips splices on vulcanized belts to be accommodated.

The economic low cost solution for Belt Metal Detector for detection of Tramp Metal on the bulk conveyor or saw table



Detector coil on Bulk Conveyor



Standard Controller



Applications:

Protecting downstream equipment
Crushers and Granulators on Bulk Conveyors and saws in Saw Mills

Typical Users:

Quarries - Mines - Steel plants - Saw Mills

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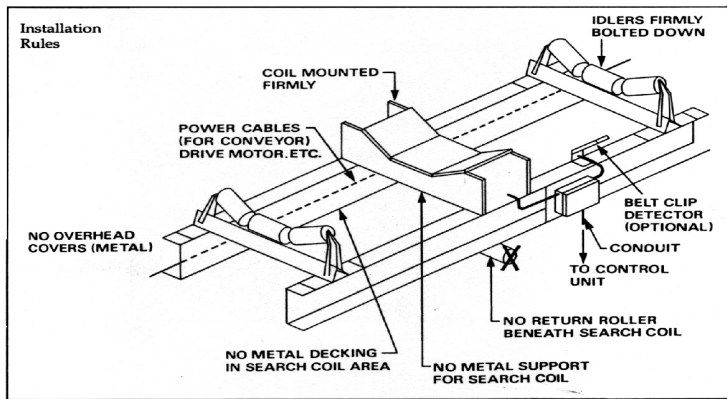
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Profiled Bulk Conveyor Detector



Detector Controller



BULK CONVEYOR DETECTOR COIL CONFIGURATION

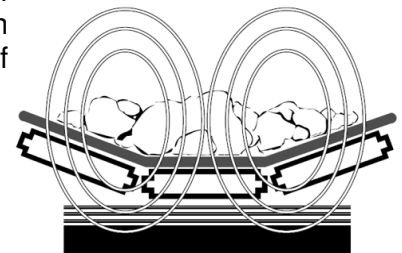
The Detector Coil configuration is constructed according to the width and shape of the bulk conveyor to accommodate client's specific requirements.

The coil is normally mounted into the conveyor metal framework between the belts supporting rollers. Some metal shielding may be required at times where roller close. Metal side guides and metal roofing may need replacing by non-metallic material. The coil is manufactured from thick polypropylene panels and can be delivered in flat pack form for the client to assemble on site.

PERFORMANCE GUIDELINES

The size of contaminate detected is a factor of coil width and the height of the metal contaminate above the coil. Quotations are put forward which specify the expected sensitivity according to the amount and height of bulk material on the conveyor or the width of the table in Saw Mill.

Typical detects a 10-20 mm piece of Tramp Metal on Bulk Conveyors and a 10 mm long nail on the Saw Table



SERIES 370 CONTROLLER SPECIFICATIONS

Housing:	Dual Glass fibre reinforced plastic IP65 sealed Enclosures secured to single mounting plate. One for power supply and other for the Amplifier. Can be enclosed within a secondary Stainless enclosure where required.	Indicators:	Power and Function Indicator Signal shift monitoring meter
Electrical:	110 or 240 50Hz supply with 5 Amp 30VDC/250VAC c/o relay output	Output relays:	Detection alarm Relay
Switches/	On/Off and Reset button	Coil cable:	Low-loss UR70 or OR76 coaxial. Length - 5 mtrs standard (Extends 30 mtrs)
Adjusters:	Zero and Gain adjustment		Coaxial cable can be extended up to 30 meters

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We reserve the right to alter specifications without prior notice. Specifications without tolerances are typical values.

Your Local Sales Representative:



Bulletin MC-S300-01-12
January 2012