# METCORR 117C

Industrial metal detector for mining operations, quarries and facilities with conveyor material.

# Reliable

**Excellent Performance** 

Minimal Maintenance

Rugged Structure for Harsh Conditions

Metcorr 117C is a metal detector, which is able to detect ferrous and non-ferrous metal objects. It is suited for mines, quarries and other industrial facilities, where unwanted metal objects in conveyed material would cause damage or excessive wear on process equipment, e.g. crushers.

Metcorr 117C comprises of one electronics set, one coil system with interconnecting cables and an optional coil mounting set. The coil system comprises of two identical coil elements, which are available in five different sizes. The material, which is to be screened for tramp metal, travels on the conveyor belt between the coils. As the coils in Metcorr 117C are identical, they are also interchangable, which enables a quick and cost-effective repair. However, Metcorr 117C is known to be an extremely reliable metal detector that is practically maintenance free. Metcorr 117C has customers that have used it for decades without interruptions.

The two channel method, used in Metcorr 117C helps reliably detect rod and bar shaped metal objects, and can be used on steel corded belts. Unlike many other metal detectors, Metcorr 117C does not cause false alarms when used on metal reinforced belts. Metcorr 117C can detect metal in any orientation on the belt and has excellent immunity to vibration.

Metcorr 117C is easy and quick to install. When needed it can be mounted in a vertical position.

## Other Industrial and Mining Products

Satmagan analyzer for fast and accurate measurement of the magnetite content in a sample.

## About Rapiscan Systems

Rapiscan Systems designs, manufactures and markets security and inspection systems worldwide. The company is a wholly-owned subsidiary of a Nasdaq-listed OSI Systems, Inc. and headquartered in Hawthorne, California. It has additional offices and manufacturing in Canada, Finland, India, Malaysia, Singapore, United Kingdom and the United States. For more information on Rapiscan Systems, please visit www.rapiscansystems.com.



### **Features and Options**

Reset Switch, Ready and Alarm Lamps

#### Coils

The rugged coil systems comprises of two electrically and physically identical coil sets, of which one operates as a receiver and the other as a transmitter. The coil windings are molded in a fibre glass reinforced enclosure with rubber edging.

Coil Mounting Set (Optional) For the protection of the upper coil against damage due to overburden on the conveyor. Materials are steel and fiberglass reinforced plastic, impact bar cushioned with rubber.

Dye Marker (*Optional*) Marks the area with dye where tramp metal is detected.

Splice Detector *(Optional)* Inhibits detection for a short period to prevent false alarms due to metal splices on the belt.

Applications Mines

- Quarries
- Recycling Plants
- Industrial Facilities



# METCORR 117C

Operating Ambient Temperature -35 °C to +55 °C continuously

#### Operating Humidity Up to 100%

## Power Supply

115V ± 10%/230V ± 8%, 45 Hz to 65 Hz, Consumption: 60 VA Max

### **Degree of Protection**

Spray water proof, dust tight IP 55 (door closed) and IP 22 (door opened) as per IEC 529 (NEMA 4)

Mounting

Four corner wall mounting

Type of Output Relay Socket mounted with 11 pin plug, coil voltage 110 (120) V DC

# Alarm Relay Contact

Contact arrangements DPDT, Contact ratings 240V-6A-AC, 120V-10A-AC

# Alarm Reset

Automatic or manual reset.

#### Interconnection Cable (from junction box to electronics set) Standard cable length supplied 10m.

Maximum recommended length 30m.

Coils Selection Guide Type of Angle Actual width WA of screened area as function of troughing angle and nominal width WN. WN in mm conveyor deg. 1000 1200 1400 1600 1800 650 800 2000 2200 2400 No side wall or 0 650 800 1000 1200 1400 1600 1800 2000 2200 2400 untroughed 624 760 960 1152 1344 1728 1920 2112 2304 20 1536 27,5 605 744 930 1116 1302 1488 1674 1860 2046 2232 Troughed belt 1068 1780 35 578 712 890 1246 1424 1600 1958 2136 45 996 1328 1328 1494 1660 1926 1992 540 664 830 800 mm 1200 mm 1600 mm 2000 mm Maximum W<sub>4</sub> Suitable coil size 08 12 16 20 Coil type Size 08 Size 12 Size 16 Size 20 designation Typical gap between 270 mm 400 mm 550 mm 750 mm coils

## Tests

Vibration and bump as per IEC 68-2-6

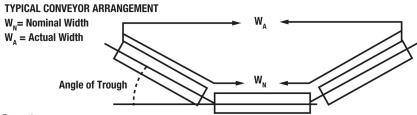
### Net Weight

Electronics: 26 kg

Coils					
Coil size	08	12	16	20	26
Net weight/ coil (kg)	5	7	10	12	18

CE Compliance Yes

Tipping Support for Upper Coil Bas Heterton Coils



Example:

When a belt with a Nominal Width ( $W_N$ ) of 1800mm is troughed at an angle of 30°, then the actual width  $W_A$  is in excess of 1600mm, and thus, coil size 20 is suitable. If coil 16 is selected, the sensitivity near the edges of the belt is somewhat impaired.

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**ONE COMPANY - TOTAL SECURITY** 

www.rapiscansystems.com

## SALES OFFICE

Rapiscan Systems 16 Rocklea Drive Port Melbourne, Victoria, 3207 AUSTRALIA Tel: +61 3 9929 4600 Fax: +61 3 9929 4655

#### EMAIL

industrial@rapiscansystems.com

#### WEB www.rapiscansystems.com



Rapiscan Systems is ISO 9001:2008 Certified