



METAL DETECTORS

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TRAMP METAL DETECTOR

SMART-100

RELIABLE - SUPERIOR PERFORMANCE



*Typical installation with spray type Marking Device
– crusher protection*

Basic features:

- Detects magnetic & non-magnetic metals
- Ignores conductive & magnetic ores
- Noise reduction
- Swing away antenna
- Microprocessor electronics
- Self circuit test
- Optional: two types of marking devices, steel clip detector, etc.

SMART-100 tramp metal detector is designed to operate in very wide and difficult range of applications. It can detect MAGNETIC & NON-MAGNETIC metals while ignoring VERY CONDUCTIVE & EVEN MAGNETIC MATERIALS. It is even compatible with steel corded belts as well as the belts where steel clips are used for splicing. Antenna search assembly is protected from overburden by SWING AWAY ANTENA.

SPECIFICATIONS

ENCLOSURE IP	DUAL, IP65	OUTPUTS	DIRECT, TIMED & FAULT (POTENTIAL FREE -SPDT, 250Vac @ 3A)
POWER SUPPLY	100/240Vac ($\pm 10\%$), 50/60 Hz	SENSITIVITY DRIFT	LESS THEN 10%
OPERAT. LOAD	35W	DUST & HUMIDITY	NO RESTRICTIONS
MAX. LOAD	990W	OPERAT. TEMP.	-10°C TO +50°C

More information at – www.pjtech.co.za

METAL DETECTOR COMPONENTS

Electronics



*Control Unit
in Protection Enclosure*

- Universal Power Supply – 100 to 240Vac, 50/60Hz
- Microprocessor Based
- Membrane Keypad with LCD Display (2 line, 32 characters)
- Reset Button
- Indicating LEDs: Metal, Fault
- Other:
Bar Graph Display, Multilanguage Available, Remote Operation Capability, Three Level Password Protection, Event Log, EEPROM Stored Parameters, Self-Test Circuit with Fault Alarm, Noise Reduction



*Control Unit
Inside Protection Enclosure*

Search Antenna Frame Assembly



Search Antenna Frame Assembly

The transmitter and receiver antennas are manufactured to meet each customer's requirements. Both antennas are encased in impact resistant, weatherproof fibreglass. The support frame is comprised of extruded fibreglass and stainless steel attachment feet. The upper antenna swings away to protect from large overburdens. Both antennas are adjustable in height. The antennas and frame are painted with two coats of enamel Electrical Orange. Only stainless steel bolts nuts and washers are used for long lasting effect.

Marking Device



*Pump with Accumulator
& 50L Colourant Tank*

Pressure dye spray system marks the location of tramp metal on a conveyor. It consist of a 50 litres LDPE tank on powder coated frame, enclosure panel with pressure pump, accumulator and pressure gauge, solenoid spray valve, interconnecting hoses and adjustable spray frame. The marking device marks the original piece of metal which trips the detector.



Adjustable Spray Arm

Clip Detector



Clip Detector

Allows the use of metal detector on conveyor belt using metal splices/joints. The clip detector has attenuation control which allows the clips to pass while still detecting substantial pieces of tramp metal in the clip zone