

STEARNS VERSATILE, SENSITIVE APERTURE-TYPE METAL DETECTORS

Stearns Metal Detectors are ideal for use in numerous industrial and manufacturing applications including: aggregate, coal, food, pharmaceutical, rubber, textiles, tobacco and wood/pulp processing.

Mount our metal detectors in any position and change aperture size anytime. Stearns inspection heads can be mounted in any position, even at an angle on a steel frame or other support, without loss of sensitivity. Our unique spacer blocks separating upper and lower plates permit you to change aperture opening size to accommodate various product sizes or changes in application. Over 350 size variations meet any inspection need.

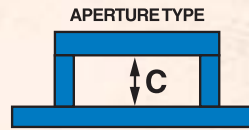
Heads are solid 1-1/2" thick, corrosion-resistant aluminum plate construction. Larger units are 2" and 2-1/2" thick aluminum plate. All inspection heads are of waterproof construction for sanitary cleaning. Temperature and humidity have little or no effect on efficiency.

STEARNS SOLID STATE DESIGN GUARANTEES RELIABLE PERFORMANCE AND HIGH SENSITIVITY

Presence of a metal particle in material conveyed through the inspection aperture causes distortion of the electromagnetic field induced by the lower transmitting head to the upper receiving head. This signal change is amplified in the control cabinet to activate any function:

1. An audible and/or visual warning device
2. Automatic rejection equipment
3. A marking device
4. Shut down equipment operation

Everything for calibrating or monitoring the detector is built into the NEMA 4 control cabinet. Once calibrated, with its digital meters, the detector needs no further adjustment. Non-technical personnel can verify proper unit operation. These stainless steel cabinets utilize plug-in printed circuits for maximum stability and are replaceable in seconds. Self-compensating circuitry automatically adjusts for normal temperature fluctuations.



DIMENSIONAL DATA

For dimensional data on inspection heads and control cabinets for all Stearns metal detectors, contact a field sales representative, or Ohio Magnetics, Inc. at **800/486-6446** for the required specification information. Standard NEMA 4 Control Cabinet with standard built-in digital display meters are outlined on Specification Sheet 110-C-1a.



Inclined conveyor system with metal detector for monitoring a bulk bagged product, including bell alarm with belt stop reject system.

ELECTRICAL SPECIFICATIONS:

Input Requirements

100 or 220 volts AC (specify voltage desired)
50/60 Hz, Single phase. Approx. 35 watts

Indicator Lamps

1. Green – Indicates ready condition of detector in normal operation.
2. Red – Indicated upon detection of metal.

Protective Provisions

1. Amber Lamp – Indicates when proper polarity input voltage is being applied to the equipment and that the unit is properly grounded.
2. Input voltage is fused for overload protection.

Control Relays

The detectors have a built-in control relay – A S.P.D.T. design with the following:

- 1-Set of Normally Open Circuits
- 1-Set of Normally Closed Circuits

Contacts are rated at 10 AMPS and are for pilot duty only. Power must be applied to these contacts through the provisions of a built-in terminal block in the unit for operating reject devices, external alarms, or equipment shut down upon detection of metal.