MODULOC®

Control Systems

SERIES 310 ENHANCED RANGE PULSE INDUCTION METAL DETECTOR

FOR DETECTING INDIVIDUAL BARS ACROSS WIDE ROLLER TABLES

- **Mounts in confined space close to rollers or in steel enclosure**
- **Glass fibre coil withstands bar at 300ºC passing over it**
- **Detects small bar and section at 120 mm range regardless of size**
- **Narrow profiled coil built-to-order of up to 2 mtrs length**
- **PTFE and stainless loop Coils for high temperature use**
- **Controller mounts up to 30 mtrs from the Coil**

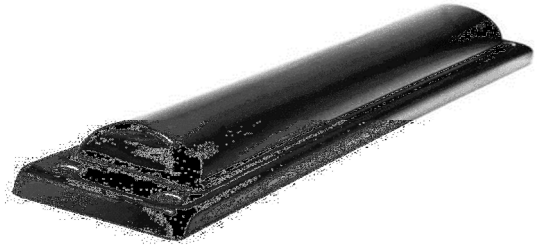
These Series 310 Metal Detectors operate by generating a pulsed flux and monitoring its rate of collapse when the metal bar passes overhead.

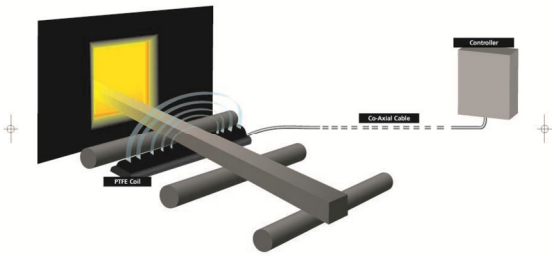
This method of detection provides 3 times the range of inductive Sensors. In addition the coils may be mounted closely surrounded by metalwork or secured within protective steel enclosure. Furthermore, as the coil windings are PTFE insulated can be used where the bar relatively hot.

The detector coils are provided in profiled glass fibre cases or PTFE coil plates with optional PTFE flying leads for high temperature areas. Stainless loop detector coils available for Cooling beds. Changes in ambient do not influence operating range.

These Detectors are the ideal solution where the user needs to detect individual bars across wide roller tables where Inductive sensors are in adequate. Also well suited for cooling beds as the remote coils can be provide in PTFE Coil plates supported in protective metal frame. Alternatively as a stainless loop

Narrow Profile Glass Fibre Coil





Remote Amplifier Unit

Controller Features:

- Auto Zero button provided
- Volt free relay output
- Voltmeter shows zero drift

Detector Coil Features:

- Mounts close within metalwork
- Up to 40 mtrs of coax connection
- Not effected by changing ambient
- Mill contaminate falls off profiled coils
- Length made to order

MODULOC CONTROLS **– BUILT TO LAST –** ***MODULOC CONTROLS*** **– BUILT TO LAST**

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DETECTOR COIL CONFIGURATIONS

There are three types of detector coil configurations available which in turn are manufactured in various sizes to accommodate client's specific requirements.

Where metal transfer systems such as walking beams present, the Detector can be shielded from this by securing in an open top metal box. Coils may be mounted into roller table framework close to surrounding metalwork or rollers.

For those areas where high ambient is expected (furnace entry tables and cooling beds) both PTFE search coils or all metal stainless loops are available.

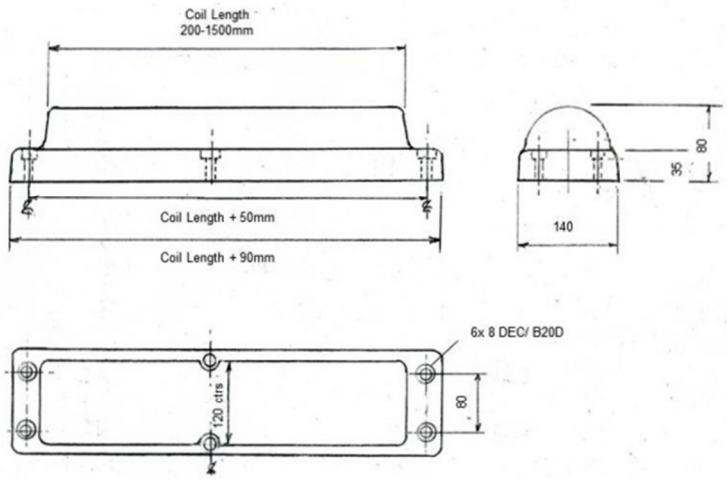
PERFORMANCE GUIDELINES

Sensitivity levels are a factor of coil length and the size and profile of the product. Quotations are normally put forward which specify expected sensitivity according to the client's production output.

Typical Sensitivities over 2 mtr long coil - Detect 100mm Steel Beam and bar at 150mm

PTFE Coil Plates mounted within supporting metalwork and where requested with water coolant radiator attached. Intended for detection of bar below 300 deg C

Single loop stainless coils intended for detection of bar at or slightly above 300ºC. at 100 mm. Steel bar should not be smaller than the detector loop.



SERIES 300 CONTROLLER SPECIFICATIONS

Housing: Painted aluminium. IP65 sealed enclosure
200mm H x 120mm W x 60mm D
Provided on isolated plastic mounting plate

Electrical: 110 or 240 50Hz supply with 5 Amp
30VDC / 250 VAC c/o relay output.
Internal Terminal strip via two cable glands

Switches: Reset button

Indicators: Power and Function Indicator with signal monitoring meter

Coil Cable: Low-loss UP70 or OR76 coaxial.
Armoured silicone or PTRE cable option of 2 mtrs. Standard coaxial cable 5 mtrs.
Local extension to 30 mtrs possible.

Adjusters: Zero and gain adjustment

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

Your local Sales Representative:

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