



## SERIES 310 ENHANCED RANGE PULSE INDUCTION METAL DETECTOR



- Detects Individual Bars and Sections across wide roller tables
- 3 Times the Range of Inductive Sensors
- Can mount in confined space within protective steel enclosure
- Glass fiber coil withstands bar up to 300°C passing over it
- Detects individual bar and section at 120mm range regardless of size
- Narrow profiled coil built-to-order of up to 2M in length
- PTFE Coil for high temperature use
- Controller can mount 30M from 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 mount 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 fiber cases or PTFE coil plates with optional PTFE flying leads for high temperature areas. Stainless loop detector coils available for cooling beams. 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 with additional water cooling radiator as required.

### Detector Coil Features:

- Mount close within metalwork
- Up to 30M of coaxial cable
- Not effected by changing ambient
- Mill contaminate falls off profile
- Length made to order

### Controller Features:

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



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## DETECTOR COIL CONFIGURATIONS

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

Coils may be mounted into roller table framework relatively close to surrounding metalwork or rollers.

For those areas where high ambient is expected (furnace entry tables and cooling beds) both PTFE search coils. Both of these may be used with or without cooling.

## 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 2M long coil - Detect 100mm Steel Beam and bar at 150mm.

PTFE Coil Plates mounted within supporting metalwork. Intended for detection of bar below 300°C to 500°C and ambient below 180°C. Can be further protected with insulating material.



**Narrow Profile  
Glass Fiber Coil**



**Flat Plate Coil  
(Polyethylene or PTFE)**

## SERIES 310 CONTROLLER SPECIFICATIONS

Housing: Painted aluminum, IP65 sealed & lockable wall mounting enclosure 200H x 120W x 60D  
Provided on isolating plastic mounting plate

Electrical: 110 or 240 50/60Hz supply with 5 Amp  
30VDC/250VAC c/o relay output

Switches: On/Off and Reset button  
Adjusters: Zero and Gain adjustment

Coil cable: Low-loss UR70 or OR76 coaxial. Armored silicone or PTFE cable option of 2M. Standard coaxial cable 5M. Local extension to 30M possible

Coaxial cable length can be extended up to 30 meters

Indicators: Power and Function Indicator with signal monitoring meter

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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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