

Aluminum or Copper Wires Inspection

Defects Detection - Research of Inclusions



CONTROLE MESURE SYSTEMES has developed an **Eddy Current system** combined with a Flux Leakage solution for wires inspection.



— Example of one of our CMS Eddy Current coil supports for aluminum and copper wire inspection

Defects detection with the Eddy Current method: Short, transverse, cracks, holes...

Research of inclusions (metallic) with the Flux Leakage method



High speed inspection

by Eddy Current encircling coils

Coil support ensures accurate positioning of the encircling coil. It is designed to be easily inserted on a production line. It supports, centers and aligns the inspection coil with the product to control.



MAIN FEATURES:

- Detection of surface and sub-surface, short and transverse defects
- Fast and easy change of guide sleeves, inserts and adaptors to match the product diameter
- Several sizes can cover a diameter range from 0.1 to 230 mm (0.004 to 9")
- Unlimited inspection speed
- Can be combined with a wide range of CMS accessories
- Low maintenance
- Robust construction
- Tailored according to customer's needs and requirements

PRINCIPLE:

During the process, aluminum or copper billets are transformed by lamination. The wire is guided and passes through an Eddy Current system, which consists of a coil support mounted on a support table with rollers to guide the product through the system.

A special encircling coil, located in the support, contains two sensors:

- one working with Eddy Current for defect detection,
- second working with Flux Leakage to identify metallic inclusions.

Eddy Current testing is performed by the Zet@Premium instrument, which operates with dual channels. When a defect or inclusion is detected, the system triggers a line shutdown, marker, visual alarm, saw or an output of your choice. An encoder installed on the line enables precise localization of defects in a customized report.





CONTROLE MESURE SYSTEMES

6 rue des LOCHES 71100 SEVREY - FRANCE +33.3.85.94.14.14 contactcms@cmseddyscan.com