### **ALUMINUM**





# Your Manufacturing Partner for Non-Destructive Testing Equipment



**Eddy Current and Ultrasonic Testing** 



### **ALUMINUM**

Zet@Setting Software

Aluminum parts are essential components in the automotive, aerospace defense, and food industries.

Since 1988, CONTROLE MESURE SYSTEMES has been designing and manufacturing customized turnkey solutions to ensure efficient and reliable quality inspection of aluminum parts using Eddy Current technology.

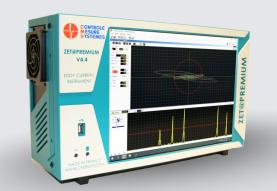
# ► Tubes, Bars and Wires Inspection

### • Detection of short and transverse defects

Inspection using an Eddy Current encircling coil allows to detect surface and sub-surface short and transverse defects. This technique allows to inspect products with several cross-section such as round, square or hexagonale. An optional flux leakage winding can be added to detect magnetic inclusions inside your tubes, bars and wires.

Coils are connected to our Eddy Current generators, Zet@Micro or Zet@Premium. Inspection results are displayed in real-time in base-time or Lissajous figure.

The user-friendly interface of our software allows the operator to fine tune the Eddy Current settings and automatically creates inspection reports.

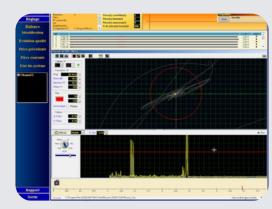


Eddy Current Generator, Zet@Premium



#### **SOFTWARE**

- ✓ Several features are included in the standard version, such as the management of delays and outputs for sortings or marking
- √ The Production software creates nspection reports automatically



**Production Software** 

# Pistons Inspection

CMS designs and manufactures Eddy Current probes for specific

This rotating equipment is used to detect surface and sub-surface defects in piston bore and combustion chamber. It is managed by our multi-channel and multi-frequency Eddy Current generator







# Strips Inspection

Detection of surface and sub-surface defects in the continuous cast of aluminum strips. The in-line, high speed inspection occurs directly after the furnace.

The strip passes through a mechanical head hosting Eddy Current probes, to inspect both the top and bottom surfaces simultaneously at high inspection speed. The floating Eddy Current inspection head allows the follow variation of the strip.

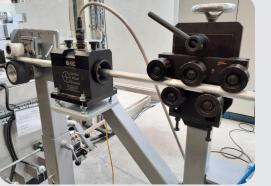
The multi-channel and multi-frequency electronic, Zet@Master, associated with our tailor-made software ensure a 100% inspection.

The inspection results are displayed in real-time and a comprehensive report is created at the end of the control to ensure traceability.



Eddy Current Surface Inspection

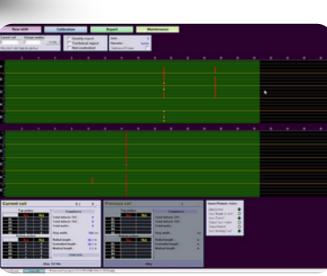












Mapping Software

Eddy Current Encircling Coils Range

Find out more on our website: www.cmsndt.com



# Conductivity Measurement of Plates

Eddy Current can be used to measure the conductivity on both sides of large aluminum plates.

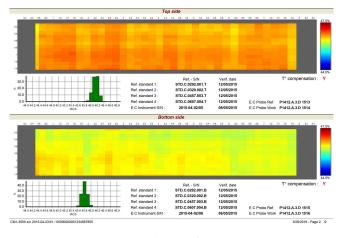
The product is inspected by 2 Eddy Current heads traveling across the surface.

The system includes a live lift-off correction to achieve highly accurate results.

The multi-channel and multi-frequency instrument Zet@Master is associated with a dedicated software to display the conductivity dispersion of the plate in realtime.



Conductivity Measurement Probe



**Mapping Software** 

# YOUR MANUFACTURING PARTNER FOR NON-DESTRUCTIVE TESTING EQUIPMENT

Since 1988, CONTROLE MESURE SYSTEMES has been offering best-in-class turnkey inspection solutions using **Eddy Current** and **Ultrasonic** technologies. With quality at the core of our strategy, we leverage our full expertise to provide customized NDT solutions tailored to your quality standards and production requirements.

Our multidisciplinary team of engineers, specialized in R&D, mechanical design, electrical systems, and software development, continuously innovates with cutting-edge technologies to ensure the ongoing evolution of our products and their seamless integration into your production line.

We offer a comprehensive range of ET & UT testers, probes & transducers, dedicated software, and a full suite of accessories.

Headquartered in France with a strong global presence, we share our expertise worldwide through our U.S subsidiary, CMS Inc., and an extensive network of agents operating in over 20 countries.





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