AERONAUTICS
NUCLEAR
RAIL

CONTROLE
MESURE
SYSTEMES




Your Manufacturing Partner for Non-Destructive Testing Equipment

Eddy Current and Ultrasonic Testing

Made in France

www.cmsndt.com

CONTROLE MESURE SYSTEMES

Non-Destructive Testing (NDT) ensures the absence of defects on parts while inspecting 100% of the production.

We provide different solutions specifically designed for the Aeronautic, Nuclear and Rail industries.

AERONAUTICS

Our systems are designed to measure conductivity and to inspect tubes, bars and forged parts.

Rotating head, RotoUTscan

Inspection of Tubes and Bars

The Ultrasonic rotating head RotoUTscan is used to detect internal or external defects, and perform highly accurate dimensional measurements including ID, OD, WT, eccentricity and ovality.

Inspection of Solids of Revolution

The inspection of surface and subsurface defect is carried out using Eddy Current pencil or custom probe, mounted on an industrial robot to scan the part's profile.

An Ultrasonic immersion tank allow to perform an inspection at core. The part is entirely scanned, and it is possible to automatically return on a defect location for further inspection. The equipment is paired with a mapping software to instantly visualize the condition of the product.

ET Pencil Probe

UT Immersion Tank for Solids of Revolution

NUCLEAR

Inspection of Tubes

Complete inspection of the product by Eddy Current and Ultrasonic combined testing method:

- Surface and subsurface defect detection by Eddy Current
- Internal or external flaw detection, and dimensional measurements (ID, OD, WT, ovality) by Ultrasonic

The supervisor software, Probus generates a complete control report of the product, stores inspection results and edits inspection reports.

Our systems are designed to inspect heat exchanger tubes, internal profilometry of tubes and assembly components.

Remote Field Inspection

Internal inspection of heat exchanger tubes and carbon steel tubes.

ET Remote Field Probe

Internal Inspection

Bended or non-bended tubes

Eddy Current internal inspection dedicated to detecting erosion, wear, grooves and notches.

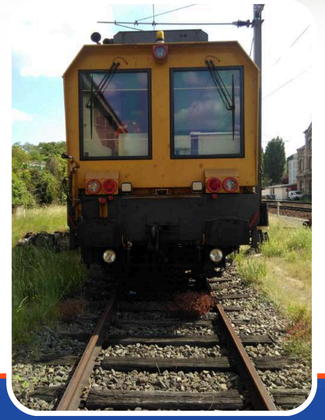
ET Internal Probe

RAIL

Surface Defects Detection

On Railway

CMS developped an Eddy Current rotary system to be mount on maintenance trains to inspect the head of the rails. The 8 probes rotate at high speed to detect headchecks (longitudinal cracks) and the lack of material. CMS received the Deutsche Bahn certification in 2021.



ET System for Headchecks Detection on Rail

Detected Defects on Rail

ET Rotating Probe for Surface Inspection

On Production Line

Eddy Current rotary system and sectorial probes are used to detect surface and subsurface defects on various part of the rails.

Ultrasonic testing transducers can be combined with Eddy Current to inspect the core of the rails.

Our supervision software, Probus, will gather the data of all the equipment and automatically create inspection report.

ET Sectorial Probe

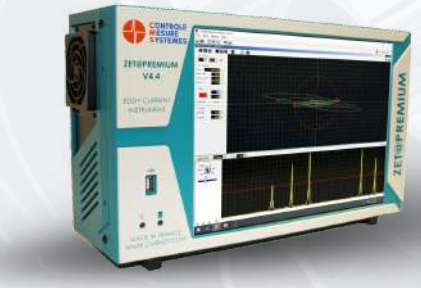
All CMS systems comply with industry standards: ASTM, API, DIN, SEP, BS, ISO, ASME, ASNT and more.

www.cmsndt.com

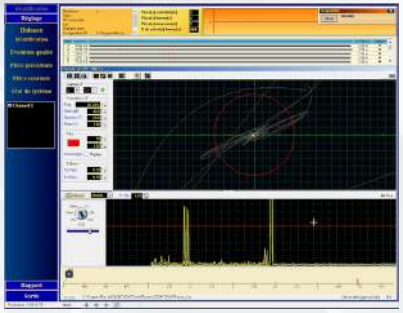
By Eddy Current Method

Eddy Current is widely used in NDT applications to detect and characterize surface and subsurface defects in conductive semi-finished products with various profiles at high speed.

- ✓ Detection of several types of defects such as external, short, transverse, longitudinal...
- ✓ Perform high-temperature inspection
- ✓ Perform conductivity measurement
- ✓ Many accessories can be associated for a 100% inspection
- ✓ User-friendly interface of the Production software allowing the operator to adjust Eddy Current settings, the display of the signals, and the alarm thresholds
- ✓ High traceability thanks to a complete report



One of our Eddy Current Generator, called Zet@Premium



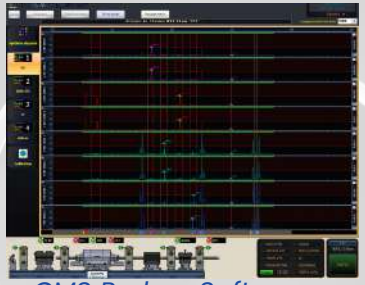
CMS Production Software

By Ultrasonic Method

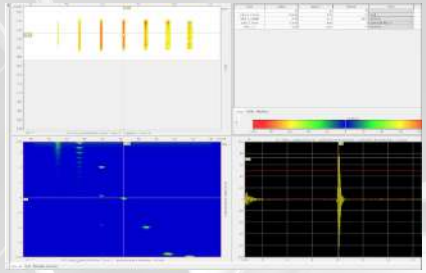
Used in NDT applications as well as in many other fields, Ultrasonic is the ideal solution to detect internal defects and perform dimensional measurements on a solid product.

- ✓ Defects detection with very high sensitivity: internal, transverse, longitudinal, oblique, holes and cracks
- ✓ Determine the exact depth of the defect while treating all the material
- ✓ Detect deep-seated defects in the material, resulting in discontinuity of mechanical properties (cracks, inclusions, porosity, etc.)
- ✓ Precise inspection of very thick parts
- ✓ Weld, ends and full body of the inspected product
- ✓ Get immediate, readable control results with a concrete report thanks to the UT generator MultiUTscan and Probus software

Our Ultrasonic Generator, called MultiUTscan



CMS Probus Software



Ultrasonic Software for Immersion Tank System

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.

ABOUT CMS

CONTROLE MESURE SYSTEMES

CONTACT US

CONTROLE MESURE SYSTEMES
6 rue des LOCHES
71100 SEVREY - FRANCE

+33.3.85.94.14.14
contactcms@cmsndt.com

www.cmsndt.com