



Electromagnetic Measuring Console

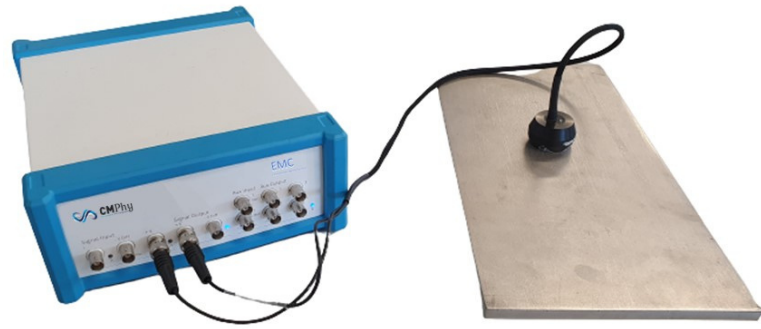
NDT

Here are our best solutions

We manufacture custom probes, call us 

SEphy

For detection of cracks on ferromagnetic / amagnetic plates surface defect and up to 10mm deep



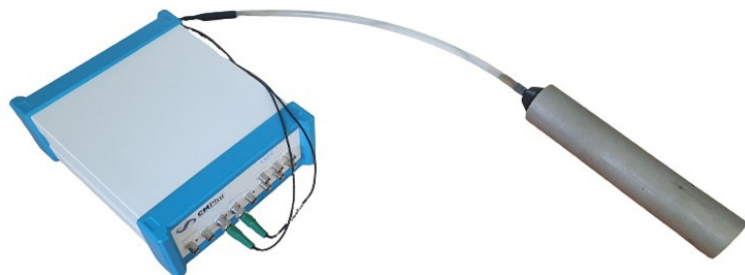
OEphy

For detection of cracks on copper, alloy and aluminum cables with 10mm air gap



PEphy

For internal/external detection of cracks on ferromagnetic / amagnetic tubes



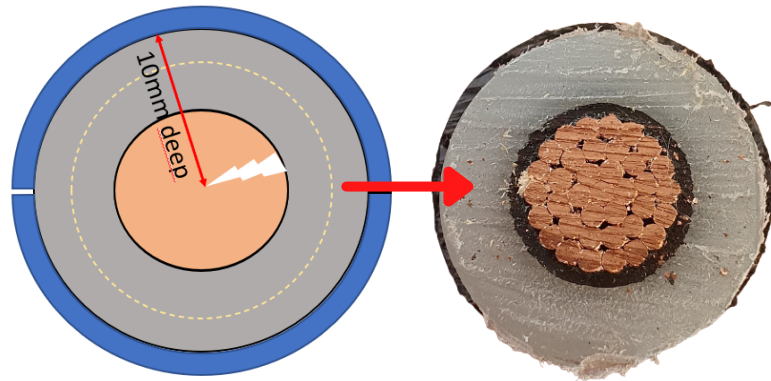
NDT

Eddy current probes with defect detection up to 10 mm depth

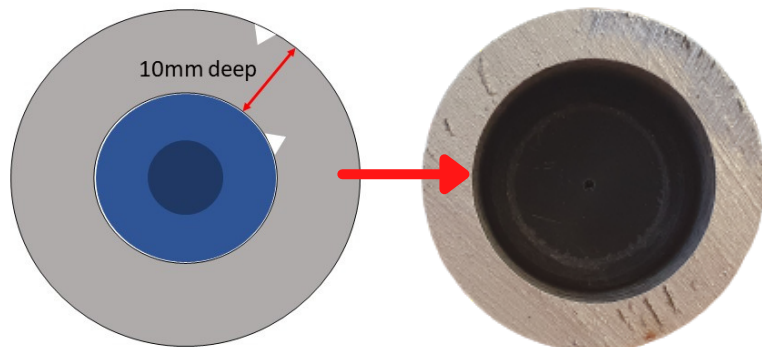
SEphy



OEphy



PEphy



MATERIALS CHARACTERIZATION



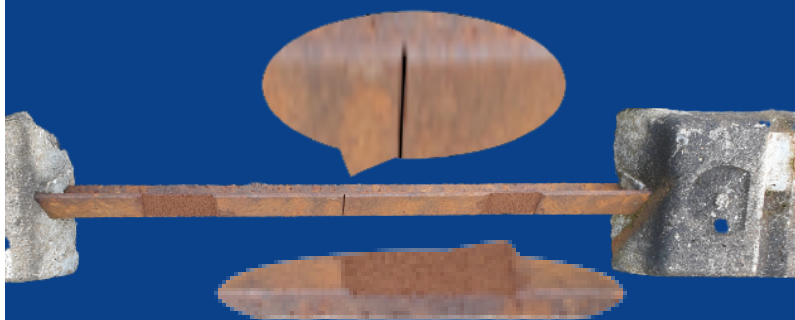
The EMC allows measurements of electrical conductivity or material variations on all types of conductive parts.



Detection of defects through a large air gap 50mm (stones, gravel...)



The domains for materials characterization are multiple as railway, nuclear, aeronautics, steel industry...

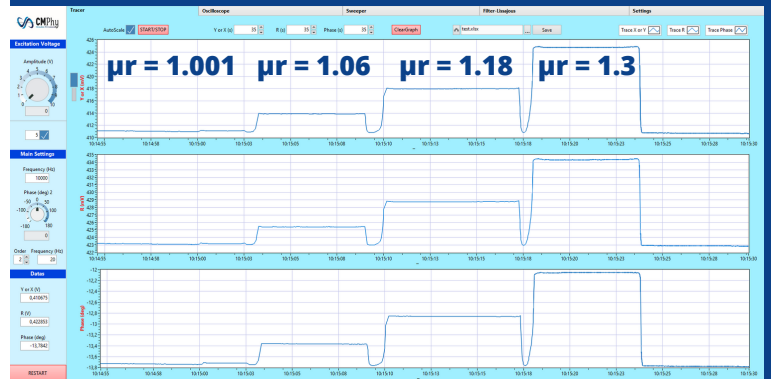
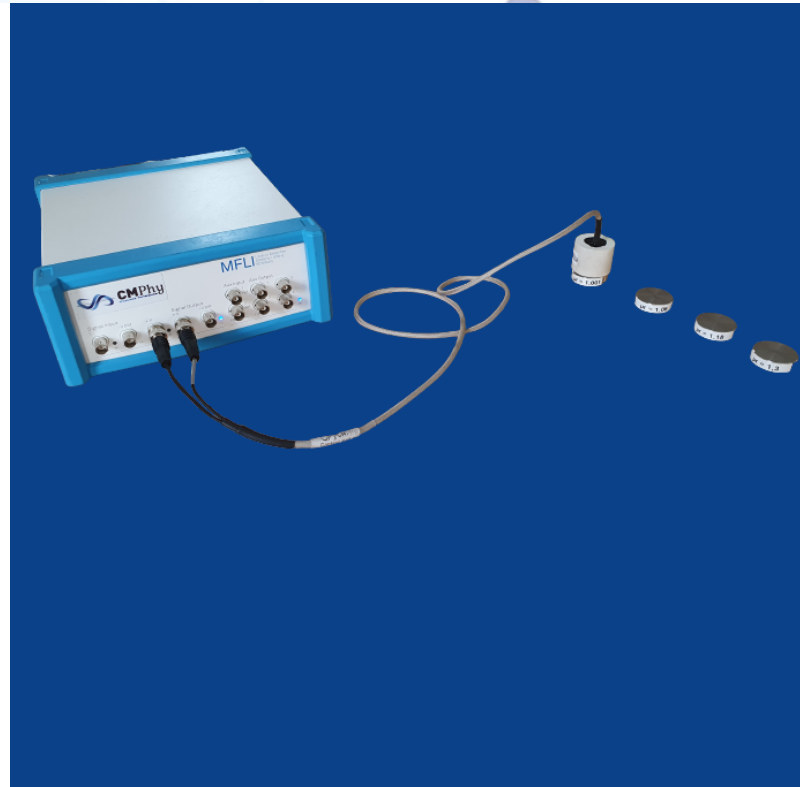


Cracks and thickness variations simulated on rails

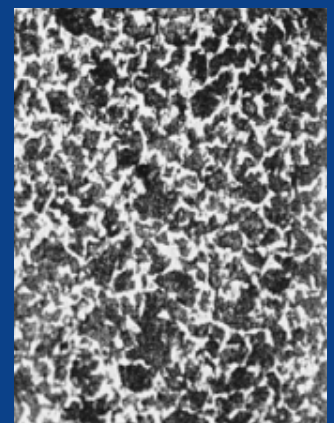
MATERIALS CHARACTERIZATION

With its adapted probe combination, the EMC is able to obtain for a material :

- its magnetic permeability (μ_r)
- its ferrite %

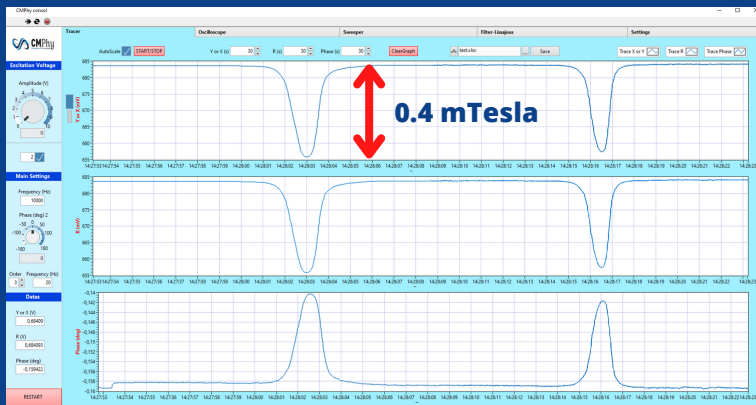


Ferrite image used in metallurgy



MAGNETIC FIELD MEASUREMENTS

The EMC is able to work with all types of magnetic sensors, magneto-resistors, hall effect sensors, fluxgate sensors...

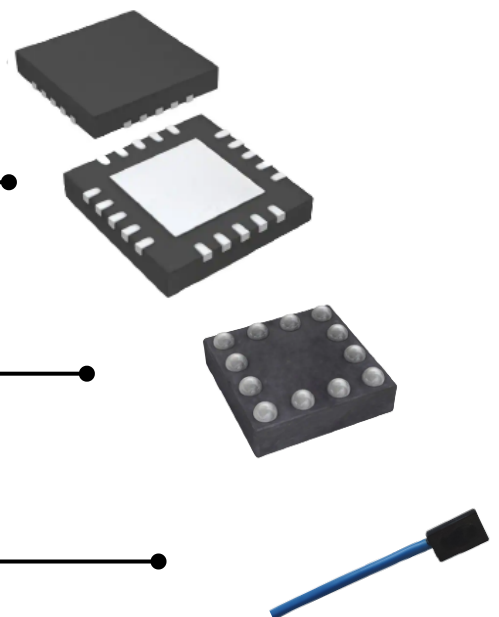


Possibility to measure very low field variation and in a very noisy environment.

Hydrocarbon detection

Guidance application

Magnetic remanence on parts



A REDESIGNED USER INTERFACE FOR YOU!



Use the CMPHy application as you wish, from a fixed or remote computer



NEW IN NON-DESTRUCTIVE TESTING, USB OR REMOTE CONNECTION BETWEEN THE EMC AND THE COMPUTER

**A 100% CUSTOMIZABLE
INTERFACE ACCORDING
TO YOUR NEEDS**

application developed under LabView and therefore modular at will

Spécifications EMC

Instrument

Storage temperature	+5°C to +65°C
Operating temperature	+5°C to +40°C
Storage relative humidity	< 95%, non-condensing
Operating relative humidity	< 90%, non-condensing
Specification temperature	+18°C to +28°C
Power consumption	< 40 W
DC Power inlet	12 V, 2 A Connector: Switchcraft 760BK, ID 2.5 mm, OD 5.5 mm
Power supply AC line	100 - 240 V ($\pm 10\%$), 50/60 Hz
Line power fuse	250 V, 2 A, fast, 5 x 20 mm, F 2A L 250V
Dimensions	28.3 x 23.2 x 10.2 cm Rack mount on request
Weight including bumper	3.8 kg

Modes de référence

External reference frequency range	1 Hz to 5 MHz
External reference input	Auxiliary inputs, trigger inputs, auxiliary outputs, current signal input, voltage signal input
Internal reference frequency range	DC - 5 MHz
Voltage Signal Output	0-10 V

Connection

Host connection	LAN, 1 GbE; USB 2.0, 480 Mbit/s
USB host	2 connectors on back panel for mass storage or WLAN modules
DIO, digital I/O	4 x 8-bit, general purpose digital input/output port, 3.3 V TTL VHDCI 68 pin female connector
Internal memory	4.7 GB for measurement data, 250 MB for settings files, 250 MB for log files

Connecteurs

Voltage Signal Input	2 BNC on front panel, single-ended and differential
Current Signal Input	BNC on front panel, float/gnd
Differential Signal Output	2 BNC on front panel, single-ended and differential
Auxiliary Inputs	2 BNC on front panel
Auxiliary Outputs	4 BNC on front panel
Trigger Inputs	2 BNC on back panel
Trigger Outputs	2 BNC on back panel
10 MHz synchronization	2 BNC, 10 MHz clock input and output on back panel



CMPhy
26 rue Paul Sabatier
71530 Crissey



03 85 47 47 20
03 85 47 47 19 (fax)



contact@cmphy.fr