





# **Analytic laboratory**

### On hand and at your service

Over 20 years of experience, recognized knowhow and equipped with leading edge technology, we guarantee you results that are clear, rapid and confidential.

#### **OUR COMPETETIVE EDGE**

- **Recognized expertise** thanks to a professional team (EPFL Chemistry and Materials) able to cope with your requirements.
- **Cutting edge technology** including a Zeiss (SEM- EDX probe) scanning electron microscope, a GC-MS, polarized light microscopes and digital microscope.
- Privileged access to our surface preparation unit (automated cleaning, ultra-cleanliness) for process improvement.
- Perfect knowledge of manufacturing constraints (lead time, detailed report with constructive answers...) and recommendations for pragmatic solutions.
- Extensive network for complementary analysis (XPS, Nano-hardness, Roughness...) available under expert's report mandate.



#### **SOME ANALYSIS EXAMPLES**

#### 1. Material

- Composition characterization at the surface or embedded (metallographic cross-section).
- Quantitative analysis of metal alloys (segregation – inclusion – structure revelation).
- Finding evidence of porosity, cracks and other superficial flaws.

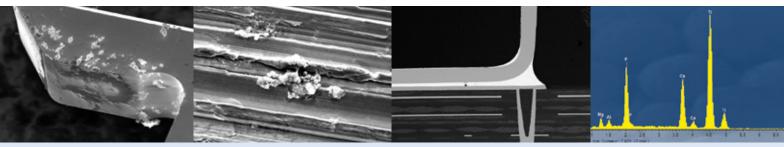
#### 2. Surface

- Quantification and chemical identification of surface contaminants (particles, residues...).
- Characterization of surface phenomena (corrosion...).
- Surface or cleanliness analysis, reference comparatives.

#### 3. Component

- Thickness measurement of various treatments (galvanic layers, under vacuum...).
- Dimensional control and measurement
- Flaw analysis of printed circuits, short circuit analysis, solder analysis.

## A problem? Your answer within 24h!



300 X 1500 X 40 X Spectre EDX

## **Expert's report mandate**

A single partner for your expert's report from A to Z.

Our analysists, specialized in chemistry, physics and materials, will find you pragmatic solutions with an overall vision.

ANALYSIS	CHARACTERISTICS
Microscopy	Electron scanning microscope – EDX probe Atomic force microscope Confocal (3D) microscope Interferometric microscope
Mechanical tests	Micro hardness HV Hardness tests HV, HB, HRC Nano hardness Shore A hardness (polymers) Tension test Tension test in EBM Bending test
Nondestructive tests	Radiography Tomography x-ray Ultrasonic Dye penetration Endoscopy
Surface Analysis/Tests	Spherical tribometry Disk/pin tribometry Calotest Scratch and nano-scratch test Dry Turbula abrasive test UV resistance test Salt spray, tarnishing
Spectrometry/ Calorimetry	GC-MS Spectrometer XPS RAMAN Spectrometer FTIR Spectrometer ICP-OES Spectrometer DSC calorimetric analysis





# SURCOTEC SURFACE COATING TECHNOLOGY

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