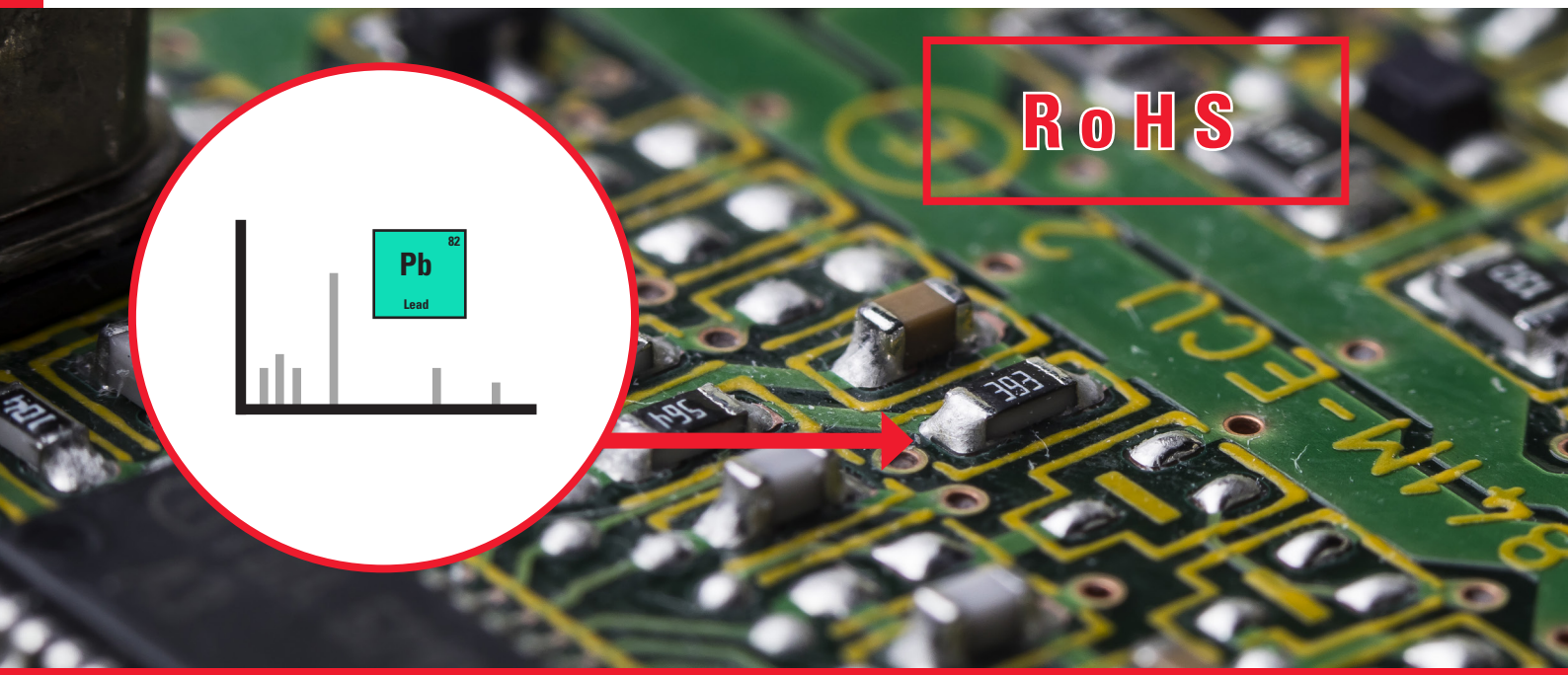
From Eye to Insight

Leica
MICROSYSTEMS



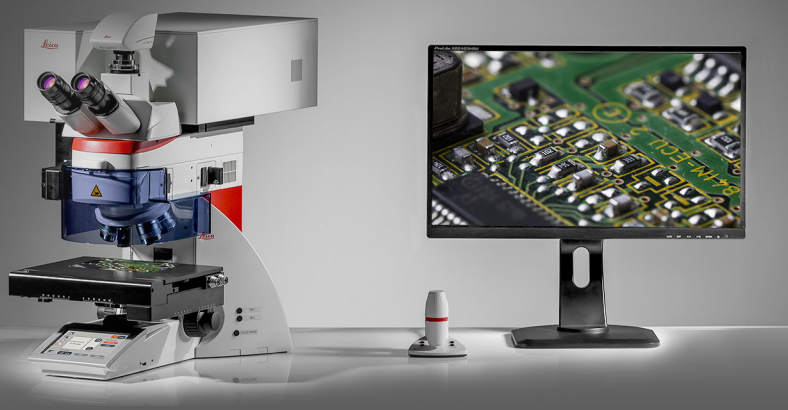
Lead Detection of RoHS Compliance: Fast Inspection for Hazardous Elements

Avoid the environmental hazard of lead in solders

DETECT IT WITHOUT SAMPLE PREPARATION

The European standard RoHS (Restriction of Hazardous Substances) requires every member state to eliminate toxic materials in electronical components. Companies are now forced to find new soldering materials that can be proven to be compliant. The presence of lead (Pb) can be analyzed by costly SEM-EDS and other methods, but only after time consuming sample preparation.

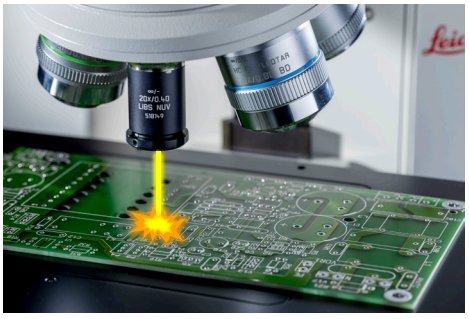
The DM6 M LIBS from Leica Microsystems reduces dramatically the time by the use of simultaneous visual and chemical analysis of solders with laser induced breakdown spectroscopy (LIBS).



Further DM6 M LIBS applications

- Environmental contamination: Cadmium & lead
- Automotive parts: Batteries
- Glass & ceramic industry: Material identification & inclusion detection

VISUAL AND CHEMICAL INSPECTION WORKFLOW BY DM6 M LIBS WITHOUT SAMPLE PREPARATION



No need for sample preparation
Simply place the sample onto the stage.

Visual inspection
Use different magnifications and illumination techniques to visually inspect the Region of Interest (RoI).

Identify the solder
Set the focus point for each solder joint to be analyzed.

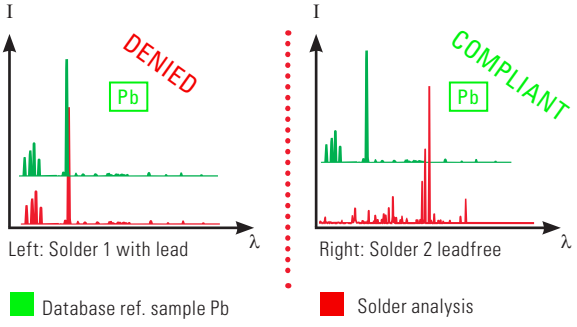
LIBS analysis
Carry out the chemical analysis within a few seconds.

Compare element peaks
Chemical analysis verifies if lead is present in the solder.

Leica Lead Detection of RoHS Compliance

The DM6 M LIBS solution easily provides simultaneous visual and chemical analysis to detect lead rapidly via its chemical fingerprint. The simple comparison of elemental peaks reduces significant time needed to confirm if lead is in the solder.

Compare the analysis with the reference database:



CONNECT WITH US!

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