

# Welding without worries

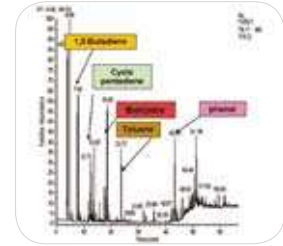
## ► Three steps to fully analyse welding fumes

### STEP 1: Fast screening

Pyrolysis of the organic coating coupled with Gas Chromatography and Mass Spectrometry (GC-MS) allows determination of the main Volatile Organic Compounds (VOCs) generated during welding, resulting in qualitative and semi-quantitative results.



Pyrolysis of the organic coating



Pyrogram

### STEP 2: Lab scale sampling of the welding fumes

A laboratory welding test using the OCAS Toxibox - a self-engineered piece of equipment - to efficiently sample dust and gas for further quantitative analysis.



Sampling welding fumes during spot welding

### STEP 3: Complete risk assessment at the workplace

Workplace analysis is recommended to complete the risk assessment. Thanks to the pyrolysis and Toxibox results, this workplace analysis can be carried out in reduced time for an affordable price.



Sampling at the workplace for further analysis

## ► Your benefits

- Extensive sampling range (from gas to dust)
- Multiple techniques for qualitative and quantitative analysis available: from composition to morphology, including ultrafine particles monitoring.
- Fast, cost-effective and easy screening of the VOCs - such as carcinogenic compounds - emitted during welding of organic coated metal (also useful for safety data sheets).
- A cost and time reducing workplace analysis based on the preliminary results from pyrolysis and Toxibox.
- Risk assessment of welding processes, including exposure scenario.

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