

## Laser OES – The evolution of Spark OES as an alternative to X-ray fluorescence analysis (XRF)

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### **Abstract**

Spark Optical Emission Spectrometry (spark OES) has been the standard in metal analysis for many years. The development of new, simpler and more stable light sources now allows alternative plasma excitation by laser. This has several advantages, such as excellent stability and short measurement times. Of particular interest, however, is the extremely small package size compared to high voltage spark or X-ray generators. Thus, laser OES handheld spectrometers are extremely lightweight and portable.

In addition to the basic characteristics of the technology, the presentation also explains the advantages and disadvantages compared to established approaches. Examples from the aluminum industry, but also from other industries, complete the presentation.