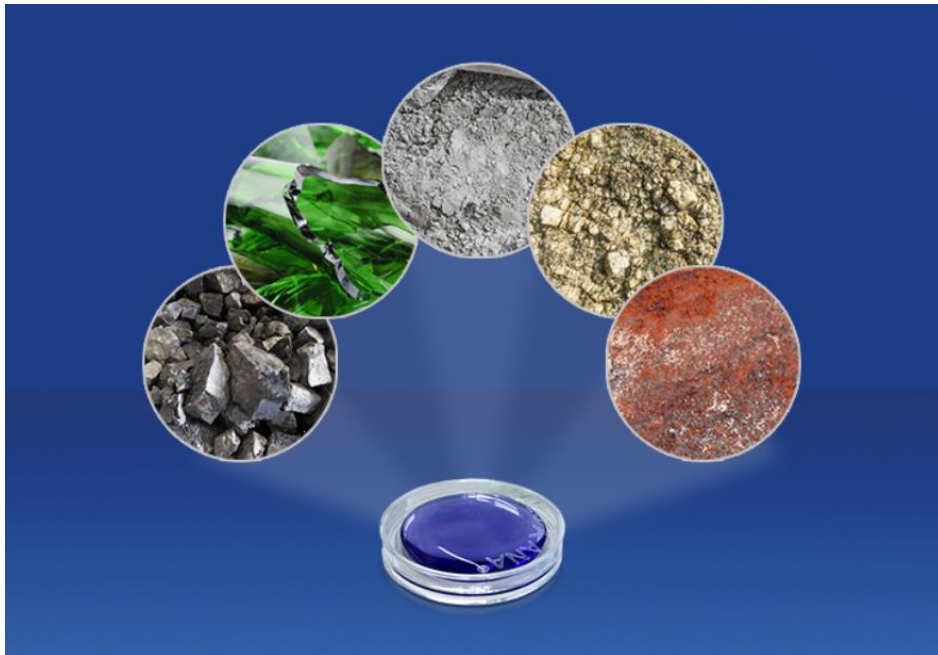


Commercial XRF analysis – Options and advantages in the allocation of analysis tasks



Introduction

Commercial XRF analysis is a laboratory service that companies usually use when analyses are not possible in their own laboratories, e.g. because their own analytical equipment is already working at full capacity, an analytical device is defective, or the appropriate method is not available.

In addition to the factors of time and cost, trusting the competence of the laboratory service provider is decisive. The methods used, the sample preparation and the analytical equipment are just some of the factors that can influence the results of the analyses. Accreditation to DIN EN ISO/IEC 17025 ensures the quality of a laboratory's results.

In the following, we would like to show you our competence, present our available test methods, and so demonstrate the advantages of awarding analyses to FLUXANA.

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Quality assurance through accreditation

The standard for quality assurance in X-ray fluorescence analysis is accreditation to DIN EN ISO/IEC 17025, which ensures that standards, guidelines and laws concerning the quality and safety of services are complied with. Accreditation strengthens confidence in competent laboratory work and in the ability to achieve valid results.



Since 2014, the FLUXANA laboratory has been certified according to DIN EN ISO/IEC 17025:2005 as a testing laboratory and has since been audited by internal and external auditors. You will find the accreditation certificate under:

<https://fluxana.com/products/commercial-analysis/accreditation>

Available test methods

The chemical analyses available from FLUXANA include all common raw materials, cement, glass, ferrous alloys and much more. A list of all available test methods can be found at:

<https://fluxana.com/products/commercial-analysis/test-methods>

In addition to the accredited analyses, overview analyses are also offered, which can be carried out more cost-effectively and quickly.

Available services

If you would like to be supported only during the preparation, we offer you

- **Grinding of samples**
- Preparation of **pellets (32 or 40 mm diameter)**
- Preparation of **fused beads (32, 34, 36 or 40 mm diameter)**

also according to your recipes.

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Advantages of order analysis

- Absorbing bottlenecks caused by machine failure or lack of staff
- Clarification of anomalies in analysis results
- Optimization of processes
- Expert advice for difficult samples
- Comparison of analysis results of own samples (keyword "laboratory comparison")
- Bridging cost-intensive investments

Order analysis procedure

Finding the right analysis for your samples is easy: our analytical specifications give accurate information about the materials, analytes and their concentrations. Similarly, certain standards, such as DIN EN ISO 12677, can be selected for refractory materials. For other requirements we will try to find an analytical solution.

Duplicate determinations are carried out and the mean value, if necessary also with measurement uncertainty, is stated in the report.

Since our analyses are carried out largely with fusion technology and XRF measurement, we need only a small amount of sample material. In general, 10 g powder should be sufficient.

Summary

The many advantages of commercial XRF analysis show that it is not only the last resort when facing a bottleneck, but also a good solution for many analytical problems. The accredited analysis provides reliable results that help to check and optimize your own procedures.

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Literature

- [1] Rainer Schramm, X-ray fluorescence analysis in practice 2nd Edition, FLUXANA (2017).
- [2] www.fluxana.com
- [3] DIN EN ISO/IEC 17025 - General requirements for the competence of testing and calibration laboratories