



**Malvern
Panalytical**
a spectris company

Analytical Consultancy Service

Setting up reliable analytical methods for your processes



Helping you get the most from X-ray analysis

In today's volatile economic environment, it's essential to maximize product quality while minimizing costs. Additionally, reducing CO2 emissions and waste is a priority due to increasing environmental challenges. Enhanced analytical methods for X-ray analysis can help meet these demands by improving analytical performance, delivering efficient process control, better materials pricing, and reduced production costs. However, setting up these methods is time-consuming and requires expert knowledge in X-ray analysis, which many laboratory technicians and managers lack the time to invest.

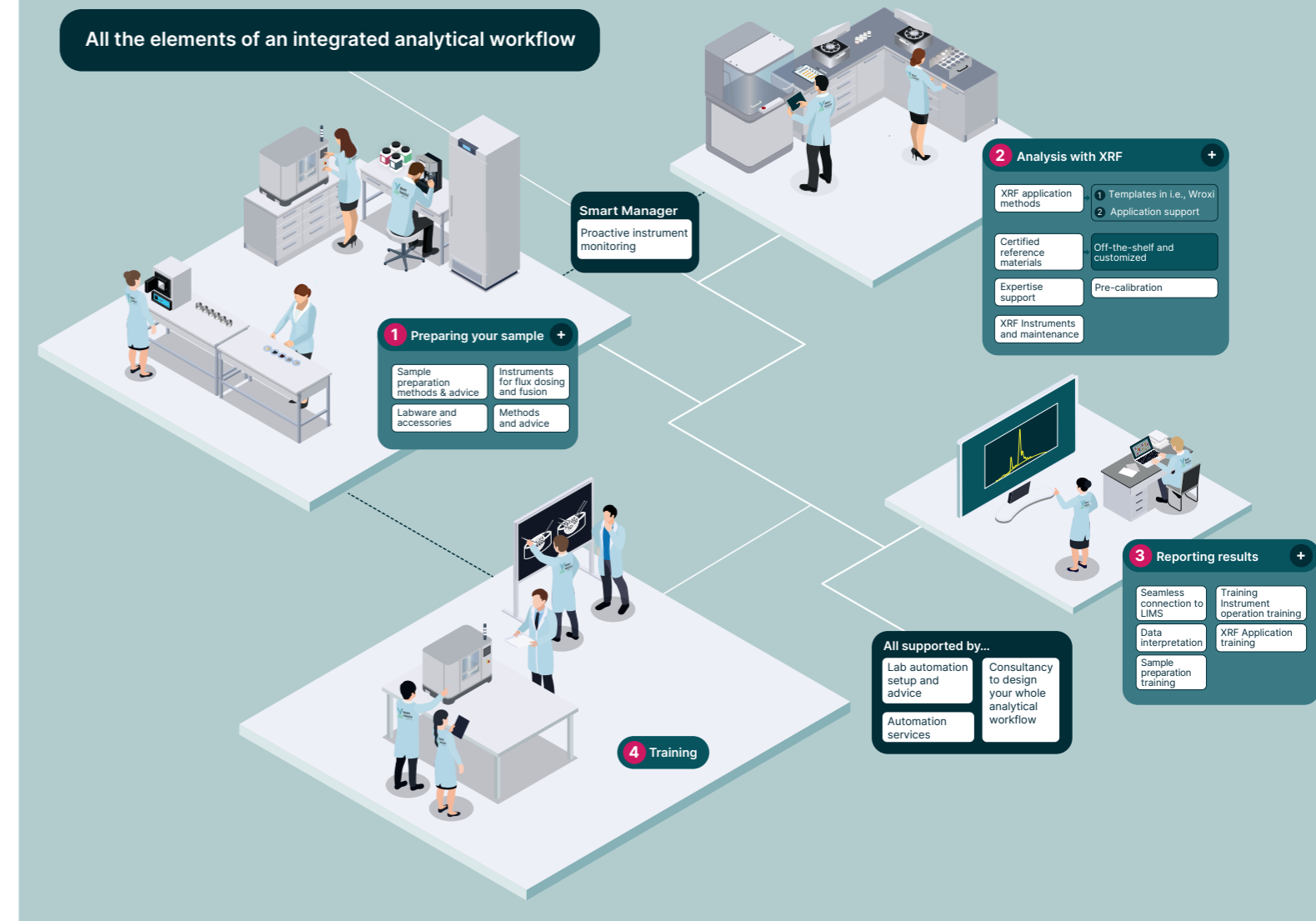
Count on our expertise

That's where Malvern Panalytical's expertise services for XRF and XRD come in. We have 70 years of experience, three Centers of Excellence, various regional application laboratories, and more than 70 specialists worldwide. All this gives us the know-how to support you with every step of X-ray analysis, from your sample arriving in the lab to reporting your final results.

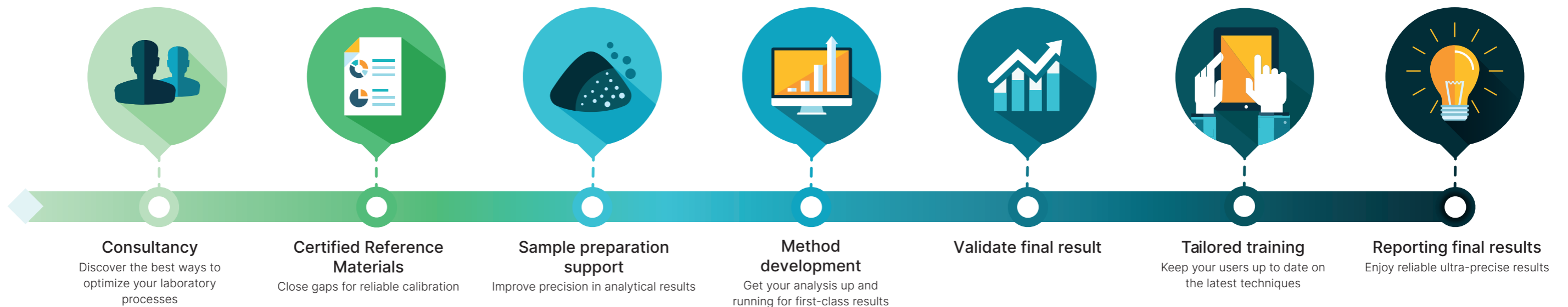
How could analytical improvements help you get better product prices?

Materials prices are often related to the content of a certain element – so small analysis errors have a big impact on pricing. Did you know that...

- In **ferro chromium**, a structural error of just **0.25%** in chromium analysis could have a price impact of **EUR 5-9 million per 100kt?**
- In **car catalyst recycling**, improving relative analytical error by **3%** changes the price by around **EUR 6 per kilogram** of recycled material?



Supporting you across your X-ray analysis journey



Our Analytical Consultancy services

Consultancy: Discover the best ways to optimize your laboratory processes

Need to improve your analytical processes or design new ones? Count on our consultancy support! We'll visit your site and then design and evaluate effective solutions to fit your needs. We'll advise you on implementing methods, arrange method transfer between analytical techniques, and conduct feasibility studies to develop new methods.

In this way, we'll help you make your lab the best it can be – minimizing labor requirements, reducing the need for expensive chemicals, and enabling faster feedback loops.

Certified Reference Materials and sample certification: Close gaps for reliable calibration

Trustworthy reference materials are essential for calibration. However, certifying your own materials or finding suitable materials on the market often leaves gaps for certain elements and concentration ranges.

Thanks to our ISO17034 accreditation, we can produce Certified Reference Materials (CRMs) for you – in fact, we're the only X-ray vendor to produce synthetic standards with this accreditation. Plus, we can help you certify your samples under ISO17025 accreditation – so you can be sure of the highest reliability.

Sample preparation support: Improve precision in analytical results

Sample preparation is the most crucial step for reliable results! That's why our knowledge centers advise on the right sample preparation technology for your instrument and recommend optimized formulations and accessories, improving precision in your analytical results.

Method development: Get your analysis up and running for first-class results

Creating tailored methods for your materials is essential for accurate results, but it requires specialized expertise and can take months. Our method development services handle this for you. We leverage our application expertise to provide premium methods and validation with the appropriate measurement parameters and times. These methods ensure long-term stability, norm compliance, and accurate measurements. You can start analyzing immediately after installation and achieve first-class results.

Tailored training: Keep your users up to date on the latest techniques

Sometimes, you need guidance on a specific application or have needs that our general training courses can't meet. That's why we also provide training tailored to your application, analysis requirements, and your users' expertise levels and languages.

"Malvern Panalytical's packages for iron oxide and ferroalloy analysis using the zetium and leneo wd-xrf systems are highly accurate and reliable. Their comprehensive support with setting up the calibration provided additional confidence in the systems' performance."

Saood Khan,
Lab/Quality Head Sulb Company BSC, Bahrain
April 2022

"Malvern Panalytical actively and professionally supports us to harmonize and standardize the xrf-based analytical methods we use in operations and r&d. We can rely on their worldwide support both at our borealis locations and in joint ventures."

Filip Samson,
Category Team Expert Borealis, Belgium
April 2022

Complete... Support packages

If you know you want to use all of these services for a specific application, our **total solutions packages** are for you. And they're available for both XRF and XRD!

Or perhaps you want continuous support with your instrument? With our **application support agreements**, an applications specialist is always available for assistance throughout your instrument's lifetime. Simply contact our support team, and we'll assign an expert to take over the task – helping you keep your methods valid for longer.

In need for automation? Design and implementation of automated analytical workflows.

Global Expertise:

Almelo, Netherlands: Optimal XRF configuration, calibration, and complete after-sales support.

Nottingham, UK: Ready-made and secondary standards, sample certification, and analytical services.

Québec City, Canada: Expertise in fusing samples, method development, and platinumware care.

Get mineralogical data without needing XRD experts

Mineralogical data from X-ray diffraction (XRD) often tells you more about your process and gives you deeper insights than elemental composition, especially when it comes to primary materials analysis.

But setting up methods for XRD often requires even more specialized knowledge than with XRF. So, how do you get this high-quality mineralogical data without qualified XRD experts?

Answer: with our total solutions package for the technology! Whether it's for cement, aluminum, steel, or mining applications, we'll set up the methods for you and take care of calibration maintenance and sample preparation.

What can I expect when requesting Analytical Consultancy for x-ray analysis?

Whether it's before, during, or after your instrument purchase, you can always reach out with any queries on our expertise support.

We'll be in touch with a quote and a proposal for how we can support you, and we'll be here for every step of your analytical journey.

From sample preparation to quality reporting, count on us for comprehensive support. Contact us to learn more!





About Malvern Panalytical

Malvern Panalytical is a global leader in the analytics of material and life sciences. We unleash the power of small things to make big things happen for our customers.

Our vision is to make the world cleaner, healthier, and more productive.

We partner with our customers to make their solutions possible through the power of precision measurements, our expertise, trusted data, and insights.

Our people are partners in discovery. We collaborate with our customers and with each other to discover new possibilities and achieve breakthroughs.

Our culture is a healthy, high-performance culture shaped by our values: Own it, Aim High and Be True.

We're committed to Net Zero in our own operations by 2030 and in our total value chain by 2040.

With over 2300 employees across the globe, we are part of Spectris plc, the world-leading precision measurement group.

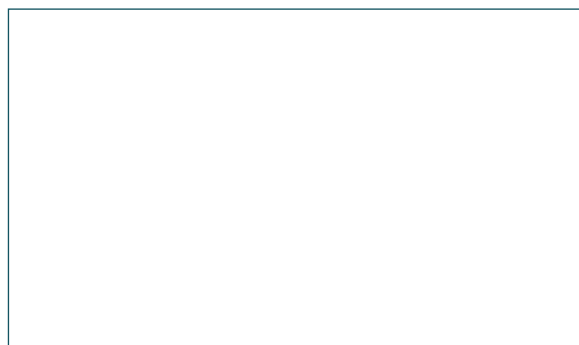
Malvern Panalytical. We're big on small™

Service & Support

Malvern Panalytical provides the global training, service and support you need to continuously drive your analytical processes at the highest level. We help you increase the return on your investment, and ensure that as your analytical requirements grow, we're there to support you.

Our worldwide team of specialists adds value to your business processes by ensuring applications expertise, rapid response, and maximum instrument uptime.

- Proactive local and remote support
- Full and flexible range of service agreements
- Compliance and validation support
- Onsite or classroom-based training courses
- e-Learning training courses and web seminars
- Digital services, including MyStore and My Customer Support Portal
- Sample analysis, method development, and applications consultancy



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