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Get your hands on

VULCAN

For fast accurate results.

THIS IS VULCAN.

Vulcan is an excellent tool for handling incoming material inspection and quality control and material verification of finished parts. It is very fast, which means you can check even large inventories very quickly. As a result, Vulcan can help you avoid material mix ups that can have serious consequences, such as the wrong materials being used in components for refineries and power plants.

Vulcan is an ergonomic, balanced laser analyser that fits easily into your hand. It is the lightest Laser Induced Breakdown Spectroscopy (LIBS) tool in the world, so even when used for long periods it will feel comfortable and easy to operate.

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Vulcan is extremely accurate.

Designed for precision, Vulcan will deliver accurate alloy identification every time, making it a tool you can rely on for consistent service to your customers.

Managing the data it produces is also a much easier task. Transfer and store all your results securely and use the most advanced reporting tools on the market. Simply connect Vulcan to the OiConnect cloud service using Wi-Fi or a smart phone or use a USB stick to download your results to a computer or laptop. Vulcan is also the simplest analyser on the market. That means it's not only quicker and easier to learn how to use, but crucially the ease of use greatly reduces user errors or eliminates them altogether. So the results you get will be far more accurate and consistent.

You can rely on Vulcan to get the job done quickly and easily, making you more productive.

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WHY YOU SHOULD SWITCH TO VULCAN

Vulcan provides great value for money and guarantees a real return on your investment. Here are just a few compelling reasons to make the switch from using an XRF tool to acquiring the best laser analyser on the market:

More accurate, more precise, more consistent

The type of work you do requires accuracy, precision and consistency of results. Vulcan delivers on all three fronts. This laser analyser has been designed for high performance and guarantees very high accuracy and precision for its analysis results.

For example, when you use Vulcan to analyse aluminium, it not only provides the commercial grade of aluminium but also its accurate chemical composition. And by making Vulcan simple to operate, we have hugely reduced if not almost completely eliminated user error, so the results obtained from your analysis will be reliable and consistent.

Advanced data management

Creating reports for your customers from your analysis and compiling data for quality control are important aspects of your work on a daily basis. Vulcan uses the most advanced reporting tools on the market, and you can connect via Wi-Fi to the OiConnect cloud service and store your results and reports securely, or use a USB stick to download results to a computer or laptop. Whatever your preference, data can be managed quickly, easily and safely, wherever you are.

Significantly increase productivity

As Vulcan is so fast, you will soon be saving time and increasing productivity. Even a couple of seconds difference in speed can have a huge impact.

For example, even if your current XRF tool produces results in three seconds, switching to Vulcan could enable you to process double the number of analyses a day. That speed can make all the difference with a large inventory to check.

Analyse a wider range of alloys

Using Vulcan enables you to identify and analyse a much wider range of alloys. It gives results on all common alloys, including aluminium, magnesium, titanium, cobalt, chromium, nickel and copper alloys as well as stainless steels, tool steels and low alloy steels and more.

Vulcan offers unrivalled scope of analysis – you can use it to identify all common alloy types, heavy and light. Many similar products are only able to analyse and identify light alloys such as aluminium, magnesium and titanium alloys.

Works almost invisibly

Vulcan features a high-powered laser that focuses on a very small surface area. It vaporises the metal being analysed to around 10,000 degrees Celsius, producing a plasma that includes every element of the metal.

It leaves an almost invisible burn mark on the surface of the metal that looks like a tiny scratch and is hardly visible to the naked eye. Less than one billionth of a gram of material is consumed during a typical analysis. Because it works almost invisibly, you can use Vulcan to analyse even finished metal goods for quality assurance and quality control purposes, which means you can carry out 100% of checks quickly and easily.

WHY IS VULCAN THE PERFECT TOOL FOR YOUR BUSINESS?

Much lower cost of ownership

XRF analysers require stricter licensing and certification for training which takes up much more money and time than that required by a laser analyser. Because Vulcan is a laser tool, there is no need for staff to attend expensive and time consuming radiation classes.

Not only can your team start using Vulcan more quickly and easily, but you will also benefit from significant cost and time savings for the training and certification required.

Tried and trusted

Vulcan delivers outstanding performance and results. Its proprietary core components (the spectrometer and laser) are manufactured in-house by Oxford Instruments and it has been carefully developed and rigorously tested. This is a completely new, second generation instrument created by the team with the most experience in the handheld LIBS market.

Built to last

The Vulcan laser tool is rugged and durable and built for use in the harshest environments. As well as being splash water and dust proof (IP54 certified), the measurement window is protected by strong sapphire glass.

Vulcan has been tested to perfection, but if anything does go wrong, you're still covered. The tool has extended warranties and service plans available covering maintenance and support, giving you peace of mind and no surprise costs.

Faster than your current XRF tool

Vulcan is the fastest tool in the world for analysing metal alloys. It is quicker than any XRF analyser or any other laser products on the market. Identifying and analysing aluminium alloys using an XRF analyser typically takes from 5 to 15 seconds or even longer. Vulcan does it in one second.

Comfortable and practical to use

Vulcan is ergonomic, balanced and fits easily into the hand, which is important when using it for several hours a day to analyse large batches. It can operate all day long on a single battery so there is no need to stop working to recharge.

Vulcan's screen is very easy to read and uses the most advanced technology to make it legible in direct sunlight. The analyser nose is also easy to clean and does not require any special tools.

OiConnect

Store your results securely and generate reports with our cloud-based service. Access your data anytime, from anywhere.

VULCAN SMART OPTION

If you are looking for a cost-effective solution to identify steels and nickel alloys only, Vulcan Smart might be exactly what you need.

It's designed for ferrous applications and its performance is limited to stainless steels, tool steels, low alloy steels and nickel alloys only. However, you can upgrade the package to include cobalt, copper, lead, tin, titanium and zinc calibrations.

Vulcan Smart is just as fast as the Vulcan Expert, so you'll still get results in a second, and it's still rugged, ergonomic and easy to use.

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Features	Vulcan Smart	Vulcan Expert
Grade identification and full chemistry	✓	✓
Stainless steels, low alloy steels, tool steels, Ni alloys	✓	✓
Co, Cu, Pb, Sn, Ti, Zn alloys	Optional	✓
Al and Mg alloys	N/A	✓
Built-in camera	Optional	✓
Wi-Fi	✓	✓
Pre-burn to clean the sample surface	✓	✓
IP54 (NEMA 3 equivalent) dust and splash water protected	✓	✓
MIL-STD-810G compliant	✓	✓
Full day operation with one battery	✓	✓
Warranty (instrument)	1 year	1+1 years
Warranty (battery)	3 months	3 months
Grade library with over 1500 grades	✓	✓

OiService®

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We're here to help you!

OiService aims to keep your Vulcan working as hard as you do. Our global network of service hubs can offer a full range of technical support to keep you up and running:

- Rental instruments so you can keep working if your analyser isn't.
- A range of consumables and accessories from spare batteries to window cleaners.
- Extended warranties to give you peace of mind and avoid unplanned costs.
- Training to help you get the most from your analyser and all its features.
- Telephone help desks to guarantee a fast response to any problem.
- A fast and efficient repair service, recertification and maintenance through our Vulcan service agreements that ensures your analyser is maintained in excellent condition and avoids any unplanned costs.

Whenever you operate a Class 3b laser device such as Vulcan, we strongly recommend you use laser safety goggles.

WHAT NEXT?

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We're very proud of Vulcan, and believe that it's an asset for any business carrying out manufacturing.

It is incredibly fast, easy to use, durable and capable of delivering the most accurate and consistent results from the widest range of alloys and materials. It even looks good. We believe it ticks all the boxes and is the perfect tool for quality assurance and quality control.

But we don't expect you to take our word for it.

Contact one of our experts today at **vulcan@oxinst.com** to arrange a demo. We're confident that you'll soon see what all the fuss is about. And then you can use the world's fastest analyser to get the best value from your scrap metal.

MORE INFORMATION

To find out more about the Vulcan range of laser analysers visit our website **www.oxford-instruments.com/vulcan** or drop us an email **vulcan@oxinst.com**

OTHER PRODUCTS

Oxford Instruments: meeting all your alloy analysis needs.

We have been providing products and analysis for over 50 years. Contact one of our experts today at **vulcan@oxinst.com**

- Handheld LIBS: the fastest tool for accurate alloy identification.
- Handheld XRF: for fast reliable, non-destructive identification and analysis of alloys.
- Mobile and portable OES: for high performance analysis of alloyed and trace elements; nitrogen analysis in duplex steels.

We would like to thank Wellington Engineering, Hayes, UK, for their help providing the images for this brochure.

Part No: 630*084 Vulcan - QA/QC brochure

As part of Oxford Instruments' environmental policy this brochure has been printed on FSC paper