

SCRAP METAL

mPulse™

The first handheld LIBS analyser for ultra fast scrap sorting and alloy identification

Sort
alloys in one
second



Point

Click

Result!

Rapid / Rugged / Reliable



The Business of Science®

NO X-RAYS

Maximise profits with the **mPulse**

Grade and sort metal alloys in just 1 second

Oxford Instruments' **mPulse** is the first handheld LIBS (laser induced breakdown spectroscopy) analyser optimised for the rapid sorting of metal alloys.

The **mPulse** enables the user to:

- Identify a wide variety of metal alloys at the press of the trigger
- Measure elements, light and heavy in only 1 second
- Test large or small samples such as shavings, turnings, granules, cables etc. The laser scans the sample surface and will 'bounce' repeatedly across small samples to optimise the measurement

Hassle free: no X-rays

Based on LIBS technique, the **mPulse** is free from the regulatory constraints usually associated with x-ray analysers

Rugged for low cost of ownership

- The analysis head is protected by a strong sapphire window in the analyser's nose, safeguarding against the need for costly repairs and preventing contamination of the optics
- Ready to use: no set up is required, skilled or unskilled staff can be up and running in minutes. The **mPulse** requires minimal training for optimum use
- Low maintenance and repair costs - no costly detector to replace
- No X-rays so no X-ray regulations. The **mPulse** is free from regulatory constraints usually associated with XRF analysers, so costly and time consuming training classes for radiation safety, regular third-party test reports, yearly user certification, etc. are not required



No X-rays



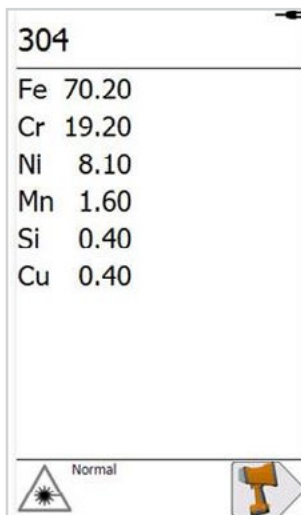
Point

Click

Result!

Ease of use

- Simple 'point and shoot' analysis. Simply place the **mPulse** nose against the sample and press the trigger to measure
- Intuitive icon driven user interface
- Large touch screen (4.3") that can be used with gloves on
- Great results visibility, even in direct sunlight
- Grade identification, chemistry, or Pass /Fail results after only 1 second



Battery operated for true handheld use

- Lightweight rechargeable battery pack
- Batteries take only seconds to swap, minimising any interruption to your work
- Up to 250 tests on a single charge
- Two batteries included



Flexible results storage and transfer

- Results are saved automatically on the mini-USB memory stick provided with the **mPulse**
- Averaging function for multiple tests across a sample surface



Your choice

Choose your **mPulse** to suit your application



mPulse for fast scrap sorting

The **mPulse** analyser is the fastest alloy sorter on the market. It has been designed for the rapid identification and sorting of heavier alloys such as Stainless Steels, Ni, Cu, Co, Ti alloys and many more. Up to 5 times faster than handheld XRF instruments, the **mPulse** makes measurements in just one second regardless of the alloy type.



mPulse+ for Aluminium sorting

The **mPulse+** is the fastest Aluminium sorter on the market, up to 10 times faster than any handheld XRF instrument available. It is able to separate even the close grades such as Aluminium 6061 and 6063 in just one second.



For ultra-fast sorting of a wide range of metal alloys including Magnesium and Aluminium alloys, stainless steels, Ni, Cu, Co, Ti alloys and many more, choose **mPulse+**.

mPulse analysers

The fastest alloy sorters available

Why use an mPulse?

Speed – 1 second test: sort large quantities of material, and turn your scrap into cash fast

Ease of use – minimum user training required

Virtually non-destructive method – the very small burn mark on the sample can be wiped with a finger or cloth

Less stringent regulatory requirements than XRF:
much easier to integrate into the work routine

Rugged – Optics are protected by a sapphire window to prevent contamination and damage

Light – 1.8kg with battery and balanced for maximum productivity throughout the day

Performance – Separate stainless steel 304 from 316 or Aluminium 6061 from 6063 in just one second



GOT A SECOND

Oxford Instruments: the only instruments supplier to meet all your alloy analysis needs

Handheld LIBS: For 1-second alloy identification, even of Al alloys, with no X-rays.



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.



OiService - Here to help

OiService aims to keep your **mPulse** working as hard as you do. Our global network of Service hubs provides a full range of technical support:

- **Telephone help-desks** – For a fast response to your problem
- **Rental instruments** – To keep you working when your analyser is not
- **Recertification and maintenance** – Ensures your analyser produces the right result every time
- **Training** – Understand your analyser and its features
- **Extended warranties** – Avoid unplanned costs
- **Consumables and accessories** – From spare batteries to lens cleaners
- **Repairs** – Fast and efficient turn around

mPulse service agreements provide a great way to avoid unplanned costs and ensure your analyser is maintained in excellent condition. Purchasing an agreement with your analyser provides seamless coverage for up to 5 years.

visit www.oxford-instruments.com/sorted for more information or email: industrial@oxinst.com

This publication is the copyright of Oxford Instruments plc and provides outline information only, which (unless agreed by the company in writing) may not be used, applied or reproduced for any purpose or form part of any order or contract or regarded as the representation relating to the products or services concerned. Oxford Instruments' policy is one of continued improvement. The company reserves the right to alter, without notice the specification, design or conditions of supply of any product or service. Oxford Instruments acknowledges all trademarks and registrations. © Oxford Instruments plc, 2015. All rights reserved. Part no: OIIA/121/0615



The Business of Science®



ISO 9001

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