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METAL ADDITIVE MANUFACTURING

ELTRA® ONH-p 2 Offers Testing for Pure Metal Powders

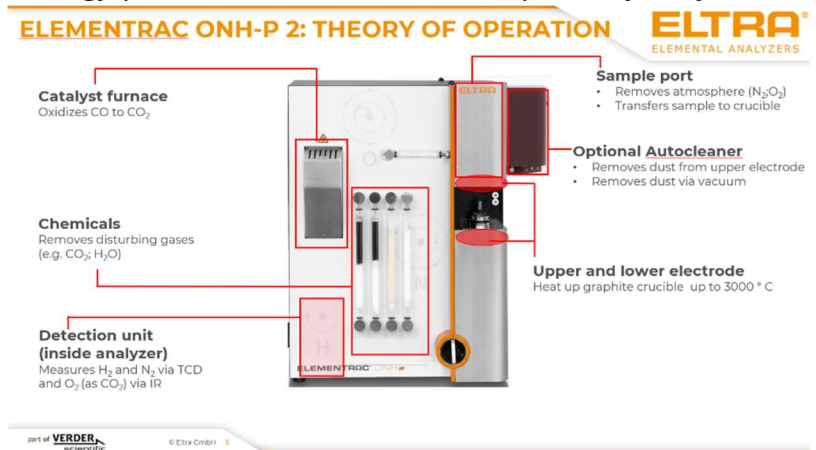
Sci-Lab Analytical is pleased to announce an **installation of the ELTRA ONH-p 2 in the UK**. As the exclusive distributor of ELTRA products in the UK, Sci-Lab helps companies select the analyser type and set up that best meets their analysis needs.

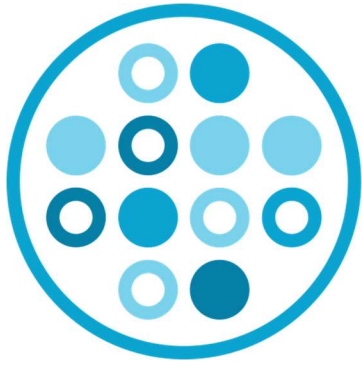
A metal powder manufacturer in the UK has been a Sci-Lab customer for many years, successfully using ELTRA's Carbon & Sulfur and Oxygen & Nitrogen instruments. Recently, they decided to invest heavily in their laboratory capabilities. Because they were very familiar with the robust nature of ELTRA instruments backed up by the Sci-Lab support package, they decided to purchase brand new analysers from Sci-Lab. One of their needs was an analyser which would be compatible with their additive manufacturing process.

Using Additive Layer Manufacturing (ALM) or 3D Metal Printing, parts that would have been impossible to manufacture just a few years ago can now be made to incredible tolerance using a wide range of pure metal powders. Additive Manufacturing has grown from solely a prototyping process into a mature technique used for the production of components for the most demanding applications. The technology produces three-dimensional parts layer by layer from a parent material. The material characteristics of the finished product can however vary widely, greatly influenced by the chemical characteristics of metal powder feed-stock.

ELTRA's ONH-p 2 is a powerful and robust elemental analyser for measurement of oxygen, nitrogen and hydrogen concentrations in inorganic

materials like steel, iron, copper or ceramics. The highly sensitive NDIR and thermal conductivity detectors reliably detect element concentrations from low ppm content to high percentages. Most importantly for Sci-Lab's customer, the innovative sample port system with pulsed chamber rinsing and vertical sample drop allow for user-friendly and





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comfortable analysis of rod-shaped, granular or powdery samples with a weight of up to 2 grams.

The metal powder manufacturer's laboratory now includes an ELTRA CSi analyser which has the capability to analyse down to 0.6ppm for both Carbon and Sulfur. Additionally, they decided to increase their analysis capabilities by purchasing the new, updated ONH-p V2 analyser, capable of analysing to 0.04ppm for Oxygen & Nitrogen and 0.08ppm for Hydrogen. These extremely low limits of detection allow this customer to certify the purity and quality of their product to unrivalled levels, which is of critical importance for their superalloy customers within the defense, aerospace, and automotive industries.

About Sci-Lab

Based in Chester, Sci-Lab Analytical Ltd has been the exclusive ELTRA® dealer in the UK since 1993. Sci-Lab doesn't just sell analysers, they also service analysers and provide spares. Whether you have an ELTRA, LECO® or Horiba®, Sci-Lab has the consumables you need.