

NEW HAND HELD XRF SPECTROMETER FEATURING A COLD CATHODE X-RAY TUBE

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For over 25 years, Oxford Instruments has been manufacturing a wide range of X-ray fluorescence spectrometers for elemental analysis for the quality assurance market. Oxford Instruments popular benchtop spectrometer, the Lab-X3500, is a world leader in its markets. Oxford Instruments continues to lead the way in obsolescing radioisotope driven spectrometers with those employing x-ray tubes, as demonstrated with its successful Lab-X product line..

The Oxford Instruments' range of products did not, until now, include a portable metal analyzer. Developers have been working to produce an instrument that takes its proprietary X-ray tube technology several steps further, thus producing a lightweight, portable, fast, robust, and above all, safe analyzer.

This new analyzer, Horizon600, is revolutionary. It is based around a digital X-ray tube that requires low power **and** has the inherent characteristic of robustness. As the cathode is constructed of carbon nanotubes, this ensures ruggedness of this typically fragile component, as these nanotubes are known for their high tensile strength, thereby ensuring longevity of the x-ray tube. (A patent is pending on this technology).

The digital X-ray tube does away with scheduled replacement and source decay, which leads to deterioration in measurements over time, and complex health regulations, such as wipe-tests. However, not only does the Horizon offer the safety of no radio isotopes, its digital (cell phone) electronics delivers speed and high resolution in a small, easy to use but powerful instrument. The high power Li-ion batteries ensure long operation and the Win/CE PDA – touch screen palm top technology – makes it simple to operate and to collect results.

The first analyzer in the Horizon range will be a dedicated metal analyzer, capable of sorting typical Fe/Ni/Co alloys. It has been designed for use in the field or in a factory environment, and for use by the inexperienced user. The Horizon 600 has been designed and manufactured by Oxford Instruments in Scotts Valley, California. As would be expected, the Horizon is the subject of several pending patents.