

intertek MINErals

CHRYSOS PHOTON ASSAY TECHNOLOGY ADDED TO MINERALS GLOBAL CENTRE OF EXCELLENCE IN PERTH

Intertek Minerals has partnered with Chrysos Corporation to install four Chrysos PhotonAssay units at the new Minerals Global Centre of Excellence in Perth, Western Australia with two additional units being installed in Tarkwa,Ghana.

Using much higher energies than traditional X-ray methods, Chrysos PhotonAssay detects and counts atoms of gold, silver and complementary elements in as little as two minutes.

PhotonAssay allows large samples to be measured and provides a true bulk reading independent of the chemical or physical form of the sample. Using uniquelynumbered sample jars, the process is completely non-destructive, and all samples can be retained for further analysis or testing if required.

The technology is also measurably safer and more environmentally friendly than previous assay processes, something that aligns with Intertek's stated purpose of bringing quality, safety, and sustainability to life.

For gold producers Chrysos PhotonAssay delivers faster, more accurate gold analysis on larger samples with lower costs.

- More representative sample analysis and results.
- Improved definition of reserves and resources.
- Lower labour requirements, less chance of human error and/or accident.
- Reduced supply chain cost, reliance and management .



Performance specifications

Assayed elements	Gold, silver and copper. * Please enquire about others.
Sample size	Containers hold 330 mL of sample (typically 400-650 g depending on material density).
Analysis time	Less than 2 minutes Standard throughput up to 1,400 samples per day.
Detection limits	Gold: 0.02 ppm (3-sigma) * Detection limit is larger for samples containing elevated levels of U, Th or Ba.
Disposal	Samples are retained inside unit for 2 hours post-analysis, after which time they can be safely handled or discarded.
Re-analysis	PhotonAssay is completely nondestructive, so materials may be sent for additional measurements if required.
ESG improvement	Every sample analysed with PhotonAssay means reduced $\rm CO_2$ emissions and less hazardous waste.

