

FACT SHEET

MINE SITE LABORATORY SERVICES

On-site expertise from mobile sample preparation facilities, customised mine site laboratories through to fully automated robotic laboratories

Outsourcing your mine site laboratory to Intertek delivers benefits to your operations from world-class expertise and services, leaving companies to focus resources and capital on their core business



Intertek designs, commissions and operates customised port and mine site laboratories and sample preparation facilities in remote locations across multiple mineral commodities globally.

Specialised on site laboratory systems enable clients to manage the challenges of staffing in remote locations along with providing efficiency, consistency and safety benefits.

Through a dedicated mine site services project team, Intertek provides clients with a complete solution for any scale of exploration, mine or port site laboratory installation from concept phase through to contract management.



Mine site laboratories are run by experienced personnel with support from Intertek's extensive global laboratory network. Fast, accurate and independent mineral analysis allows mines to effectively manage their process control and regulatory reporting requirements.

Mine Site Laboratory Services

From simple crusher installations to full service analytical laboratories and automated robotic facilities, Intertek will customise the facility to meet your operational requirements. Mine site services include;

- Sample preparation
- End to end sample preparation and analytical laboratory services including a vast range of instrumentation finishes for mine exploration, grade control, process control and final product
- Containerised preparation and laboratory options
- Robotics & automated laboratory systems
- Laboratory outsourcing, build, own, operate
- Consulting services

Key Benefits of Outsourcing

Outsourcing your mine port or site laboratory services to Intertek ensures your operation will benefit from world-class expertise and Total Quality Assurance services, while enabling your company to focus resources and capital on the core business. Outsourcing options and benefits include;

- Optimised laboratory design, equipment and method selection
- Wide range of technical and operational support available
- Reduced costs on external analysis
- Independence of data
- Access to Intertek's skilled staffing pool

Staffing and Technical Support

Intertek's extensive global laboratory network provides technical and staffing support, the ability to leverage global equipment and service provider agreements, and the reassurance of partnering with a global industry leader.

- Identifying and hiring of suitably qualified, experienced staff
- Staff coverage during periods of leave available from a broad staffing pool across multiple disciplines
- The site laboratory becomes a part of Intertek's global network of laboratories with support from Global Technical Experts

Laboratory Design

Intertek has extensive experience in designing and operating laboratories globally, with the focus on specialised design and equipment selection for optimised throughput, efficiency and quality.

With a global network of laboratories, Intertek often receives improved level of after sales service support from equipment suppliers and preferential customer status.



Offsite Analysis

A wide range of specialised analyses typically not carried out on mine site laboratories are available at Intertek's hub commercial laboratories and can be expedited through Intertek's global network. Preferential rates reflect the broader relationship of long-term contracts.

Advanced Minerals laboratory robotic and automated systems, customised and designed to meet specific laboratory requirements

Robotics and Automated Minerals Laboratory Systems

Intertek is the largest global commercial operator of automated and robotic mine site laboratories. Intertek's automated and robotic sample systems are purpose built, ranging from individual cells to fully integrated systems, providing complete end-to-end sampling and analysis solutions. Using advanced robotic sample handling technology for minerals testing has distinct advantages, including rapid sample throughput, unparalleled consistency, exclusion of human error, a comprehensive audit trail, synchronised process control, reliability and fully programmable comminution parameters.

Fully automated designs can be incorporated for specific requirements and various commodities, powered by superior software. Various options can be proposed to facilitate the amount of automation through a process, in line with client requirements.

Programmable parameters ensure that ores obtain the requisite treatment consistently.

Robotics and automated services include;

- Sampling systems
- Semi-automated sample preparation
- Automated robotic sample preparation
- Mechanised analytical systems
- Robotic analytical systems
- Integrated instrumentation



Robotic systems reduce OH&S exposure to employees, eliminating heavy lifting and isolating personnel from hazardous materials, significantly improving safety.

Additional Minerals Services

Mineralogy

Intertek's leading expertise and state-of-the-art facilities offer a range of mineralogical services. Technical specialists in XRF and XRD support local and global operations, producing quality reliable data with the reassurance of years of experience and a proven track record.

Mineralogy services include;

- Research quality lithochemical packages
- Applied bulk mineralogy
- XRD instruments and specialist on site
- Low cost XRF & spectral scanning
- TerraSpec Near-Infrared Spectroscopy
- FTIR Spectroscopy
- Applied Micro Mineralogy QEMSCAN

Minerals Trade Services

Intertek's independent inspection, sampling, testing and certification services assist to protect the quantity and quality of mineral commodities reducing commercial risk in the trading environment.

Intertek's network of trade inspectors and samplers survey, weigh and sample a range of high value bulk commodities and concentrates. Elemental analysis is a key service that is provided for all commodities with locally accredited laboratories for shipment analysis and globally specialised laboratories for party assays. Intertek certificates of weight and quality support

commercial contracts and settlement through party exchanges. Umpire analysis is provided through Laboratory Services International (Intertek LSI), a London Metal Exchange (LME) listed sampler and assayer, based in Rotterdam and globally viewed as a leading independent analytical expert and leader for accuracy, service and quality.

Production Services

Intertek's analytical and scientific services are focused on extending the longevity of plant and equipment and optimising operations. Services include;

- Oil conditioning monitoring
- Pipeline inspection and testing
- Refinery representation & superintending
- Fuel tank inspection and testing
- Tank/pump inspection and calibration
- Environmental chemistry

Environmental Testing Services

Intertek environmental laboratories support the minerals industry with water, soil and air testing to governmental, regulatory and industry standards.

FOR MORE INFORMATION



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