

AllScan Slurry

Next Generation Slurry Analysis



 **Elemental Analysis**

 **24/7 Remote Support**

 **Superior Performance**

Real Analysis. Real Data. Real Time.
EMPOWERING INFORMED DECISIONS THAT SHAPE TOMORROW

MEASUREMENT IN MINING

Understanding the material's composition is vital at every stage, allowing operators to maximise product value, maximise efficiency and minimise risk. With value dependent on material content, small changes can drastically alter the end value of the material. Without measurement, operators are incapable of determining material value and run the risk of drastically reducing revenue.

PGNAA TECHNOLOGY

Material composition is usually determined by laboratory sampling. This process is slow and expensive, failing to provide information in real-time. RTI focuses on measuring materials in real-time while they are still being processed.

The AllScan harnesses Prompt Gamma Neutron Activation Analysis (PGNAA) to measure the entire flow of material, penetrating bulk materials.

This method of analysis provides a number of benefits:

- Target a wide range of elements.
- Can be used in various setups (on-belt or in-pipe).
- Non-invasive, no contact with material.
- Measure entire cross section of material.

WHY REAL TIME INSTRUMENTS?

RTI solutions are built by miners, for miners, with over 20 years of experience.

With a global customer base, 24/7 remote servicing and a customer focused approach, RTI has established itself as a leading provider of real-time analysis solutions across a range of commodities.

Our solutions are tailored to the customer, with expertise in bulk ore sorting, ore management, grade control, feedback systems and process optimisation.



GLOBAL HEADQUARTERS

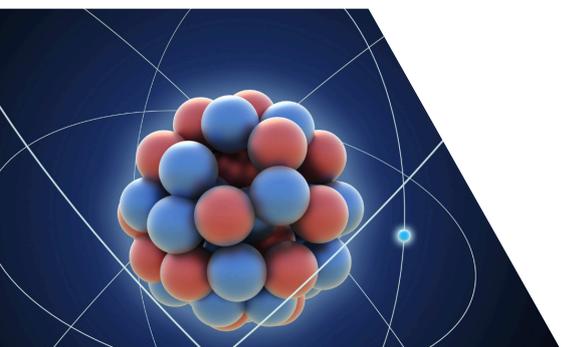
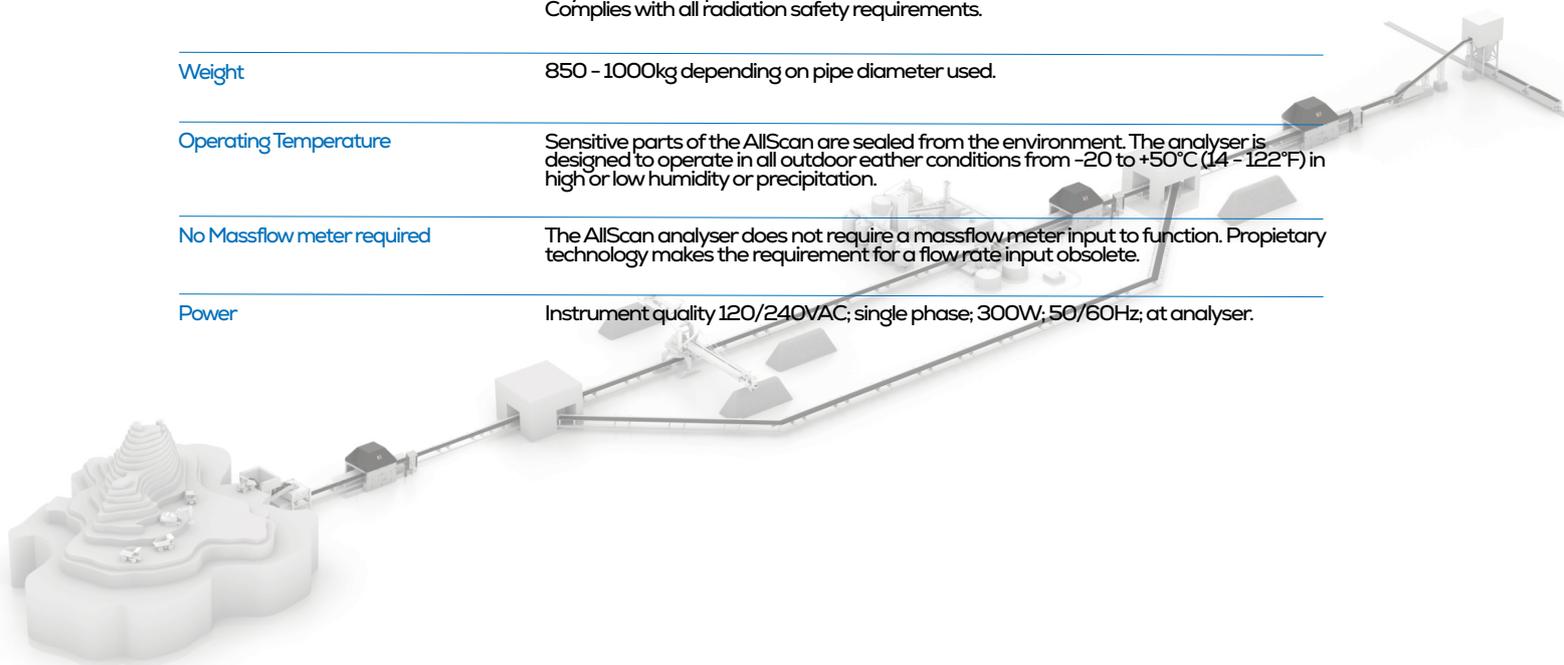
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Specifications

| | |
|----------------------------|--|
| Measurement Technique | Prompt Gamma Neutron Activation Analysis (PGNAA) |
| Analytical Data Reported | User defined. Most elements can be reported depending on concentration and accuracy required. Typical elements include Ag, Al, Au, Ca, Cd, Ci, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, S, Si, V, Zn, Moisture Trace elements include: Hg, As and Se. |
| Source | Standard analyser loaded with 20µg Cf-252 (2.5 years half-life). For larger pipes or high performance applications 40µg Cf252 is used. Typically, an initial 20µg source is topped up with 10µ after 2.5 years. |
| Source Holder | Automatic source drive with automatic fail safe in event of power loss. Physical isolation point. Complies with all radiation safety requirements. |
| Weight | 850 - 1000kg depending on pipe diameter used. |
| Operating Temperature | Sensitive parts of the AllScan are sealed from the environment. The analyser is designed to operate in all outdoor eather conditions from -20 to +50°C (14 - 122°F) in high or low humidity or precipitation. |
| No Massflow meter required | The AllScan analyser does not require a massflow meter input to function. Proprietary technology makes the requirement for a flow rate input obsolete. |
| Power | Instrument quality 120/240VAC; single phase; 300W; 50/60Hz; at analyser. |



Most Advanced PGNAA Slurry Analyser

Dura-G technology built into the AllScan separates the effects of presentation effects and composition effects, creating a cleaned-up spectrum.

The removal of the 'noise components' from the complex raw Prompt Gamma Spectrum, Dura-G.

- Increases the signal to noise ratio of the measured compositional signal and improves the de-convolution of same to provide output data with reduced measurement error compared to the traditional raw spectrum.
- Supports a sophisticated calibration methodology to provide an elemental analyser that is not dependant on material or ongoing calibration techniques.

Suitable for Most Ores And Minerals

Online PGNA is suitable for coal and most mineral ores, including:

- Iron Ore
- Bauxite
- Copper
- Manganese
- Phosphates
- Sulphide and Laterite Nickel Ores
- And more

Detectable and measurable elements include:

- | | |
|------|------|
| • Ag | • Co |
| • Cu | • Ni |
| • Al | • Cr |
| • Fe | • P |
| • Au | • S |
| • K | • Si |
| • Ca | • Ti |
| • Mg | • V |
| • Cd | • Zn |
| • Mn | |
| • Ci | |
| • Na | |

Economic Benefits Of The AllScan

Utilising available seamless interface options, users of AllScan can access composition analysis of slurries on a minute by minute basis, rolling average and interval basis. Pending specific application details some or all of these operational benefits will be experienced:

- Full stream analysis reducing the effect of sampling bias
- Direct on-line analysis without sampling latency
- No moving parts normally associated with other analysis methods
- Improved yield through pro-active control of process additive consumption
- Reduction in waste management cost
- Small footprint and low mass with reduction in structural steel requirements

Improve metallurgical accounting

With the lowest cost of ownership on the market, the AllScan offers the best return on investment to reach these important benefits.

On-line PGNA technology continuously measure the concentration of individual chemical elements of interest in mineral slurries and concentrates.



LOCATIONS

North America | South America | Oceania

GLOBAL HEADQUARTERS

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