

# AllScan Cf252

## On-line Elemental Analysis



 Elemental Analysis

 24/7 Remote Support

 Measure All Material

**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.

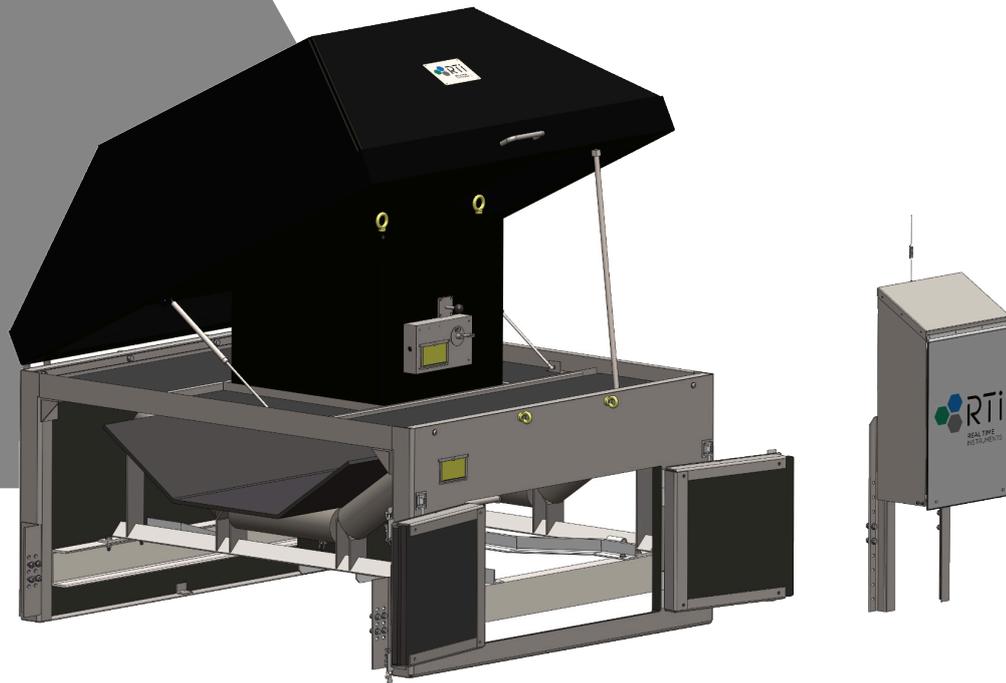
Our solutions are tailored to the customer, with expertise in bulk ore sorting, ore management, grade control, feedback systems and process optimisation.



### GLOBAL HEADQUARTERS

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## Specifications

<b>Measurement Technique</b>	Prompt Gamma Neutron Activation Analysis (PGNAA)
<b>Elements Measured</b>	Fe, Al, Si, K, Ti, Ca and others. Total Ash calculated using elements found in Ash.
<b>Source</b>	20 - 30µg Cf-252 (2.6 years half-life). Source is topped up with 10µg after 2.5 years and again after 5 years. Disposal occurs at 7.5 years.
<b>Belt Widths</b>	750 - 2400mm (30 - 96 inch).
<b>Environmental Conditions</b>	Sensitive parts are sealed from the environment. The analyser is designed to operate in all outdoor weather conditions from -10 to +50 degrees Celsius in high or low humidity or precipitation.
<b>Aperture</b>	Variable; height of the tunnel should be sufficient to clear the material that flows through it so the analyser does not sustain damage. Can be easily adjusted to appropriate tunnel height during manufacture/ installation.
<b>No Belt Weigher Required</b>	The AllScan analyser does not require a belt scale input to function. Proprietary technology makes the requirement for a feed rate input obsolete.

### Unrivalled Accuracy and Responsiveness

The AllScan n-Gen and AllScan incorporate two sophisticated algorithms - DuraG and DuraSum.

- DuraG - Overcome the usual adverse affects of chlorine on analytical performance.
- DuraSum - Eliminate the need for time-based averaging of data in order to obtain stable results.

### Measuring Moisture

RTI analysers incorporate state of the art technology deriving moisture from elemental composition eliminating the need for a second analyser dedicated to moisture measurement.

### Improving Safety

Smaller sources reduce dose rates and permit operators to safely stand next to or near the analyser, and work safely near the entrance or exit of the conveyor with minimal exposure.

### I/O And Diagnostics

A browser based touch panel interface in the control cabinet allows for immediate access to all data and functions including trending displays.

A 4G interface is included so that data is uploaded automatically to a secure site, providing alternative ways to view and retrieve data that is completely independent of site communication infrastructure.



## Simplifying Installation

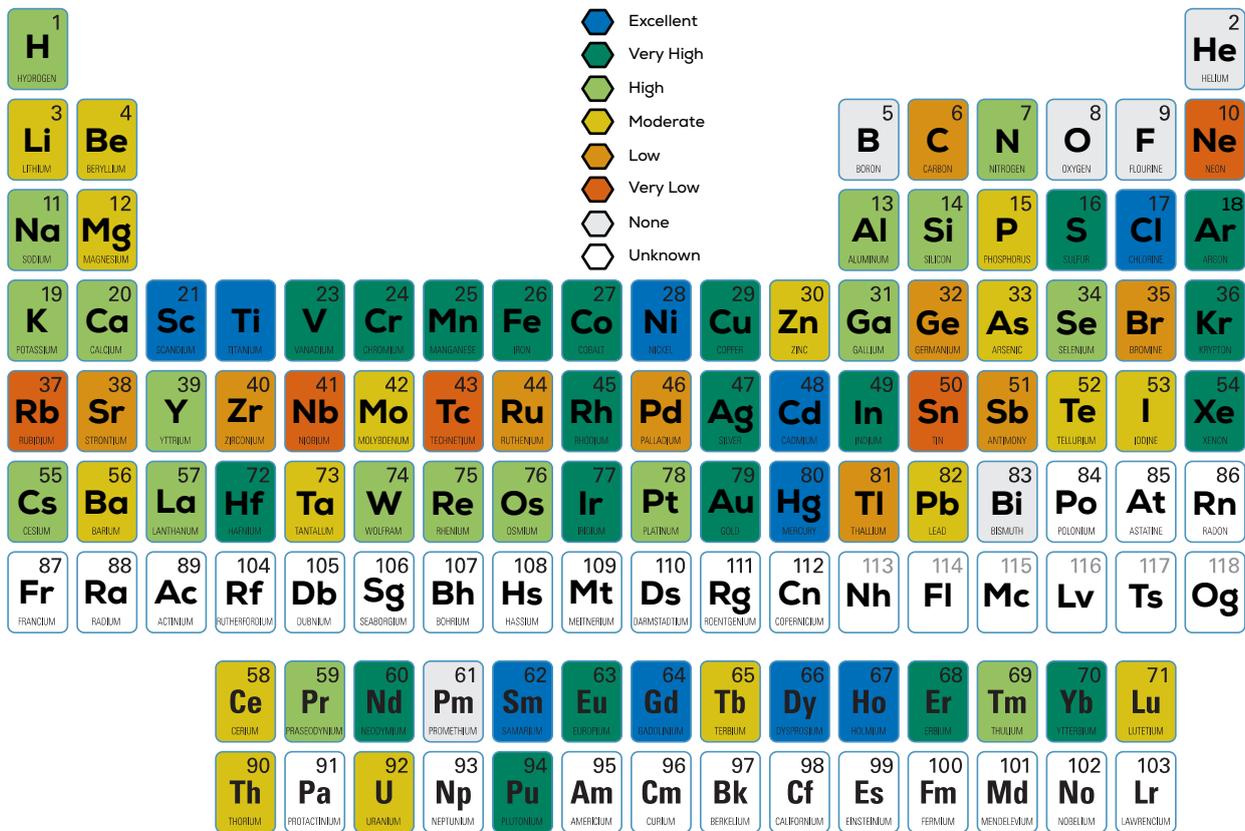
Our elemental analysers are designed to mount on the support rails of a conveyor system, and the small size and weight of analyser greatly simplifies installation.

## 24/7 Remote Support

Our remote support team is available 24/7 and our analysts harness guided workflows for fast problem solving onsite for issues without RTI assistance.



### Material Precision Guidelines in PGAA



## Cross Belt Measurement

PGAA analysis allows for measuring the entire profile of the material.



### LOCATIONS

North America | South America | Oceania

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