

ESTABLISHED 2000



ScanMin Africa have developed a rapid bulk sample elemental analyser using our well-established Neutron Inelastic Scatter and Thermal Neutron Capture techniques.

System description

Rapid Bulk Sample analyser

The Rapid Bulk Sample analyser comes complete with:

- Am241Be
- Special high-resolution detectors
- Rapid consistent feed
- Failsafe interlock systems
- Bulk samples can be sent for further laboratory analysis for verification

Electronics control cabinet

- Processor / PLC
- Power supplies
- Electrical terminations
- Analyser components
- Display panel and terminal

Mass measurement

- The analyser has a scale and reports mass
- The volume of the sample will also be known
- A bulk density can be derived
- Minimum sample size is 200 litres

ONLINE PROCESS CONTROL SOLUTIONS

Operation

The analyser is designed to take samples anywhere from 300kg to 500kg. Measurement time per sample can be as short as 5 minutes. Our proprietary application combined with our latest, state of the art detectors will supply an accurate elemental analysis of the sample within minutes.

The analyser can work in a range of minerals including Coal, Iron ore, Cement, Copper and many more. The analyser will be able to supply a complete assay without the necessity of sample preparation.

Results reporting

Results can be placed directly into the client's SCADA without any manipulation of the result. The system is designed with a failsafe mechanism with automated sample loading capability. The analyser has been designed to be safe and will conform to all international radiation standards and requirements.

Technical specifications

Operational

Material top size	Typically, up to 300mm (material dependent)
Moisture range	0 to 80%
Measurement update time	Typically, 1 - 5 minutes (material dependent)
Instrument precision	Typically, 0.3% at 1 standard deviation (ultimate precision achievable 0.1%)

Electrical requirements

At the electronics control cabinet 240 volt or 110V single phase, 16 Amp supply.

