

CB Omni Agile online elemental analyzer

Bulk online elemental analysis for your process control needs

The Thermo Scientific™ CB Omni Agile online elemental analyzer drives efficiency in your plant through enabling real-time control decisions, by identifying and responding to process variations, consistently achieving target chemistry and reducing corrective additives.

The analyzer's precedented configuration flexibility suits various applications through its modular industrial design. In addition, it's a light, easy to install analyzer, with the same industry leading performance that you have come to expect.

The real-time online elemental analyzer integrates into a material conveyor and provides a minute-by-minute elemental analysis of raw materials. The system provides a reliable and accurate means for process control to achieve consistent chemistry thus minimizing cost and improving process efficiency.

Benefits

- Sends only economically viable ore to the concentrator for processing and minimizes loss of valuable material to waste
- Blends, sorts, monitors material quality in real time which avoids continuous sampling
- Reduces process upsets and increases process throughput while consuming less energy
- Minimizes use of highest cost, additive materials

Features

- Modular industrial design
- Configurations tailored to specific application needs
- Belt widths from 600 mm (23.6 in) to 1800 mm (70.8 in), including steel corded belts
- Rapid bulk analysis, ≤ 30 sec, using PGNAA or PFTNA
- Variable tunnel heights to accommodate process conditions
- Isotope (PGNAA) OR Neutron Generator (PFTNA) configuration
- One to four large volume, NaI detectors
- Superior, robust accuracy (ABLC)
- State-of-the-art electronics
- Comprehensive, flexible user interface - Omni View
- Integrated process control software
- Flexible plant connectivity



CB Omni Agile elemental analyzer

The CB Omni Agile elemental analyzer measures and reports

| Cement applications | | | | Minerals applications | | | |
|---------------------|--------------------------------|--------------------------------|-----------------|-----------------------|----|----|----|
| SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | CaO | Ag | Co | Mg | Si |
| MgO | K ₂ O | Na ₂ O | SO ₃ | Al | Cr | Mn | Ti |
| TiO ₂ | Mn ₂ O ₃ | Cl | Moisture | Au | Cu | Na | V |
| | | | | Ca | Fe | Ni | Zn |
| | | | | Cd | Hg | P | |
| | | | | Cl | K | S | |

Specifications

| Thermo Scientific CB Omni Agile | | | | | | |
|---|-----|--|-----------|---------------------------------|-------------|--|
| Physical specifications | | ²⁵² Cf source configuration | | Neutron generator configuration | | |
| Belt size | mm | 600-1200 | 1400-1800 | 600-1200 | 1400-1800 | |
| | in | 24-48 | 54-72 | 24-48 | 54-72 | |
| Length of unit | mm | 2450 | 3059 | 2450 | 3059 | |
| | in | 96 | 120 | 96 | 120 | |
| Approximate width | mm | 2165 | 2755 | 2165 | 2755 | |
| | in | 85 | 108 | 85 | 108 | |
| Approximate height | mm | 1685-1813 | 1838-1966 | 1716-1966 | 1838-2116 | |
| | in | 66-71 | 72-77 | 68-77 | 72-83 | |
| Weight | kg | 2833-3079 | 3944-4302 | 4076-4315 | 5463-5805 | |
| | lbs | 6233-6774 | 8677-9464 | 8967-9493 | 12019-12771 | |
| Standard physical specifications | | | | | | |
| Troughing angle | | 35° | | | | |
| Electronics enclosure | | IP65 enclosure 600 mm width x 800 mm height x 300 mm depth (24 in x 32 in x 12 in) | | | | |
| Electronics connection to analyzer | | Standard 25-meter cable provided | | | | |
| Operating temperature | | -25 °C to +55 °C (-13 °F to +131 °F) | | | | |
| Electrical specifications | | | | | | |
| Electronics enclosure | | 230 VAC 50 or 60 Hz, 16 Amps 3 wire (L1, N, GND) | | | | |
| Operator console | | 120 VAC 50 or 60 Hz, 5 Amps 1 Phase or 230 VAC 50 or 60 Hz, 2.5 Amps 1 Phase | | | | |
| Communications | | | | | | |
| Electronics enclosure to operator console maximum (customer supplied) | | Fiber Optic 62.5/125 multimode (minimum of 2 fibers) 2000 meters maximum (customer supplied) (longer distances optionally available) | | | | |
| Operator console to customer | | OPC client/server link, major communication protocols, ODBC | | | | |
| Offsite (remote) communication | | Ethernet connection to Internet | | | | |
| Neutron source | | Either a neutron generator or Cf-252, with amounts determined by application and accuracy requirements | | | | |
| Neutron generator (optional) | | | | | | |
| Electronics enclosure dimensions | | 240 mm width x 340 mm height x 160 mm x depth (9 in x 13 in x 6 in) | | | | |
| Electronics enclosure weight | | Approximately 18 kg (40 lb) | | | | |
| Related products | | | | | | |
| Raw Mix Optimization Software (RAMOS) | | | | | | |
| Pre-Blending Optimization Software (PREBOS) | | | | | | |
| AccuLink – Automatic Calibration Software | | | | | | |

Learn more at thermofisher.com/minerals
 or email pgnaa@thermofisher.com



thermo scientific