ABB gas analyzer solutions for the stack testing industry
So smart, they’re simple

At ABB, we are dedicated to making you look good in front of your customers through our leading technology and national service network.

Measurement made easy

“ABB provides compact, robust source emission analyzers, that reduce rack space and travel well. The ranging flexibility and menu simplicity of ABB analyzers, in particular, lends itself to the needs of stack testers.”

Robert Wilson CEO Emission Technologies, Inc.

We get stack testing
ABB knows that your reputation is built on being there for your customers, where and when they need you. You need reliable equipment that is easy to use and maintain and is fully supported when you need help. If you’re a seasoned stack tester, the analyzer frustrations listed below are probably painfully familiar to you:

• Ill-timed instrument issues
• Infuriating “F” functions
• Mystifying malfunction messages
• Distressing drift dilemmas
• Laborious linearity limitations
• Fussy FID flames
• Complex communication conundrums

Well, ABB offers robust and reliable analyzers that are so smart, they’re simple. Read on to find out more...

* Applies to EL3000 series only

Save money and time on site
ABB offers the widest range of measuring principles of any manufacturer, enabling you to standardize on a single brand for all your instrument needs. This saves you valuable time and money through common user interfaces, spare parts and communications.

Key reasons to partner with ABB

• Longest warranty in the industry of 5 years *
• Only supplier offering all measuring principles
• Most horsepower in the smallest footprint
• Service and parts from a single source
• Confidence dealing with the world leader in gas analysis
Easy to configure, integrate, operate and maintain

EL3000 (short for EasyLine) continuous gas analyzers were designed to make your life easier while still offering the market-leading performance that ABB is renowned for.

- **Uras26 NDIR** measures up to 4 components with ranges from 0 to 10 ppm up to 100 vol %
- **CL3020 CLD NOx** analyzer with dual cell option for continuous NO/NO$_2$ or NOx/NH$_3$ speciation
- **Limas23 NDUV** with corrosion resistant measuring cell is ideal for SO$_2$ and/or NOx measurement
- **Magnos28 Paramagnetic O$_2$** available as an option in the Uras26 or Limas23
- **Fidas24 FID** measuring THC; there are reasons why 40 % of U.S. cement plants have chosen ABB
- Flat menu structure and intelligent four-way navigation requires no training to operate
- Extensive self-diagnostics and clear text status messages warn you before a failure occurs
- Compact 19 inch housing (3HU) with industry standard analog and digital communications
- Excellent price / performance ratio with a great deal of horse power at a very reasonable price point

The most trusted and reliable NDIR analyzer in the world

Originally licensed from BASF in 1952, ABB (formerly Hartmann & Braun) has continuously refined the Uras to where it is today, with over 30,000 installations worldwide. The Uras26 is a dual beam, Luft-type NDIR, capable of both low (0 to 10 ppm) and high (0 to 2000 ppm) range CO measurement in combination with up to three additional IR absorbing components (e.g. NO, SO$_2$, CO$_2$). What’s more, due to the modular design, you can freely reconfigure the analyzer at a later date to add components or extend ranges.

Solid. Simple. Superior. CLD NOx analyzer

ABB’s new CL3020 CLD NOx analyzer was designed around Method 7E for low-NOx CEMS on gas-fired power plants using innovative all solid-state detection. The compact footprint also allows assembly of two detectors inside a single 19 inch housing, enabling continuous NOx speciation or NH$_3$ measurement and eliminating complex valve switching. The instrument is fully compliant with 40CFR60 and 40CFR75 demands for relative accuracy, linearity and calibration drift in low and ultra-low NOx combustion applications.
Robust $SO_2$ measurement with corrosion-resistant UV analyzer

Low-drift $SO_2$ measurement is one of the key features of this product and the corrosion-resistant quartz measuring cell would be a valuable option if acid formation in the system is a concern. Where continuous speciation of NO and NO$_2$ is required, the LIMAS UV analyzer is a great choice. It also eliminates errors associated with CO$_2$ quenching and converter efficiencies common to all CLD analyzers.

Paramagnetic oxygen measurement reaches new heights

The Magnos28 represents the future of paramagnetic oxygen measurement, leveraging ABB’s pioneering technology leadership and over 75 years of innovation in the field of continuous gas analysis.

This exciting new product completely rethinks paramagnetic oxygen analysis, replacing the glass dumbell with a revolutionary new silicon sensor, the microwing, and automating historically manual manufacturing processes leading to levels of quality and reproducibility beyond anything that is currently available on the market.

Think all FID analyzers are problematic... then think again

You might remember the FID analyzer from Hartmann & Braun (formerly a Mannesmann subsidiary), renowned for high performance and reliability. After the Elsag Bailey acquisition in 1998, ABB has built on that solid foundation with the MultiFID14 now preferred by around 40% of U.S. cement plants. The latest Fidas24 analyzer is available in the EL3000 series and comes with a standard sample eductor, with no moving parts, or with an optional internal pump should instrument air not be available.

ABB uses computer-controlled machines to automate the manufacturing of the FID detector block, cutting and threading holes to very precise tolerances so that the component alignment and gas supply injection are optimized. Starting with a solid block of metal also ensures even temperature control throughout the detector. It is this attention to detail that sets ABB apart from the rest, as evidenced by the large number of loyal users in the United States and around the world.
Pioneers in CEMS for over 60 years

1952
- first usable NDIR for combustion optimization paved the way for widespread use of continuous gas analyzers.

1988
- invention and subsequent patent of gas-filled calibration cells was a major breakthrough for ABB and they continue to be a very popular option with our photometers.

1993
- introduced the first fully automated FTIR based CEMS, now in its 4th generation with >1600 installations worldwide.

1996
- the world’s first truly modular gas analyzer system, the AdvanceOptima series, is still the benchmark in continuous gas analysis today and was certainly years ahead of its time then.

2005
- recognizing the demand for high performance measurement technology in a more compact enclosure with only essential functionality, the EasyLine series was launched.

2013
- following acquisition of Los Gatos Research (LGR), ABB is again leading the way with highly sensitive, cavity enhanced laser absorption technology called Off-Axis ICOS.

2017
- continuing with our pioneering spirit, ABB is rethinking paramagnetic oxygen measurement with revolutionary new microwaving technology

ABB’s comprehensive CEMS offering also includes integrated path TDL technology, DP stack flow monitoring, pressure and temperature measurements, zirconia O₂ probes and predictive emission monitoring software (PEMS).

The added value

What you can expect from the market leader.