INTRODUCING . . .

**Dycor ProLine Series Process Mass Spectrometers**
Compact, real-time process monitoring and control with a multiple-port sampling system

The new ProLine Series of process mass spectrometers is the latest addition to the Dycor product line from AMETEK. The compact ProLine Series offers new levels of performance in either a general purpose or hazardous-location package.

AND . . . IT’S PRICED TO MAKE YOUR PROCESS GAS ANALYSIS APPLICATIONS MORE AFFORDABLE!

Using matrix deconvolution, this versatile quadrupole mass spectrometer can quantify the amount of different gas species in your sample by providing data output in concentration units (PPM, %, etc.) rather than just ion current or partial pressure. In addition, sensitivity, accuracy, and stability are maintained through its automatic calibration feature.

Available with up to 32 inlet ports for sampling your process streams and calibration gases, your ProLine compact system comes complete with multi-port automatic valve switching, inlet manifold, turbomolecular pumping package, Dycor closed ion source analyzer of your choice, one-button start, and Dycor Process 2000 software.

The new ProLine Series offers features and performance not available in systems that cost much more, including least cost-per-sample point, flexible design, higher sample rate and data throughput, user-defined data presentation and it’s also easy to maintain.

**KEY FEATURES**

- Fully automatic, unattended operation with one-button start.
- Compact, multi-port system. Up to 32 inlet ports for sampling process streams and calibration gases.
- Dycor analyzer of choice includes: Enclosed Ion Source with 1-100, 1-200, or 1-300 AMU range, Faraday cup and/or microchannel plate electron multiplier detector.
- Process 2000 software with auto-tune, auto-calibration, real time calculations and matrix deconvolution capability.
- Analog and digital I/O system.
- Optional Mobile Cart.
- Optional hazardous location packaging.

**APPLICATIONS**

- Fermentation / Bioreactor Off-Gas Analysis
- Catalytic Reactions / Temperature Programmed Desorption
- Bulk Gas Analysis
- Pharmaceutical Solvent Drying and Lyophilization Monitoring
- Gas Scrubber Efficiency
- Laboratory / Pilot Plant Process Profiling
User-Defined Methods Creation
Configure your analyzer for a particular application using custom screens, scheduling of events (valve switching, calibration verification), and even different tune settings to optimize your system for a particular gas sample. Setup does not require programming and can be saved as a "configuration file" to be recalled at any time. Any number of configuration files can be saved to disk.

Stream Deconvolution
Determine the amount of a particular gas species present when there is another gas species appearing at the same mass-to-charge ratio. Process 2000 software solves a matrix of fragment peaks to calculate the contribution of each gas species to a common peak. This process determines the amount of each gas species in the sample without having to separate the sample into discrete components as with a gas chromatograph.

External Process Parameters
Display and record temperature, pressure, valve position, etc. and then use these parameters to trigger events.

Automatic Calibration and Calibration Verification
Use these features to enable your analyzer to quantify the amount of gas species in the sample and to maintain the sensitivity and stability of the analyzer. Initiate manually or on a scheduled basis, or trigger by an event.

Real-Time Calculation
Enable trending of ratios, and other functions of partial pressures and inputs, instantaneously for real-time control.

Visual Basic Scripting
Provide the ultimate in unattended operation using this feature.

Self-Diagnostics
Ensure GMP compliance with self-diagnostics and automatic device event logging.

Sample and Calibration Valve Sequencing
Switch between the calibration and/or sample streams of your process via software control.
Applications

Process 2000 Software’s capabilities extend far beyond what other packages offer. Custom screens, such as the one above, can be configured to allow monitoring of both trend and analog modes from a variety of sample streams as well as other components of the analysis crucial to your process. A maximum of 32 streams can be viewed on one screen during an analysis.

Who’s Who in the World
The automatic calibration feature of Process 2000 Software enables the analyzer to quantify the amount of gas species in the sample and to maintain the sensitivity and stability of the analyzer.

Now Is the Time
This feature helps determine the amount of a particular gas species present when there is another gas species that appears in the same mass-to-charge ratio. Process 2000 software can solve a matrix of fragment peaks to determine the contribution of each gas species to a common peak allowing you to determine the amount of each gas species present in the sample.

The Quick Brown Fox Jumped
Using this feature, you can switch between calibration and/or sample streams to allow sampling of the various streams in the process. Inlet ports are available to a maximum of 32 ports.

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