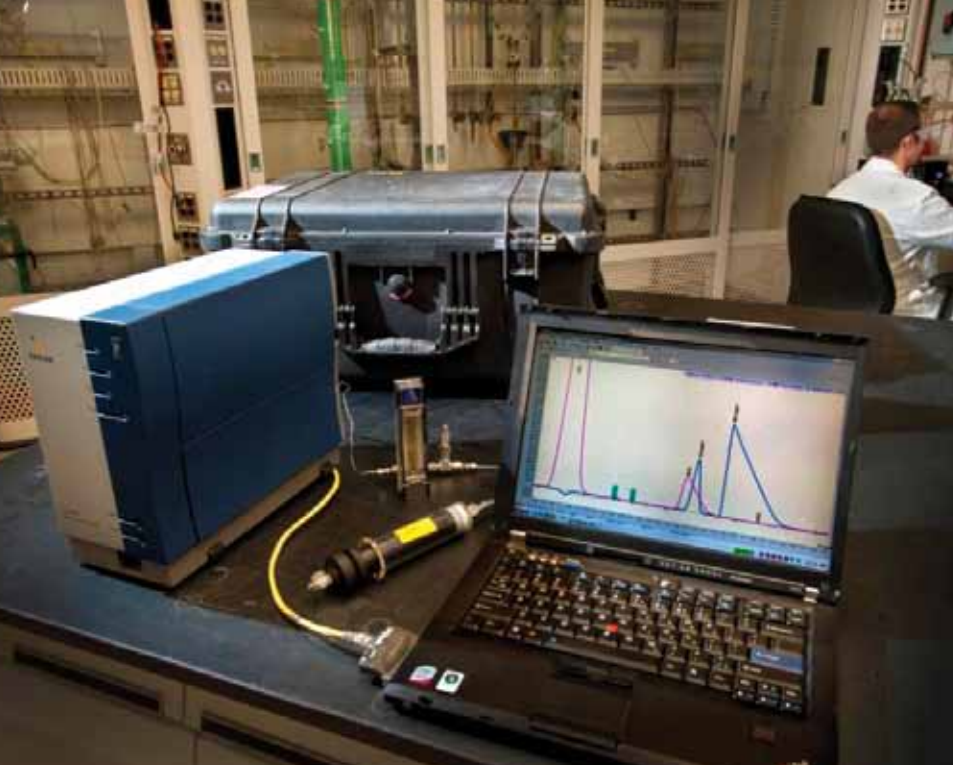


MECS® PeGASyS PORTABLE GAS ANALYSIS SYSTEM



MECS® DIAGNOSTIC AND CATALYST SERVICES

MECS® PeGASyS — THE INDUSTRY'S ONLY GAS CHROMATOGRAPHY BASED DIAGNOSTIC SYSTEM.

The MECS® PeGASyS system uses proprietary simulation software to troubleshoot and optimize sulfuric acid plant operations. The system includes a portable gas chromatograph, carrier and calibration gases, sample syringes, and all the necessary supplemental equipment to operate the system safely and effectively. MECS, Inc. (MECS) is in a unique position to offer PeGASyS as a state-of-the-art tool combined with hands on practical engineering experience. The in-plant tech service involves a PeGASyS technician traveling to a customer site, setting up the equipment, collecting gas samples in the plant, and analyzing the samples using a portable gas chromatograph to determine the concentration of SO₂ and O₂ in the gas sample. Unlike other test methods that use infrared analyzers or Reich tests, PeGASyS uses proprietary simulation software and a custom designed gas chromatograph to generate consistent and more accurate test data. This data is put into a database and is discussed with the customer representative. A sulfuric acid plant should be tested with the same frequency as it undergoes a turnaround, or whenever it encounters problems with conversion, pressure drop, heat exchangers, or emissions.

FEATURES AND BENEFITS

MECS® PeGASyS PROVIDES

- Pre-turnaround investigation of an existing problem
- Post-turnaround validation of a solution
- Heat exchanger and leak detection
- Converter performance optimization
- Emissions monitoring

MECS® PeGASyS ADVANTAGES

- Plant management will understand the true health of the plant
- Equipment repair or replace decisions can be made faster as a result of acquiring more data
- Operating costs can be better evaluated
- Systematic maintenance planning is enabled
- Optimized plant production and profitability
- Reduced SO₂ emissions results in cleaner air



MECS®

CATALYST SERVICES

Learn more at www.mecs.dupont.com

MECS® PeGASyS PORTABLE GAS ANALYSIS SYSTEM

TEST TIMING AND DURATION

The customer should allow for at least two months lead time before the ideal testing date to ensure technician availability, and avoid scheduling conflicts. MECS strives to accommodate urgent testing needs and prior scheduling may prevent us making emergency trips. The customer should expect a PeGASyS technician to arrive on site the day before scheduled testing in order to set up and calibrate the equipment. Collecting samples and analyzing data takes one full day for each plant tested. The customer should expect to ship the PeGASyS equipment back to the lab or another testing site. The technician will leave the following day, finishing any further testing needed. After all data is acquired and the technician has returned, complete analysis of the data is performed. This analysis includes using proprietary design and simulation programs to analyze the current state of the sulfuric acid plant. As a result of the thorough investigation, the customer will receive a report detailing the conclusions and recommendations for the plant.



MECS® PeGASyS EXPECTED RESULTS

A PeGASyS test is an all-encompassing look into the gas side of a sulfuric acid plant. By acquiring data at many different points in the process, PeGASyS can reach the following conclusions:

- Quantification of heat exchanger leak
- Calibration of plant analyzers & indicators
- Quantification of catalyst activity
- Overall bed conversion efficiency
- Pressure drop through catalyst bed
- Recommended screening of catalyst
- Quality of operating process conditions

REQUEST AN MECS® PeGASyS TEST

PeGASyS technical service is offered throughout the world. You may contact your local representative, sales agent, an MECS sales engineer or visit the PeGASyS web page at <http://www.mecsglobal.com/pegasys-request.aspx> to request testing and improve the efficiency, quality and emissions performance of your plant.



PeGASyS equipment cases are configured for heavy duty protection as well as ease of U.S. TSA and international customs and security inspections to expedite shipment and avoid delays.



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