Pharmabilities
Complete Contamination Monitoring Solutions

Contamination Monitors
Services
Environmental Monitoring and Data Management
Training and Education

Without measurement there is no control

Providing Superior Knowledge, Technology, Quality and Service since 1972
Superior Knowledge
Our experts are recognized as thought leaders, evidenced through our speaking requests, webinars, authored papers, and high education levels.

Our technology experts actively participate with customers and industry standard committees to understand the evolving needs and challenges faced by our broad customer base. Our renowned Particle College® program includes a two-day series of lectures and hands-on labs covering basic contamination measuring concepts and advanced applications of contamination monitoring and control.

Superior Technology
A core investment in research, engineering and product manufacturing has resulted in more than 60 patents related to our products and applications. We create the technology that enables you to make fact-based decisions, improve yield process, and comply with changing regulatory requirements. We are also leaders in microbial detection, developing traditional techniques that reduce false positives and rapid techniques to improve speed and accuracy of detection.

Superior Quality
Particle Measuring Systems sets the standard for contamination monitoring by first designing reliability into our products and advisory services. We support this with an unmatched Quality Management System.

Superior Service
Our focus on customer relationships and providing the highest quality service means that we succeed when our customers succeed.

Particle Measuring Systems provides you with the tools and industry experts to detect, analyze, and manage cleanroom contamination.

Without measurement there is no control.
Contamination Monitoring Solutions

REMOTE

**MICROBIAL SAMPLING**
- **BioLaz® Real-Time Monitor**
  - Full process control via real time continuous viable air monitoring
  - Meets regulatory requirements for process control under PAT/QbD and USP <1223>/EP 5.1.6 compliance
  - Cleanroom mapping

- **BioLaz® Microbial Impactor**
  - Meets regulatory requirements - remote sampling and ISO 14698-1/2 compliance
  - Versatile petri dish compatibility through adjustable height
  - 316L stainless steel sampling head ensures optimal sampling through radial slit design

- **MiniCapt® Remote Air Sampler**
  - Environment protected by HEPA filtered exhaust air
  - Modern, easy to use data and sample configuration management by integration with a FacilityPro® system
  - Remote sampling automation eliminates operator errors

**PARTICLE COUNTING**
- **Airnet® II Particle Sensor**
  - Part of an automated monitoring system reducing manpower
  - Consistent location monitoring
  - Used for particle trend analysis
  - Compact size for flexible mounting
  - Polycarbonate or stainless steel enclosures resist cleaning chemicals
  - Particle channels of 0.5 and 5.0 µm
  - ISO 21501-4 compliant

- **IsoAir® 310P Aerosol Particle Sensor**
  - Simple integration into monitoring systems
  - Built-in pump reduces infrastructure
  - Local status LEDs for visual indication
  - 4-20 mA input and digital output options
  - Integration of environmental input sensors
  - Automatic shutoff mode for capped probes
  - 0.5 and 5.0 µm particle channels
  - ISO 21501-4 compliant

**MOBILE**

- **Lasair® III Aerosol Particle Counter**
  - Unparalleled flexibility with multiple handheld, remote and compressed gas monitoring applications
  - Unique safety and precision - HEPA filtered exhaust air and radial slit design
  - Meets current requirements of data management

- **DataAnalyst Software**
  - Long term data archiving for Lasair III and MiniCapt Mobile
  - Compliant with 21 CFR Part 11 for data security and integrity
  - Simple instrument data download
  - Cleanroom certification and contamination trend analysis

MACH3 Liquid Particle Counter
- Cost effective solution
- Easy to use
- Small, handheld design
- Battery allows for portable use

**MICROBIAL SURFACE DETECTION KIT**
- **SurCapt™ Microbial Surface Detection Kit**
  - Improved productivity - results within 24 hrs
  - Automated readout of results
  - Validated according to EP/USP guidelines

**LIQUID PARTICLE COUNTING**
- **APSS-2000 Automated Parenteral Sampling System**
  - Meets all US, Japanese and European Pharmacopeias.
  - Particle sizing from 1.5 µm to 125 µm
  - Sample volumes from 0.2 mL to 1 L per USP <857>
  - 21 CFR Part 11 compliant software
  - Intuitive recipe and auto-report creation minimizes operator errors

**PROCESS TESTING**
- **APSS-2000 Automated Parenteral Sampling System**
  - Meets all US, Japanese and European Pharmacopeias.
  - Particle sizing from 1.5 µm to 125 µm
  - Sample volumes from 0.2 mL to 1 L per USP <857>
  - 21 CFR Part 11 compliant software
  - Intuitive recipe and auto-report creation minimizes operator errors
Environmental Monitoring Systems

The FacilityPro® Advantage
Designed specifically for pharmaceutical environmental monitoring.
Sampling, Detection, Data Storage

Data Integrity Assured
A robust system architecture ensures critical data are always available and protected when needed for batch release and reporting.
- Industrial system architecture
- Built on GE Proficy® iFix and Historian platform (SCADA version)
- Redundancy and data buffering throughout the system
- Sensor-based time stamping
- 21 CFR Part 11 compliant

Ultimate Efficiency and Reduced Errors
Intelligent software features make the job of collecting and reporting data efficient, with reduced human error.
- Viable / Nonviable / Environmental data integrated
- Sampling automation and recipes
- Batch identifiers and other data filters
- Configurable reports and data management

Simple Implementation
Hardware and software modules are designed to speed installation and validation. The modular design makes upgrading or expanding simple and quick.
- Prebuilt vacuum and power infrastructure (5010 series)
- GAMP 5 Category 4 compliant software
- Standard configurable components

Flexible Integration
Easy to integrate with existing third-party software and hardware systems.
- Remote access through client stations, web browsers and tablets
- Industry-standard protocols
Data Management

Nova-EM is integrated with PMS systems and other sources of information, helping companies manage the collection, analysis, and trending of data. Timely detection of problems in production allows issues to be addressed before they become a concern. Risks and costs associated with product loss and recalls are reduced.

Advisory Services

Providing you with experts to support you at every step of your process. Whether it’s from non-compliance issues, setting up a new process, our team has the background and education to support you.

Education and Training

Companies have relied on our accredited Particle College® to educate thousands of individuals on the fundamentals of contamination monitoring and control. In addition we offer a wide variety of pre-set and customized training services to meet the exact needs of each customer.
Project Services

From system design to installation, commissioning and validation, we can guide you through a project from conception to completion.

Subject-matter experts provide you with design and analytical consulting services, including:

- Risk assessment
- Facility monitoring system design
- Design specifications
- Validation
- Project management
- User training
- Application support

Quality Calibration & Service

Service technicians specially trained to calibrate your instruments to the highest standards, and our software-controlled approach automates critical steps that drive consistency in each calibration.

This ensures the same result and performance, consistent with factory calibration, regardless of where the calibration is performed—anywhere in the world.

Services

Calibration Services
- Calibration and adjustment back to factory standards - As Found/As Left data available
- Preventative maintenance
- Technical support
- NIST traceable
- ISO 9001:2008
- ISO 21501-4:2007
- ISO/IEC 17025*

Additional Services
- Dedicated Particle Measuring Systems technician available year-round at your facility
- Service contracts for on-site calibration and repair at your facility or return to factory service
- Extended warranty for calibration and unexpected repairs
- Rentals and spare instruments while your particle counter is in factory for service

*available at specific service centers
Many years of experience and well trained technicians make PMS/CAS your partner for cleanroom certification and thermal validation.

The Swiss Accreditation Service (SAS) grants to PMS the accreditation as a testing laboratory for testing cleanroom systems and thermal processes in accordance with ISO/IEC 17025. The scope of the STS0566 accreditation is defined in the Official Directory of the Accredited Testing Laboratories.

- **ISO 14644-1:2015 COMPLIANT**
- Limited to specific locations
- Limited to specific products

**See our scope and certificate(s) at**

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**GMP Services**

**Cleanroom Qualification**

- ISO 14644, EU GMP Annex 1, VDI 2083
  - Performance data: air measurements, temperature and relative humidity, room differential pressure, etc.
  - Installed filter system leakage test
  - Cleanroom classification
  - Recovery test
  - Smoke studies

- ISO 8573
  - Compressed air parameters: particles, aerosol oil content, dew point, microbiological measurements

- ISO 14698
  - Microbiological sampling (airborne and surface)

**Standard Operating Procedure**

- On-site calibration
- Sound levels and luminosity
- Maintenance of filters including changes and installations

**Thermal Validation**

- Steam sterilization
- Process simulation
- Dry heat sterilization
- Temperature and climatic mappings

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**Accreditations**

**ISO 9001:2008 Certified**

- Limited to specific locations
Particle Measuring Systems

Particle Measuring Systems Inc. (PMS) is the technology leader in contamination monitoring around the globe and the inventor of laser particle counting. PMS has expanded into most forms of contamination monitoring, including microbial detection, airborne molecular contamination, as well as traditional particle counting, and is a leading supplier of advisory services related to contamination control.

History

How did we get to be the largest particle counter manufacturer in the world? It’s simple. Since 1972, we have reaffirmed our technology leadership position by continually pursuing advanced detection technologies, and regularly releasing new products that focus on current challenges and future needs of the industries we serve. Acquired by Spectris in 1996, PMS is one of 12 operating companies focused on providing productivity enhancing instrumentation and controls.

Values

Our culture is just as important as the technology we create. We are committed to doing things the right way, whether that is interacting with our customers, employees, or technology. Our values of restless innovation, empowerment, absolute integrity, customer focus, and high performance drives our pursuit of excellence. We are proud to produce and reward a culture of ethical behavior at all levels and in all circumstances.

Mission Statement

To be the differentiated leader for contamination monitoring by improving the performance of clean manufacturers through the application of superior technology, quality, and services.

HEADQUARTERS
5475 Airport Blvd
Boulder, Colorado 80301 USA
pmeasuring.com
T: +1 303 443 7100, +1 800 238 1801
Instrument Service & Support
T: +1 800 557 6363
Customer Response Center
T: +1 877 475 3317
E: info@pmeasuring.com

GLOBAL OFFICES

AUSTRIA
T: +43 512 390 500
E: pmsaustria@pmeasuring.com

BENELUX
T: +32 10 23 71 56
E: pmsbelgium@pmeasuring.com

BRAZIL
T: +55 11 5188 8227
E: pmsbrazil@pmeasuring.com

CHINA
T: +86 21 6113 3600
E: pmschina@pmeasuring.com

FRANCE
T: 33(0)1 60 10 32 96
E: pmsfrance@pmeasuring.com

GERMANY
T: +49 6151 6671 632
E: pmssgermany@pmeasuring.com

ITALY
T: +39 06 9053 0130
E: pmssrl@pmeasuring.com

JAPAN
T: +81 3 5298 8175
E: pmsjapan@pmeasuring.com

KOREA
T: +82 31 286 5790
E: pmsskorea@pmeasuring.com

MEXICO
T: +52 55 2271 5106
E: pmsmexico@pmeasuring.com

NORDIC
T: +45 707 028 55
E: pmnsic@pmeasuring.com

PUERTO RICO
T: +1 787 718 9096
E: pmspuertorico@pmeasuring.com

SINGAPORE
T: +65 6496 0330
E: pmssingapore@pmeasuring.com

SWITZERLAND
T: +41 71 987 01 01
E: pmsswitzerland@pmeasuring.com

TAIWAN
T: 886-3-5525300 Ext: 301
E: pmsta@pmeasuring.com