

# MSC-LIMS™

## *An Affordable Laboratory Information Management System for Small Labs*



### **Product Summary**

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MSC-LIMS is an affordable Windows-based laboratory information management system (LIMS) for small analytical laboratories. MSC-LIMS offers improved productivity for laboratories burdened by paper-based records management and increased sample processing volume. MSC-LIMS organizes lab data, helps prevent lost or expired samples, and provides efficient report, chart and statistics generation. Current MSC-LIMS installations include water, wastewater, commercial environmental, food testing, and petrochemical applications.

MSC-LIMS is available under both a Full System license, which includes all source code, and a low-cost non-source code Annual Subscription license. Both licenses are available in single- or multi-user versions.

### **Addressing the Needs of Small Labs**

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MSC-LIMS allows even the smallest lab to realize the benefits of LIMS automation. Start with a single-user version and upgrade to a multi-user version as your lab's needs change or your budget allows.

At \$500 per workstation per year, the non-source Annual Subscription license is an ideal low-cost low-risk solution when MSC-LIMS meets your lab's needs "out of the box."

The Full System license is appropriate when the ability to customize the system is an important requirement. This licensing option includes all Visual Basic for Applications (VBA) source code fully accessible for on-site customizing with Microsoft Access® 2010.

### **Setup and Administration**

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MSC-LIMS consists of five modules, which are accessed from a notebook tab-style main menu: Setup, Administration, Samples, Laboratory Notebook, and Quality Control. The Setup and Administration modules are used to configure the system's operating parameters and authorized users. Analyses, result types, QC data types, projects, sample types, locations, units, container types, preservatives, customers, and contract laboratories are all configured in the setup module.

### **Samples**

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The Samples module includes functions for logging individual samples and sample batches, entering and importing analysis results, tracking samples, and viewing sample data with various reports. To log a new sample, the user selects a project, location, sample type, customer, etc. The sample's project automatically determines the required analyses. However, the user is free to add or delete analyses and requirements as necessary. Sample data and analyses can also be imported.

When login is complete the system can automatically print any number of barcoded container labels using various configurable label styles. To enter results by sample, technicians simply pass a barcoded sample container or work sheet under the laser scanner to retrieve the sample, and enter the appropriate results. Using the results by analyte option, technicians can enter results for a single analyte for any number of samples, create analytical batches, and enter QC data.

### **Laboratory Notebook**

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The LIMS administrator uses the Laboratory Notebook module to develop and document analysis methods and to schedule samples. Adding a project to the sample schedule helps to ensure that a sample for the project is logged by a certain date. When the LIMS is started, the system automatically detects and displays both schedule and sample warnings. Users also print bench sheets and generate custom barcoded work orders and work sheets to record analysis results from this module.

### **Quality Control**

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The Quality Control module is used to log QC samples and their results, maintain information on samplers, employees, employee training and certification histories, instruments and their calibration and maintenance schedules, and laboratory procedures. Control charts and statistical reports are also generated from this module. MSC-LIMS also supports QC data by analytical batch for regular sample analyses.

## Feature Summary

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- ✓ **Single Sample or Batch Login**
- ✓ **Results Entry by Sample or Analyte**
- ✓ **User-Defined Result and QC Data Types**
- ✓ **Integrated Excel Interface.** Import sample data and analyses to log samples. Import results from instrument data files, create custom reports from data in any LIMS report, and create custom analyte-specific data entry screens to calculate and import final results.
- ✓ **QC Data by Analytical Batch.** Define QC data types by analysis. Create analytical batches, enter QC data by batch, and print associated QC data with sample results.
- ✓ **Integrated Messaging.** Automatically send an email or fax with sample information when a sample or sample batch is logged or completed. Message styles support attached files in rich text, snapshot, Excel, HTML, PDF, and XML formats.
- ✓ **Sample Tracking and Warning.** Prevent lost or expired samples with automatic warnings triggered when a sample has an analysis due. Track incomplete samples and samples with warnings, and quickly locate samples using extensive query criteria.
- ✓ **Sample Scheduling.** Schedule samples to be logged by a specific date and optionally repeat at a given frequency.
- ✓ **Integrated Barcoding.** Automatically generate barcoded container labels when logging samples. Speed results entry by scanning sample containers or barcoded worksheets or sample lists.
- ✓ **Reports, Charts and Statistics.** Use an extensive list of reports to collect, present, and analyze lab data.
- ✓ **User-Defined Reports.** Create your own application-specific reports to list, calculate, format, and summarize sample data.
- ✓ **Billing Module.** Assign costs by analysis, project and customer. Generate detail and summary invoices.
- ✓ **Instrument and Procedure Lists.** Maintain instrument and lab procedure records and generate maintenance, calibration, and procedure calendars.
- ✓ **Personnel Records.** Record laboratory personnel training and certification histories.
- ✓ **Integrated Security Model.** Whether running standalone or in a multiuser environment, create user login accounts assigned to one of four security roles with different system privileges.
- ✓ **Powerful Queries.** Query sample data for viewing or printing using query-by-example or structured query language (SQL).
- ✓ **Audit Trail.** Track data modifications using the integrated sample audit trail.
- ✓ **Data Archiving.** Keep the production database fast and efficient by moving older data to an archive database.

## Specifications

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- Available in single- or multi-user versions
- Minimum requirements are a 500 MHz or faster processor, 512 MB RAM, 3.0 GB available disk space, and 1024 x 768 or higher resolution monitor
- Windows XP SP3, Windows Vista SP1, or Windows 7/8/10
- Supports file server and peer-to-peer networks
- Developed using Microsoft Access® 2010
- Full System license includes all VBA source code
- Includes version updates and unlimited technical support for one year

## Why Microsoft Access?

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We chose Access because it is widely used, has extensive third-party support, is accessible to non-programmers and has robust security. Access is also fully relational, which means the system's underlying database model can be constructed with data integrity rules which ensure the organization and structure of the data can not be compromised by operator error.

## About MSC

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Since 1986, Mountain States Consulting has provided a broad range of information systems consulting and software development services, including: systems analysis, design and development; systems integration; database modeling; database development and administration, and application programming.

In 1995 our focus quickly changed following the success of the first MSC-LIMS installation. Today, our business' only product is MSC-LIMS and our services are devoted to helping our clients successfully implement the system.

## More Information

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Visit our web site at [www.msc-lims.com](http://www.msc-lims.com) for more information. The site includes product benefits, feature lists, frequently asked questions, prices, and hardware and software requirements. You can also download the MSC-LIMS Demo, MSC-LIMS Report Viewer, example reports, and Excel report examples.

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