



Automate Your Laboratory Operations

The Sample Master® product line provides a total laboratory automation and data management solution that brings the ease and familiarity of Windows-based, point-and-click operability to the laboratory. Sample Master® Laboratory Information Management System (LIMS) has an intuitive user interface, hot look-ups, pull-down menus and allows users to modify screen captions to common terminology. Sample Master® features uncluttered screens and provides dozens of modifiable canned reports. Users can easily incorporate new screens, report forms, queries, pull-down menus, macros and modules.

Sample Master® Features:

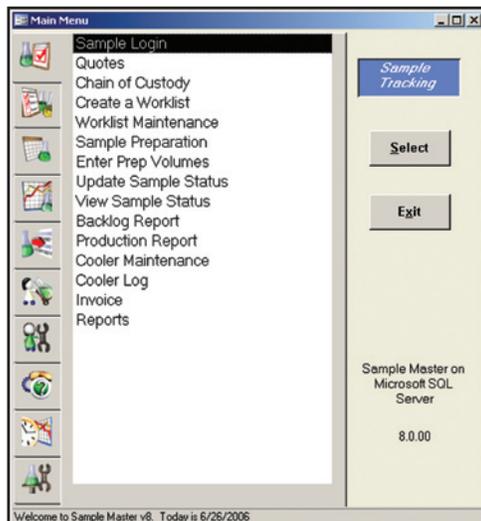
- ◇ User Definable Screen & Field Names
- ◇ User Configurable without Programming
- ◇ Microsoft Office Integration
- ◇ Powerful Reporting Tools
- ◇ Quality Alert - Automatic Notification
- ◇ Enhanced SPC Charting
- ◇ Trend Analysis Functionality
- ◇ Client/Product Specifications
- ◇ Out of Specification Warnings
- ◇ Bar Code Integration
- ◇ Custom Reporting (Certificate of Analysis)
- ◇ Instrument Integration
- ◇ Multiple Level Specifications with Corresponding Actions
- ◇ NWA's Quality Analyst Software Integration Capability
- ◇ Integrated E-mail Capability (i.e. Microsoft Outlook, Lotus Notes, etc.)
- ◇ Full System-wide Auditing of Data
- ◇ Flexible Job Scheduling
- ◇ Import Data from Various File Types (i.e. MS Excel, csv, ASCII (text) etc.)
- ◇ Integrated Invoicing Functionality
- ◇ Create Built-in or Custom EDDs (Electronic Data Deliverables)



The Sample Master® product line uses the latest database technology, giving users the flexibility to choose hardware and software specific to their needs and can be used on PCs that are networked over local and wide area networks. Sample Master® is 100% Windows compatible, allowing seamless integration with the Microsoft Office Suite and can easily import and export from Sample Master® to a variety of other Windows' applications.

Sample Master® utilizes the latest versions of Microsoft SQL Server or Oracle as the back-end database engine. Sample Master® can be used by small and large laboratories by matching the size of the database engine to the need of the laboratory. Since both SQL Server and Oracle are standard databases, integration with other enterprise applications such as ERP, financial and BPM can be easily integrated to provide a total management package.

User Friendly, Flexible and Secure



Sample Master[®] was created with end users in mind. This means rapid implementation due to quick and easy login by first time users, as well as experienced users. Similar screens are used throughout the software which means users don't have to memorize a different screen for each function. Sample Master[®] is modular by design and offers users unparalleled flexibility throughout its feature-rich components. The unique design allows users to create custom reports, new forms and functions without losing any upgrade ability. To expedite implementation, user-definable screen captions are found throughout the application. This exceptional flexibility extends to customer contact information allowing multiple addresses and telephone, fax or e-mail information to be entered into the software. ATL recognizes that data security is also a top priority in laboratories. Therefore, ATL's software engineers have integrated multiple levels of security and LIMS access into the software. Access to certain areas of the software can be restricted to only those users that have been granted appropriate permissions. In addition, users can be assigned various levels of permissions, such as view, enter, validate or approve.

Sample Master[®] Modules

Sample Master[®] is modular in design and includes ten modules that can greatly improve the operations of your laboratory. This modularity allows customers to purchase only modules that they require and can be expanded as the laboratory grows. Sample Master[®] integrates laboratory processes such as sample login/tracking, bar coding, invoicing and quoting, scheduling and stability, data and result entry, electronic data transfer, QA/QC, resource management, chemical inventory, (CRM) customer relationship management, time tracking and LIMS maintenance.

Sample Tracking Module



A powerful module that allows the login of samples into the LIMS and the ability to track their progress through the laboratory. The Sample Tracking module allows you to quickly and efficiently automate many functions, a few include:

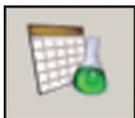
- Create quotes, turn a quote into an order and generate invoices
- Log in samples, order tests or test groups
- Maintain an electronic Chain of Custody
- Create and maintain worklists
- View and update the sample status
- View management reports
- Automatically generate bar coded labels

Data Entry Module



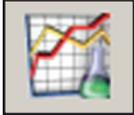
This module allows users to enter data, create QC Batches and Custom Reports, check the Audit Trail, run a Trend Analysis, run the GIS (Geographic Information System) function, setup Unit Conversions and use the Customer Call Up function. QC Batches can be created, allowing you to batch samples to ensure that samples conform to QC levels (upper/lower warning limits) and regulations. The run sequence for the QC Batches can be edited, are highly customizable and exportable. Custom Reporting allows you to harness the power of the "Master Query" and apply it to create custom reports. Leave the querying of the database to Sample Master[®] and create an unlimited number of user-definable reports. The Audit Trail function allows users to print preview or print a report which shows all audits done to any sample. The "Master Query" allows you to define the audit report criteria. The audit trail report shows the when, who, why and which sample(s) were audited. Using historical data, you can trend result values for a given period of time. Trend Analysis charts by test, department, client, site or a variety of additional criteria. Using the LIMS GIS function, users can plot sampling locations and test result values.

Sample Scheduling Module



Automatically pre-log samples for routine collection into the LIMS. Samples can be automatically scheduled as daily, weekly, monthly, quarterly, semi-annual or annually. Coupled with a calendar printout and the ability to reschedule for holidays, this ensures that sampling events will not be missed while worklists and labels are automatically generated.

QA/QC Module



The QA/QC module allows users to graph results and create control charts for data that has been entered into Sample Master[®]. Users can configure tests to include QC, matrix spikes, blanks, duplicates, surrogates, matrix spike duplicator and many others. Control limits may be entered manually or calculated from historical limits. You can easily select the data to plot using criteria such as test, sample number, analyst, etc.

Electronic Data Transfer Module



This module allows transfer of data electronically from the instrument to Sample Master[®] LIMS via spreadsheets (.xls), .csv or text (ASCII files). Sample Master[®] will accept the instrument output file and parse (format) the data in the required input format accepted by the LIMS. Using the Task Scheduler, Sample Master[®] will scan specific directories at user definable times seeking files to import. You can also specify the exact data to be imported in the case of multiple runs or dilutions for a sample.

Chemical Inventory Module



Let Sample Master[®] handle your inventory with the Chemical Inventory module. This module allows you to track supplies and vendors. It provides the ability to assign prices to supplies, track lot numbers and assign expiration dates. The lab manager can make better purchasing decisions when comparing vendors that offer the same supply by looking at pricing and the amount of time each takes to fill an order. You can receive and make supplies, reconcile them and update supplies used in sample analysis, track lot and expiration date information. Sample Master[®] will warn users when stock is running low and in need of replenishment, giving you ample time to place an order and saving you the inconvenience of an out of stock supply.

Resource Management Module



This module allows you to setup instrument calibration schedules and personnel certificates which can be used to enforce regulatory compliance. If an instrument calibration is out of date, and this is set as required, then the LIMS will not allow data to be imported from that instrument. The same is true for employees; if a certain employee has a certification that is out of date then that employee will not be allowed to perform a specific task, such as enter results for a test (for which their certification has expired) in Sample Master[®] until their certification is updated.

Customer Relationship Management Module



Customer Relationship Management (CRM) is vital to laboratory success. Laboratories need to constantly evaluate their efforts in order to build and maintain customer trust and loyalty, and enhance business relationships. Laboratories that have a focus on CRM have seen improved laboratory processes and have received high marks in customer satisfaction. The CRM module offers an easy and affordable way to effectively support system deviations through an organized method of tracking, monitoring and rapidly resolving potential problems. Advantages of the CRM module include:

- Complaints have unique identifier and can be reported by priority, status or elapsed time.
- User-definable complaint type list.
- Mode of contact whether it be via phone, fax, e-mail, mail, etc.
- Automatic date/time stamp when complaints are logged.
- Fields are provided for sample comments and details of customer issue.
- Integrated SOPs for training new employees and for consistency among existing employees.

Time Tracking Module



The Time Tracking module is ideal for managing employees and tracking time expended on tasks and projects. Create stand alone projects or multiple projects for a single client and calculate billable hours through completion. Monitor employee workload and generate reports by employee, project or client.

LIMS Maintenance Module



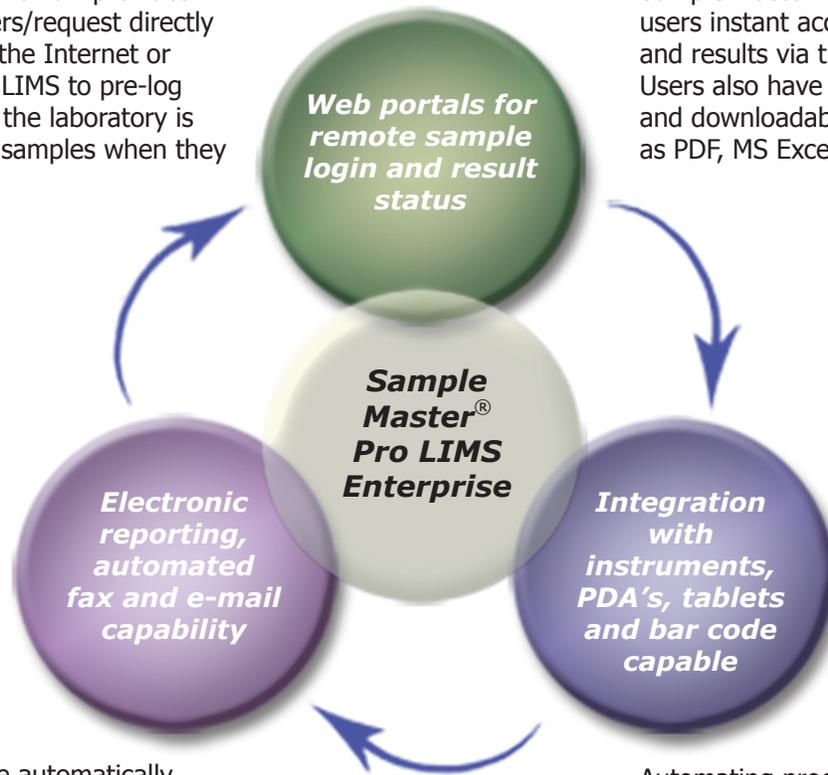
The LIMS Maintenance module is comprised of the entire laboratory's static information that is configured and maintained by the database administrator. This is where the Sample Master[®] default settings and setup information is found. Information such as defaults, number format, QC batch ID, employees, permissions, tests, methods, limits, prices, departments, ID formats, reports and many other settings are stored and edited in this module.

The Total Solution

Sample Master® is the total data management solution that provides the necessary components to automate processes to compete in a constantly evolving environment. With Sample Master® Result point™, users can reduce overhead and maximize customers' experience with web access to real-time data and reports. Increase efficiency with electronic reporting, automated e-mail and faxing, instrument integration and so much more. All of these components equate to increased productivity and profits.

Sample Master® Request Point™ provides the ability to submit orders/request directly into Sample Master® via the Internet or Intranet. This allows the LIMS to pre-log the orders and therefore the laboratory is already prepared for the samples when they arrive.

Sample Master® Result Point™ provides users instant access to real-time statuses and results via the Internet and Intranet. Users also have access to XML web reports and downloadable reports in formats such as PDF, MS Excel, MS Word, etc.



Electronic reports that are automatically generated from within the LIMS can be created in various formats that comply with regulations, such as CFR 21 Part 11. Reports, quotes, invoices and more can be setup to automatically be e-mailed and/or faxed directly from the LIMS. These automated functions save human resources, time and expenses.

Automating processes within the LIMS with instrument integration, data loggers (such as PDAs and Tablets) and bar coding saves time, provides data accuracy and eliminates paperwork, along with many other benefits. ATL has a library of hundreds of instrument parsers that have been integrated with it's LIMS products.

The use of Sample Master® to manage your data allows you to automate every day tasks, ensure data integrity, set Standard Operating Procedures and maximize laboratory productivity. For more information on the Sample Master® product line or any other automation enhancement product, please contact an ATL Sales Representative at 1-800-565-LIMS (5467) or e-mail us at info@atlab.com or visit www.atlab.com.

Minimum Technical Specifications	
Client Requirements	Windows XP SP2, Pentium 4 2.0 GHz, 512 MB of Ram. MS Access 2003 runtime engine and a full version of MS Access 2003 for customizing Sample Master®.
Server Requirements	Windows 2003 Server w/SP1 or higher, Pentium4 3.0Ghz, 1GB or higher of RAM, 1GB of free hard drive space. Recommendations are general and will vary by installation.

Accelerated Technology Laboratories, Inc. (ATL) is headquartered in West End, North Carolina. For more information, contact ATL at 1-800-565-LIMS (5467) or e-mail us at info@atlab.com or visit www.atlab.com.