

WinLIMS Functionality



WinLIMS™ is a full-function, client/server Laboratory Information Management System. **WinLIMS™** has been designed to fit into virtually any computing and network architecture and will operate using most popular relational databases including SQLServer (both Microsoft & Sybase), Oracle, Sybase, SQLBase, Informix, Ingres & more.



WinLIMS is a configurable system that provides the laboratory with the following functions:



Single Sample Login

Enables users to register a single sample. The registration process allows the user to identify a sample and automatically assign tests and their product-specific limits (if desired) using simple point and click operation.



Barcode Sample Receipt

This performs the same function as the Sample Receipt function; however, instead of clicking on a form to identify the sample, a barcoded representation of the sample's unique identifier may be 'wanded' into **WinLIMS™** to confirm receipt in a quick and efficient manner.



Batch Sample Login

Provides a means for registering multiple samples using a single form. This is normally used when a series of samples are to be associated with each other. Within production facilities the batch is normally based on a production Lot; whereas, in research or analytical services laboratories the samples may be associated based on a specific work Request, Job or Submission.



Results Entry by Crosstab

A powerful tool for quality and process control laboratories or any other laboratory where it is desirable to view results from a number of related samples. Results Entry by Crosstab allows the user to select the identifiers that associate a number of samples. Upon making the selection, the results of all of the related samples will be presented on the form in a crosstabular fashion for data review and/or results entry.



Sample Receipt

It is possible for samples to be logged into **WinLIMS™** by users who are not physically located within the laboratory -or- automatically via automatic schedule or MRP interface. When this happens it is essential for **WinLIMS™** to record when the samples are received by the laboratory since testing cannot begin until the lab actually has the samples in-hand. The sample receipt function enables the laboratory to record when the sample was received and by whom. This information may be used to calculate laboratory turnaround times within management reports.



Results Validation (review)

In many laboratories it is standard operating procedure to require results that were entered into **WinLIMS™** to be reviewed by a peer or a supervisory staff member. This is often the case within pharmaceutical, food or any other regulated laboratory. When this level of data review is not required, or if data is only reviewed when it does not meet its specification requirements, the results validation step may be bypassed.

Sample Approval (disposition)

The sample approval step is used to confirm that the sample's testing cycle has ended and the laboratory management has given the sample a final disposition. The dispositioning of samples will differ from lab to lab; however, most laboratories assign disposition status' which include Approved, Rejected, Reworked, Canceled, Concession, etc. This let's the rest of the organisation know what was determined by virtue of the laboratory's testing of the sample.

Work Assignment

WinLIMS™ may be configured to automatically assign tests to lab groups or individual analysts. Tests that are automatically assigned may be easily re-assigned to by authorised users using a simple drag and click interface.

Instrument Calibration & Maintenance

WinLIMS™ provides integrated functions which allow users to define and closely monitor each of the instruments that are used for analysing samples. The function provides an on-line means for recording all instrument maintenance records for instant scheduling of maintenance events and on-line recall of past events. In addition, the function also enables users to record results from all calibration and QC samples that were run on each instrument in order to maintain data on-line for monitoring both usage and performance. Instant SQC charts for each instrument may be presented to provide a clear, graphic illustration of instrument performance to detect trends and take a proactive role to prevent instrument-related problems.

Report Generation

QSI recommends and provides integration for Crystal Reports due to its ability to work with all of the WinLIMS™ supported databases, its powerful functionality and its affordable price. By virtue of utilising an open database architecture, WinLIMS™ allows each laboratory to select the report generator which best suits their needs. Currently the report writers that are being used with WinLIMS™ includes IQ Objects, Business Objects, Access, Report Windows, Report Smith and more.

Worklist Generation

A wide variety of worklists are available which may be used to help the laboratory efficiently process samples. Worklists may be organised by lab, by individual, by instrument or any other logical criteria. The worklists may be presented on the screen, printed to hardcopy or passed to an analytical instrument for automatic run generation.

Results Entry by Sample

Within some laboratories it is convenient to view all of the sample information while entering analytical results. Laboratories use this mode of results entry when it is beneficial to have a full perspective of the sample being tested at the time of results entry.

WinLIMS™ provides a mode of results entry whereby the user may select a single sample using one or more of its descriptive identifiers. When the sample is selected a listing of all of the required results will be presented for data review and entry.

Results Entry by Method

When laboratories assign their work to analysts by test method, the WinLIMS™ Results Entry by Method function may be used. This function permits a user to select a specific test method and be instantly presented with a spreadsheet-like form that contains with all samples for which results for the selected test have not been entered. Users then enter results for a large number of samples in an efficient manner.

Results Entry by Analytical Run

At times it is essential that all analyses that are performed be organised within analytical batches which group series of samples together. Within WinLIMS™ analytical batches are uniquely identified, are associated with the instrument used to acquire the data. Within the batch, the position at which all calibration, control, quality assurance and unknown samples are recorded and results are time and date stamped to provide a complete audit trail for analytical batches. The quality data is automatically associated with the selected instrument to provide a continuous control charting for all analytical equipment.

Data Archive

Although there is no limit to the size of a WinLIMS™ database, it may become prudent to remove data that is infrequently accessed from the active WinLIMS™ database in order to optimise database performance. WinLIMS™ includes a Data Archive function which enables users to select samples for removal based on any sample identification field. This means that samples may be archived by date, product, project, etc. - or - any combination thereof.

Automatic Sample Scheduling

This module permits users to specify automatic sample login times. The automatic login of samples is performed on the basis of Sample Type (or Product Specification). Assignment of tasks is accomplished through a simple table entry on the basis of time, date, week or month. Samples will be automatically logged into WinLIMS™ at the specified time & day and given the status of N (New sample logged, but not received in the laboratory).

Complaints & Corrective Actions (Optional Module)

The WinLIMS™ Complaint and Corrective Action Option provides additional database tables, functions and reports which are used to log complaints from customers or to file problems associated with the production of products. Once logged, corrective actions which have been implemented to resolve the complaint or problem may be logged until the problem has been resolved.



Quotation & Invoicing (Optional Module)

The **WinLIMS™** Q&I provides additional database tables, functions and reports which are used to register and produce quotations and invoices for samples either individually or as a group. Q&I permits customer specific pricelists to be maintained and used by **WinLIMS™**. Q&I also includes a login feature which permits multiple samples to be assigned to a group making organisation of customer submissions easy.



Staff Training (Optional Module)

The **WinLIMS™** Staff Training module permits your company to keep detailed training records for all of your staff members. By virtue of the training courses attended, your staff members are granted qualifications in a manner that is consistent with record keeping requirements for GLP and ISO9000. By virtue of training, analysts are granted the ability to enter results for only those testing procedures for which they have been trained.



QA/QC (Optional Module)

The **WinLIMS™** QA/QC option enables users to set up templates for automatic insertion and recording of quality control items such as blanks, spikes, duplicates and standards. A wide variety of site-specific configuration needs are also customised when this option is purchased.



Multi-Site Option (Optional Module)

The **WinLIMS™** Multi-Site Option is designed to enable a single **WinLIMS™** implementation to restrict access to information and functions to individual laboratory groups. This is especially useful when operating multiple sites within a single database over a Wide Area Network (WAN).



Email Option (Optional Module)

Allows status changes within **WinLIMS™** to automatically generate customer specific actions such as, creation of C of A's and "out of spec" reporting, via external E-Mail systems.



Confirmatory Testing (Optional Module)

The **WinLIMS™** module Confirmatory Testing Option permits users to automatically assign supplemental tests to samples when a result on a previous test fall outside specified limits. This allows you to "chain" tests together so that if the parent test, when logged in with a sample, has a child test ready to be assigned if and when an out-of-spec result is entered for the parent test. Once an out of spec result is entered, the child test is automatically assigned to that sample.



Stability Testing (Optional Module)

Many laboratories test their products to see how they stand up over time when stored in a variety of environmental conditions. This type of testing is routine for within the pharmaceutical, food and beverage industries; however, chemical companies often have the same requirements.

The **WinLIMS™** Stability Testing module is used to define testing protocols for both research and standard release products. Pull schedules, inventory reports, schedule adjustments and other useful functions are built into the **WinLIMS™** stability module to provide an effective means to manage the most demanding stability testing laboratories.



Support & Update Services (Optional Module)

Software continues to improve even after it is purchased, installed and implemented in your lab. The **WinLIMS™** warranty covers the software for 90 days after the installation of the basic software. To ensure that your laboratory continues to take advantage of functional advancement in LIMS, Windows and Client/Server technologies, we strongly recommend the purchase of the **WinLIMS™** Support and Update Services. Coverage entitles the user to technical support via telephone and software updates as they become available. Currently 2 levels of **WinLIMS™** support are provided. Basic Support & Software Upgrade Service and Remote Access and Software Upgrade Service.



Training (Optional Module)

Software is only useful if it is used, and used properly. Multiple options are offered by Quality Systems International Corporation (QSI) for training both the **WinLIMS™** LIMS administrator and the end users of the software. **WinLIMS™** training is both formal and informal, so it fits the style of your organisation. Traditional LIMS vendors offer generic LIMS training courses at their facilities on a scheduled basis for any and all users under very controlled conditions. Our experience has been that generic classroom training for LIMS is of limited use because of the variations in the students.



Customisation and Implementation (Optional Module) TIB-09

Before the **WinLIMS™** design & implementation process begins, a system administrator and backup must be designated. These staff members must have an intimate knowledge of the laboratory and be authorised to make critical decisions which will influence the design of **WinLIMS™**. We strongly recommend that all staff members who will be influential in the design of special **WinLIMS™** functions take the time to learn the basic design and user interface concepts of **WinLIMS™** by executing the Tutorial which is delivered with the Core software. Remember, this is a mission critical application that you must rely on for many years. A few days of familiarisation is an excellent investment of time which will allow you to effectively communicate your requirements to QSI during the configuration and implementation process an efficient manner. This will ensure a faster implementation and result in far fewer "surprises" than if left to the discretion of your QSI design team. The **WinLIMS™** implementation process occurs in a logical and well-organised manner. The process requires effort and commitment by both the QSI and Customer staff.



Instrument Data Acquisition (Optional Module)

Interfacing instruments to **WinLIMS™** improves the efficiency of laboratory staff members while reducing or eliminating data transposition errors. QSI's instrument interfacing software enables end users to configure their own interfaces to instruments or to files that are produced by instruments, spreadsheets or 3rd party data acquisition tools. This cost-effective option often provides the payback required justifying the purchase of your **WinLIMS™** software.



MRP Interface (Optional Module)

QSI has made use of its advanced and open **WinLIMS™** system architecture to provide a product which will improve the efficiency and effectiveness of corporations who use **WinLIMS™** in conjunction with the MRP software. It is assumed that, like **WinLIMS™**, the MRP system has been designed to make use of the open architecture, power and functionality of the underlying database used by the individual MRP system. Unlike most MRP software, **WinLIMS™** is not restricted to using only a single relational database engine, so any DBMS selected for use by **WinLIMS™** will be able to make use of this interface.



Customer Spec & Product Regrading (Optional Module)

The prime objective of today's quality-driven organizations is to deliver products which accommodate the customer's product specification requirements. In addition, these organisations also conform to the customer's report formatting requirements enables. The **WinLIMS™** Customer Specification & Product Regrade Option allows samples to be logged in and tested using the testing methodologies and result specifications which match corporate manufacturing specifications then match the product at a later time to match individual customer's product requirements. This is an effective and efficient means of ensuring that high quality products are manufactured while customers receive the products and information according to their needs.



Control Room Viewer (Optional Module)

A stand-alone **WinLIMS™** application designed plant personnel to quickly view laboratory data and statistical trends.



Reduced/Audit Testing (Optional Module)

One of the greatest problems with selecting a LIMS has been the compromise between laboratory functionality and the need to conform to corporate computing standards. The selection is a precarious balance between LIMS functionality, system configurability, usability, performance, and computer architecture and, of course, cost. **WinLIMS™** from Quality Systems International Corporation (QSI) is the first LIMS to eliminate all compromise. The development of **WinLIMS™** is what makes it so unique. It was developed by chemists using the most powerful client/server, object-oriented development tools available. This document reviews the functionality of the optional Reduced/Audit Testing & Sample Planning **WinLIMS™** module. Most manufacturing organisations are searching for ways to reduce costs in order to provide their product to the market at a lower cost. The laboratory must be cautious when seeking ways to reduce costs as they are also responsible for ensuring the quality of the product that is produced.



SAP Interface (Optional Module)

The SAP Interface provides customised linking between **WinLIMS™** and your company's SAP software system. Traditionally, the LIMS/SAP interface permits samples to be automatically logged into **WinLIMS™** from SAP and permits **WinLIMS™** to communicate sample and test status back to the SAP. These communications may occur either on an event or timed basis. Each interface differs from installation to installation and because of this, the SAP interface is really a fixed price for customised function.



WinLIMS

www.qsiaus.com.au

North & South America

QSI Corporation
445 Godwin Ave.
Midland Park, NJ 07432
+01 201-251-2101

Central & Eastern Europe

QSI GmbH
Robert Bosch Str. 5
63225 Langen Deutschland
+49 6103 9007 0

Western Europe

QSI (UK) Ltd.
The Lodge, Station Road
Chinnor, Oxfordshire
OX9 4HA United Kingdom
+44 1844 351212

Australia & Asia

QSI Pty
Sterling House, Suite 6
1012 Doncaster Road
East Doncaster, VIC 3109
+61 03 9841 5511

European Technical Center

QSI BV
Sourethweg 9, NL-6422 PC
Heerlen, Netherlands
+31 45 5660065