

# TECHNICAL SHEET

## Labor*soft*-LIMS

### PHYSICAL-CHEMICAL AND MICROBIOLOGICAL ANALYSIS

#### SACCORDING ISO 17025

Meets the conditions imposed regarding the standardization of the laboratories' activity.

#### Ultra-secure

*The integrity and security of information is a priority for us.* 

### 🔀 Adaptable to the flow

Regardless of the way the work is developed, the system adapts to the needs of any laboratory.

#### 🖒 Easy to use

With an intuitive structure and interface, it has been designed for maximum efficiency.

The Labor**Soft**-LIMS system streamlines the laboratory's activity through the automatic and centralized processing of specific information, fluidized their intra- and inter-departmental circulation, while eliminating redundant operations, consuming financial and human resources.

Increases the competitiveness of the laboratory by applying clear and well-established procedures. It processes the information specific to the laboratory's activity, centralizes and automates its management processes.

Launched at the end of 2017, the system aims to meet the needs of contemporary digitization, being at the same time flexible and customizable depending on the particularities of each laboratory.

#### **FEATURES**

### 🗱 Flow detailing

Nomenclatures for defining equipment, devices, tests, standards, price lists, services, partners, attributes, tests, personnel, resources, units of measurement.

Entering test orders with the association of information: order number / date to the customer; series and order number automatically assigned by the application; requested sampling date; the client's point of work; GPS coordinates; attaching documents. Issuance of partial or complete proforma invoices, depending on the valid price list and the associated discount.

Generation of sampling plans and sheets, with the automatic inclusion of the details from the order level so that the sampling teams have the maximum information necessary to carry out the sampling action with efficiency.

Highlighting the delivery of samples and sampling sheets in the laboratory, by issuing the minutes of delivery-receipt between the sampling teams and the laboratory staff.

Entering information related to sampling sheets and samples taken [including GPS coordinates and attaching pictures / sketches] and automatic generation of worksheets.

Prioritization of tests depending on sample ID / sample type / sampling date / order ID / number of tests requested / types of tests / quantity.

Introduction of the test results [even in the repeated test version with the highlighting in the report / bulletin of all the results or ... only of one / some of them] with the possibility of prioritizing the issuance of sequential [partial] reports.

Issuing and closing test reports / reports.

Generation of minutes of delivery-receipt of test reports.

#### 🐣 Multi-user & subsidiaries

If the laboratory has several locations, in different cities, or by the nature of its activity requires more users [users in LaborSoft-LIMS can be generated infinitely many work points / users.

Moreover: for special cases, the same user can be assigned rights to different work points.

#### Beaches of series and numbers on forms

Through the "Administration" menu, for each form used, you can assign both series and number ranges for ... each existing work point.

The laboratory may change its serial and number allocation policy at any time, with immediate applicability in LaborSoft-LIMS.

#### 🔥 Input level attributes

Whether it is a device, equipment, a sample, an order or a sampling sheet, there is a clear need to associate them with the most diverse information in order to have a complete picture of the action. LaborSoft-LIMS can do this, and more. Thus, their attributes and groups are predefined by means of nomenclatures, after which, at the level of forms ... only values are entered.

### 🕵 Information traceability

The system offers the facility to find all the information along the entire flow, starting with the registration of the order and until the issuance of the bulletin or the test report.

#### ፰ Incadrare rezultate incercari

One of the general options in the application is to issue final documents including automatic framing of results [or ... no framing], within the limits imposed by the standard associated with each test.

Moreover, another option is the automatic marking on documents of those tests accredited by RENAR / authorized by the Ministry of Health / etc ... only during the period of validity of the accreditation / authorization documents...

#### Document input - output registers E

It is one of the most common functions in the application, but also the one that frees the laboratory from all the labor consumption that was necessary in the manual completion of the registers.

Limited only by the physical dimensions of the sheets used [A4 / A3 ... etc], the input / output registers can be generated with even more than 50 columns of data,

with the information related to each record line.

#### Document versioning

Through the quality manual, each laboratory establishes and configures the forms used, starting with their name and up to the information contained as well as their arrangement on the page. Thus, LaborSoft-LIMS allows the uniform use of the same forms throughout the laboratory.

Consequently, from the moment of modifying a form, the entire organization will issue / print in the same form.

#### Rapoarte complexe de activitate

From simple activity reports to complex ones, which include data from different areas of activity [including graphical representations of developments], LaborSoft-LIMS is a powerful tool dedicated to laboratory management and the presentation of activity information in various forms.

#### Attach files

In multiple areas of the application, there is the possibility of attaching documents. Starting from the nomenclature area, and going through the entire flow to the level of the reports, the system allows the attachment of files in various formats.

Thus, a diagram, an image or even the technical details provided by the customer [such as autocad files] can be attached to any data entry window.

Files of any format can be attached, and those recognized by the browser [.pdf; .jpeg; .png] open directly from the application in a secondary window, no need to download them from LaborSoft-LIMS in the device memory. And that happens even on mobile devices.

Video files can also be attached, and standard format [.mp4] files run ... directly in the browser.

### TEHNIC

#### 🕒 Cloud storage

LaborSoft-LIMS is an application stored in the cloud, available 24 hours a day, which allows very simple and instant access to information only ... through an internet connection and a browser.

#### Compatible devices

Accessing the LaborSoft-LIMS application can only be done using an internet browser from any device, such as:

- a | computer [*laptop / desktop*];
- b | smartphone;
- c | tablet.

The operating system of the device can be: Windows, macOS, iOS or Android.

The main compatible browsers are: Chrome; Mozilla, Internet Explorer, Edge, Safari.

No local installation of the application or an extension is required.

#### Bar code 1D & 2D

The system was designed to be used in conjunction with barcod technology [both reading them with barcod readers and printing on documents issued from the application]. Thus, on the printed forms [test reports / bulletins; sampling sheets; worksheets;

handover-receipt reports ... etc] document series / numbers or any other information can be translated into 1D and 2D barcodes [type CODE128 or even QR Code].

And for maximum efficiency, even touchscreen monitors, such as POS, can be used.

#### ☐ Multi-tab operation in the browser

LaborSoft-LIMS provides ease of operation in multiple tabs in the same session. Thus, the same user can operate data in different tabs [each for a different area of the application], open in the same browser.

Users can create desktop shortcuts, bookmarks or even bookmark bars in browsers, for instant access to the areas they currently use.

### Security and safety

This is done cumulatively by:

» through antivirus services provided by the cloud storage service provider;

» enrollment in the application of laboratory devices, fixed or mobile;

» setting and managing users and passwords by each laboratory;

>> the initial configuration and modification of the rights of each user, including the immediate and total blocking of a user, or temporary ... during the holiday.

Enrolling a device in LaborSoft-LIMS is the creation of a direct link between the application and the device [eg laptop] as a physical hardware entity, such that the latter is accepted as a friendly device in relation to the computer system.

In order for a person to be able to access the system, they must have the following security features:

- a | laboratory code;
- b | unique key;
- c user;
- d passwords.

Moreover, the transfer of information through the application, between the device and the cloud area, is done using a 1024-bit encryption key, thus ensuring the integrity and absolute secrecy of data transfer.

The same user can use different devices for logging in with the mention that each of them must have been enrolled in the application.

If the laboratory management considers it sufficient to access the application only from the devices located at its headquarters, it can do so by keeping confidential the code and enrollment key received at the time of signing the contract.

### SaaS [Software as a Service]

LaborSoft-LIMS is used in SaaS mode [Software as a service], based on a monthly subscription. Thus, there are no investments from the laboratory in equipment ...

- >> without servers
- » without licenses
- **»** no upgrades for other secondary systems

In this way the laboratory will use a minimum of IT resources [a browser and an internet connection] in the conditions in which we ensure both the security and the continuous optimization and functionality of the database.

In addition, the laboratory can have access to the latest functionalities that we will load in the application, thus benefiting from a huge knowhow, without any additional costs1.

<sup>&</sup>lt;sup>1</sup> Valid for 2-year subscriptions

### BENEFITS

### 🖌 Cost savings

The transition from manual records [classic registers] to an integrated laboratory information management system such as LaborSoft-LIMS significantly reduces costs by:

IT equipment [acquisition / maintenance and continuous licensing thereof];

- maintenance of laboratory equipment;
- Iaboratory materials and consumables;

### 🖄 Configurability

The system has the highest degree of configurability, the allocation of various rights according to the user, starting from user rights, the association of multiple values to equipment or documents, and up to the possibility of issuing new versions of the latter.

#### 💼 Comercial

The efficient and fast management of the information, creates to the laboratory a very strong competitive advantage.

Easy access to the price lists associated with the tests, automatic invoicing according to the existing offers / price lists [valid or general], is another advantage offered by the application.

At the request of the beneficiaries, cumulative lists can be generated to include information that has been collected starting from the initiation of the order and until the issuance of the bulletin / report.

#### Activity verification

The system proves to be an ideal tool for working time management, offering multiple activity control options.

#### 🚓 Automatic data retrieval

The equipment and laboratory equipment that have their own software can be connected to the application for the automatic download of the test results. Note: This area requires development for each device, given their great diversity.

#### Documents with an avant-garde design

In printed / printed documents we use icons and icons, for an easy, correct and fast transmission of information.

### 🟓 Paperless

Last but not least, the use of LaborSoft-LIMS reduces paper consumption.

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