User guide to the Ångström equipment database

This is a short guide on how to use the Ångström equipment database. It is not meant to be comprehensive, but as an introduction to quickly get a grasp of all relevant functions.

The system has been developed for cleanrooms by the *Swedish research infrastructure for micro and nano fabrication*, Myfab. The Ångström database so far only uses the tool catalogue. Other functions include booking, logs and invoices, but those can be ignored for practical purposes. They may be implemented in the future in some form if needed. If you would like to know more, a section describing how to use some of them is included at the end of this guide.

Finally, there is also an inbuilt help function that can be consulted with more questions. It can be accessed from every page by clicking on the question mark in the upper right corner.

Contents

1. The navigation bar

When logged in, you always see the navigation bar shown in Fig. 1. To get to the tool list, go to *Tools* / *All tools* (1). To edit your tools, go to *Advanced* / *Tool responsible* / *My tools* (2).

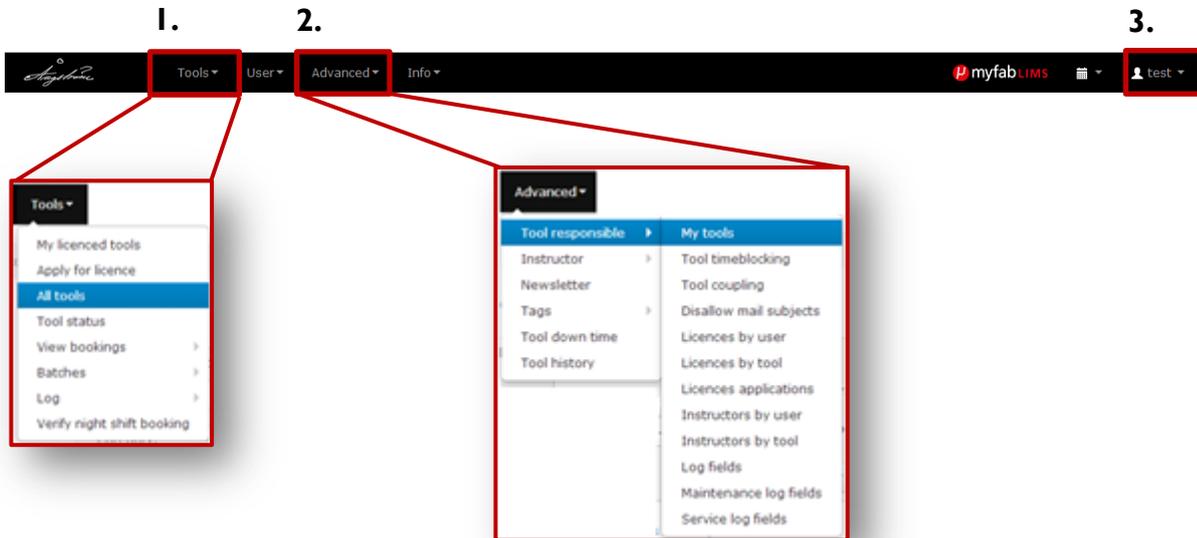Changing user information is done from (3).

Fig. 1

2. The start page

At first when you log in you see the page shown below in Fig. 2. You'll find an pane in the center (1) where information and updates can be posted. To the right (2) is an interface to the booking system. As stated in the introduction above, this is not yet in use and will not be in the near future. More on this later.

The inbuilt help page (3) is accessible from every page via the question mark, and has more information about almost everything written in this guide.

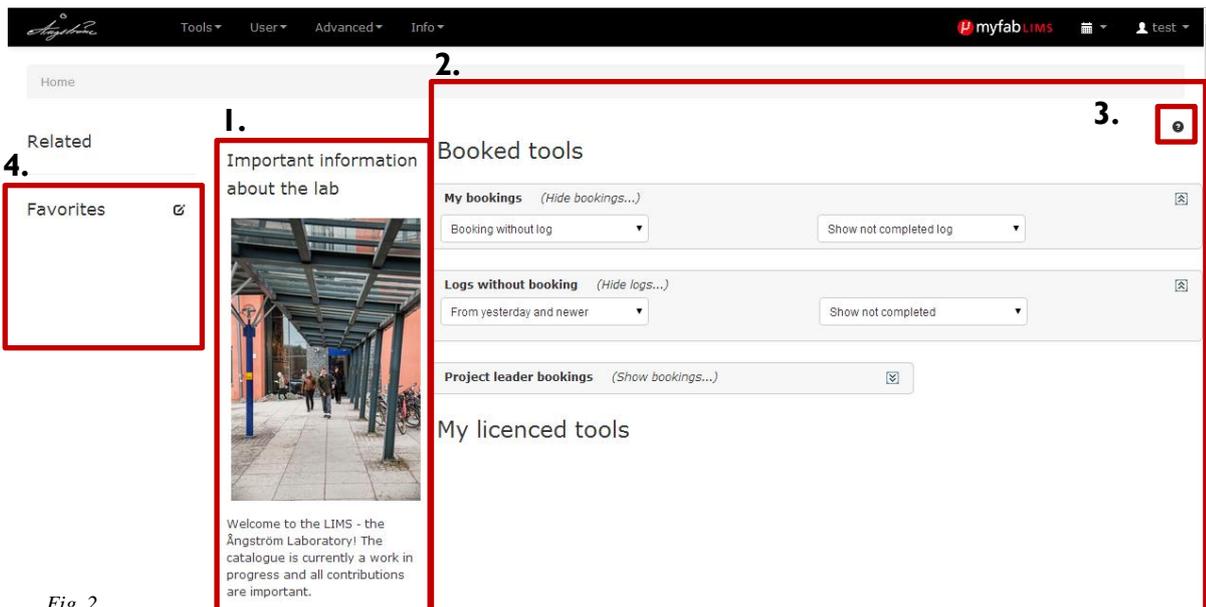Pages that you visit often can be pinned in this field (4) by clicking the text *Favourite this page*.

Fig. 2

3. The tool list

The tool list shows all the equipment in the database, as is displayed in Fig. 3. You can filter them by category or with certain phrases entered in *Tool name*, or if you are logged in you can sort them by any associated information using the option to *Add/remove columns* (1).

TIP: If you want to for example search for products by a manufacturer or for descriptions containing a certain keyword - add a column with *manufacturer* or *description* respectively and search the list with Ctrl + F in your browser.

If you click a name of a responsible (2), contact information appear (you must be logged in).
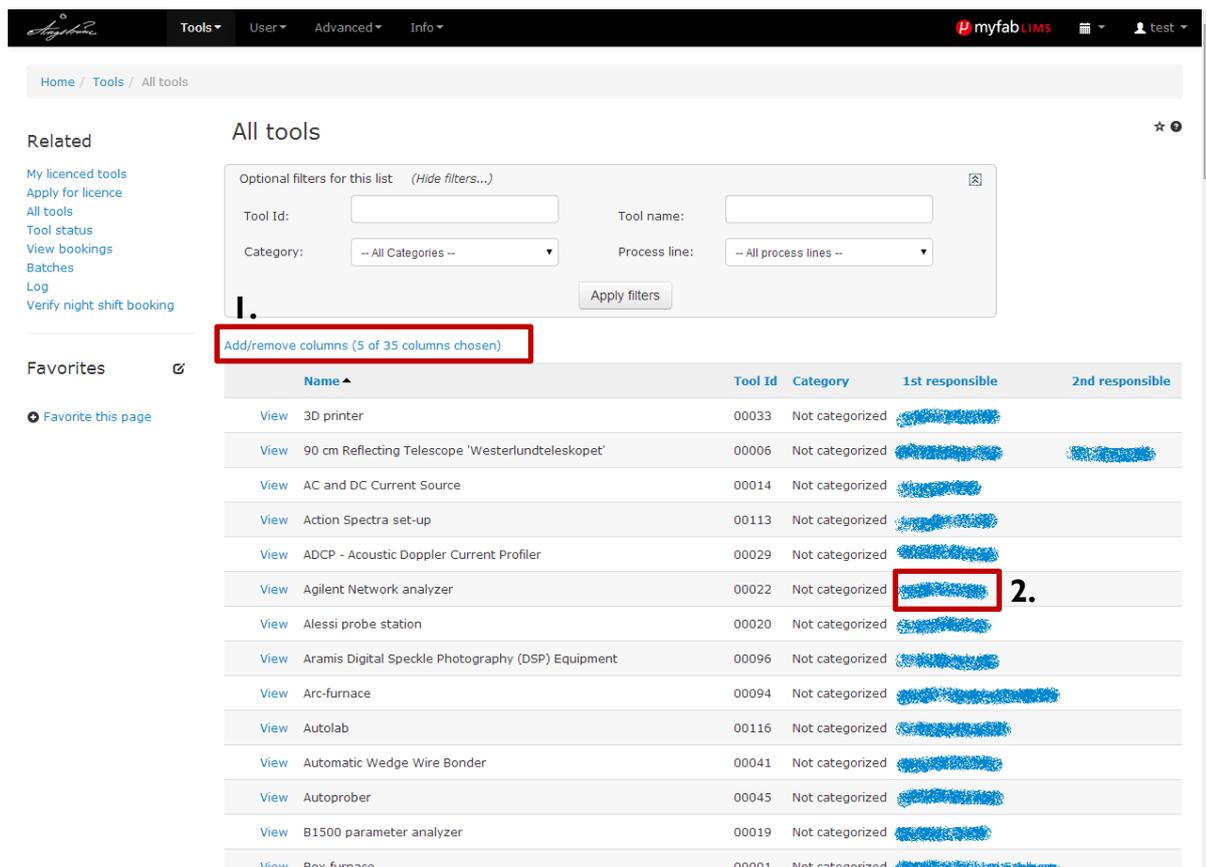

Fig. 3

4. The View tool page

On the V*iew tool* page you can find all relevant information about a piece of equipment, like manufacturer and model, a description, details about who the tool responsible is and an image if there is one. You can also access uploaded tool documents (e.g. user manuals) if you are logged in and they are available.

If the details about manufacturer and model are hidden, click on the *Details* bar halfway down the page.

5. The My tools page

Through the *My tools* page you can edit your equipment and add photos to them. Click *Edit* (1) on the relevant tool as shown in Fig. 4 to administrate it. Click *Documents* (2) to add a manual or brochure.

Fig. 4

When you edit a tool you see the following view (Fig. 5):

Fig. 5

You may want to change the *Tool name* (3), *Manufacturer* or *Model* (4), or Category (5). You may also want to set a Second tool responsible (6). The *Tool owner*-field (7) is recommended if you want to specify where a tool is located and who owns it on a sub-division level (eg. *battery group*). If you find that a category is missing, send an email to Tobias Blom with it (see **How to add a piece of equipment** below) and it will be added unless there is a very good reason against it.

If you set a tool to *is deleted* (8), it will be hidden, but can be restored later. (To see deleted tools, set *Deleted tools: Show all tools* on the page *My tools*).

Images can be uploaded in the field *Image* (not shown), by simply browsing with *Choose file* or the equivalent in your browsers language. The image is uploaded when you click *update* at the end of the page, so nothing happens before you do that. Accepted file types are jpg, png and gif.

Please consider adding a description if there is none already. It is very helpful to other researchers looking for equipment to fit their needs.

Other fields are not required and mostly relate to booking. Please don't change *Tool id*.

6. How to add a piece of equipment

If you want to add a piece of equipment, please send an email to Tobias Blom at Teknat Samverkan, *tobias.blom@uadm.uu.se*, with information about:

- The equipment name

- Manufacturer

- Model

- Equipment responsible

Optional: Include a description and an image of the equipment in the email.

7. How to get an account

The easiest way to get your own log-in is to send an email to Tobias Blom (as above in **How to add a piece of equipment**). Otherwise you can fill in the application form under *user access* in the navigation bar.

When you have access you can, among other things, select what columns to show in the tool list, see contact information for tool responsible persons and open any uploaded tool documents. You also get an account if you add a piece of equipment (see above).

8. Projects, licenses, booking and logs

These functions are grouped together partly because they are not used yet, and partly because they depend on each other. The concept of booking may seem overreaching or intrusive in an Ångström wide context and for now it is a rather large step to take from this catalogue to that. But that said, it is already used in the parallel LIMS at MSL, and has several benefits:

- It enables quick access to when a piece of equipment is available.
- The included log is a good way to keep track on equipment peculiarities.

This following section is completely for those who are curious about the unused functions until they are introduced.

Projects

The *project* feature will probably not be introduced at all, unless someone finds use for it, in which case that person of course is free to use it.

Because it is sometimes asked for, everyone can be added to the *Standard project*.

Licenses

A license is essentially a permission to book a piece of equipment, and it implies an agreement between the user and the tool responsible and some form of training in its use.

To apply for a license, go to *Tools / Apply for license*, and select a tool from the dropdown list. Then fill the form on the following page (Fig. 6):

The field *Practical coach* is not required. Otherwise enter suitable dates for instructions, how much time you think you will need to use the equipment and why you need it. But please note again that this is mostly a formality and should not take the place of an agreement between the involved.

The tool responsible will then receive an email, and a notification on their front page that looks something like this (Fig. 7):

There are **1** licence applications to process

Fig. 7

Clicking on *process* in the notification, and then again in the appearing list, takes you (the responsible) to the application processing page where you can confirm or decline it. This should be fairly simple as the real agreement should have been made already.

Apply for licence

Please fill the form with information regarding your license.

Tool:	00001 Calculator "Monroe"
Possible dates for usertraining:	Primary:
	Secondary:
	Third:
Estimated uses: (in period of 6 month)	hours
Practical coach: (on this tool)	Type to see suggestion (min. 3 charac

Short info of intended use:

Send application

Fig. 6

If a piece of equipment is not selectable in the list on the *Apply for License* page, the most likely explanation is that the option *License option: Possible to apply for license* is unticked for the equipment. It is so by default, so a dialogue with the tool responsible should solve the problem.

Booking

Once you are licensed for a tool, it will show up in the *My licensed tools* pane on the front page. The easiest way to book a session is to click *Book* in the line of the equipment you are interested in. You will then get a window with a calendar as shown in Fig. 8. Use the menu on the left (1) to navigate the calendar, and when you find a free spot, click and draw to choose how long you want the session. Then double click on it (2) to edit and save it as shown in Fig. 9.
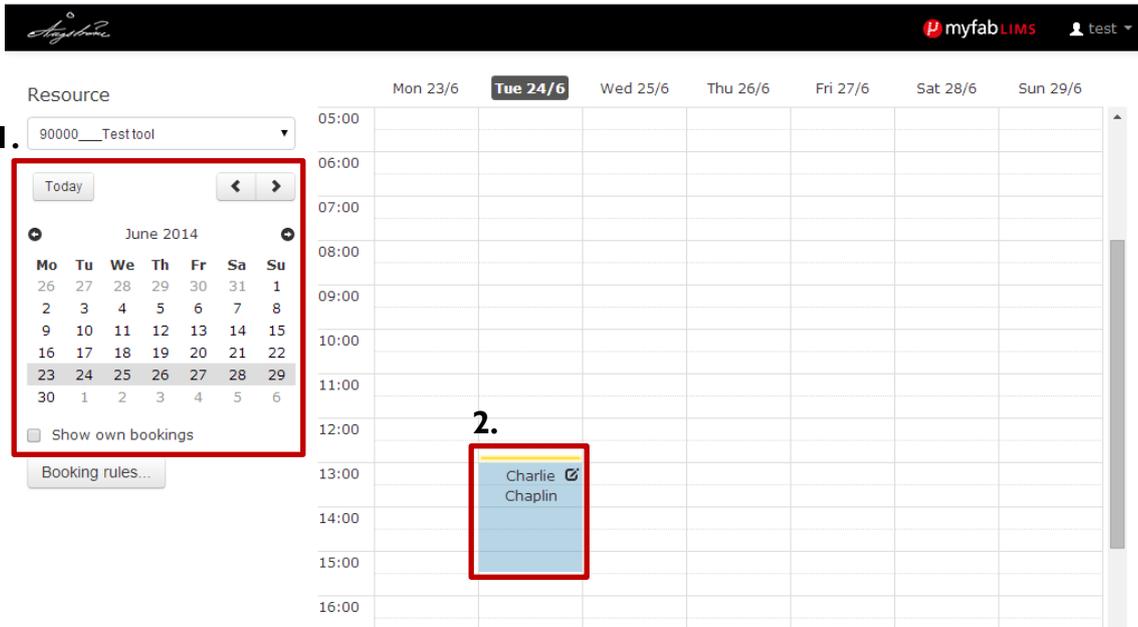
Fig. 8

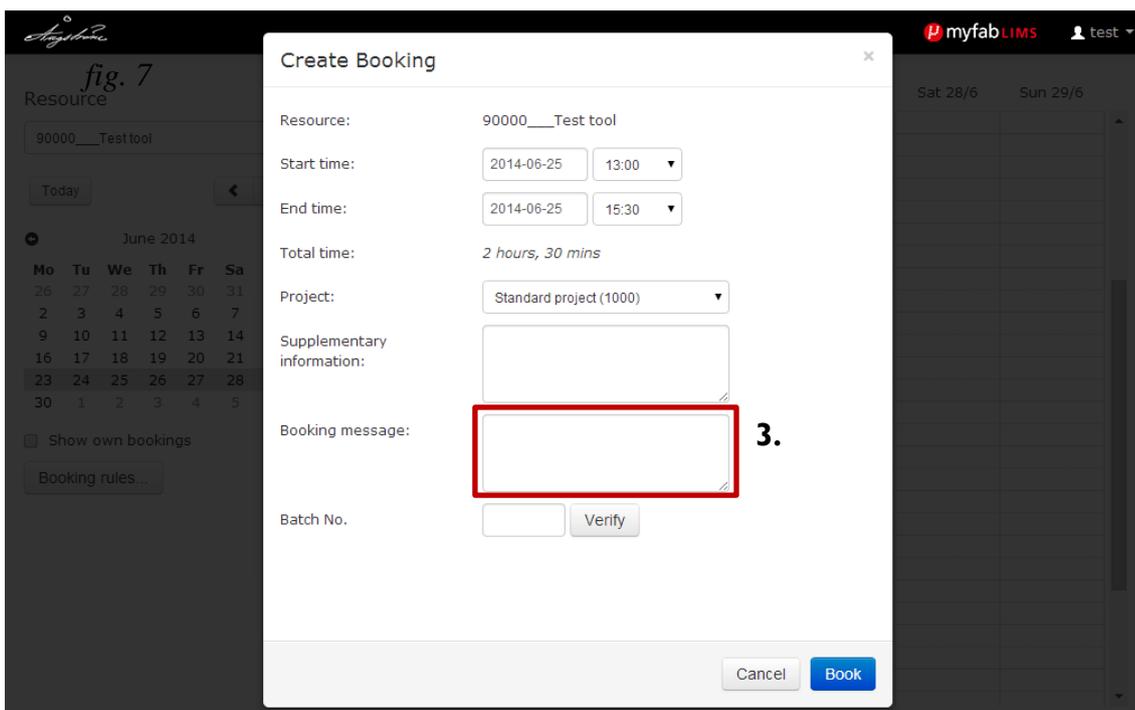When you double click on the new entry, you get this screen (Fig. 9):

Fig. 9

Here you can change the time/date, and write a message. Everything written in the second box (3) is visible to all users. At *Project*, simply choose S*tandard project* (see above), and *Batch No.* can be completely ignored. Finish by clicking *Book*.

You can review your booking any time from the *Booked tools* pane on the front page. When you are finished with the experiment, you can write a log entry for the tool with how it went or if something unexpected happened.

Logs

When a session is over, you can write a log entry with anything from experiment parameters (as a reminder to yourself), to a note about equipment behavior. It can be especially useful as a way of informing the next user of anything unexpected that happened.

NOTE: Maybe there already are systems in place to fill this function, and in that case there is perhaps no point in fixing something that's not broken. This system merely offers a nice alternative.

To write a log entry: go to the start page, look at the *Booked tools* pane, and click *Log* by a recent session (1) as shown in Fig. 10.
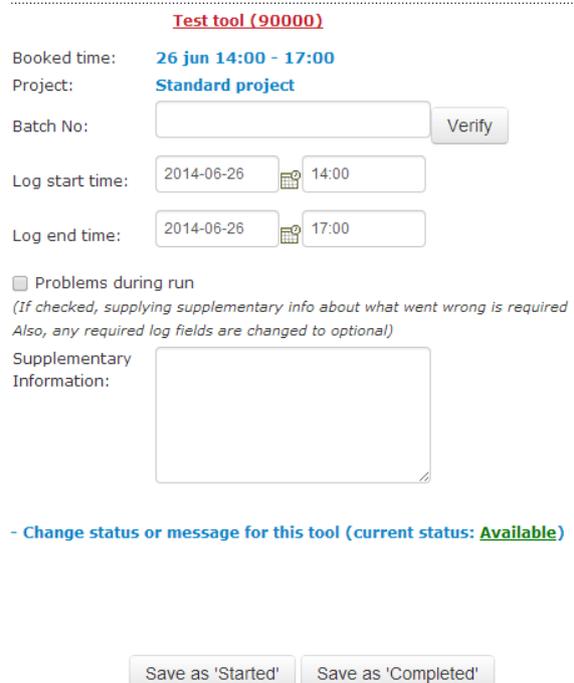
1.
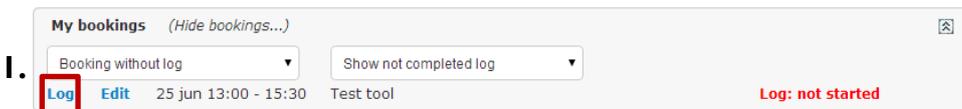
Fig. 10

Then write whatever you want in *Supplementary information* on the following page (Fig. 11). It is also possible to write nothing. If something happened, check the box *Problems during run* and describe what happened briefly. You can also change tool status between *Available* and *Warning*. Only a tool responsible can set tool status to *DOWN*. Ignore the field *Batch No.* again, and then finish by saving.

All users can read the log entries of other users. The easiest way to do this is to look at existing entries through Home / Tools / Log / Log history by tool. In that case you can just select a tool from the drop down list under the filters.

If the setting *Booking type: Optional* is active for a tool, no booking is needed to write a log entry.

Fig. 11