

User Documentation

Team 07 – 2023/24 Software Hut

Preface	1
User Roles	1
University Login	2
No Sign Up	2
Permission to Access Data	2
Home Page	3
Login	4
Logout	5
Search and Filter	6
Filter by Parameters	7
Applying multiple filters	8
Clear Filters	9
Filtering in Ascending/Descending order	9
Materials	11
Adding a New Material	11
Viewing a Material	12
Editing a Material	13
CADs	14
Adding a New CAD File	14
Viewing a CAD	15
Editing a CAD	16
Builds	17
Creating a New Build	17
Viewing a Build	18
Editing a Build	19
Machines	21
Creating a New Machine	21
Viewing a Machine	22
Editing a Machine	23
Parameters	24
Creating a New Parameter	24
Viewing a Parameter	25
Adding a Parameter to a Machine	26
Build Projects	27
Creating a New Project	27
Groups	29
Creating New Groups	29
Editing Groups	30
Default Groups	32
Confidential	32
Commercially available	32
Profile Page	33

Preface

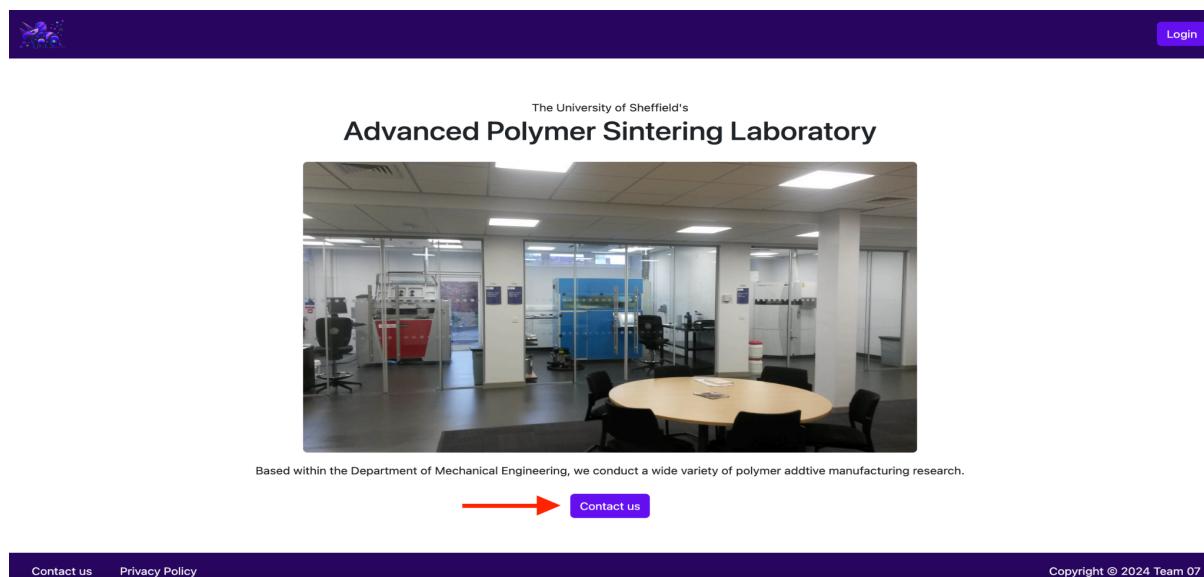
This software aims to address the challenges encountered by the APSL (Advanced Polymer Sintering Laboratory), in managing and storing substantial volumes of data. This data, generated by diverse staff members and students at varied times, exists in a variety of formats. The software is designed to facilitate accessibility for users both on and off campus, ensuring seamless access of data by authorised personnel.

User Roles

There are 4 different user roles. By default, you are a User.

- 1) Users – Anyone who has access to the software
- 2) Student – Students are users, having access and editing rights to their own data.
- 3) Staff – Staff are users, having access and editing rights to commercially available data.
- 4) Administrators – Administrators are users that can manage user access levels, assign data to groups and archive items.

If you require higher access, contact an administrator, through the ‘Contact’ button present on the Home Page.



The screenshot shows the homepage of the Advanced Polymer Sintering Laboratory. At the top, there is a purple header bar with a logo on the left and a 'Login' button on the right. Below the header, the text 'The University of Sheffield's Advanced Polymer Sintering Laboratory' is displayed, followed by a photograph of a laboratory interior with various pieces of equipment and a conference table. A red arrow points from the bottom left towards a 'Contact us' button, which is highlighted with a blue border. At the very bottom, there is a dark footer bar with links for 'Contact us' and 'Privacy Policy' on the left, and 'Copyright © 2024 Team 7' on the right.

University Login

To use the system, users must have a University of Sheffield username and password.

To log in, enter your university username and password, into the login fields.

No Sign Up

There are no particular sign up options, only University of Sheffield accounts are able to access the system.

Permission to Access Data

No data is available by default. Administrators will need to assign a role to users before their accounts are given permission to access data. Contact an administrator if you require (higher) access.

Home Page

The Home Page shows the default view shown once a user lands on the system.



The University of Sheffield's Advanced Polymer Sintering Laboratory



Based within the Department of Mechanical Engineering, we conduct a wide variety of polymer additive manufacturing research.

[Contact us](#)



The default view for the 'Home Page' before Login



The University of Sheffield's Advanced Polymer Sintering Laboratory



Based within the Department of Mechanical Engineering, we conduct a wide variety of polymer additive manufacturing research.

[Contact us](#)



The view for the 'Home Page' after Login

Login

In order to use the system, you will need to log in.

To Login:

1. On the homepage, click on the 'Login' button.



2. Enter your university username and password

A screenshot of a login form titled 'Log In'. The form contains two input fields: 'Username *' and 'Password *', each with a red arrow pointing to it from below. A third red arrow points to the 'Log in' button at the bottom right of the form. Above the form, there is a purple header with a logo on the left and a 'Login' button on the right.

3. Press 'Enter' or click 'Login'.

Logout

After finishing work, you need to logout of the website.

To logout:

1. Click on the 'Profile' icon in the top right corner.
2. Click 'Logout', to exit the system.



Search and Filter

The search and filter feature helps narrow down the search results and show only the specific results required. These features are available for Materials, CADS, Builds, Machines and User Roles.

Filtering Options ▲▼

Material Name: <input type="text" value="Name"/>	Material Type: <input type="text" value="Select Material Type"/>	File Creator: <input type="text" value="Creator"/>
Last Modifier: <input type="text" value="Last Modifier"/>	Melting Onset: <input type="text" value="Min °C"/> <input type="text" value="Max °C"/>	Crystallisation Onset: <input type="text" value="Min °C"/> <input type="text" value="Max °C"/>
Creation Date: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>	Last Update: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>	Archived <input type="text" value="Select Archived"/>
<input type="button" value="Clear Filters"/> <input type="button" value="Apply Filters"/>		

Default view for 'Search-Filter' for 'Materials'.

Filtering Options ▲▼

File Name: <input type="text" value="File Name"/>	File Type: <input type="text" value="Select File Type"/>	File Creator: <input type="text" value="Creator"/>
Last Modifier: <input type="text" value="Last Modifier"/>	Machine: <input type="text" value="Select Machine"/>	Creation Date: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/> <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>
Last Update: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>	Archived <input type="text" value="Select Archived"/>	
<input type="button" value="Clear Filters"/> <input type="button" value="Apply Filters"/>		

Default view for 'Search-Filter' for 'CAD's'.

Filtering Options ▲▼

Build Name: <input type="text" value="Name"/>	Project: <input type="text" value="Select Project"/>	Machine: <input type="text" value="Select Machine"/>
Material: <input type="text" value="Select Material"/>	File Creator: <input type="text" value="Creator"/>	Last Modifier: <input type="text" value="Last Modifier"/>
Average UTS: <input type="text" value="Min MPa"/> <input type="text" value="Max MPa"/>	Average Modulus: <input type="text" value="Min MPa"/> <input type="text" value="Max MPa"/>	Average EaB: <input type="text" value="Min %"/> <input type="text" value="Max %"/>
Creation Date: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>	Last Update: <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/> <input type="text" value="yyyy/mm/dd"/> <input type="button" value="Open"/>	
<input type="button" value="Clear Filters"/> <input type="button" value="Apply Filters"/>		

Default view for 'Search-Filter' for 'Build's'.

Filtering Options ▲▼

Name: <input type="text" value="Name"/>	<input type="button" value="Apply Filters"/>
<input type="button" value="Clear Filters"/>	

Default view for 'Search-Filter' for 'Machines'.

Proceed to [parameter filtering](#), to see filtering based on parameters.
Proceed to [ordered filtering](#), to see filtering in ascending/descending.

Filter by Parameters

For each of the above-mentioned pages, we can filter results based on the specific search criteria.

For example, for the Material's page, we can search materials based on the following parameters:

Material Name, Material Type, File Creator, Last Modifier, Melting Onset (Min/Max), Crystallisation Onset (Min/Max), Creation Date (between the specified time frame), Last Updated (between the specified time frame) and Archived (yes/no).

The screenshot shows a user interface for filtering and listing materials. At the top, there is a 'Filtering Options' section with dropdowns and input fields for Material Name, Material Type, File Creator, Last Modifier, Melting Onset, Crystallisation Onset, Creation Date, Last Update, and Archived status. Below this is a table titled 'Listing Materials' showing two entries: 'Material1' and 'Material2', with columns for Mat. Name, Mat. Type, Melt. Onset, Cryst. Onset, Location, Created By, Modified By, and Archived status. A 'New Material' button is also present.

Mat. Name	Mat. Type	Melt. Onset	Cryst. Onset	Location	Created By	Modified By	Archived
Material1	powder	1000.0	500.0	A6	Atri	Atri	false
Material2	powder	1050.0	580.0	F2	Annie	Annie	false

To filter by parameters:

1. Enter details in the specified field for the parameter you want to filter by, then click 'Apply Filters' for results.

For example, filtering materials having 'Melting Onset' between 500°C and 1000°C.

The screenshot shows the 'Filtering Options' section with red arrows pointing to the 'Melting Onset' input fields where '500' and '1000' have been entered. A large red arrow points to the 'Apply Filters' button at the bottom right.

This should display only 'Material 1', since it 'Material 2' has a melting onset of 1050°C.

Listing Materials								New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
Material1	powder	1000.0	500.0	A6	Atri	Atri	false	Show

2. Proceed to [applying multiple filters](#), to include multiple parameters while filtering.
3. Proceed to [clear filters](#), to remove the applied filters.

Applying multiple filters

You can apply more than one filter at the same time.

To apply multiple filters:

1. Enter details in all the different fields by which you want to filter the materials.

For example, filtering materials having 'Melting Onset' between 500°C and 1000°C, as well as the 'Crystallisation Onset' between 200°C and 600°C.

Filtering Options ▲▼

Material Name: <input type="text" value="Name"/>	Material Type: <input type="text" value="Select Material Type"/>	File Creator: <input type="text" value="Atri Hegde"/>
Last Modifier: <input type="text" value="Last Modifier"/>	Melting Onset: <input type="text" value="500"/> <input type="text" value="1000"/>	Crystallisation Onset: <input type="text" value="200"/> <input type="text" value="600"/>
Creation Date: <input type="text" value="yyyy/mm/dd"/> <input type="button" value=""/>	Last Update: <input type="text" value="yyyy/mm/dd"/> <input type="button" value=""/>	Archived <input type="text" value="Select Archived"/>
Clear Filters		Apply Filters

This should display only 'Material 1', since that is the only one satisfying both the conditions.

Listing Materials								New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
Material1	powder	1000.0	500.0	A6	Atri	Atri	false	Show

Clear Filters

Once filters are applied, we can remove them to see all the materials again.

To clear the applied filters:

1. Click 'Clear Filters' on the Materials page.

The screenshot shows a 'Filtering Options' section with the following fields:

- Material Name: Name (text input)
- Material Type: Select Material Type (dropdown)
- File Creator: Creator (text input)
- Last Modifier: Last Modifier (text input)
- Melting Onset: Min °C (text input) and Max °C (text input)
- Crystallisation Onset: Min °C (text input) and Max °C (text input)
- Creation Date: yyyy/mm/dd (date input) and yyyy/mm/dd (date input)
- Last Update: yyyy/mm/dd (date input) and yyyy/mm/dd (date input)
- Archived: Archived (checkbox) and Select Archived (dropdown)

At the bottom left is a blue 'Clear Filters' button with a red arrow pointing to it. At the bottom right is a blue 'Apply Filters' button.

Filtering in Ascending/Descending order

For each of the above-mentioned pages, we can also filter them in ascending/descending order based on a specific parameter.

For example, for the Material's page, we can filter materials based on the following parameters:

Material Name, Material Type, Melting Onset, Crystallisation Onset, Location, Created By, Modified By and Archived.

Listing Materials								New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
Material2	powder	1050.0	580.0	F2	Annie	Annie	false	Show
Material1	powder	1000.0	500.0	A6	Atri	Atri	false	Show

Default view for 'Listing Material'.

To filter in ascending order, click the '▲'.

For example, filtering materials in ascending order based on the 'Melting Onset'.

Listing Materials								New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
Material1	powder	1000.0	500.0	A6	Atri	Atri	false	Show
Material2	powder	1050.0	580.0	F2	Annie	Annie	false	Show

To filter in descending order, click the '▼'.

For example, filtering materials in descending order based on the 'Location'.

Listing Materials								New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
Material2	powder	1050.0	580.0	F2	Annie	Annie	false	Show
Material1	powder	1000.0	500.0	A6	Atri	Atri	false	Show

Materials

The 'Materials' page (accessed from the top right of the page) is used to store all the available materials in the laboratory. By default, it will list all materials you have access to.

Your level of access depends upon your user role.

Filtering Options ▲▼

Material Name:	Material Type:	File Creator:
Name	Select Material Type	Creator
Last Modifier:	Melting Onset:	Crystallisation Onset:
Last Modifier	Min °C	Max °C
Creation Date:	Last Update:	Archived
yyyy/mm/dd □	yyyy/mm/dd □	yyyy/mm/dd □ Select Archived □
Clear Filters		Apply Filters

Listing Materials [New Material](#)

Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived
No Materials found							

Default view for 'Materials' page.

Adding a New Material

To add a new Material:

1. Click on the 'New Material' on the 'Materials' page.

Listing Materials [New Material](#)

Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived
No Materials found							

2. Enter all the required information. For uploading a file, click 'Choose File' and upload a file from your computer. Click 'Submit' to add the new Material.

New Material

Name: *	
Description:	
Material Type:	Powder
Quantity(kg or ml):	
Location: *	
Melting Onset:	
Crystallisation Onset:	
<input type="checkbox"/> Archived	
MSDS: <input type="button" value="Choose File"/>	No file chosen
CoSHH: <input type="button" value="Choose File"/>	No file chosen
DSC: <input type="button" value="Choose File"/>	No file chosen
FT4: <input type="button" value="Choose File"/>	No file chosen
<input type="button" value="Back"/>	<input style="background-color: #000080; color: white; font-weight: bold; font-size: 10pt; padding: 2px 10px; border-radius: 5px; border: none; width: 60px; height: 20px;" type="button" value="Submit"/>

3. Proceed to [viewing material](#) to see the details of a particular material.
4. Proceed to [editing material](#) to edit the details of a particular material.

Viewing a Material

To view details of a Material:

1. Click on the 'Show' button present on the 'Materials' page.

Listing Materials							<input style="border: 1px solid #000080; border-radius: 5px; padding: 2px 10px; font-size: 10pt; margin-right: 10px;" type="button" value="New Material"/>
Mat. Name ▲▼ Mat. Type ▲▼ Melt. Onset ▲▼ Cryst. Onset ▲▼ Location ▲▼ Created By ▲▼ Modified By ▲▼ Archived							
Material 1	Liquid	100.0	20.0	Rack 5	Lekha	Lekha	false

2. It takes you to a page, consisting of all details related to the particular Material. You can also download the files attached with the Material, by clicking on the download button.

Material 1 Details

Name:	Material 1
Description:	Used for XYZ
Material Type:	Liquid
Quantity (Kg or ml):	20
Location:	Rack 5
Melting onset (°C):	100.0
Crystallisation onset (°C):	20.0
Created By:	Lekha Mohta lmohta1@sheffield.ac.uk
Created At:	2024-05-04 18:25:26
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated At:	2024-05-04 18:25:26
Archived:	false
MSDS:	Download MSDS
CoSHH:	Download CoSHH
DSC:	Download DSC
FT4:	Download FT4

[Back](#) [Edit](#)

3. Click on the 'Back' button to return to the 'Materials' home page.

Editing a Material

To edit a Material:

1. Click on the 'Show' button present on the 'Materials' page.

Listing Materials							New Material
Mat. Name ▲▼	Mat. Type ▲▼	Melt. Onset ▲▼	Cryst. Onset ▲▼	Location ▲▼	Created By ▲▼	Modified By ▲▼	Archived
Material 1	Liquid	100.0	20.0	Rack 5	Lekha	Lekha	false Show

2. Click on the 'Edit' button on the 'Show Material' page. This will take you to a page where you can edit details of that particular material.

Material 1 Details

Name:	Material 1
Description:	Used for XYZ
Material Type:	Liquid
Quantity (Kg or ml):	20
Location:	Rack 5
Melting onset (°C):	100.0
Crystallisation onset (°C):	20.0
Created By:	Lekha Mohta lmohta1@sheffield.ac.uk
Created At:	2024-05-04 18:25:26
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated At:	2024-05-04 18:25:26
Archived:	false
MSDS:	Download MSDS
CoSHH:	Download CoSHH
DSC:	Download DSC
FT4:	Download FT4

[Back](#) [Edit](#)

3. Once you have completed editing, click 'Submit' to save the changes.

CADs

The 'CADs' page (accessed from the top right of the page) is used to store all the CAD files created during a process, by a user. By default, it will list all CAD files you have access to.

Your level of access depends upon your user role.

The screenshot shows the 'Filtering Options' section with fields for File Name, File Type, File Creator, Last Modifier, Machine, Creation Date, Last Update, Archived status, and date range. Below this is a table titled 'Listing Designs' showing one entry: CAD 1, Build File, Scintilla (HSS), Lekha, Lekha, false. A 'New CAD' button is located in the top right corner of the table header.

File name ▲▼	File Type ▲▼	Machine ▲▼	Created By ▲▼	Modified By ▲▼	Archived
CAD 1	Build File	Scintilla (HSS)	Lekha	Lekha	false

Default view for 'CADs' page

Adding a New CAD File

To add a new CAD file:

1. Click on the 'New CAD' on the 'CADs' page.

The screenshot shows a table with columns for File name, File Type, Machine, Created By, Modified By, and Archived. A red arrow points to the 'New CAD' button in the top right corner of the table header. The message 'No CADs found' is displayed below the table.

File name ▲▼	File Type ▲▼	Machine ▲▼	Created By ▲▼	Modified By ▲▼	Archived
No CADs found					

2. Enter all the required information (Name, File Type, Machine, Archived, File). To upload a File, click 'Choose File' and upload a file from your computer.
3. Click 'Submit' to add a new CAD.

Editing CAD 1

Name: *	CAD 1
File Type: *	Build File
Machine: *	Scintilla (HSS)
<input type="checkbox"/> Archived	
File: * <input type="button" value="Choose File"/>	No file chosen
<input type="button" value="Back"/>	<input type="button" value="Submit"/>

4. Proceed to [viewing cads](#) to see details of a specific CAD.
5. Proceed to [editing cads](#) to edit details of a specific CAD.

Viewing a CAD

To view details of a CAD:

1. Click on the 'Show' button present on the 'CADs' page.

Listing Designs

						<input type="button" value="New CAD"/>
File name ▲▼	File Type ▲▼	Machine ▲▼	Created By ▲▼	Modified By ▲▼	Archived	
CAD 1	Build File	Scintilla (HSS)	Lekha	Lekha	false	<input type="button" value="Show"/>

2. It takes you to a page, consisting of all details related to the particular CAD. You can also download the file attached with the CAD, by clicking on the download button.

CAD 1 Details

File name:	CAD 1
File type:	Build File
Machine:	Scintilla (HSS)
Created By	Lekha Mohta lmohta1@sheffield.ac.uk
Created at:	2024-05-04 14:15:34
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated at:	2024-05-04 14:15:34
Archived:	false
File:	<input type="button" value="Download"/>
<input type="button" value="Back"/>	<input type="button" value="Edit"/>

3. Click on the 'Back' button to return to the 'CADs' home page.

Editing a CAD

To edit a CAD:

1. Click on the 'Show' button present on the 'CADs' page.

Listing Designs						New CAD
File name ▲▼	File Type ▲▼	Machine ▲▼	Created By ▲▼	Modified By ▲▼	Archived	Show
CAD 1	Build File	Scintilla (HSS)	Lekha	Lekha	false	

2. Click on the 'Edit' button on the 'Show CAD' page. This will take you to a page, where you can edit details (Name, File Type, Machine, Archived, File).

CAD 1 Details

File name:	CAD 1
File type:	Build File
Machine:	Scintilla (HSS)
Created By	Lekha Mohta lmohta1@sheffield.ac.uk
Created at:	2024-05-04 14:15:34
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated at:	2024-05-04 14:15:34
Archived:	false
File:	Download

 **Edit**

Back

3. Click 'Submit' to save the changes.

Builds

The 'Builds' page (accessed from the top right of the page) is used to keep track of all the builds created by a user. By default, it will list all builds you have access to.

Your level of access depends upon your user role.

The screenshot shows the 'Builds' page interface. At the top, there is a 'Filtering Options ▲▼' section containing various search and filter fields: Build Name (Name), Project (Select Project), Machine (Select Machine); Material (Select Material), File Creator (Creator), Last Modifier (Last Modifier); Average UTS (Min MPa, Max MPa), Average Modulus (Min MPa, Max MPa), Average EaB (Min %, Max %); Creation Date and Last Update date pickers; and buttons for 'Clear Filters' and 'Apply Filters'. Below this is a table header row with columns: Name ▲▼, Project, Machine, Material, Avg UTS ▲▼, Avg Modulus ▲▼, Avg EaB ▲▼, Created By ▲▼, and Modified By ▲▼. The main body of the table displays the message 'No Builds found'.

Default view for 'Builds' page.

Creating a New Build

To add a new Build:

1. Click on the 'New Build' on the 'Builds' page.

The screenshot shows the 'Builds' page with the 'New Build' button highlighted by a red arrow. The table below it shows the same structure as the previous screenshot, with the message 'No Builds found'.

2. Enter the required information. Clicking on the 'Load Machine-Specific Parameters' will show the parameters based on the machine selected. Enter details for all these parameters.

The screenshot shows a 'Choose Machine' dialog box. It contains a 'Machine Name' dropdown labeled 'Select Machine' and a 'Load Machine-Specific Parameters' button at the bottom, which is highlighted by a red arrow.

- To upload a File, click 'Choose File' and upload a file from your computer. Click 'Create Build', to add the new build.

New Build

Name:

Project: New Project

Material:

Comments:

Avg UTS:

Avg Modules:

Avg EaB:

Completed:

Tenstile Raw Data:
 No file chosen

Back Create Build

- Proceed to [adding new project](#), to see how to add a new project
- Proceed to [viewing builds](#) to see the details of a specific build.
- Proceed to [editing builds](#) to edit the details of a specific build.

Viewing a Build

To view details of a Build:

- Click on the 'Show' button present on the Builds page.

Listing Builds

Name ▲▼	Project	Machine	Material	Avg UTS ▲▼	Avg Modulus ▲▼	Avg EaB ▲▼	Created By ▲▼	Modified By ▲▼	New Build
Build 1	Project 1	P100 (LS)	Material 1	80.0	20.0	10.0	Lekha	Lekha	Show

- It takes you to a page, consisting of all the details related to that particular Build. You can also download the files attached with this Build, by clicking on the download button.

Build 1 Details	
Name:	Build 1
Project:	Project 1
Material:	Material 1
Machine:	P100 (LS)
Comments:	Comments for Build 1
Avg. UTS (MPa):	80.0
Avg. Modulus (MPa):	20.0
Avg. EaB (%):	10.0
Bed Temperature (°C):	70
Hatching Laser Power (W):	20
Edges & Contours:	90
Edges & Contours Laser Power:	10
Hatching Laster Speed (mm/s):	5
Edges & Contours Laser Speed (mm/s):	5
Scan Spacing (mm/s):	80
Completed:	false
Created By:	Lekha Mohta lmohta1@sheffield.ac.uk
Created At:	2024-05-06 17:24:58
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated At:	2024-05-06 17:24:58
Tensile Raw Data:	Download

Download



- Click on the 'Back' button to return to the 'Builds' home page.

Editing a Build

To edit a Build:

- Click on the 'Show' button present on the 'Builds' page.

Listing Builds								New Build
Name ▲▼	Project	Machine	Material	Avg UTS ▲▼	Avg Modulus ▲▼	Avg EaB ▲▼	Created By ▲▼	Modified By ▲▼
Build 1	Project 1	P100 (LS)	Material 1	80.0	20.0	10.0	Lekha	Lekha

Show



- Click on the 'Edit' button on the 'Show Build' page. This will take you to a page where you can edit details of that particular build.

Build 1 Details

Name:	Build 1
Project:	Project 1
Material:	Material 1
Machine:	P100 (LS)
Comments:	Comments for Build 1
Avg. UTS (MPa):	80.0
Avg. Modulus (MPa):	20.0
Avg. EaB (%):	10.0
Bed Temperature (°C):	70
Hatching Laser Power (W):	20
Edges & Contours:	90
Edges & Contours	10
Laser Power:	
Hatching Laster Speed (mm/s):	5
Edges & Contours	5
Laser Speed (mm/s):	
Scan Spacing (mm/s):	80
Completed:	false
Created By:	Lekha Mohta lmohta1@sheffield.ac.uk
Created At:	2024-05-06 17:24:58
Updated By:	Lekha Mohta lmohta1@sheffield.ac.uk
Updated At:	2024-05-06 17:24:58
Tensile Raw Data:	Download

[Back](#)  [Edit](#)

3. Once you have completed editing the details, click 'Update Build' to save the changes.

Machines

The 'Machines' page (accessed from the drop-down in the top right) is used to store all related information for the machines in the laboratory. By default, it will list all machines. This page is only accessible by administrators.

Filtering Options ▲▼		
Name:		
Name		
<button>Clear Filters</button>		<button>Apply Filters</button>
Listing Machines		
		<button>New Parameter</button> <button>New Machine</button>
Name	Description	Archived
P100 (LS)	One of the machines provided to us	false
VX200 (HSS)	One of the machines provided to us	false
Sinratec (LS)	One of the machines provided to us	false
Scintilla (HSS)	One of the machines provided to us	false

Default view for 'Machines' page.

Creating a New Machine

To create a new Machine:

1. Click on the 'New Machine' on the 'Machines' page.

Listing Machines		
		<button>New Parameter</button> <button>New Machine</button>
Name	Description	Archived
P100 (LS)	One of the machines provided to us	false
VX200 (HSS)	One of the machines provided to us	false
Sinratec (LS)	One of the machines provided to us	false
Scintilla (HSS)	One of the machines provided to us	false

2. Enter the name, description and archived (yes/no) by selecting the checkbox for the machine. Click 'Submit' to add the new Machine.

New Machine

Name *

Description *

Archived

Back Submit

3. Proceed to [viewing a machine](#) to see the details of a particular machine.
4. Proceed to [editing a machine](#) to edit the details of a particular machine.

Viewing a Machine

To view details of a Machine:

1. Click on the 'Show' button present on the 'Machines' page.

Listing Machines

Name	Description	Archived		
P100 (LS)	One of the machines provided to us	false	Add Parameters	Show
VX200 (HSS)	One of the machines provided to us	false	Add Parameters	Show
Sintratec (LS)	One of the machines provided to us	false	Add Parameters	Show
Scintilla (HSS)	One of the machines provided to us	false	Add Parameters	Show

2. It takes you to a page, consisting of the name, description and archived feature of the machine.
3. Click on the 'Back' button to return to the 'Machines' home page.

Machine details

Name: P100 (LS)
Description: One of the machines provided to us
Archived: false

Back Edit

Editing a Machine

To edit a Machine:

1. Click on the 'Show' button present on the 'Machines' page.

Listing Machines			New Parameter	New Machine
Name	Description	Archived		
P100 (LS)	One of the machines provided to us	false	Add Parameters	Show
VX200 (HSS)	One of the machines provided to us	false	Add Parameters	Show
Sintratec (LS)	One of the machines provided to us	false	Add Parameters	Show
Scintilla (HSS)	One of the machines provided to us	false	Add Parameters	Show

2. Click on the 'Edit' button on the 'Show Machine' page. This will take you to a page, where you can edit the name, description and archived features of the machine.

Machine details	
Name:	P100 (LS)
Description:	One of the machines provided to us
Archived:	false
Back	Edit

3. Click 'Submit' to save the Machine features.

Editing Machine	
Name *	P100 (LS)
Description *	One of the machines provided to us
<input type="checkbox"/> Archived	
Back	Submit

Parameters

Parameters store all the details for each of the machines in the system.

Listing Parameters		New Parameter
Name	Unit	
Bed Temperature	°C	Show
Hatching Laser Power	W	Show
Edges & Contours	N/A	Show
Edges & Contours Laser Power	N/A	Show
Hatching Laster Speed	mm/s	Show
Edges & Contours Laser Speed	mm/s	Show
Scan Spacing	mm/s	Show
Aperture Height	mm	Show
Emissivity	N/A	Show

Default view for 'Parameters Page'.

Creating a New Parameter

To create a New Parameter:

1. Click on the 'New Parameter' on the 'Machines' page.

Listing Machines				New Parameter	New Machine
Name	Description	Archived			
P100 (LS)	One of the machines provided to us	false	Add Parameters	Show	
VX200 (HSS)	One of the machines provided to us	false	Add Parameters	Show	
Sinratec (LS)	One of the machines provided to us	false	Add Parameters	Show	
Scintilla (HSS)	One of the machines provided to us	false	Add Parameters	Show	

2. Enter the name and unit for the parameter. Click 'Submit' to add a new Parameter.

New Parameter

Name *	<input type="text"/>
Unit *	<input type="text"/>
Back	Submit

3. Proceed to [viewing parameters](#) to see the details of a parameter.
4. Proceed to [adding parameters to the machine](#) to see how to add a parameter to a particular machine.

Viewing a Parameter

To view details of a Parameter:

1. Click on the 'Show' button present on the 'Parameters' page.

Listing Parameters		New Parameter
Name	Unit	
Bed Temperature	°C	Show
Hatching Laser Power	W	Show
Edges & Contours	N/A	Show
Edges & Contours Laser Power	N/A	Show

2. It takes you to a page, consisting of the name and unit of the parameter.
3. Click on the 'Back' button to return to the 'Machines' home page.

Parameter details

Name:	Bed Temperature
Unit:	°C
Back	

Adding a Parameter to a Machine

To add a Parameter to a Machine:

1. Click on the 'Add Parameter' button on the 'Machines' page.

Listing Machines			New Parameter	New Machine
Name	Description	Archived		
P100 (LS)	One of the machines provided to us	false	Add Parameters	Show
VX200 (HSS)	One of the machines provided to us	false	Add Parameters	Show
Sintratec (LS)	One of the machines provided to us	false	Add Parameters	Show
Scintilla (HSS)	One of the machines provided to us	false	Add Parameters	Show

2. Click on the 'Add' button to add the particular parameter to the selected machine. To search for a particular parameter, type the parameter name and click 'Search'. To clear search filters, click 'Clear'.

Manage Parameters of: P100 (LS)		Done
Parameter Name:		
Name		
<input type="button" value="Search"/>	<input type="button" value="Clear"/>	
Listing Parameters		New Parameter
Parameter Name ▲▼	Units	
Bed Temperature	°C	
Hatching Laser Power	W	
Edges & Contours	N/A	
Edges & Contours Laser Power	N/A	
Hatching Laster Speed	mm/s	
Edges & Contours Laser Speed	mm/s	
Scan Spacing	mm/s	
Aperture Height	mm	<input type="button" value="Add"/>
Emissivity	N/A	<input type="button" value="Add"/>
Part Bed Temperature	°C	<input type="button" value="Add"/>

3. Once you are done adding parameters, click 'Done' to return to the 'Machine' home page.

Build Projects

Projects stores the projects used in the Builds.

Listing Build Projects		New Build project
Name	Description	
Project 1	Description for Project 1	Show
Project 2	Description for Project 2	Show
Project1		Show
Project2		Show

Default view for 'Build Projects' page.

Creating a New Project

To create a new Project:

1. Click on the 'New Build Project' on the 'Build Projects' page.

Listing Build Projects		New Build project
Name	Description	
Project 1	Description for Project 1	 Show
Project 2	Description for Project 2	Show
Project1		Show
Project2		Show

Or, through the 'New Build' page by the 'New Project' button.

The screenshot shows two stacked interface sections. The top section is titled 'Choose Machine' and contains a 'Machine Name:' dropdown set to 'Select Machine' and a purple 'Load Machine-Specific Parameters' button. The bottom section is titled 'New Build' and includes fields for 'Name:', 'Project:' (with a dropdown for 'Select Project' and a purple 'New Project' button highlighted by a red arrow), 'Material:' (with a dropdown for 'Select Material'), and 'Comments:'.

2. Enter the name and description of the Build Project. Click 'Save' to add the new project.

The screenshot shows the 'New Build Project' form. It has fields for 'Name *' and 'Description', both with input boxes. At the bottom, there is a purple 'Save' button and a blue 'Back' link.

3. Proceed to Viewing Build Project to see the details of that build project.
4. Proceed to Editing Build Project to edit the details of that build project.

Groups

Groups are a way to manage access control. Only administrators can access this page from the menu dropdown in the top right.

Listing Groups		New Group
Name	Description	
Confidential	Do not share with others!	Show Edit Destroy
Commercially Available	Available for purchase commercially!	Show Edit Destroy

Default view for 'Groups' page.

Creating New Groups

To create a new group:

1. Click on 'New Group' on the 'Groups' page.

Listing Groups		New Group
Name	Description	
Confidential	Do not share with others!	Show Edit Destroy
Commercially Available	Available for purchase commercially!	Show Edit Destroy

2. Enter a name and description.
3. Click 'Save'.

New Group

Name	<input type="text"/>
Description	<input type="text"/>
<input type="button" value="Save"/>	Back

4. Proceed to [editing groups](#) to manage what is included in each group.

Editing Groups

To edit a group:

1. Click on the 'Edit' button for the group you wish to edit. This will take you to a page, where you can manage (add/remove) Users, Builds, Machines and CAD files, in the group.

Listing Groups		New Group
Name	Description	
Confidential	Do not share with others!	<button>Show</button> <button>Edit</button> <button>Destroy</button>
Commercially Available	Available for purchase commercially!	<button>Show</button> <button>Edit</button> <button>Destroy</button>

2. To edit the name and description, click the 'Update Group' button.
3. Click on any of the 'Manage XXX' buttons to take you to a page where you can add or remove the relevant data.

The screenshot shows the 'Editing Group' interface. The top section, 'Group Details', contains fields for 'Name' (set to 'Confidential') and 'Description' (set to 'Do not share with others!'). Below these is a purple 'Update Group' button. A red arrow points to this button. The bottom section, 'Group Objects', is titled 'Users' and shows 'No users in group'. It has a 'Manage Users' button. The 'Builds' section shows 'No builds in group' with a 'Manage Builds' button, which is also highlighted by a red arrow. The 'CADs' section shows 'No CADs in group' with a 'Manage CADs' button. The 'Machines' section shows 'No machines in group' with a 'Manage Machines' button. The 'Materials' section shows 'No materials in group' with a 'Manage Materials' button.

- a. You are able to filter by name
- b. Click the 'Remove' or 'Add' buttons

Add Users to: Confidential Back

User Email:

Search Clear

Email	Username	Given Name	User Role	
ahegde1@sheffield.ac.uk	ace22ah	Atri	admin	Remove
jhargreaves3@sheffield.ac.uk	acd22jh	Joffray	admin	Add
c.majewski@sheffield.ac.uk	me1cm	Candice	admin	Add
atse1@sheffield.ac.uk	acb22at	Annie	admin	Add

Default Groups

There are two default groups that cannot be deleted. These groups contain information accessible only by a particular set of users.

Confidential

This group contains info that is included in NDA agreements. The information within this group is not accessible to anyone except people included within the agreement.

Commercially available

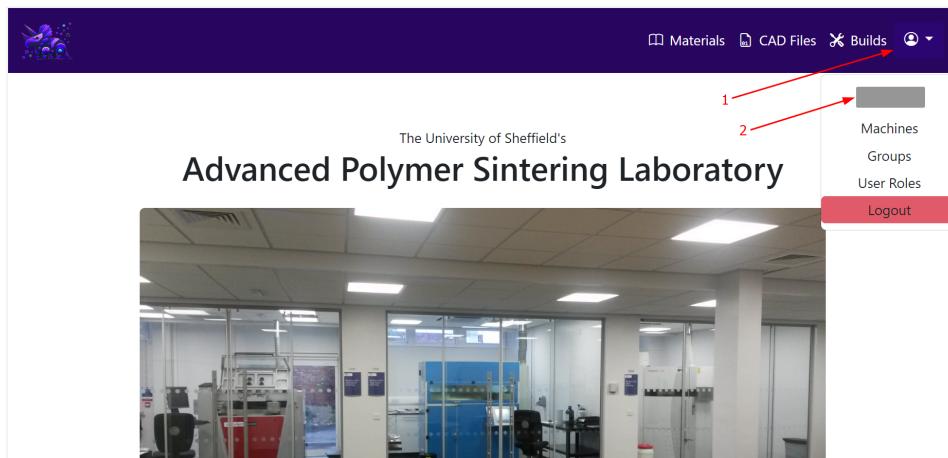
This group contains information that is only available to the staff members at APSL.

Profile Page

The profile page allows you to view your details as registered on the APSL website, you cannot change these details as they are acquired from your university login. If you found out that any of your user details are incorrect, please contact the administrator promptly for support.

To open your profile page:

1. Click on the profile icon in the top right corner
2. Click on your username

A screenshot of the Profile page. The top navigation bar is identical to the homepage. The main content area is titled "Profile" and contains a table of user information:

Username:	abc19ww
First name:	abc
Last name:	xyz
Email:	xyz123@sheffield.ac.uk
Role:	Admin

At the bottom of the page are links for Contact us and Privacy Policy, and a copyright notice: Copyright © 2024 Team 07.

The Profile page view