

Production Tools and Equipment Manager

Operating Manual

Security information

Getting started

1

Admin

2

Manager

3

Toolbook

4

Appendix

5

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

 DANGER
indicates that death or severe personal injury will result if proper precautions are not taken.

 WARNING
indicates that death or severe personal injury may result if proper precautions are not taken.

 CAUTION
indicates that minor personal injury can result if proper precautions are not taken.

NOTICE
indicates that property damage can result if proper precautions are not taken.

If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

 WARNING
Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.

Trademarks

All names identified by ® are registered trademarks of Siemens AG. The remaining trademarks in this publication may be trademarks whose use by third parties for their own purposes could violate the rights of the owner.

Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Security information

General Data Protection Regulation

Siemens complies with the principles of data protection, in particular the principle of data minimization such as privacy by design.

We do not keep any customer information according to the decision tree of the General Data Protection Regulation (GDPR).

Industrial security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (For example firewalls and / or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit <https://www.siemens.com/industrialsecurity> (<https://www.siemens.com/industrialsecurity>).

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under <https://www.siemens.com/cert> (<https://www.siemens.com/cert>).

Table of contents

	Security information	3
1	Getting started	7
2	Admin	15
2.1	Admin operations	16
2.1.1	Overview	16
2.1.2	Importing and creating data files	16
2.1.2.1	Creating new tools	17
2.1.2.2	Importing Demands data	20
2.1.2.3	Importing Tool Costs data	21
2.1.2.4	Importing Incoming Goods data	22
2.1.2.5	Importing Outgoing Goods data	23
2.1.3	Customizing the UI terms	23
2.1.4	Managing Suppliers	24
2.1.5	Creating Owning Groups	25
2.1.6	Managing Plant Information	26
2.1.6.1	Creating new plant	27
2.1.6.2	Modifying plant information	28
2.1.7	User Management and Authorization	28
2.1.8	Managing Code Types	31
2.1.9	Track Activity Logs	33
2.1.10	Managing Support Information	34
2.1.11	Monitoring Interface applications	34
3	Manager	37
3.1	Tools Manager home screen	37
3.2	Tool details	39
3.3	Product List	49
3.4	Tool History	49
3.5	Incoming Goods	50
3.6	Outgoing Goods	51
3.7	Tool Files	53
3.8	Tool Costs	54
3.9	Edit Tool function	56
4	Toolbook	59
4.1	Toolbook home screen	59
4.2	Toolbook Operations	62
5	Appendix	75
5.1	Monitoring Guaranteed Output Quantity Calculations	75

5.2	Monitoring Capacity Calculations	75
-----	--	----

Getting started

Introduction

Production Tools and Equipment Manager (PTEM) comprises of three applicaitons.

App	Description
Admin	<ul style="list-style-type: none"> • Tool setup • Tool data maintenance • Equipment management • User management
Manager	<ul style="list-style-type: none"> • Production planners • Purchasers • Tool responsible
Toolbook	<ul style="list-style-type: none"> • Production line • Plant workers

Accessing MindSphere and PTEM apps

To access MindSphere

1. Open an internet browser.
2. Launch MindSphere using your tenant's URL.
By default, the core MindSphere applications will be accessible.

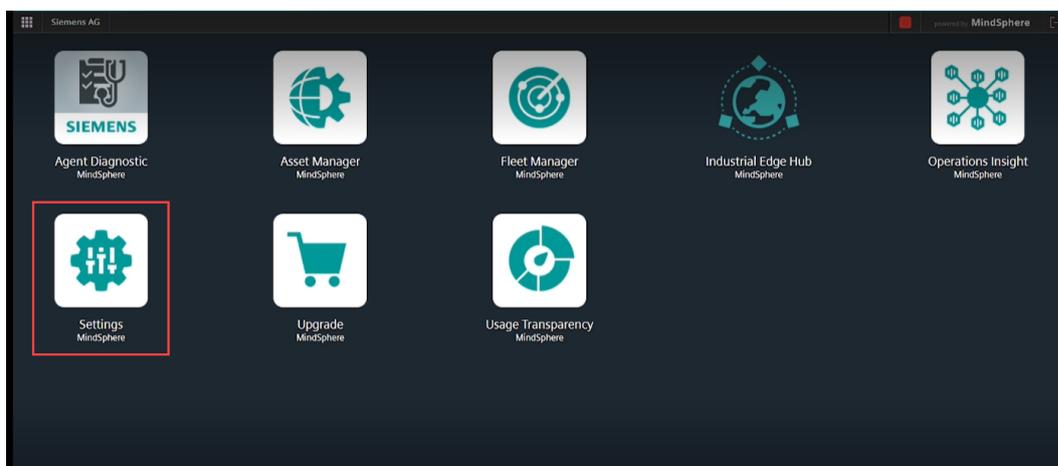


Figure 1-1 MindSphere Settings

Note

Access roles in MindSphere

The Tenant Administrator can create users and assign roles in MindSphere specific to PTEM apps.

To provide access to PTEM apps in MindSphere

- 1. Log into MindSphere with Tenant Administrator credentials.
- 2. Click **Settings** as highlighted in the above picture.

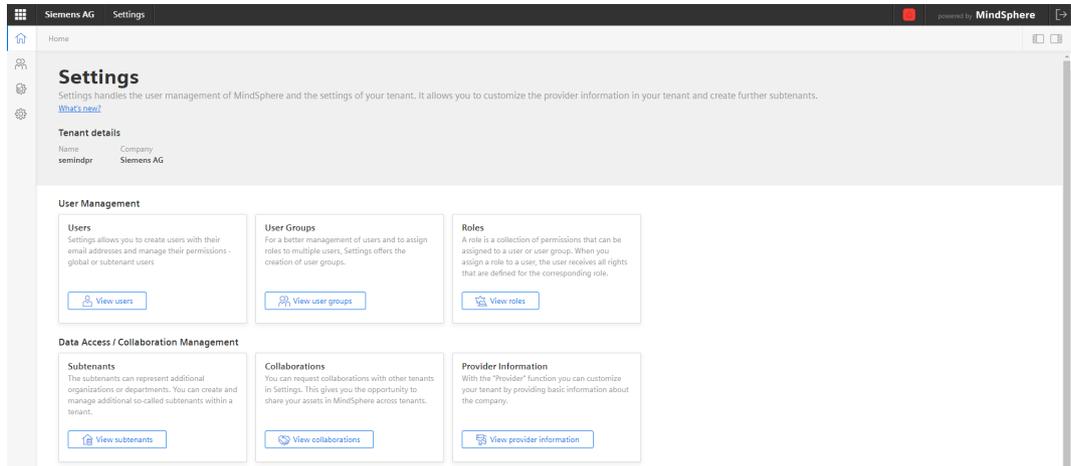


Figure 1-2 MindSphere settings homepage

- 3. Navigate to **User Management > Users**.
- 4. Click **Create User**.
- 5. Create user by entering the email address of the user in the **E-Mail** text box.

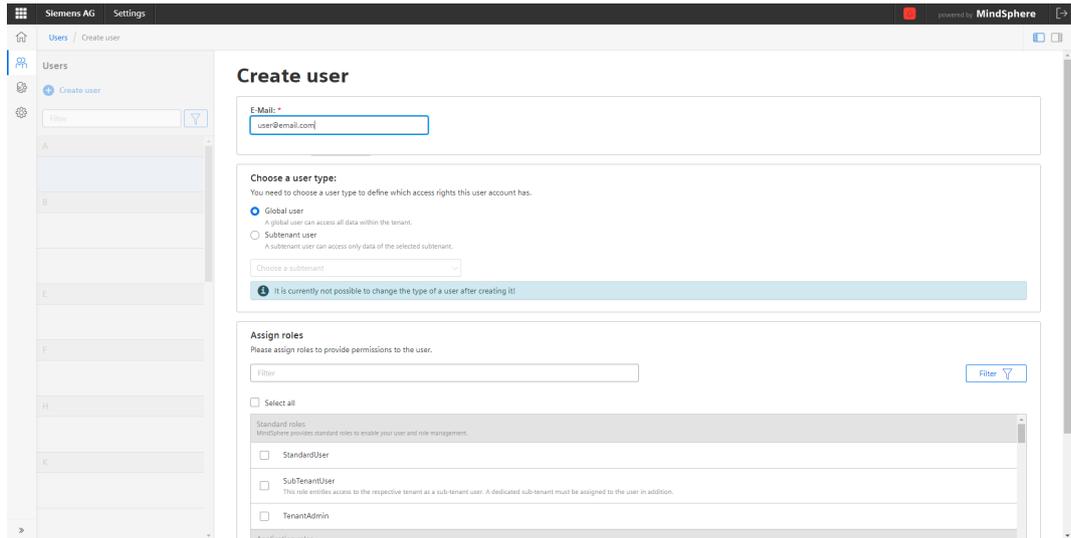


Figure 1-3 MindSphere - Email

The user would receive an email invitation with access information. The user would be able to access all the MindSphere tenants for which the access is granted.

To add users to a group

1. Navigate to **User Management > User groups**.
2. Click **Create user group**.

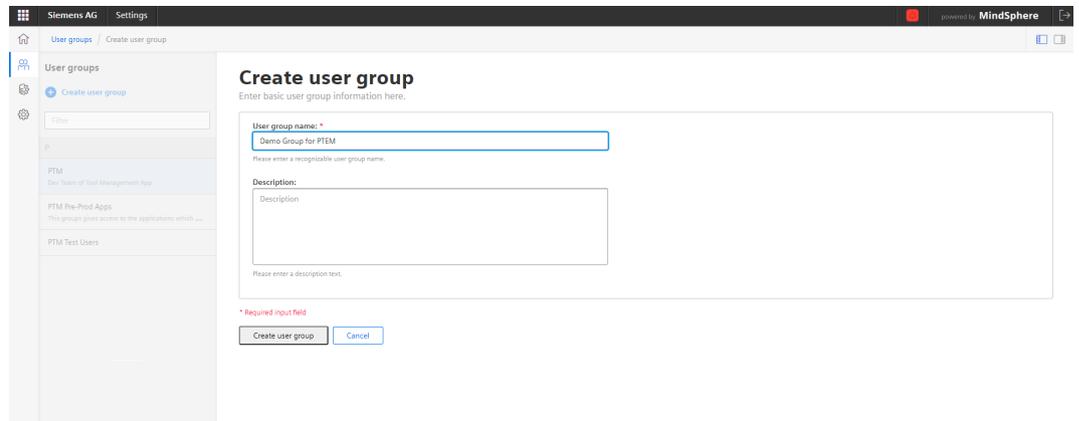
The screenshot shows the MindSphere web interface for creating a user group. The browser address bar shows 'Siemens AG Settings' and 'MindSphere'. The left sidebar has 'User groups' selected, with a 'Create user group' button. The main content area is titled 'Create user group' and contains a form with two input fields: 'User group name' (with the value 'Demo Group for PTM') and 'Description'. Below the form are 'Create user group' and 'Cancel' buttons. A red asterisk indicates a required input field.

Figure 1-4 MindSphere - create user group

3. Enter a name in the **User group name** text box.
4. Enter a description in the **Description** box.
5. Click **Create user group**.

The user group is created.

To manage a user group

1. Navigate to **User Management > User groups**.

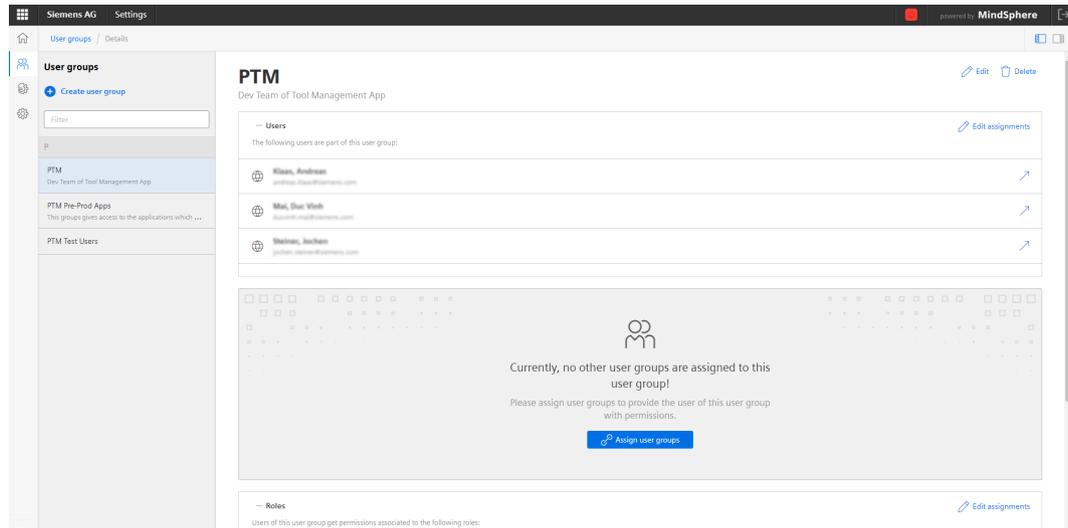


Figure 1-5 MindSphere settings - groups

2. Click and open the desired user group.

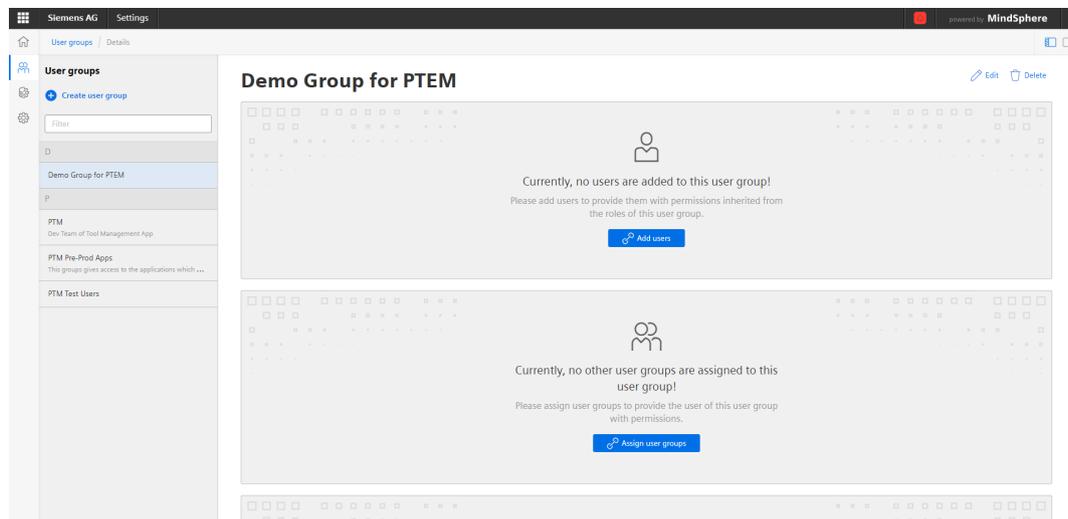


Figure 1-6 MindSphere - new created group

3. Three options are available:

- **Add users** – You can add users to a group.

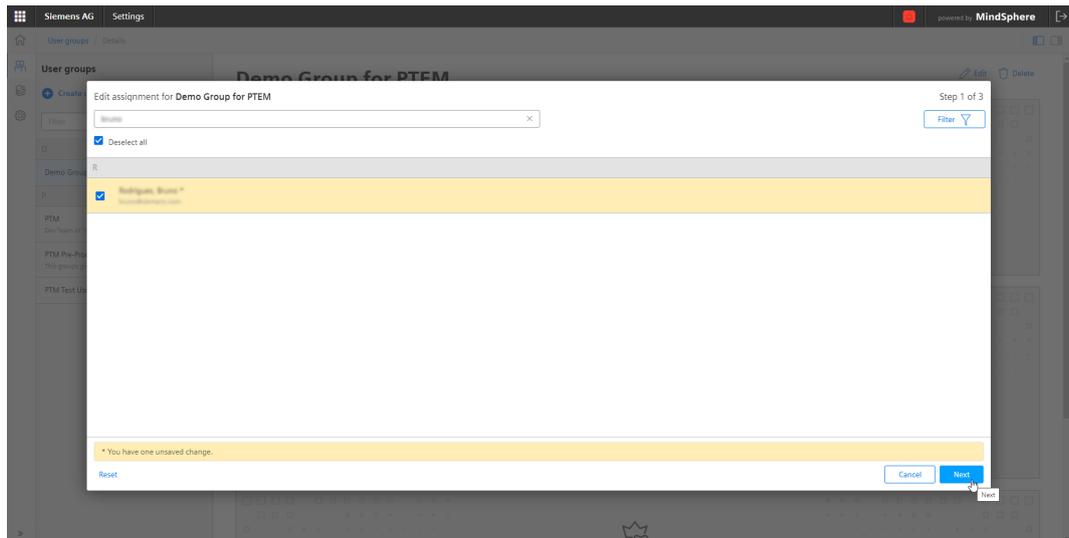


Figure 1-7 Adding user to groups

- **Assign Roles** – You can assign roles to different users to access specific applications.

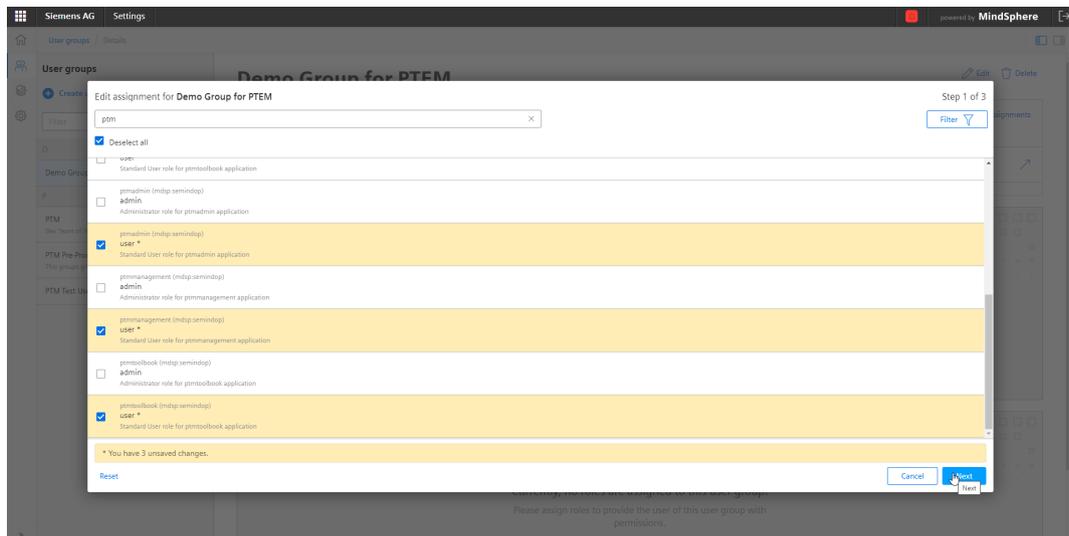


Figure 1-8 Adding roles to groups

– **Assign user groups** – You can assign permission to users of specific groups.

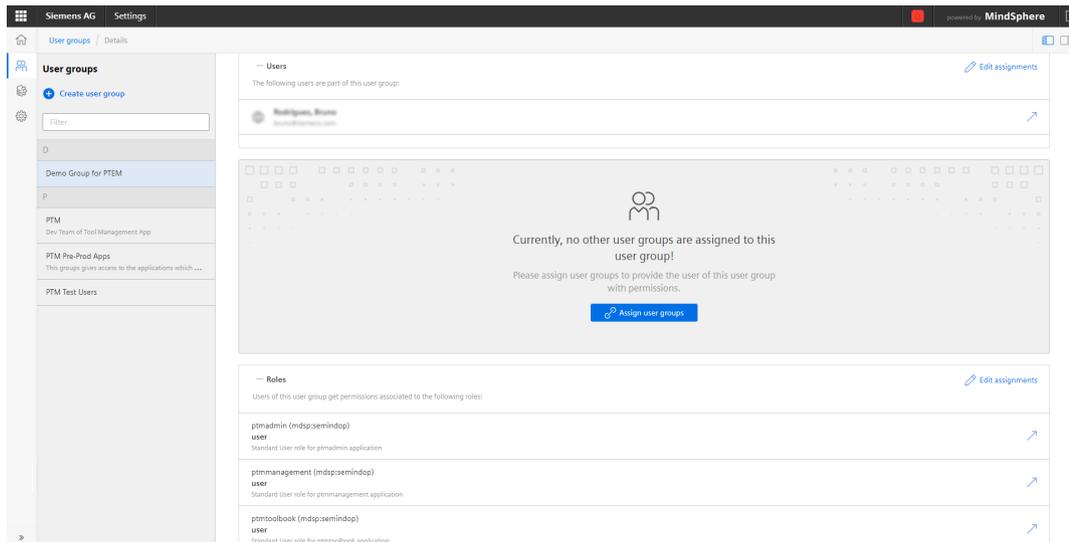


Figure 1-9 User groups with users and roles

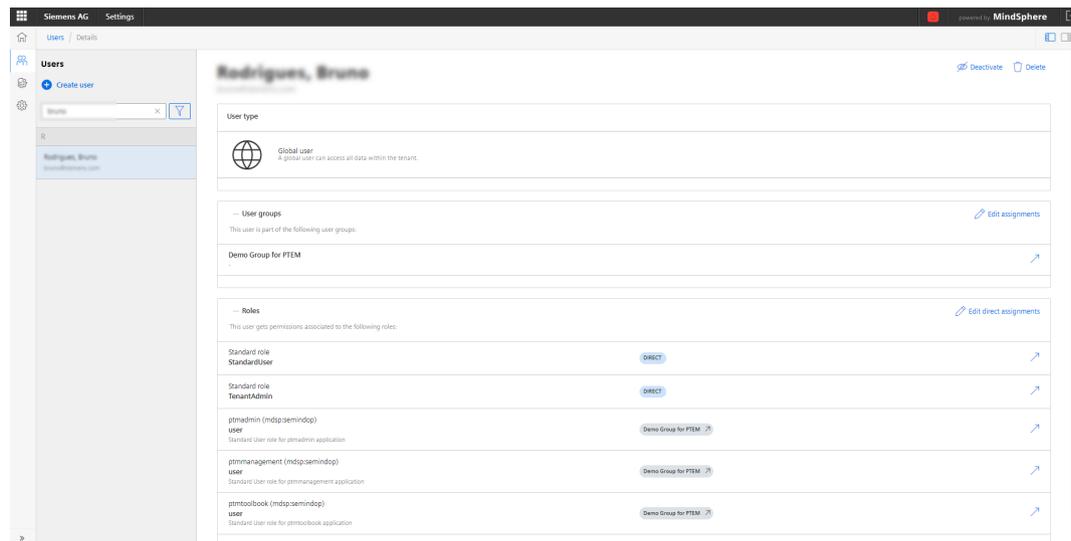


Figure 1-10 User with roles assigned by groups

To check the access to PTEM apps in MindSphere Dashboard

1. Log into MindSphere using your tenant's URL.
2. The available apps are displayed in the MindSphere Launchpad. You can launch any app by clicking on it.

NOTICE

Adding users in the MindSphere settings application

Tenant administrator should add users in the MindSphere settings application to make the PTEM applications visible on the launchpad. Refer to the **To provide access to PTEM apps in MindSphere** section above.

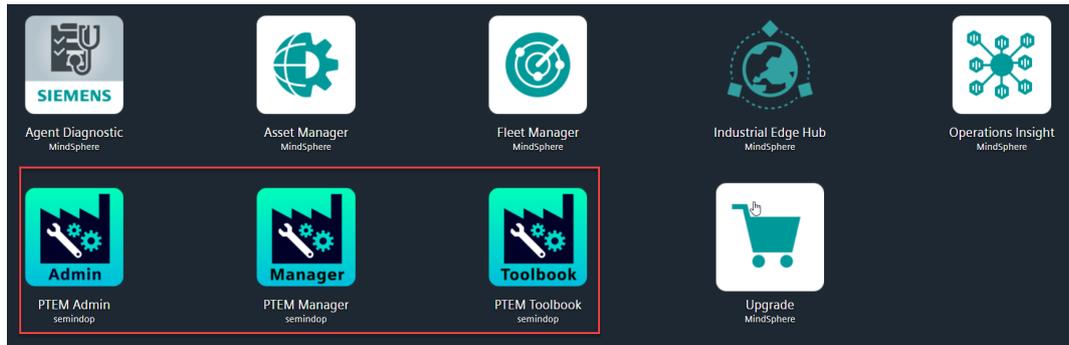


Figure 1-11 MindSphere launchpad

Click on the Launchpad  icon to return to the MindSphere Launchpad view from any app. To exit MindSphere, click on the Logout  icon on the top right corner.

NOTICE

Access to PTEM apps

If you do not find PTEM apps in your dashboard, you can contact your tenant administrator for access.

Note

Supported languages

The **Manager** and the **Toolbook** apps are available in English and German language.

The **Admin** app is currently available in English language.

Admin

The Admin app

The **Admin** app can be used to setup data, maintain tool data, equipment management and user management.

The **Admin** app can be launched from the MindSphere launchpad.

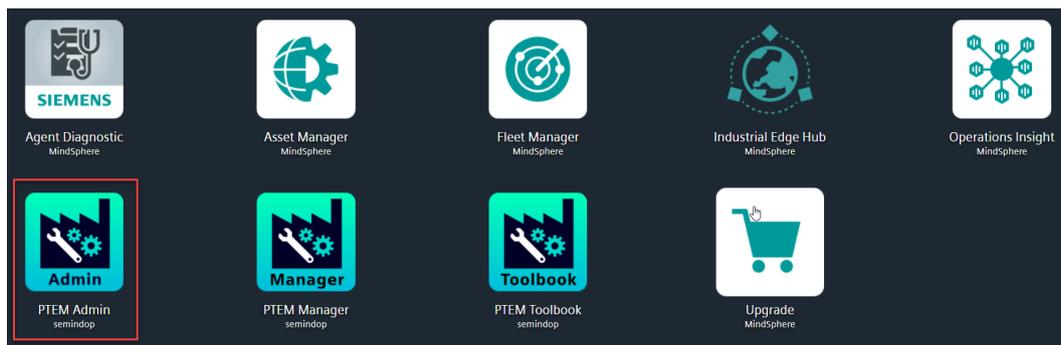


Figure 2-1 PTEM Admin

Upon launching the **Admin** app, the Home screens displays the following dashboard.

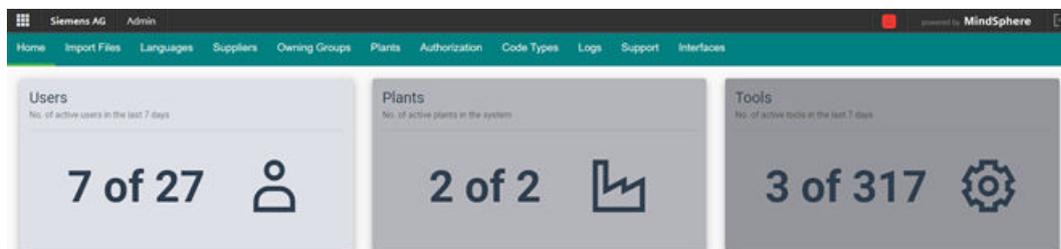


Figure 2-2 The Admin dashboard

The Dashboard displays the summary of data from Users, Plants, and Tools sections.

Using the **Admin** app, you can perform the following actions.

- Import files using templates (Page 16)
- Add and modify languages and terms (Page 23)
- Add and modify suppliers (Page 24)
- Add and modify owning groups (Page 25)
- Add and modify plant information (Page 26)
- Add and modify users and authorizations (Page 28)
- Add and modify code types (Page 31)
- Track activity logs (Page 33)

- Manage support related content (Page 34)
- Monitor different interface applications (Page 34)

Basic Admin operations are described in this sections. You can also refer to the **Manager** and **Toolbook** app sections for detailed procedures.

2.1 Admin operations

2.1.1 Overview

This section covers some of the important operations that can be performed by a PTEM administrator. Also refer to the **Manager** and **Toolbook** sections for their specific operations in detail.

2.1.2 Importing and creating data files

The data for tools, suppliers, demands, bill of materials, costs and incoming goods can be manually imported using Excel files. The Excel file templates can be downloaded by clicking the respective **Download Template** button in the **Admin** app.

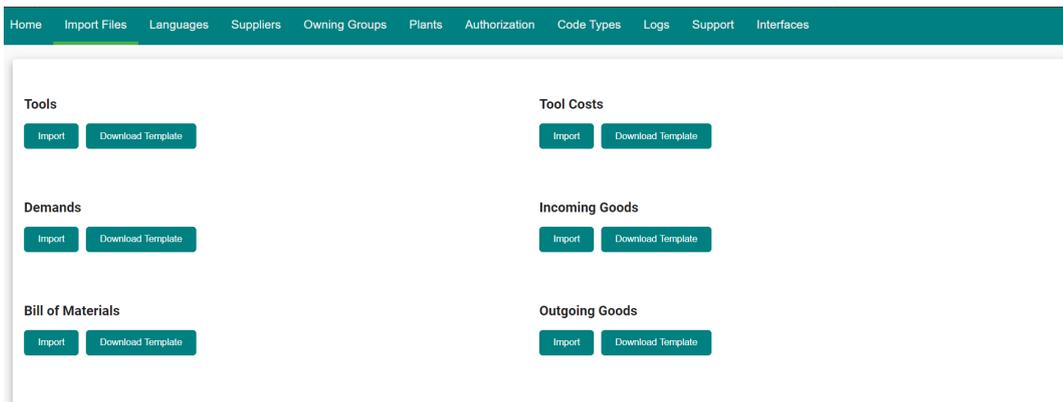


Figure 2-3 Import files

You can import data files for the following:

- Demands (Page 20)
- Tool Costs (Page 21)
- Incoming Goods (Page 22)
- Outgoing Goods (Page 23)

You can create data files for the Tool (Page 17).

2.1.2.1 Creating new tools

Creating a new tool

To create a new tool:

1. Navigate to the **Import Files** tab in the **Admin** app.
2. From the **Tools** section, click **Download Template** to download the Excel file.
3. Enter the tool details in the Excel file by filling all the properties columns.

	AI	AJ	AK	AL	AM	AN	AO	AP
1	CustomerName	Group	Critical Threshold	Next Planned Usage	Responsible Designer	Production Cost Group	Inventory Number	Lifetime Status
2	Customer Name	TGRP.EXAMPLE	1.00	8/12/2021	Name Of Designer	Prod Cost Group Info	Number123456	USABLE
3	Customer Name	TGRP.EXAMPLE	1.00	8/12/2021	Name Of Designer	Prod Cost Group Info	Number123456	USABLE
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Figure 2-4 Tool Data template file

4. You can refer to the **Documentation** tab in the Excel file to know more details about each of the property column.

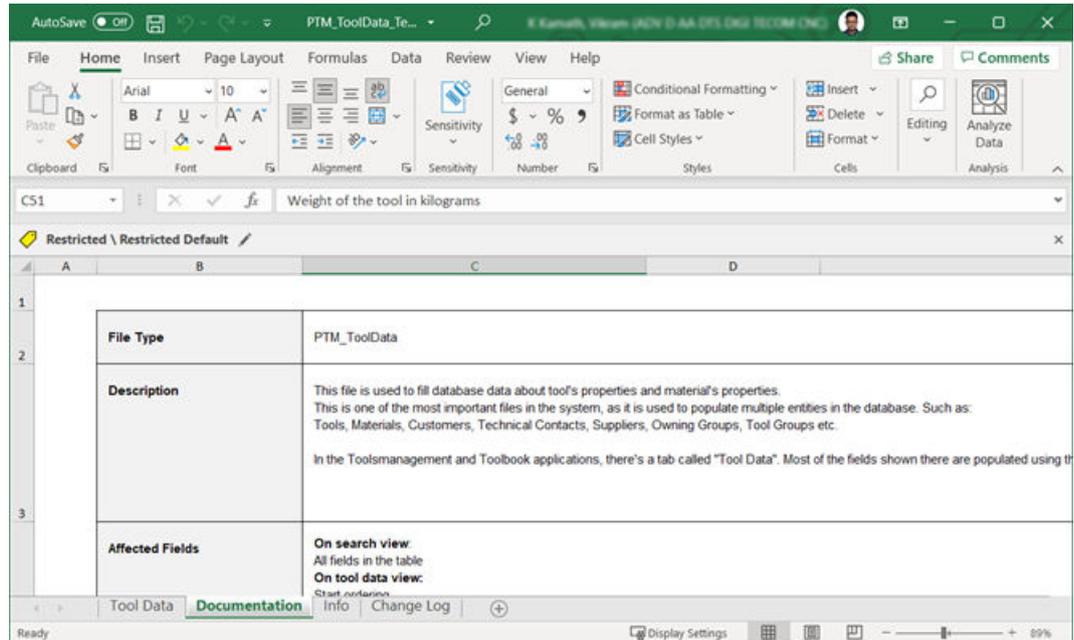


Figure 2-5 Tool Data Documentation

5. After adding all the details, save the Excel file in your computer folder.
6. Navigate back to the **Import Files** tab in the **Admin** app.

- From the **Tools** section, click **Import** to import the Excel file.

Figure 2-6 Importing data file

- In the **Columns** section, select all columns for importing all columns data.
- From the **File Upload** section, select the Excel file to be imported.
- From the **Import Type** drop-down box, select appropriate option.
 - Delta** - Adds more tools and updates the existing ones.
 - Delete** - Tool IDs in the Excel file are removed from the application.
 - Remove all and initial filling** - Removes all the existing tools in the system and adds the tools that are in the Excel file.
- Click **Submit** to complete the import process.
- The success message appears on successful import. You can also check the log files.



The data is updated in the **Manager** and **Toolbook** apps. You can search for the **Tool ID** and update the tool details.

2.1.2.2 Importing Demands data

Procedure

To add demand:

1. Navigate to the **Admin** app home screen.
2. Click on **Download Template** to download the demands template from the **Import Files** tab.

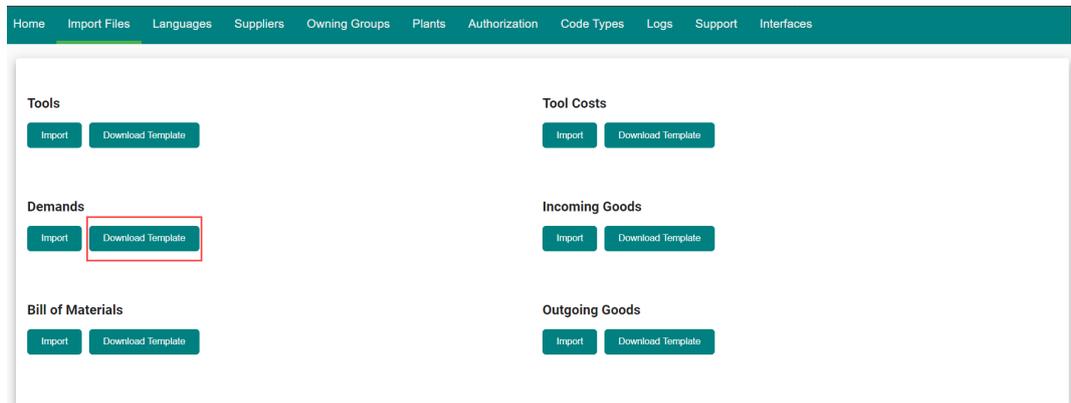


Figure 2-7 Importing demands 1

3. Enter the details in the sheet.
4. Click **Import**, select the file and click **Submit**.

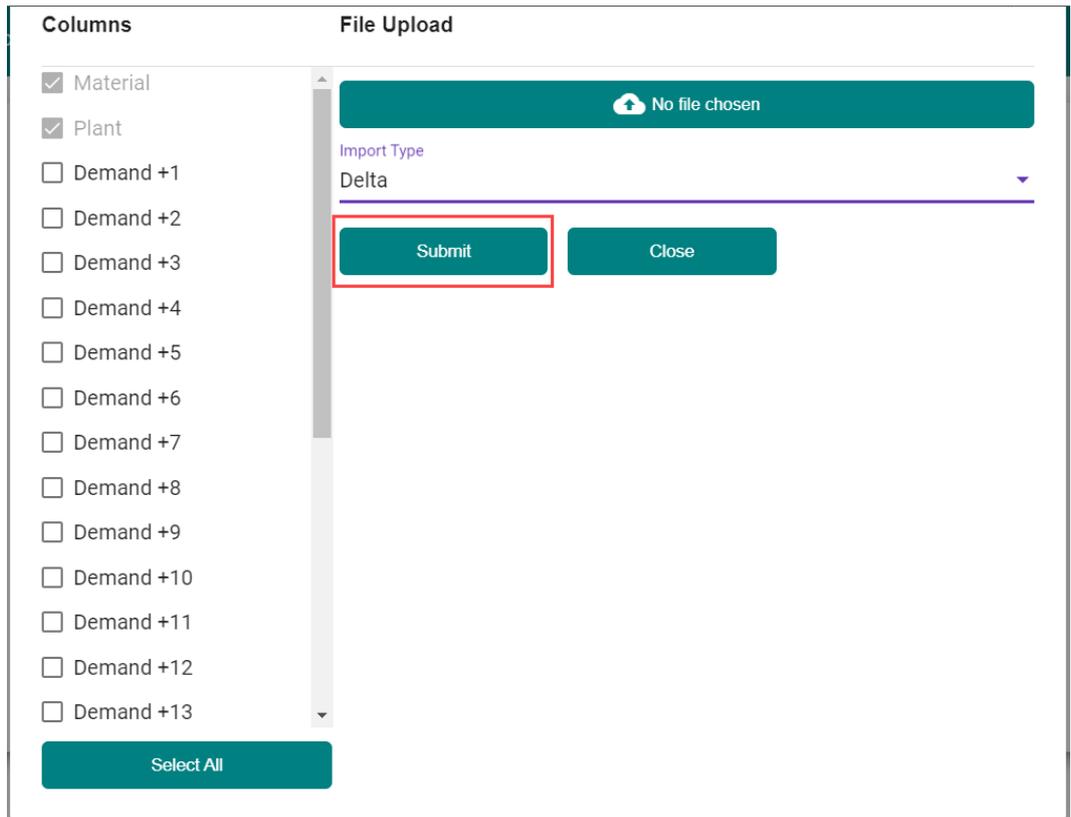


Figure 2-8 Importing demands 2

The updated values are reflected in the graphs in the **Manager** app.

2.1.2.3 Importing Tool Costs data

Procedure

To import the tool cost:

1. Navigate to the **Import Files** tab of the **Admin** app home screen.
2. Click on the **Download Template** under the **Tool Costs** to download the tool cost template.

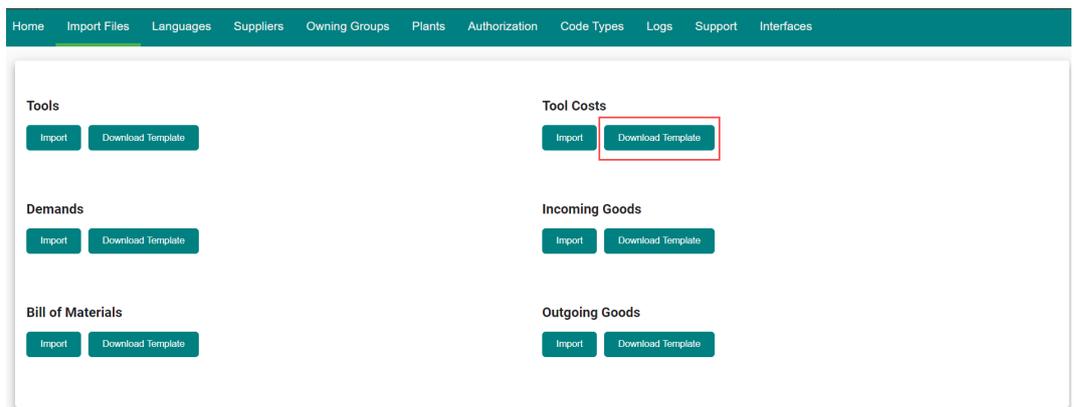


Figure 2-9 Importing tool costs 1

3. Enter the cost details in the sheet.
4. Click **Import**, select the file and click **Submit**.

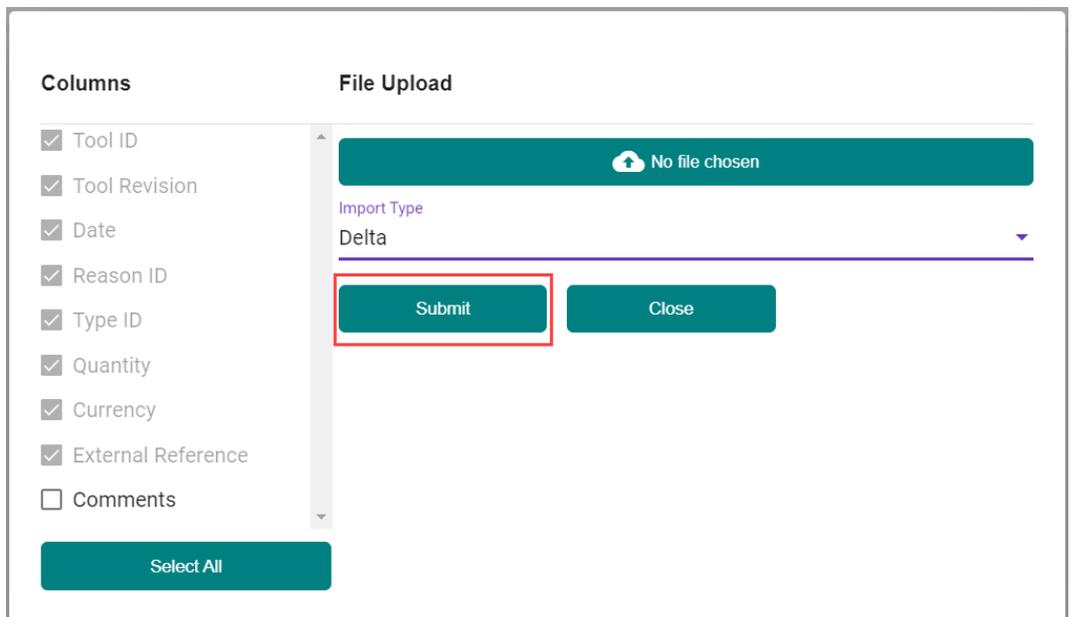


Figure 2-10 Importing tool costs 2

The updated tool costs is reflected in the **Tool Cost** tab of the **Manager** app.

2.1.2.4 Importing Incoming Goods data

Procedure

To add the incoming goods :

1. Navigate to the **Admin** app home screen.
2. Click on **Download Template** to download the Incoming Goods template from the **Import Files** tab.

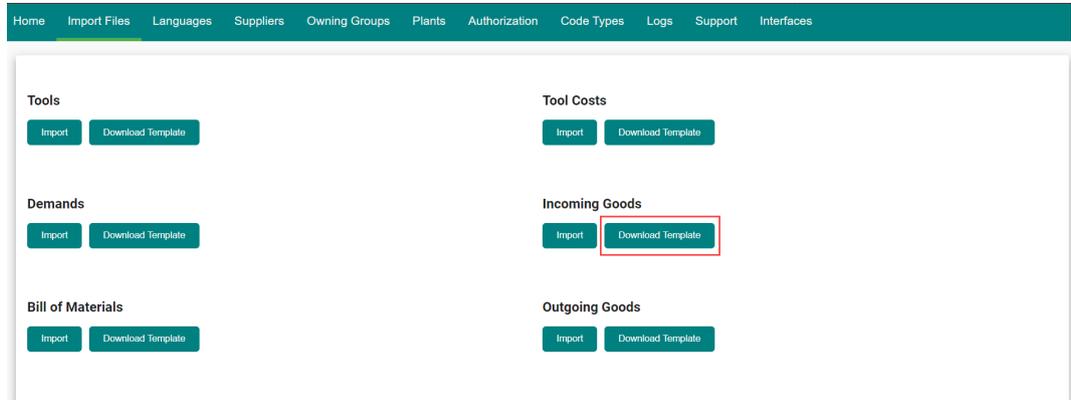


Figure 2-11 Importing incoming goods 1

3. Enter the quantity details in the sheet.
4. Click **Import**, select the file and click **Submit**.

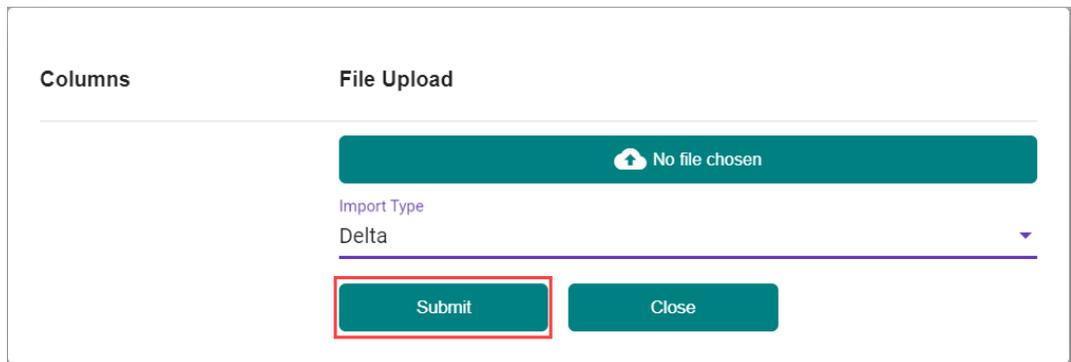


Figure 2-12 Importing incoming goods 2

The updated Incoming goods is reflected in the **Incoming Goods** tab of the **Manager** app.

2.1.2.5 Importing Outgoing Goods data

Procedure

To add the outgoing goods:

1. Navigate to the **Admin** app home screen.
2. Click on **Download Template** to download the **Outgoing Goods** template from the **Import Files** tab.

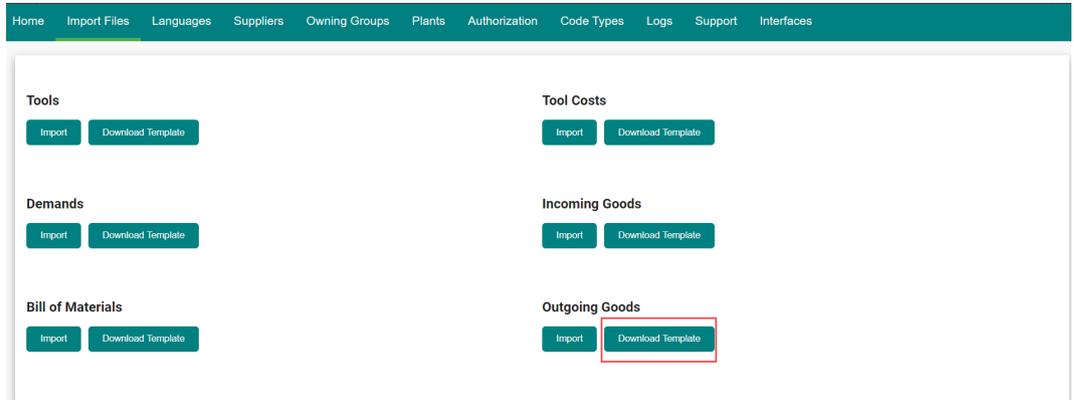


Figure 2-13 Importing outgoing goods 1

3. Enter the details in the sheet.
4. Click **Import**, select the file and click **Submit**.

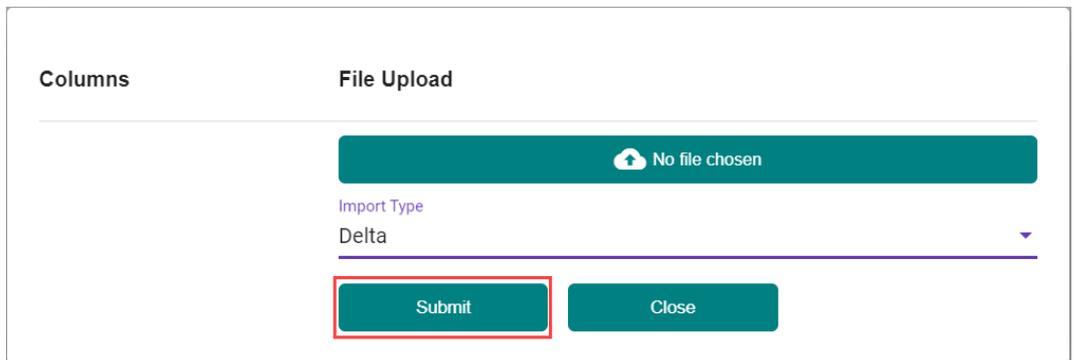


Figure 2-14 Importing outgoing goods 2

The updated outgoing goods is reflected in the **Outgoing Goods** tab of the **Manager** app.

2.1.3 Customizing the UI terms

The languages and terms used in the PTEM applications can be modified. You can modify and translate the UI (User Interface) labels used in the apps as per user needs.

Procedure

To modify the terms:

1. Navigate to the **Languages** tab in the **Admin** app.
2. Click **Add Language Term** to add a new language term.
3. Look for the desired terms by typing in the text.
4. The smart search lists the related terms.
5. Select the desired term and click Edit  symbol to edit the text content.

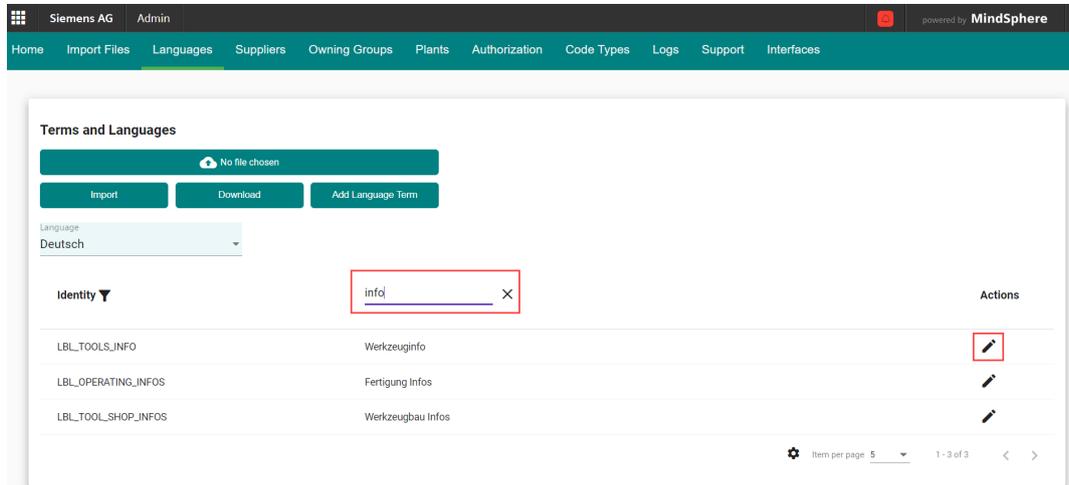


Figure 2-15 Languages and terms

Note

Bulk Translation

You can update multiple terms at once by downloading the template file and importing it back with the modified terms. Click on **Download** to download the language file template and click on **Import** to import the file with multiple terms.

2.1.4 Managing Suppliers

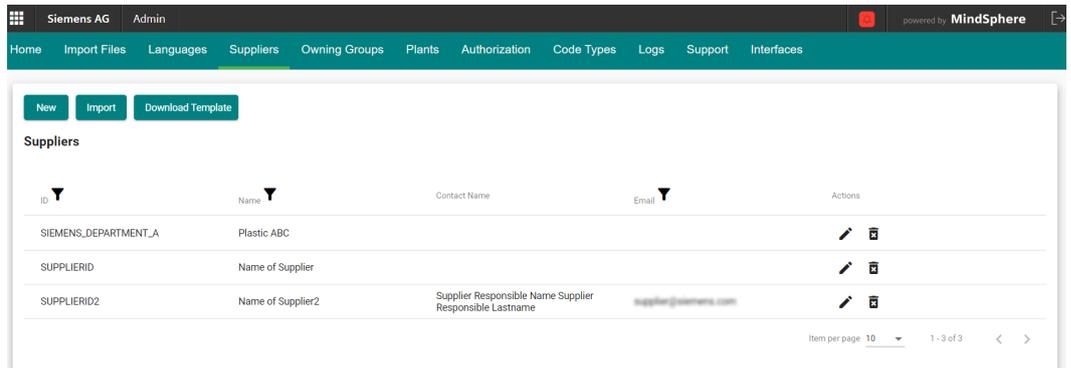
You can add and manage supplier data.

Procedure

To update supplier information:

1. Navigate to the **Suppliers** tab in the **Admin** app.
2. Click **New** to add a new supplier.

3. Click the Edit  symbol to edit the supplier information.
4. Save the data.



ID	Name	Contact Name	Email	Actions
SIEMENS_DEPARTMENT_A	Plastic ABC			 
SUPPLIERID	Name of Supplier			 
SUPPLIERID2	Name of Supplier2	Supplier Responsible Name Supplier Responsible Lastname	supplier@siemens.com	 

Figure 2-16 Suppliers

Note**Bulk Import**

You can update multiple supplier information at once by downloading the template file and importing it back with the modified terms. Click on **Download Template** button to download the file and click on **Import** to import the file with multiple suppliers information.

NOTICE**Key Information modification**

Key information such as **Supplier ID** cannot be modified once created.

2.1.5 Creating Owning Groups

Owning Groups refer to different organizations involved. You can add and manage different owning groups.

Procedure

To update owning groups:

1. Navigate to the **Owning Groups** tab in the **Admin** app.
2. Click **New** to add a new owning group.

2.1 Admin operations

- 3. Click the Edit  symbol to edit the owning group information.
- 4. Save the data.

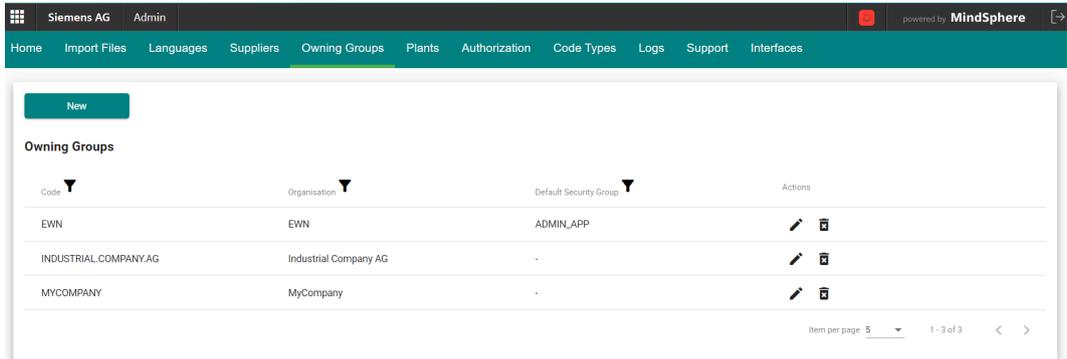


Figure 2-17 Owning Groups

Note

The Code for the owning group cannot be edited as it serves as the link between the tool and the owning groups.

2.1.6 Managing Plant Information

Plants are important entities used for specific purposes such as to relate incoming goods to certain plants and forecast demands of materials or parts to certain plants. The tools are not directly connected to the plants in the PTEM system. However, this can be achieved through organizations, as the tools and the plants are related to specific organizations. This way, the tool scan be connected to plants.

2.1.6.1 Creating new plant

Procedure

To add a new plant:

1. Navigate to the **Plants** tab of the **Admin** app home screen.

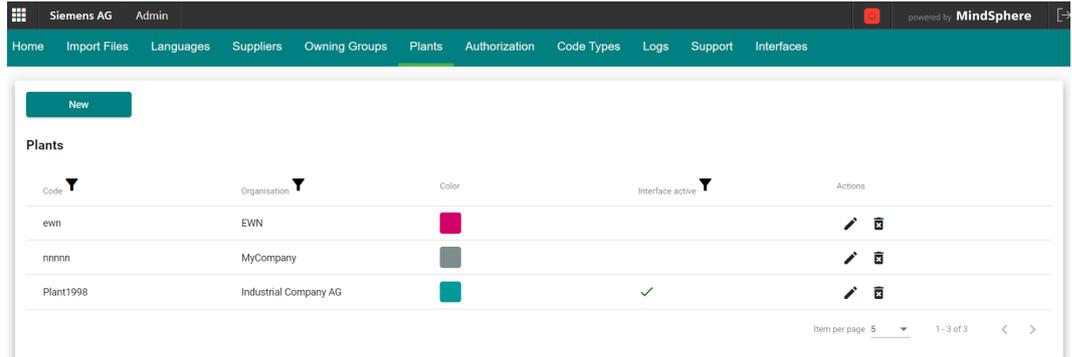


Figure 2-18 Plants tab

2. Click on **New** and enter the **Code** and the **Organization** name.

New Plant

Code Organisation Interface active

Choose one of the suggested colors, or write your own color code.

■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

Figure 2-19 Adding plants

3. Choose the desired color and click **Save**.

2.1.6.2 Modifying plant information

Procedure

To update a plant information:

1. Navigate to the **Plants** tab in the **Admin** app.

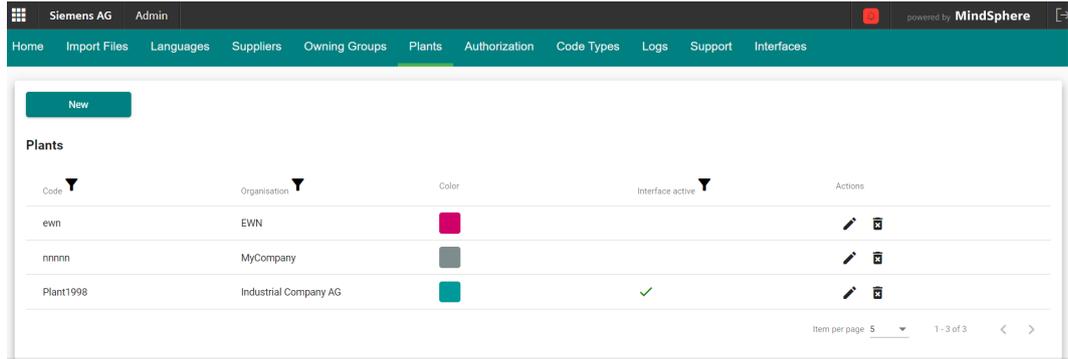


Figure 2-20 Plants

2. Click the Edit symbol to edit the plant information.
3. Save the data.

NOTICE

Key Information modification

Key information such as **Plant Code** cannot be modified once created.

2.1.7 User Management and Authorization

An administrator can add different users with specific rules and groups to access tools. Users with their assigned roles can perform different actions such as adding, defining, modifying, and deleting different user groups and also assign authorizations.

Procedure

To update authorizations:

1. Navigate to the **Authorization** tab in the **Admin** app.

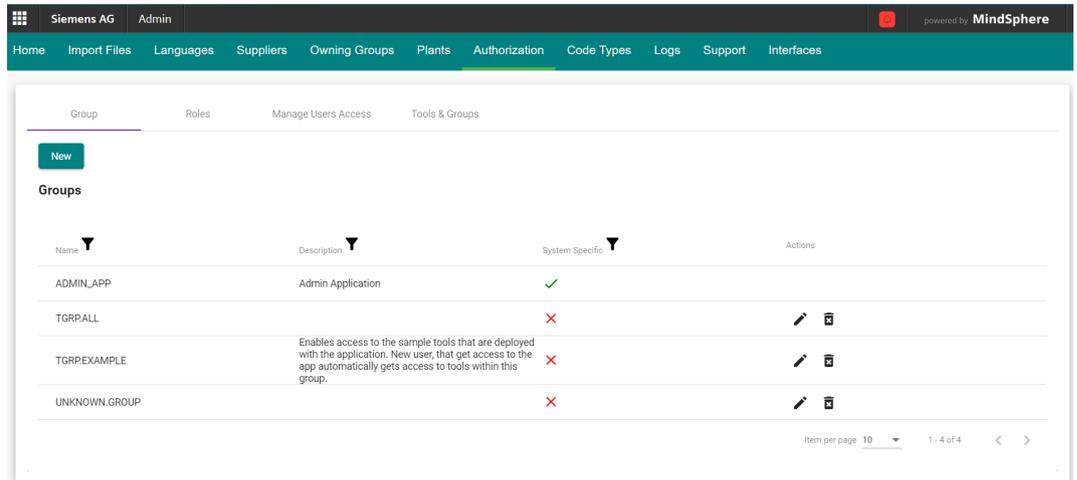


Figure 2-21 Authorization

2. In the **Groups** tab, you can create or modify groups.
3. In the **Roles** tab, you can create different user roles to assign permissions for viewing certain menus and tabs.

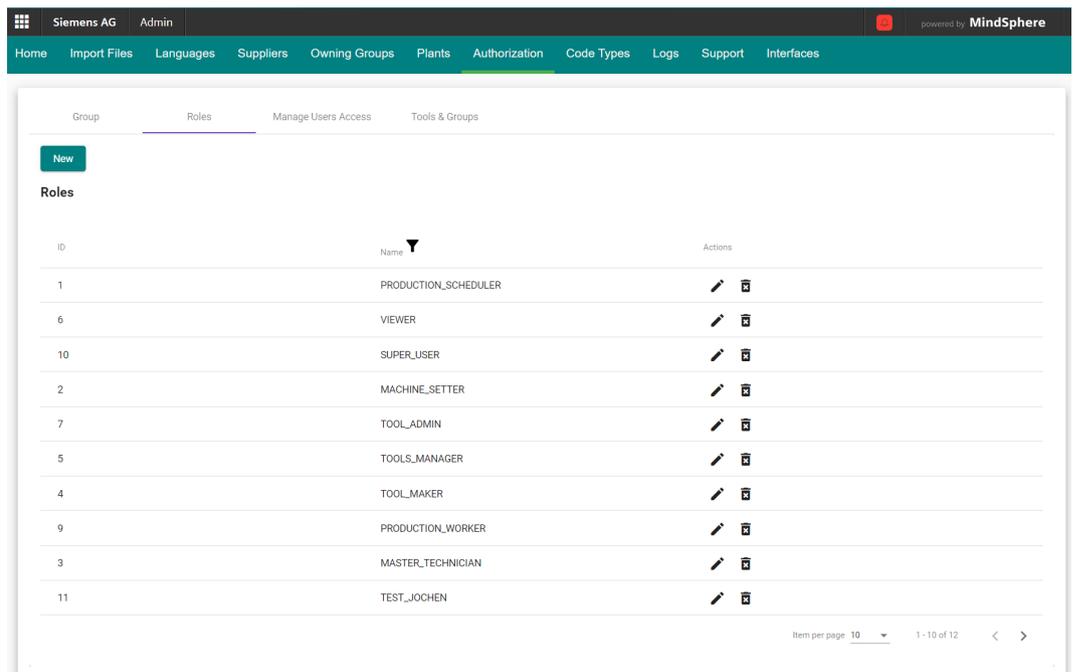


Figure 2-22 Authorization - Roles

- In the **Manage Users Access** tab, you can manage different users by assigning certain groups and roles.

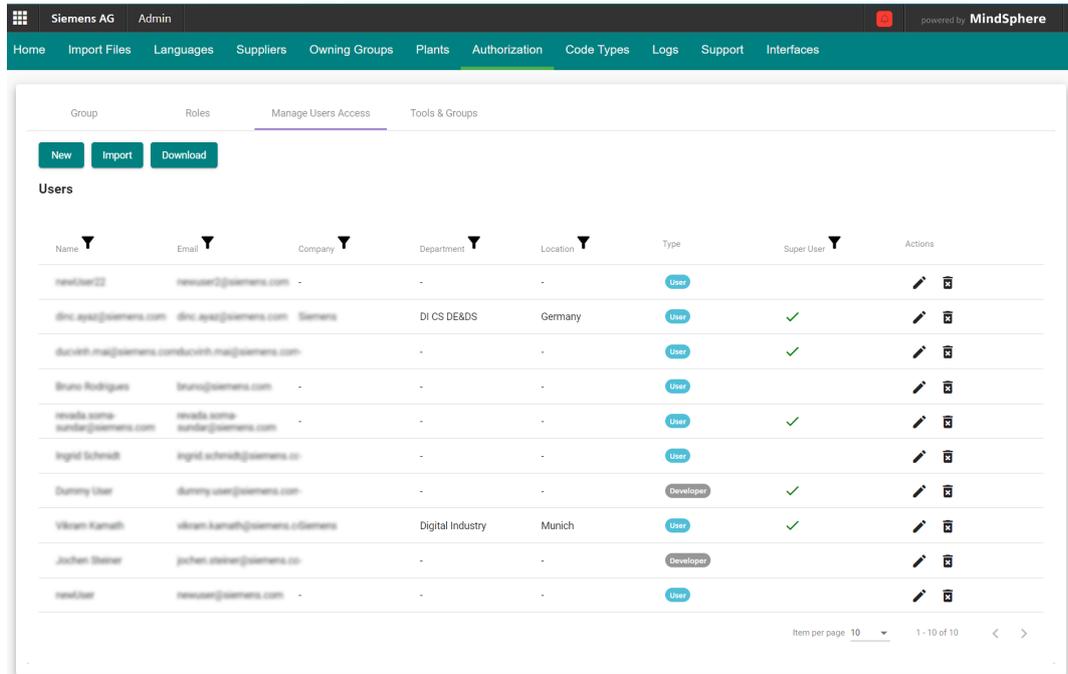


Figure 2-23 Authorization - Manage User Access

- In the **Tools & Groups** tab, you can manage user access to different tools. The user can see those tools for which the access is provided.

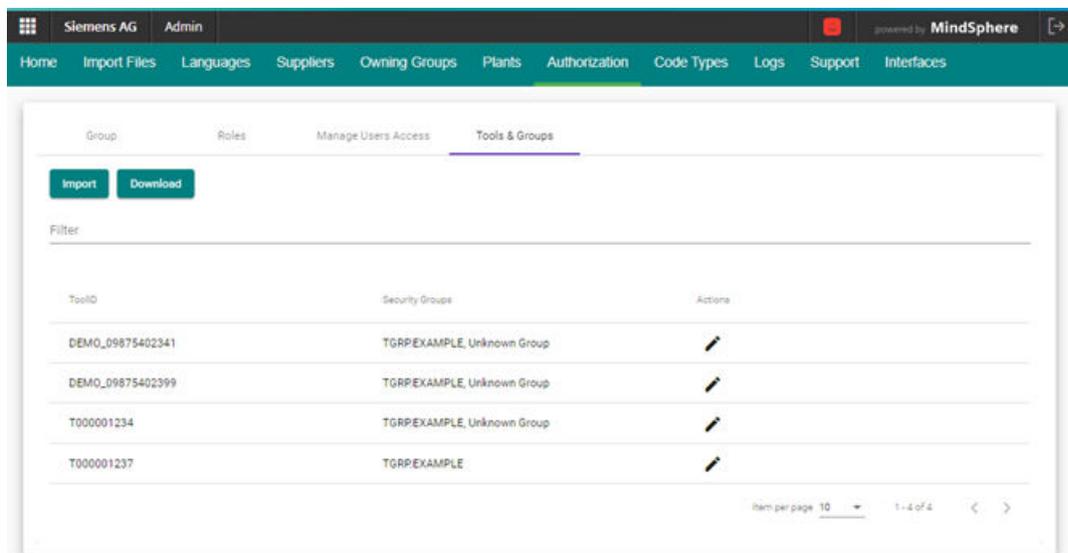


Figure 2-24 Authorization - Tools and Groups

- Save the data.

NOTICE**Super User**

These settings do not affect the **Super User**. To modify permissions for a **Super User**, you first need to disable the **Super User** access by deselecting the **Super User** check box.

The screenshot shows the 'New User' form in the Siemens AG Admin interface. The 'Super User' checkbox is checked and highlighted with a red box. The form includes fields for Name, Email, Company, Location, and Department, and a 'Groups & Roles' section with a table listing the user's role as VIEWER.

Group	Role	Scope & Context	Actions
ADMIN_APP	VIEWER	App	

Figure 2-25 Authorization - Super User

2.1.8 Managing Code Types

Code Types are used to populate dropdowns in the PTEM app. There are three kind of Code Types: System Specific, Configuration Specific and User Specific. You can add and manage different code types using the Admin app.

By default, all system specific and configuration specific code types are translated, and user code types need to be translated.

Procedure

To update Code Types:

1. Navigate to the **Code Types** tab in the **Admin** app.

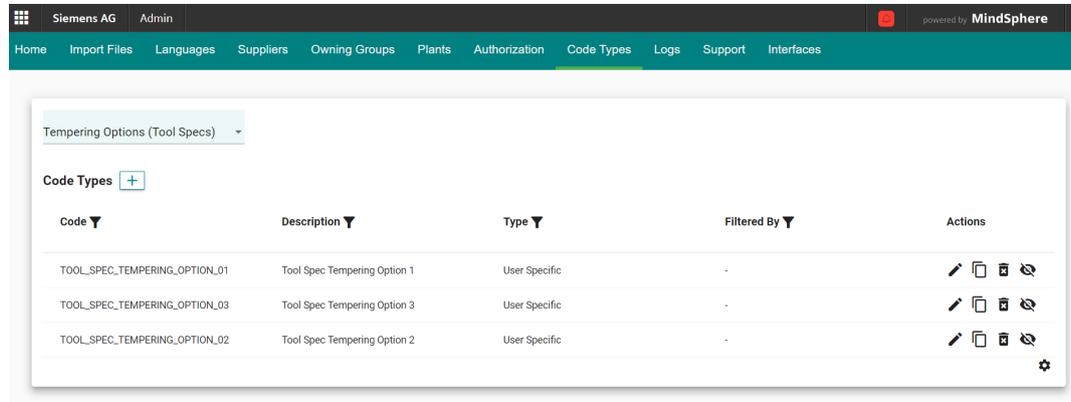


Figure 2-26 CodeTypes

2. Click **+** symbol to add a new code type.

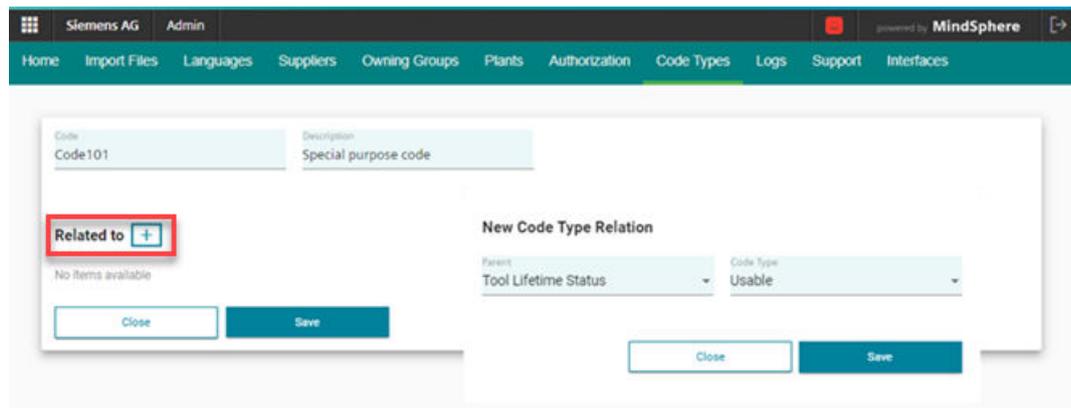


Figure 2-27 Code Types - create new Code Type

3. Click **Related to** **+** symbol to add parent information.
4. Save the data.

NOTICE

Code Types Translation

The code types are not automatically translated. After adding code types, you need to manually add the related translations.

2.1.9 Track Activity Logs

You can track different activity logs.

The screenshot shows the Siemens AG Admin interface. The top navigation bar includes 'Home', 'Import Files', 'Languages', 'Suppliers', 'Owning Groups', 'Plants', 'Authorization', 'Code Types', 'Logs', 'Support', and 'Interfaces'. The 'Logs' tab is selected. Below the navigation bar, there are filters for 'All', 'Success', and 'Failed'. A dropdown menu shows 'All Processes'. The main content area displays a table of activity logs.

ID	Process	Start	End	Status	User
45	Load Tools file	2022-03-28 05:33:21	2022-03-28 05:33:21	SUCCESS	revada.soma-sundar@siemens.com
44	Load Tools file	2022-03-27 07:29:59	2022-03-27 07:29:59	SUCCESS	vikram.kamath@siemens.com
43	Load Tools file	2022-03-25 02:07:35	2022-03-25 02:07:36	SUCCESS	bruno@siemens.com
42	Load Bill of Materials	2022-03-22 03:00:51	2022-03-22 03:00:51	SUCCESS	ingrid.schmidt@siemens.com
41	Load Demands file	2022-03-21 07:52:28	2022-03-21 07:52:28	SUCCESS	ingrid.schmidt@siemens.com
40	Load Tools file	2022-03-21 05:25:32	2022-03-21 05:25:33	FAILED	ingrid.schmidt@siemens.com
38	Load Tools file	2022-03-21 05:25:03	2022-03-21 05:25:03	FAILED	ingrid.schmidt@siemens.com
36	Load Tools file	2022-03-21 05:23:43	2022-03-21 05:23:43	FAILED	ingrid.schmidt@siemens.com
34	Load Demands file	2022-03-21 04:00:36	2022-03-21 04:00:36	SUCCESS	ingrid.schmidt@siemens.com
33	Load Demands file	2022-03-21 03:57:27	2022-03-21 03:57:27	FAILED	ingrid.schmidt@siemens.com

At the bottom right of the table, there is a pagination control showing 'Item per page 10' and '1 - 10 of 38'.

Figure 2-28 Logs

2.1.10 Managing Support Information

You can place here support related content like the contact persons, phone numbers, email addresses, link to help pages or wiki pages, and so on. The content in this support menu of theapps provide your users with additional information to contact for further help.

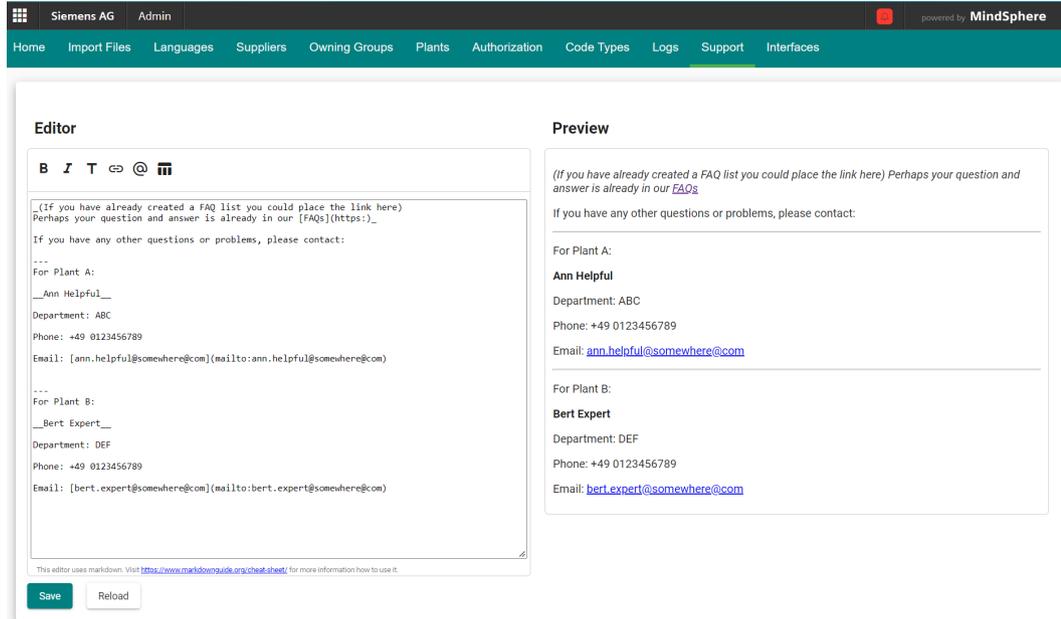


Figure 2-29 Support

2.1.11 Monitoring Interface applications

There is a dedicated API, that currently supports the data ingestion of Tools, Incoming Goods and Demands.

Demands and Incoming Goods share the same API endpoint. For Tool Data, there is an API endpoint responsible to receive data of tools; which is used to add or update the existing tool's master data.

Currently there is a live connection from SAP HANA and Team Center to PTEM. SAP HANA is responsible for sending information about Demands and Incoming Goods, while Teamcenter sends information about tool's master data.

NOTICE
Interfaces service
The interface services are not part of the standard offering. These can be evaluated based on business needs.

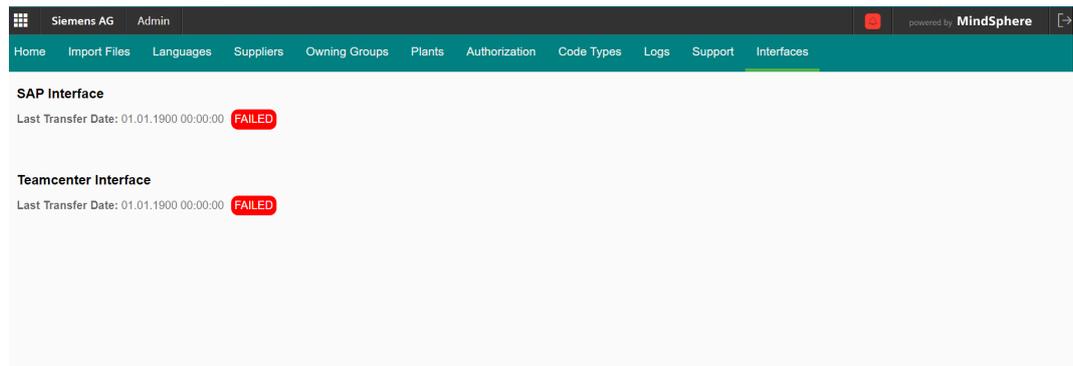


Figure 2-30 Interfaces

Manager

3.1 Tools Manager home screen

The **Manager** app addresses the Production planners, Purchasers and Tool responsables. The **Manager** app can be launched from the MindSphere launchpad.

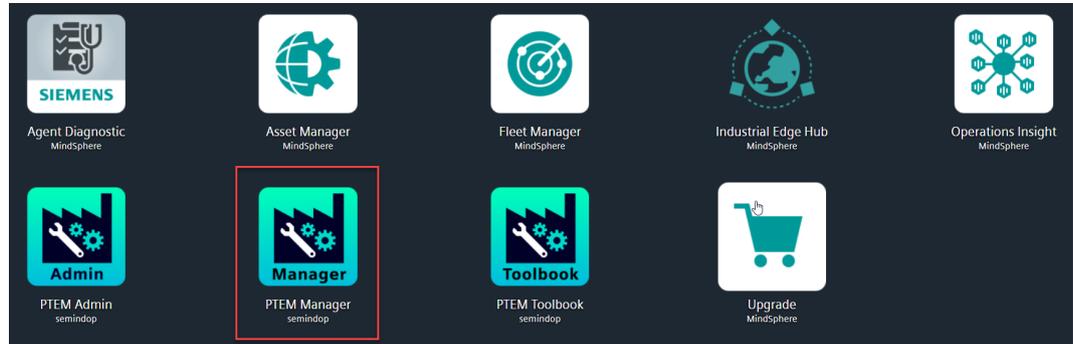


Figure 3-1 PTEM Manager

Tools Manager

Tools Manager can be launched by clicking the **PTEM Manager** from the MindSphere Launchpad home screen.

The entry mask is divided into the following areas:

Favorites

Contains the tools which are marked as favorites for quick navigation and frequent use.

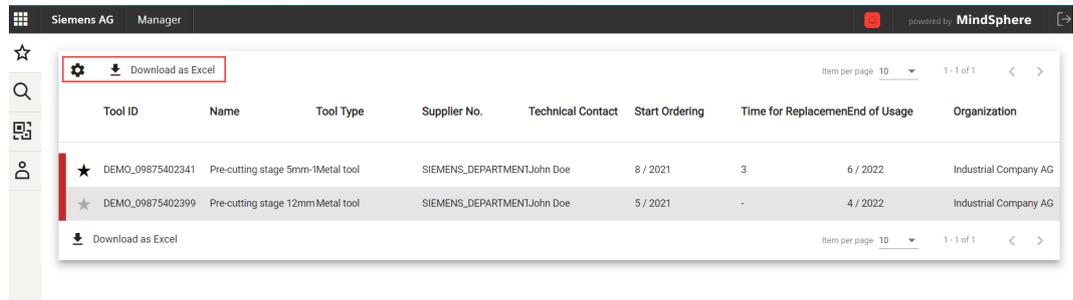


Figure 3-2 Favorites

Visualization Settings

3.1 Tools Manager home screen

Click on the **Visualization Settings**  symbol to open the **Visualization Settings** window. You can select the columns to be visible and also save the settings with different names for future use. Each tool is marked with the following colors which indicate the status of the tool.

Color	Description
Red	Critical tool
Green	Non critical tool
Grey	Scrapped tool

Download as Excel

Click on the **Download as Excel**  button to download the data into a Microsoft Excel spreadsheet.

Search

You can search for tools by entering the keywords in the **Search Item** text box. The search returns the results with all the tools related to the entered keywords.

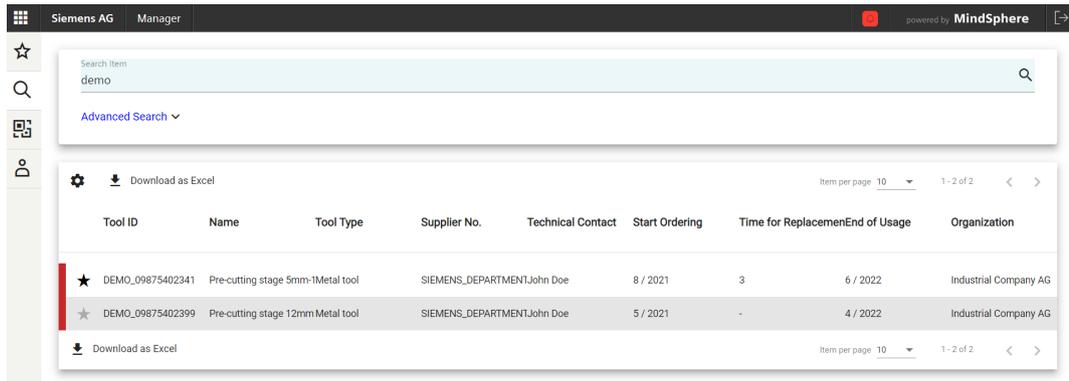


Figure 3-3 Search

Advanced Search can be used to search specific data. This search returns the tools that exactly match all the search criteria.

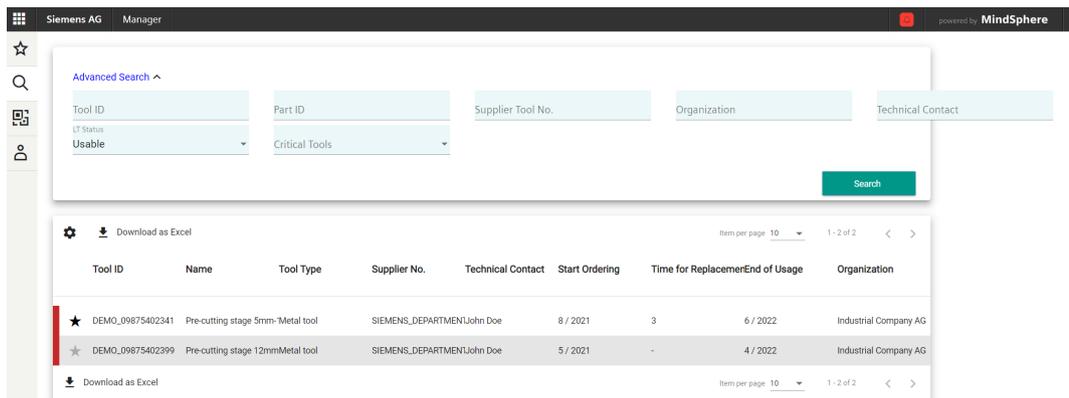


Figure 3-4 Advanced Search

Scan QR Code of Tool

Tools can be quickly searched by scanning the QR Code using the app on handheld devices such as tablets.

Tool ID	Name	Tool Type	Supplier No.	Technical Contact	Start Ordering	Time for Replacement	End of Usage	Organization
★ DEMO_09875402341	Pre-cutting stage 5mm-1Metal tool		SIEMENS_DEPARTMENT	John Doe	8 / 2021	3	6 / 2022	Industrial Company AG
★ DEMO_09875402399	Pre-cutting stage 12mm Metal tool		SIEMENS_DEPARTMENT	John Doe	5 / 2021	-	4 / 2022	Industrial Company AG

Figure 3-5 Tool scan

User Profile

User can update settings such as Name, Email, Language, and so on.

My Profile
revadis.soma-sunder@siemens.com

Name: revadis.soma-sunder@siemens.com
 Email: revadis.soma-sunder@siemens.com
 Department:
 Location:
 Company:
 Language: English (selected)
 Deutsch

Save Cancel

Figure 3-6 User profile

3.2 Tool details

The Tool details can be displayed by selecting any tool. All the tool relevant data is displayed on this page.

The Tool number, which consists of the product version ID, TC status and tool name, is displayed on the upper left corner of the screen and is available in all tabs.

The Tool details page has the following tabs:

- Tool Data
- Product List
- Tool History
- Incoming Goods

3.2 Tool details

- Tool Files
- Tool Costs

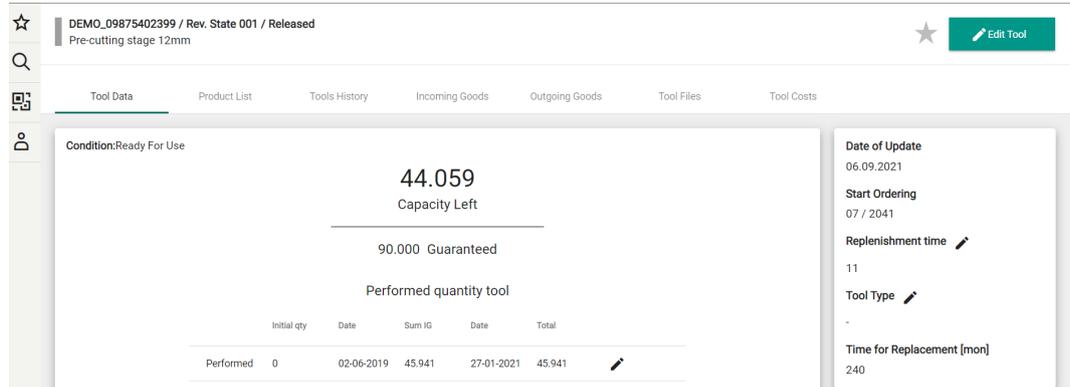


Figure 3-7 Tool Data

Tool Data

The Tool data screen consists of the following information:

- Status Information
- Quantities Area
- Parts Area
- Date and Key figures Area
- Assemblies Area
- Monitoring Guaranteed Output quantity
- Monitoring Monthly Capacity

Status Information

The current tool status is displayed in this area.

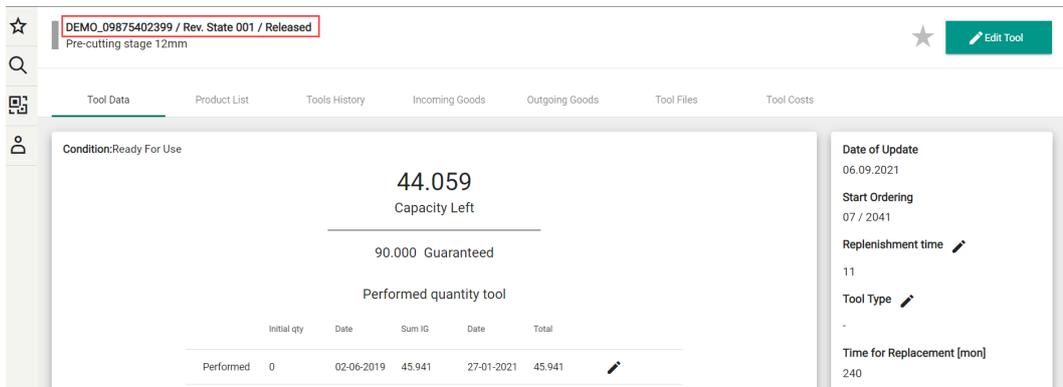


Figure 3-8 Tool status

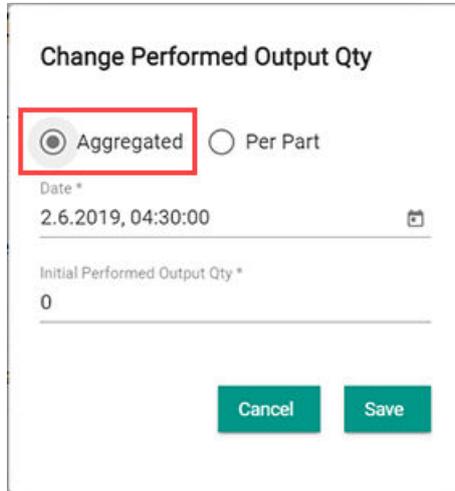
Quantities Area

The following quantity specifications related to the tool are present in this area:

Quantity Specification	Description
Capacity Left	This quantity signifies the remaining quantity of parts that can still be produced from the tool. Capacity Left = GOQ-Performed Quantity
Guaranteed	This quantity signifies the Guaranteed Output Quantity (GOQ) agreed between customer and supplier in a contract.
Performed	This quantity signifies the output quantity produced according to recorded goods receipts.
Performed TB	This quantity signifies the output quantity according to entries as per Toolbook app.

To change the Performed and Performed TB quantities, click on the **Edit**  symbol and enter an initial quantity with date using the following settings:

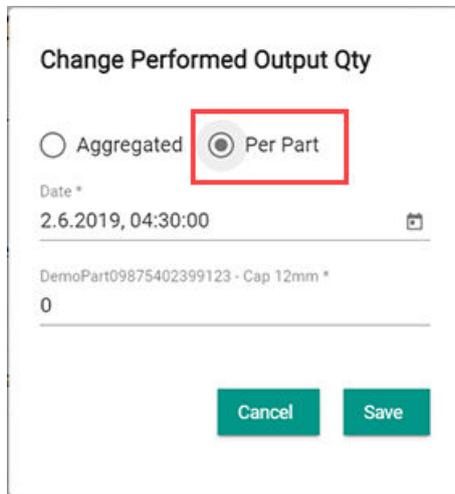
- Aggregated



The screenshot shows a dialog box titled "Change Performed Output Qty". At the top, there are two radio button options: "Aggregated" (which is selected and highlighted with a red box) and "Per Part". Below this, there is a "Date *" field containing "2.6.2019, 04:30:00" with a calendar icon to its right. Underneath is an "Initial Performed Output Qty *" field containing the number "0". At the bottom of the dialog are two buttons: "Cancel" and "Save".

Figure 3-9 Settings 1

- Per Part



The screenshot shows the same "Change Performed Output Qty" dialog box. In this version, the "Per Part" radio button is selected and highlighted with a red box, while "Aggregated" is unselected. The "Date *" field still shows "2.6.2019, 04:30:00". The "Initial Performed Output Qty *" field now contains the text "DemoPart09875402399123 - Cap 12mm *" above the number "0". The "Cancel" and "Save" buttons remain at the bottom.

Figure 3-10 Settings 2

Click **Save** to save the new data

Otherwise click **Cancel** to preserve the old data.

The entered incoming goods are summarized and displayed based on the date of initial entry.

Parts Area

The Important information related to the part is displayed in this area as follows:

- **Part ID, Part Name, Revision State:** Information on the part
- **Share:** Distribution of a scheduled quantity to two or more tools
- **Supplier Share:** Allocation of a planned quantity to two or more vendors as per SAP
- **Performed quantity:** Specification of the produced parts per material number

- **Performed TB:** Indication of the produced parts per material number as per the **Toolbook** app
- **Insert Number:** Number of the tool insert
- **Active:** Display for which variant the tool is currently equipped as per the **Toolbook** app

Part ID	Part Name	Revision State	Part Share	Supplier Share	Performed Qty	Performed TB	Insert No.	Active	Shared Use
DemoPart09875Cap 12mm		AD	1.00	1.00	0	15.580	-		-

Figure 3-11 Parts area

Edit Share Function: If the parts produced with this tool are also produced with other tools at the same supplier, the allocation of the quantity to the tools can be defined. This function has an influence on the allocation of future requirements, but also on the goods receipts allocated to the tools.

Part ID	Part Name	Revision State	Part Share	Supplier Share	Performed Qty	Performed TB	Insert No.	Active	Shared Use
DemoPart09875Cap 12mm		AD	1.00	1.00	0	15.580	-		-

Figure 3-12 Edit Shared Use function

In order to specify whether other plants are to obtain parts from the tool, select **Parts** followed by **Locations** and then click **Save**.

Figure 3-13 Edit Shared Use window

Note

The locations are only visible if there is future demand for that particular location.

Date and Key Figures Area

The following information is present in this area:

Figure 3-14 Dates and key figures area

Information	Description
Date of Update	Date calculated according to future requirements
Start Ordering	Date, calculated by subtracting the Replenishment Time from the sum of Date of Update and the Time for Replacement

Information	Description
Replenishment Time	Key figure, number of months from current month to end of service life
Time for Replacement (in months)	Number of capacity overruns within the next 24 months, depending on future monthly requirements

Owning Groups

Owning Group is internal relation between a tool and an organization. For more information on adding owning groups, refer *Creating Owning Groups (Page 25)* .

Suppliers

Suppliers are the organisations or business entities which supply parts or assemblies for the production. For more information on managing suppliers, refer *Managing Suppliers (Page 24)* .

Assemblies Area

In order to specify whether the parts produced from the tool are to be incorporated into assemblies or further refined, the **Edit Assembly** function can be used.

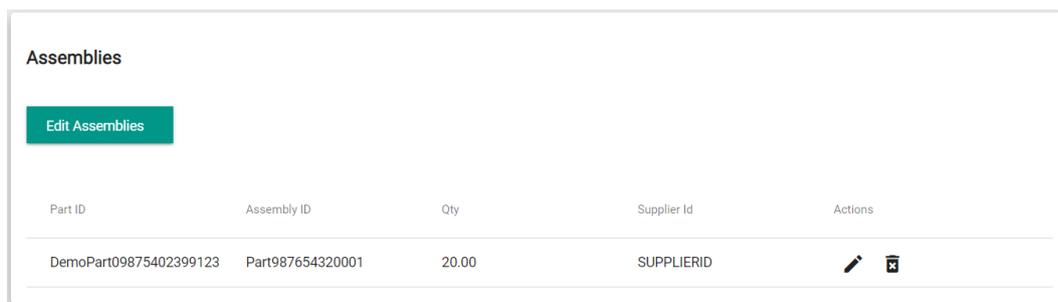


Figure 3-15 Assemblies area

Click on **Edit Assembly** and enter the following values:

- **Part Number:**Material number, which is produced with the tool.
- **Assembly ID:**Material number of the assembly (or finished part) for which the manufactured part is used.

- **Quantity:**Number of parts used for an assembly.
- **Supplier:**Supplier of the assembly. This Supplier might differ from the supplier of the individual parts.

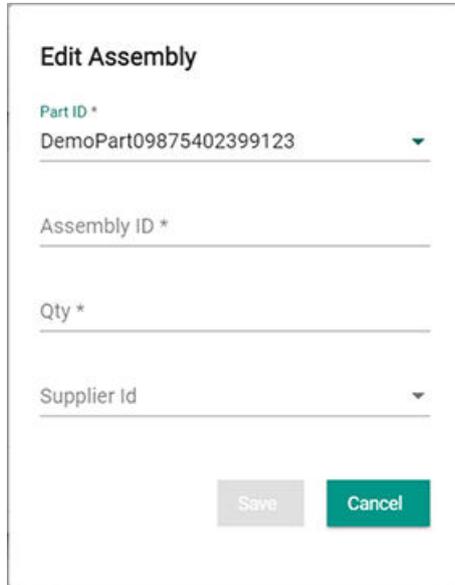


Figure 3-16 Edit Assembly window

Monitoring Guaranteed Output Quantity

Taking into account future planned monthly future requirements, the temporal course of the output quantity is displayed in this area. The monthly future demands of all material numbers that can be produced with the tool are added to the output quantity produced in the current month, whereby other locations are also taken into account. The end of use of the tool is at the point of intersection of the monthly course with the GOQ.

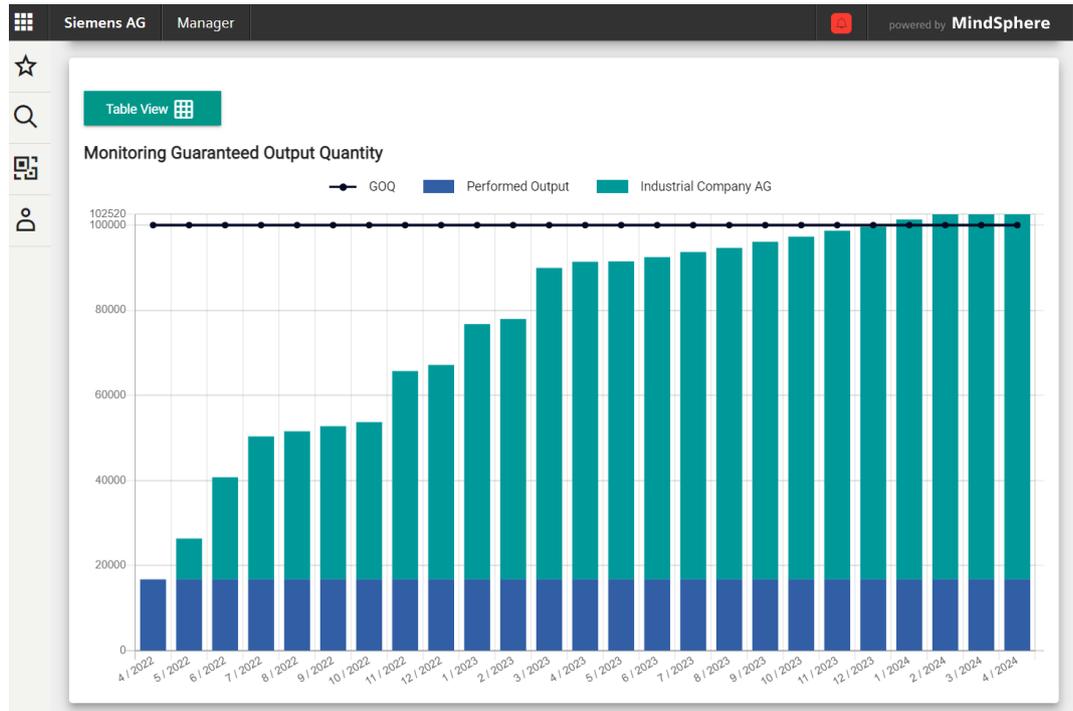


Figure 3-17 Monitoring GOQ

Click on the **Table View** to switch to a table view in which the values on which the graphic is based are displayed.

Click on **Save as Excel** to export the table.

The screenshot shows the 'Table View' of the 'Monitoring Guaranteed Output Quantity' data. The 'Save as Excel' button is highlighted with a red box. Below is the data table:

Part ID	Part Name	Location	+1	+2	+3	+4	+5	+6
DemoPart09875402	Cap 5mm	Industrial Company AG	9.600	24.000	33.600	34.800	36.000	36.960
	Performed Qty		16.740	16.740	16.740	16.740	16.740	16.740
	TOTAL		26.340	40.740	50.340	51.540	52.740	53.700

Figure 3-18 Exporting GOQ

For more information on adding demands, refer Importing Demands data (Page 20) .

For more information on managing plant information, refer Managing Plant Information (Page 26) .

Monitoring Monthly Capacity

The chronological development of the planned monthly future requirements is displayed in this area. The monthly future requirements of all material numbers that can be produced with the tool are presented in comparison to the monthly capacity of the tool, considering other locations. The monthly planned future requirements are transferred directly from SAP or HANA once a day. The frequency of exceedance is also displayed in the **Dates** section.



Figure 3-19 Monitoring Monthly Capacity

Click on the **Table View** to switch to a table view in which the underlying values of the graph are displayed.

Click on **Save as Excel** to export the table.

The screenshot shows the 'Save as Excel' button highlighted with a red box. Below it is a table with the following data:

Part ID	Part Name	Location	+1	+2	+3	+4	+5	+6	-
	DemoPart09875402Cap 5mm	Industrial Company AG	9.600	14.400	9.600	1.200	1.200	960	-
		TOTAL	9.600	14.400	9.600	1.200	1.200	960	-

Figure 3-20 Exporting Monthly Capacity

For more information on the above topics, refer Monitoring Guaranteed Output Quantity Calculations (Page 75) and Monitoring Capacity Calculations (Page 75) .

3.3 Product List

The **Product List** tab shows all finished products, which include the parts produced with the tool.

Product MLFB	Product Description	Part ID	Part Name
3RT2018-2B841-0AA6	Contacto DC SLT 7,5kW 24V HS 20G opt.	ABE56203290001	Magnetkammer DC FZT
3RT2017-2F841-1AA0	Contacto DC SLT 5,5kW 24V HS with Diode	ABE56203290001	Magnetkammer DC FZT
3RT2016-2F841-1AA0	Contacto DC SLT 4kW 24V HS with Diode	ABE56203290001	Magnetkammer DC FZT
3RT2015-2UB41	Contacto DC CC 3kW 24V HS VDR	ABE56203290001	Magnetkammer DC FZT
3RT2015-2K442	Cont. Couple DC SLT 3kW 12V HOE SupDiode	ABE56203290001	Magnetkammer DC FZT
3RT2015-2UB42	Contacto DC CC 3kW 24V HOE VDR	ABE56203290001	Magnetkammer DC FZT
3RT2016-2K442	Cont Couple DC SLT 4kW 12V ASNC SupDiode	ABE56203290001	Magnetkammer DC FZT
3RT2015-2B641	Contacto DC CC 3kW 12V HS	ABE56203290001	Magnetkammer DC FZT
3RT2017-2UB41-Z	Con Couple DC SLT 5,5kW 24V HS DiodeZX95	ABE56203290001	Magnetkammer DC FZT

Figure 3-21 Product List

3.4 Tool History

In the **Tool History** tab, all events belonging to a tool that are added in **Toolbook** app can be viewed. These events include:

- Clamping/Unclamping
- Maintenance activity
- Service Request
- Service Interval
- Quality report

Clamping No.	Date, Time	Type	Details	Total Produced	Actions
5	07/04/2022 11:20:32 am	Clamping	Clamping Remark -	0	👁
-	02/22/2021 03:31:43 pm	Maintenance activity	-	0	👁
-	08/17/2020 01:17:40 pm	Maintenance activity	-	0	👁
4	08/11/2020 04:25:16 pm	Unclamping	No reason -	0	👁
4	08/05/2020 04:23:48 pm	Clamping	Unknown - this is a test text	0	👁

Figure 3-22 Tool History

Note

Changes cannot be made in the **Manager** app.

Refer to the **Adding Clamping Event**, **Adding Unclamping Event** and **Adding Maintenance Activity** topics in the Toolbook Operations (Page 62) section.

Evaluation of the tool history with Excel

Click on the **Export** to export all documented data as Excel files.

3.5 Incoming Goods

In the **Incoming Goods** tab, the material numbers which can be produced with the tool can be displayed.

Set the date of the initial entry here, all events from this date are displayed and summed up in the top line. The calculated sum is added to the tool, starting from a starting quantity.

Entry Date IG	Part ID	Supplier Id	Share	Quantity	Assembly ID	Parts/Assembly	Qty.	Plant
Total	DemoPart09875402399	SIEMENS_DEPARTMENT1		45.941	-	1	0	Plant 1998
2021-01-26 09:13:14	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:14:13	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:14:16	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:14:17	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:14:18	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:14:19	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:15:15	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:15:17	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:16:14	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998
2021-01-26 09:16:15	DemoPart09875402399	SIEMENS_DEPARTMENT1		100	-	1	0	Plant 1998

Figure 3-23 Incoming Goods

For more information on adding incoming goods, refer Importing Incoming Goods data (Page 22) .

3.6 Outgoing Goods

In the **Outgoing Goods** tab, the information related to the parts, which are shipped or requested from customers is displayed. This tab displays the following information:

Name	Description
Date	This column displays the information of the date and time when the part is shipped to the customer
Part ID	This column displays the information of the part identification number that is shipped to the customer
Customer	This column displays the information about the customer to which the part is shipped
Quantity	This column displays the information of the quantity of the parts shipped to the customer

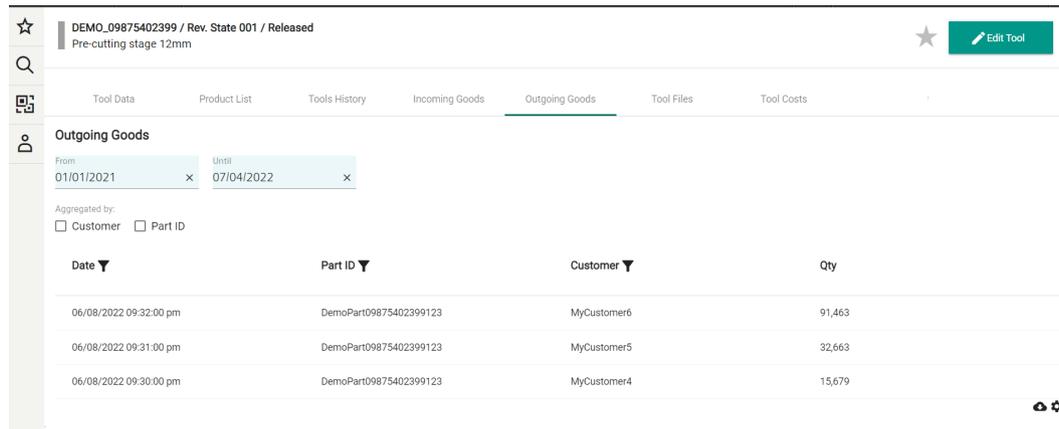


Figure 3-24 Outgoing Goods

The user can select the date range for the query. All the results are displayed pertaining to the date range. The information in this tab can be aggregated in two ways.

- Customer
- Part ID

Customer

If the data is aggregated by **Customer**, then the customers to which the maximum parts are shipped, the corresponding quantities and the percentages are displayed.

3.6 Outgoing Goods

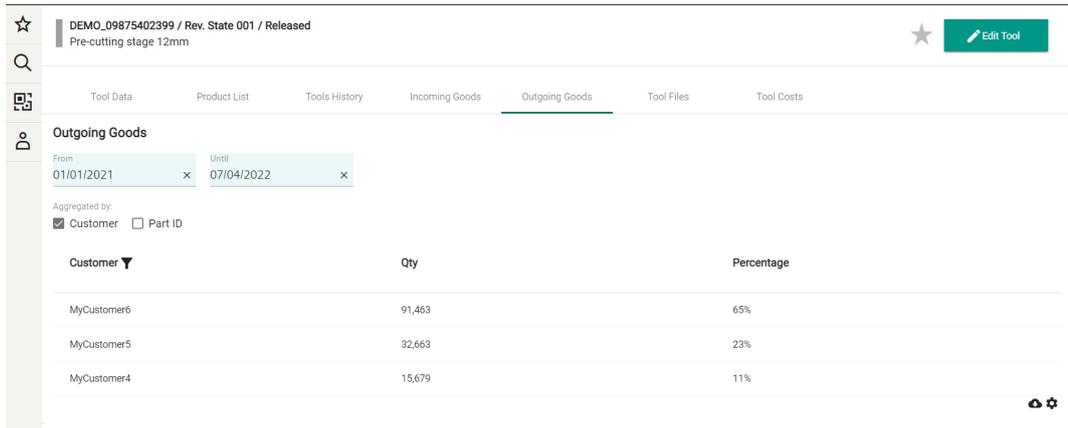


Figure 3-25 Aggregated by Customer

Part ID

If the data is aggregated by **Part ID**, then the parts which are shipped to the customers, the corresponding quantities and the percentages are displayed.

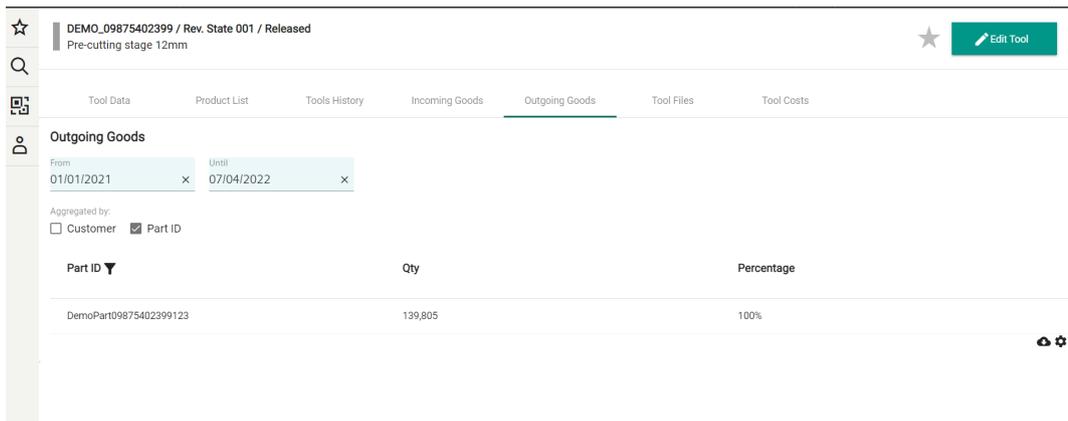


Figure 3-26 Aggregated by Part ID

The user can also aggregate the data by both the **Customer** and the **Part ID**. In this way, the user can have a better understanding of the customers to which the respective parts are shipped and the corresponding percentages.

DEM0_09875402399 / Rev. State 001 / Released
Pre-cutting stage 12mm

From: 01/01/2021 To: 07/04/2022

Aggregated by:
 Customer Part ID

Part ID	Customer	Qty	Percentage
DemoPart09875402399123	MyCustomer6	91,463	65%
DemoPart09875402399123	MyCustomer5	32,663	23%
DemoPart09875402399123	MyCustomer4	15,679	11%

Figure 3-27 Aggregated by Customer and Part ID

Note

The date column is not displayed in either of the above two cases as the information is already displayed in the selected date range

For more information on adding outgoing goods, refer Importing Outgoing Goods data (Page 23) .

3.7 Tool Files

In the **Tool Files** tab, all the files belonging to the tool can be imported and saved.

To upload a tool file:

1. Click on the **Upload File**.

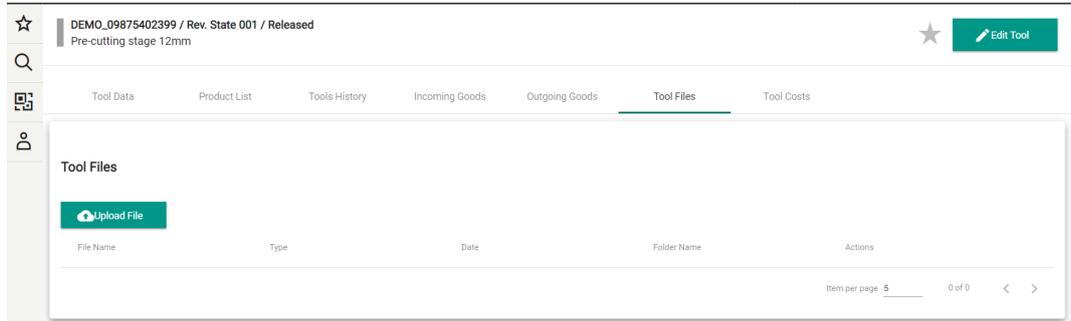


Figure 3-28 Tool Files

2. In the selection window, Select the file to be uploaded and click **Add File**.

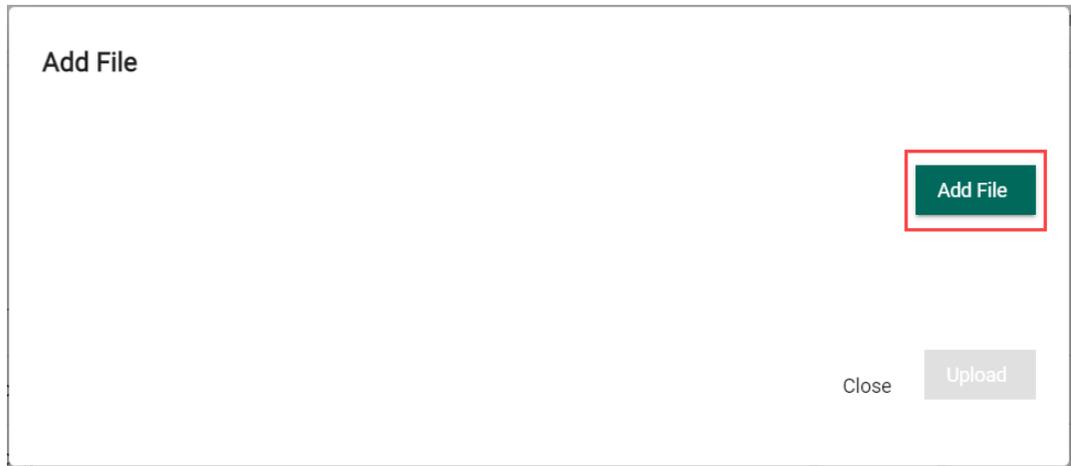


Figure 3-29 Adding tool files

A folder can also be uploaded in the same way.

3.8 Tool Costs

In the **Tool Costs** tab, the user can add or change the tool cost data.

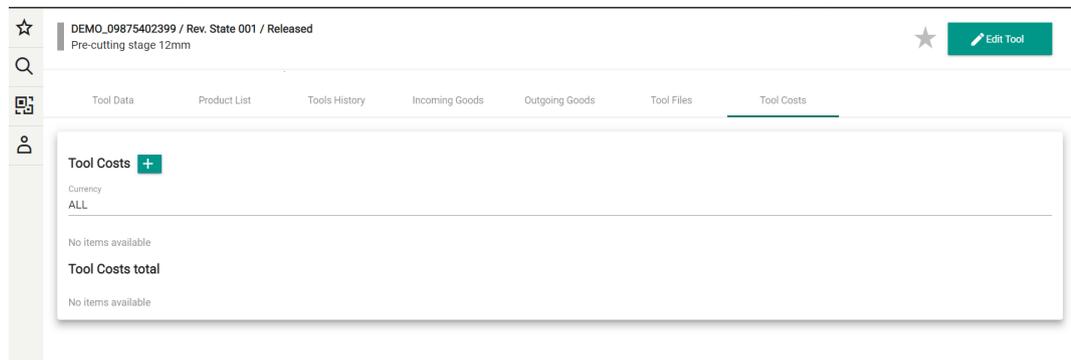


Figure 3-30 Tool Costs

Adding Tool Costs

To add the tool costs:

1. Navigate to the **Tool Costs** tab in the **Manager** app and click on the **Add** symbol as shown below.

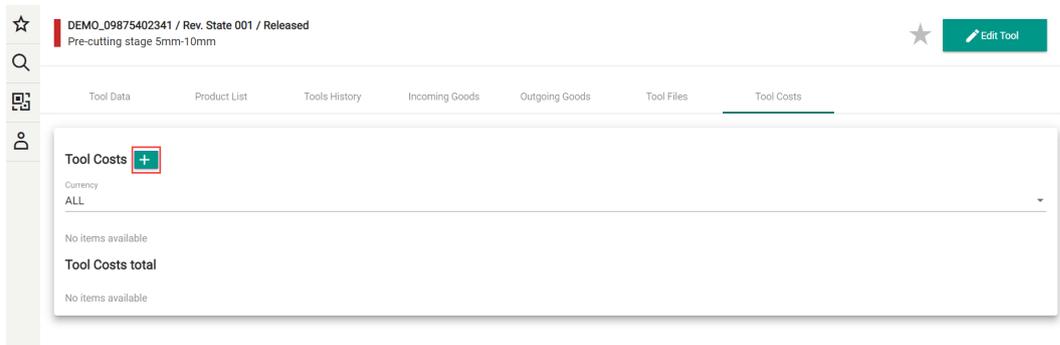


Figure 3-31 Adding Tool costs 1

2. A new window is displayed on the screen.



Figure 3-32 Adding Tool costs 2

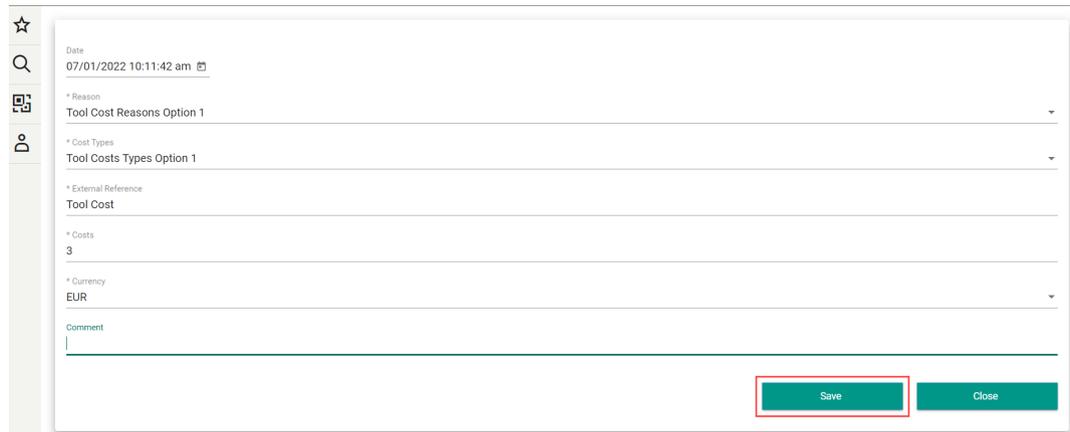
3. Enter the details as required.



The screenshot shows a form in the Manager app. On the left is a vertical sidebar with icons for home, search, list, and user. The main form area contains the following fields: Date (07/01/2022 10:11:42 am), Reason (Tool Cost Reasons Option 1), Cost Types (Tool Costs Types Option 1), External Reference (Tool Cost), Costs (3), and Currency (EUR). There is also a Comment field. At the bottom right, there are two buttons: 'Save' and 'Close'.

Figure 3-33 Adding Tool costs 3

4. Click on the **Save** symbol to save the changes.



This screenshot is identical to Figure 3-33, showing the same form with the 'Save' button highlighted by a red rectangular box.

Figure 3-34 Adding Tool costs 4

The Tool costs are updated in the **Manager** app.

For more information on importing tool costs, refer Importing Tool Costs data (Page 21) .

3.9 Edit Tool function

The **Edit Tool** function can be used to change the data of a tool. This function is present in all the tabs of the **Manager** app.

To edit the tool:

1. Click on the **Edit Tool**.

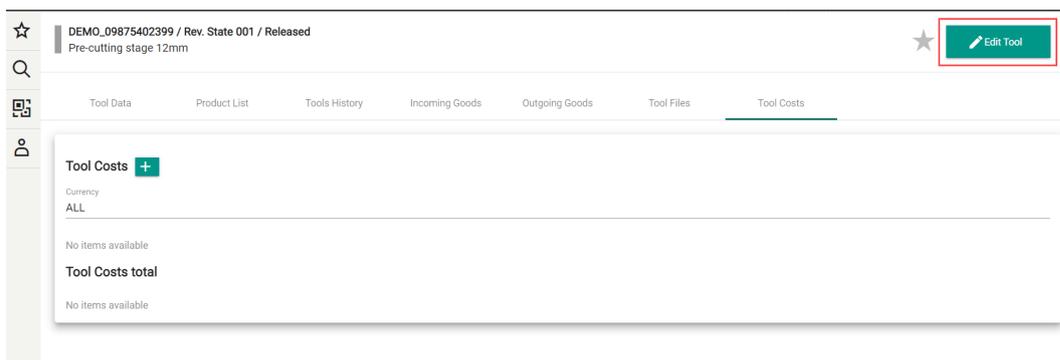


Figure 3-35 Tool costs

2. A window appears on the screen which contains the following tabs:
 - Details
 - Quantities
 - Investments and Costs
 - Customer or Supplier or Technical Contact
 - Parts

The screenshot shows the 'Edit Tool' interface in Siemens AG Manager. The interface has a dark header with 'Siemens AG' and 'Manager' on the left, and 'powered by MindSphere' on the right. Below the header, the title 'Edit Tool' is displayed. A navigation bar with tabs 'Details', 'Quantities', 'Investment & Costs', 'Customer / Supplier / Technical Contact', and 'Parts' is visible. The 'Details' tab is active. The form contains the following fields:

- Tool ID: DEMO_09875402399
- Name: Pre-cutting stage 12mm
- Revision: 001
- Status: Released
- Owning Group: Industrial Company AG
- Class: Plastic Moulding
- Supplier Tool No.: Plastic-Moulding-Tool 19764
- Capacity: 10000
- Unit of Measurement: M
- Time for Replacement: 11
- No. of Cavities: 1
- Cavity No. From: (empty)
- Cavity No. To: (empty)
- LT Status: Usable (dropdown menu)

At the bottom right, there are two buttons: 'Save' and 'Close'. The 'Save' button is highlighted with a red rectangular box.

Figure 3-36 Edit Tool

3. Make the required changes in the above tabs and click **Save** to save the changes.

Toolbook

4.1 Toolbook home screen

The **Toolbook** app addresses the production and line workers. The following information is available in this app:

- Workers can store data about their production lines
- Relevant tool info and tool master data
- Quality maintenance and Repairs

The **Toolbook** app can be launched from the MindSphere launchpad.

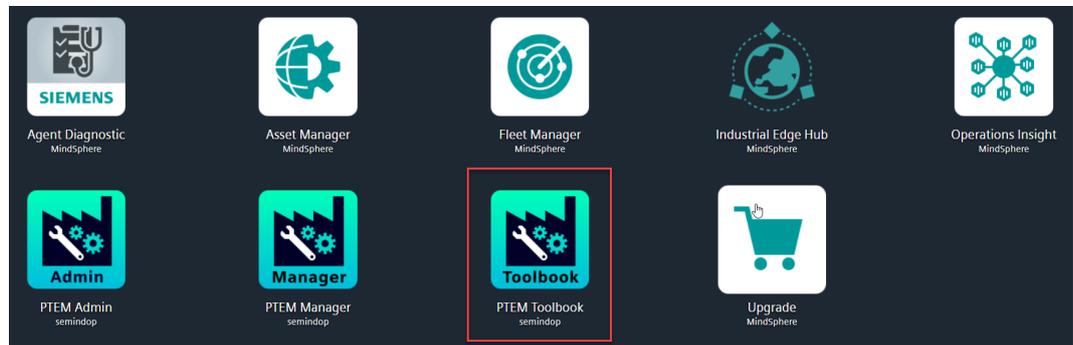


Figure 4-1 PTEM Toolbook

Using Tools

Click **PTEM Toolbook** from the MindSphere Launchpad home screen.

The entry mask is divided into the following areas:

Favorites

Contain the tools which are marked as favorites for quick navigation and frequent use.

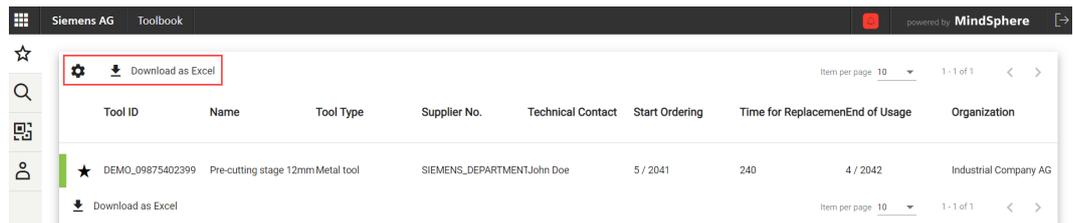


Figure 4-2 Favorites

4.1 Toolbook home screen

Visualization Settings ⚙️

Click on the **Visualization Settings** ⚙️ symbol to open the **Visualization Settings** window. You can select the columns to be visible and also save the settings with different names for future use. Each tool is marked with the following colors which indicate the status of the tool:

Color	Description
Red	Critical tool
Green	Non critical tool
Grey	Scrapped tool

Download as Excel

Click on the Download as Excel ⬇️ button to download the data into a Microsoft Excel spreadsheet.

Search

You can search for tools by entering the keywords in the Search Item text box. The search returns the results with all the tools related to the entered keywords.

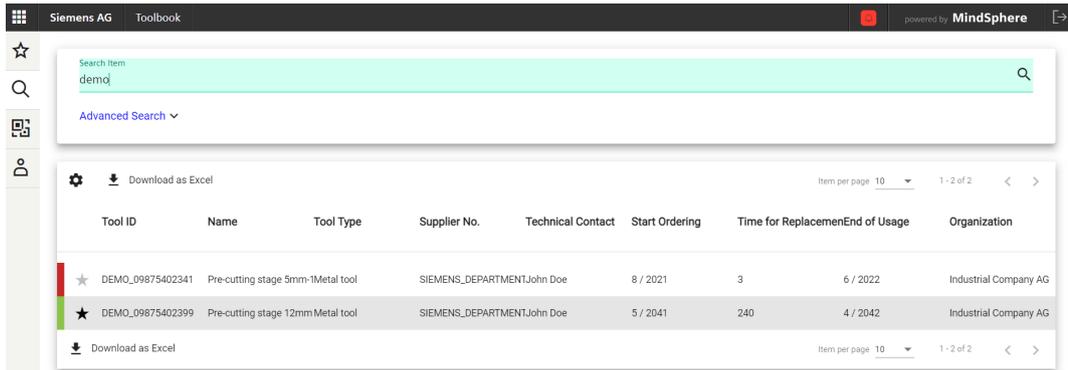


Figure 4-3 Search

Advanced Search can be used to search with specific data. This search returns the results with the tools that exactly match all the search criteria.

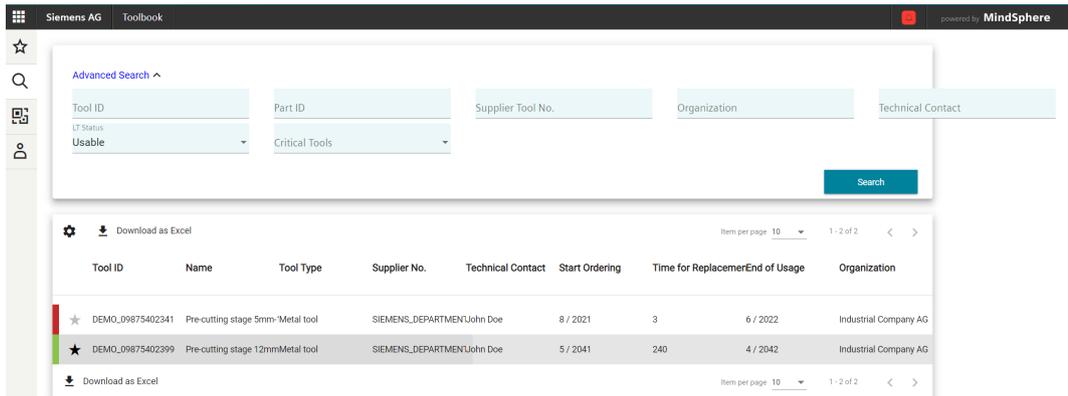
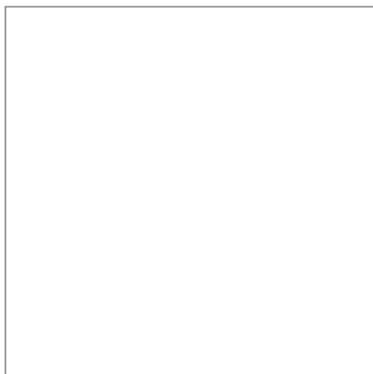


Figure 4-4 Advanced Search

Scan QR Code of Tool

Tools can be quickly searched by scanning the QR Code using the app on handheld devices such as tablets.

Tool Scan



Cancel

Figure 4-5 Tool Scan

User Profile

User can update settings such as Name, Email, Language, and so on.

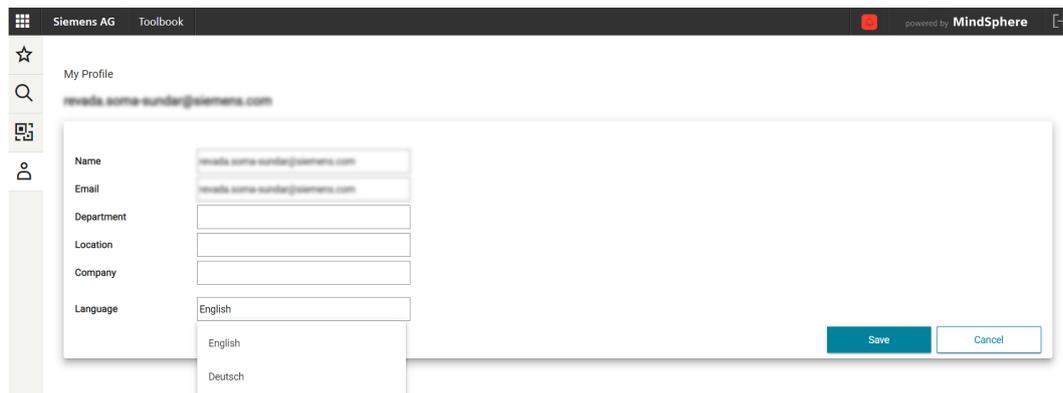


Figure 4-6 User Profile Toolbook

4.2 Toolbook Operations

The Toolbook home screen consist of the following tabs:

- Tool Data
- Clamping / Unclamping
- Production
- Maintain / Repair
- Tool Files

Tool Data

This tab contains all the tool related data. The Tool data screen is divided as follows:

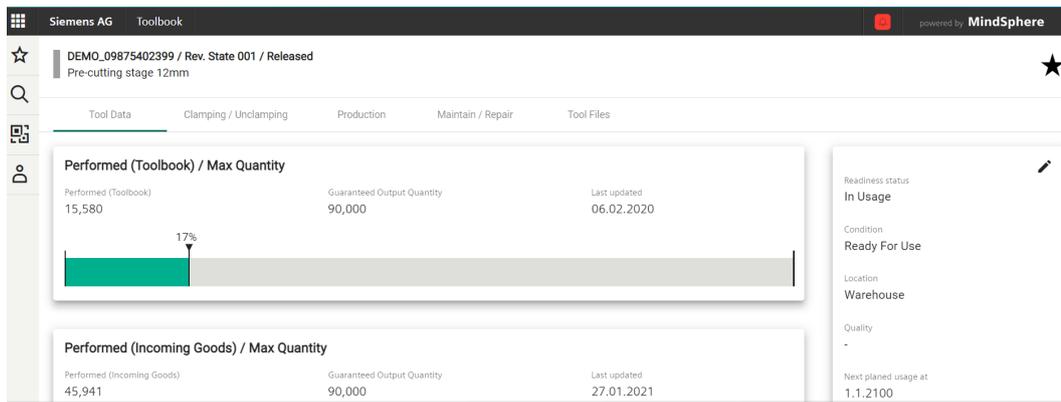


Figure 4-7 Tool Data tab

Name	Description
Performed (Toolbook) / Max Quantity	This area gives information about the performed output as per the toolbook.
Performed (Incoming Goods) / Max Quantity	This area gives information about the performed incoming goods.
Tool Status	<p>This area gives information about the tool status such as:</p> <ul style="list-style-type: none"> • Readiness State • Condition • Location • Quality • Next Planned usage • Capacity Left • Next Service Interval • Last Machine Parameter <p>This information is present in all tabs of the Toolbook app except the Tool Files tab.</p>
Storage Location	This area gives information about the storage location of the tool.
Properties	This area gives information about the properties of the tool.
Machine	This area gives information about the machine in which the tool is clamped.

Name	Description
Remarks	This area gives information about the remarks of the tool.
Part(s)	<p>This area gives information about the parts that are produced with the tool. The Part(s) area contains three tables:</p> <ul style="list-style-type: none"> • Part(s): This table gives information about the parts that are produced with the tool. • ISIR History: This table gives information about Initial Sample Inspection Report (ISIR). Refer to the Add ISIR topic below. • Quantity (Detail): This table gives information about the quantity of parts that are produced with the tool.
Production Planner Data	<p>This area gives information about the production planner data such as:</p> <ul style="list-style-type: none"> • Production Planner • Responsible Designer • Production Cost Group • Inventory number • Supplier • Used Since <p>This information is present in all tabs of the Toolbook app except the Tool Files tab.</p>

Add ISIR

The Initial Sample Inspection Report (ISIR) can be generated for parts.

To add ISIR:

1. Click **Add ISIR**.

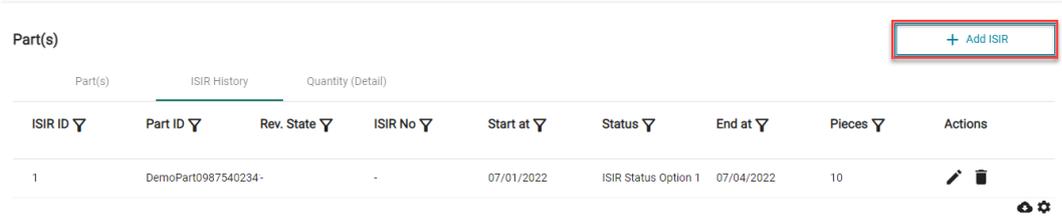


Figure 4-8 Add ISIR

2. In the **Add or Update ISIR** window, fill all the details.

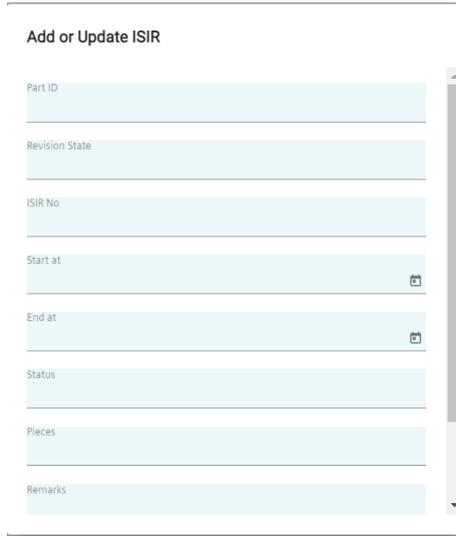


Figure 4-9 Add ISIR form

- **Part ID:** The ID of part to which ISIR needs to be generated
- **Revision State:** Revision state of the ISIR
- **ISIR No:** The number of the ISIR
- **End at:** The time when ISIR needs to be ended
- **Pieces:** The number of pieces for which ISIR needs to be generated
- **Remarks:** Enter remarks about the ISIR that needs to be generated

3. Click **Save**.

Add or Update ISIR

ISIR No

Start at 

End at 

Status

Pieces

Remarks

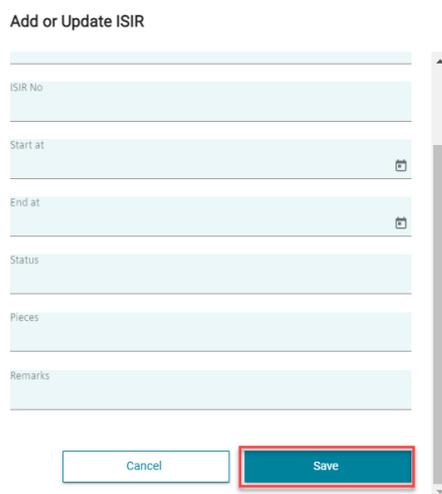


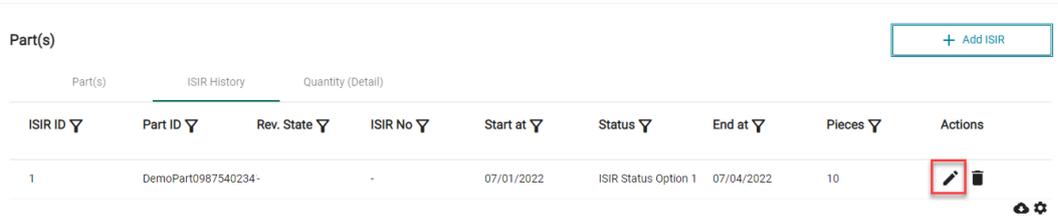
Figure 4-10 Save ISIR

Update ISIR

The details of an ISIR can be modified.

To update an ISIR:

1. Click the edit icon in the corresponding ISIR row.

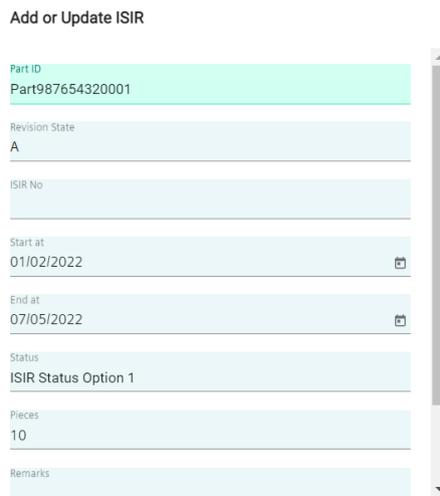


The screenshot shows a table with columns: Part(s), ISIR ID, Part ID, Rev. State, ISIR No, Start at, Status, End at, Pieces, and Actions. A row is visible with the following data: 1, DemoPart0987540234-, -, 07/01/2022, ISIR Status Option 1, 07/04/2022, 10. The edit icon in the Actions column for this row is highlighted with a red box.

Part(s)	ISIR ID	Part ID	Rev. State	ISIR No	Start at	Status	End at	Pieces	Actions
	1	DemoPart0987540234-	-		07/01/2022	ISIR Status Option 1	07/04/2022	10	

Figure 4-11 Update ISIR

2. In the **Add or Update ISIR** window, update the details you want to modify.

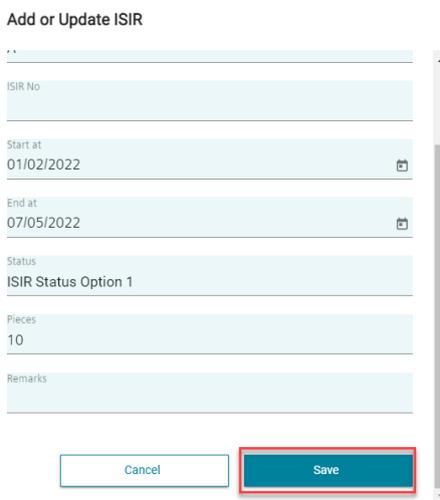


The screenshot shows the 'Add or Update ISIR' form with the following fields and values:

- Part ID: Part987654320001
- Revision State: A
- ISIR No:
- Start at: 01/02/2022
- End at: 07/05/2022
- Status: ISIR Status Option 1
- Pieces: 10
- Remarks:

Figure 4-12 Update ISIR form

3. Click **Save**.



The screenshot shows the 'Add or Update ISIR' form with the following fields and values:

- ISIR No:
- Start at: 01/02/2022
- End at: 07/05/2022
- Status: ISIR Status Option 1
- Pieces: 10
- Remarks:

At the bottom of the form, there are two buttons: 'Cancel' and 'Save'. The 'Save' button is highlighted with a red box.

Figure 4-13 Save update ISIR form

Clamping / Unclamping

This tab contains the data related to the status of the tool whether it is clamped or unclamped. The Tool can be clamped or unclamped as and when required.

The tool history information is also displayed in this tab.

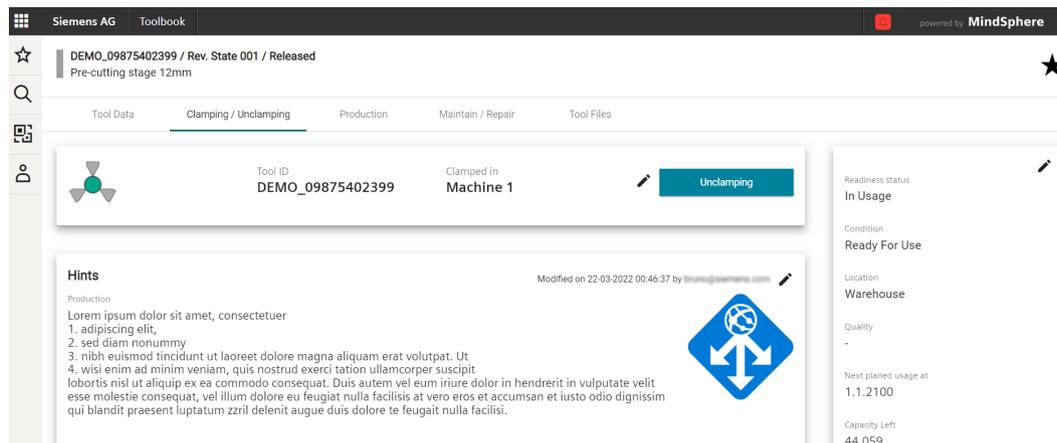


Figure 4-14 Clamping / Unclamping tab

Adding Clamping Event

To add a clamping event:

1. Navigate to the **Clamping / Unclamping** tab in the **Toolbook** app home screen.

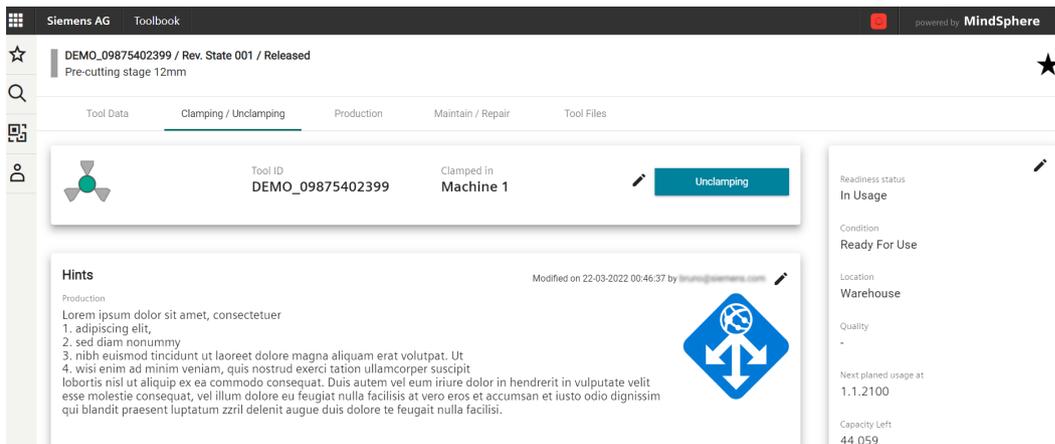


Figure 4-15 Clamping / Unclamping event

2. Click **Clamping** to create a clamping event.

Note

If the tool is already clamped, click **Edit**  symbol to make changes in the event.

3. Enter the **Machine no** and select the **Produced Part ID** that is being manufactured with the tool.

Clamping

Clamped at 23.3.2022, 17:16:19	Name revada.soma-sundar@siemens.com	Department
* Machine No 1	Produced Part ID DemoPart09875402399123	Part Name Cap 12mm
Order No.	Order quantity 0	
Clamping Remark Clamping Remark	Remarks	

Continue with new quality report

By clicking on SAVE, I agree to the safety precautions according to the instructions.

Figure 4-16 Adding Clamping event

Note

Entering the **Order No** and **Order quantity** is not mandatory.

4. Click **Save** to save the event.
After saving the event, the readiness status of the tool is set to **In Usage**.
The event can be seen in the **Tool History** tab in the **Manager** app.

Adding Unclamping Event

To add an unclamping event:

1. Navigate to the **Clamping / Unclamping** tab in the **Toolbook** app home screen.

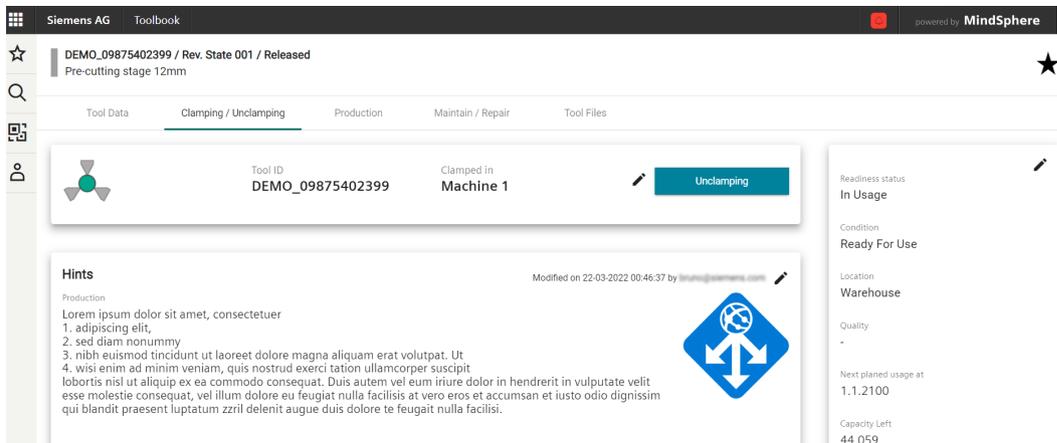


Figure 4-17 Clamping / Unclamping event

2. Click **Unclamping** and select the **Reason** from the dropdown.

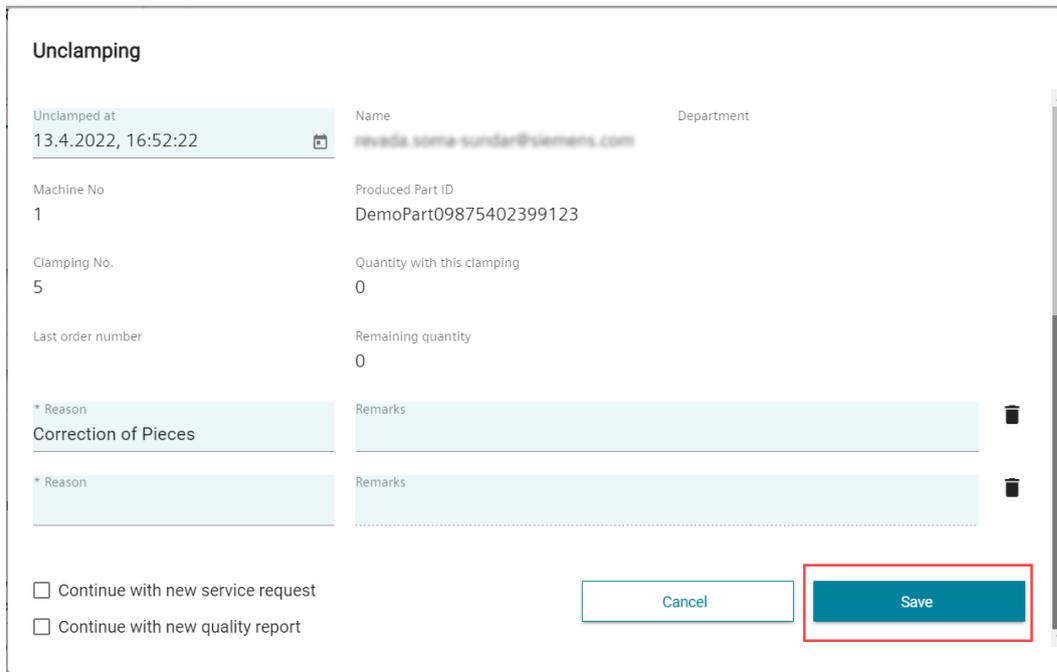


Figure 4-18 Adding Unclamping event

3. Enter the **Remarks** and click **Save**.

Note

Before saving the event, select the following check box as required:

1. **Continue with new service request** - to add a new service reques.
2. **Continue with new quality report** - to add a new quality report.

The event can be seen in the **Tool History** tab in the **Manager** app.

Adding Maintenance Activity

To add a maintenance activity:

1. Navigate to the **Maintain / Repair** tab in the **Toolbook** app home screen.

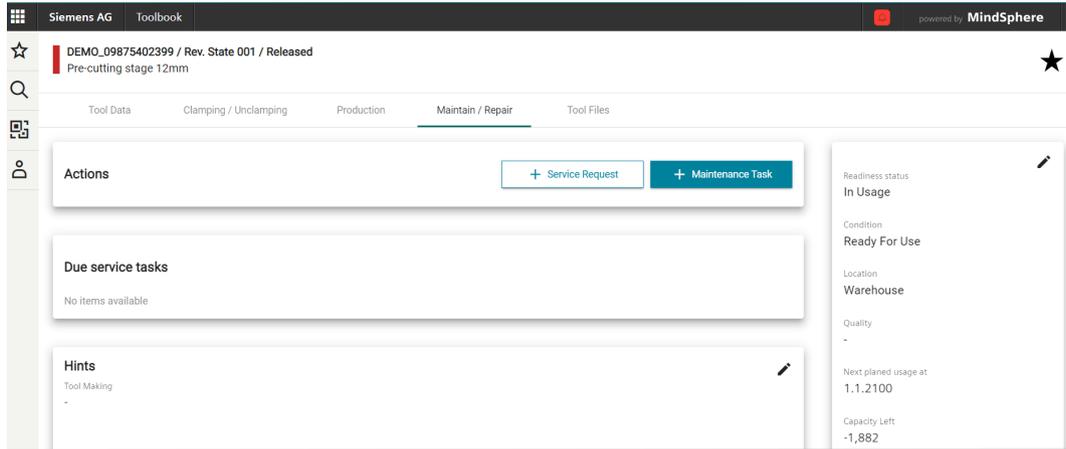


Figure 4-19 Maintain / Repair

2. Click **Maintenance Task** and select the appropriate **Task** from the dropdown.
3. Enter the **Remarks** as required and click **Executed**.

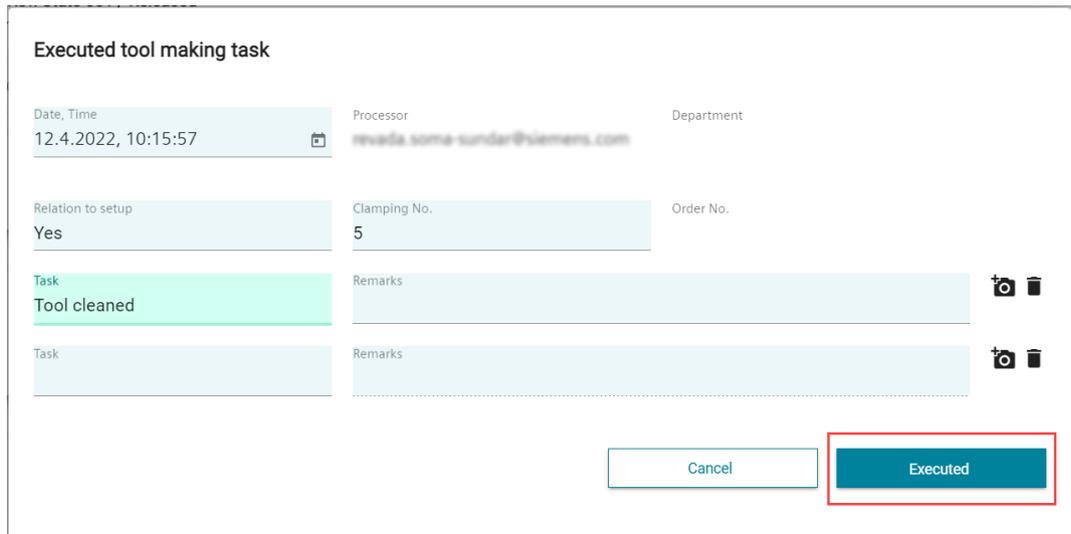


Figure 4-20 Adding maintenance Task

The Maintenance activity can be seen in the **Tool History** tab in the **Manager** app.

Production

This tab contains information related to the order number and the order quantity that is supposed to be produced with the tool.

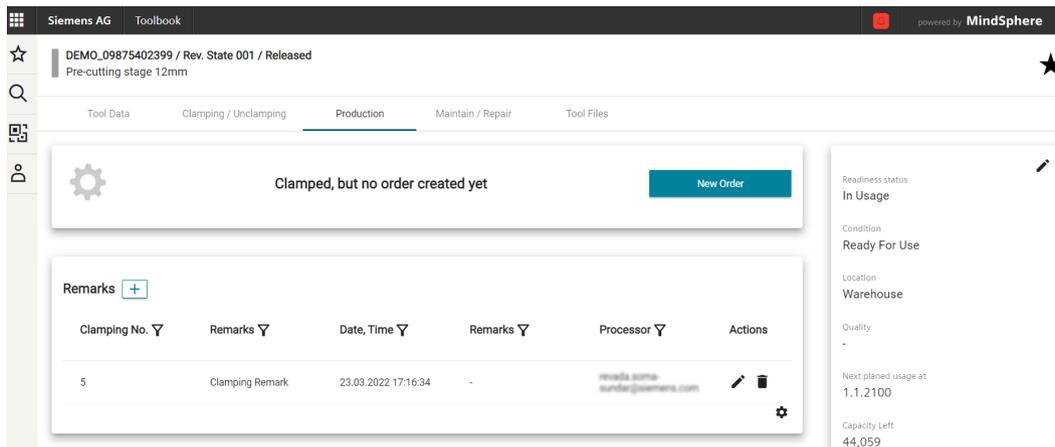


Figure 4-21 Production tab

To create a new order:

1. Navigate to the **Production** tab of the Toolbook home screen.
2. Click on **New Order** to create a new order.

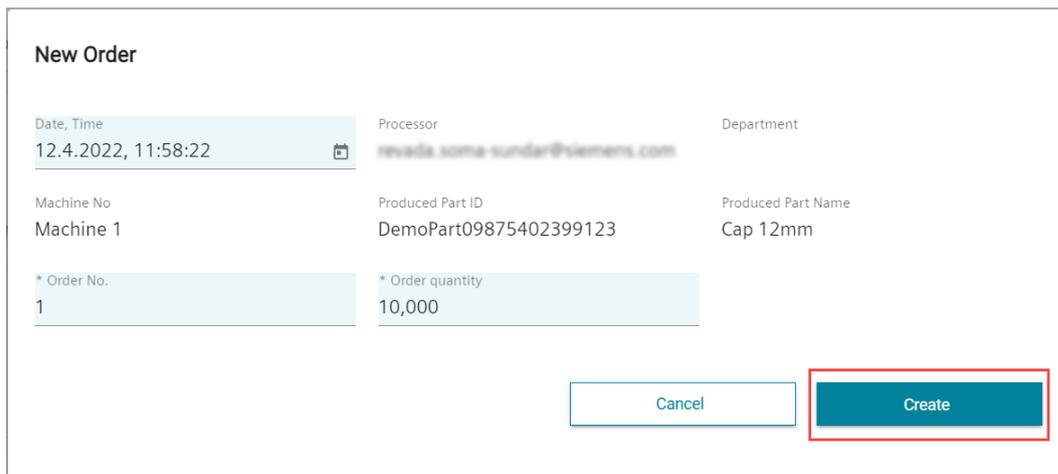


Figure 4-22 Creating new order

3. Enter the order number and the order quantity.
4. Click on **Create** to create the order.

Continue interrupted orders

User can continue the orders that were interrupted during the process.

The **Orders** area shows all the previous orders with order number, order quantity, performed quantity and a progress bar, which shows the percentage of performed quantity.

Orders

Order No.: BR12345	Order quantity: 30.000	Performed Qty: 10.000	33 %
Order No.: BR1234	Order quantity: 10.000	Performed Qty: 10.000	100 %
Order No.: 1	Order quantity: 1.000	Performed Qty: 1.000	100 %
Order No.: O-1002	Order quantity: 4.000	Performed Qty: 4.600	115 %
Order No.: O-1000	Order quantity: 1.000	Performed Qty: 721	72 %
Order No.: x14500	Order quantity: 8.000	Performed Qty: 910	11 %
Order No.: 2022_04	Order quantity: 5.001	Performed Qty: 4.801	96 %

Figure 4-23 Orders

The users can continue the orders that were not completed.
To continue an interrupted order, expand the order and click **Continue**.

Order No.: O1001 Order quantity: 10.000 Performed Qty: 9.000 90 %

Date	Shift	Performed Qty	Name	
2022-07-04 11:29	2	6.000	Bruno Rodrigues	<input type="button" value="Continue"/>
2022-07-04 11:29	1	3.000	Bruno Rodrigues	

Figure 4-24 Continue an interrupted order

Note

If the tool is not clamped, users cannot continue the order. The tool should be clamped before continuing the order. To clamp a tool, refer to the **Adding clamping event** topic above.

Maintain / Repair

This tab contains the data related to the maintenance of the tool and its service requests.
Refer the **Adding Maintenance Activity** topic in the Tool History (Page 49) in the **Manager** app.

Figure 4-25 Maintain / Repair

Tool Files

This tab contains the tool files that are uploaded in the **Admin** app.

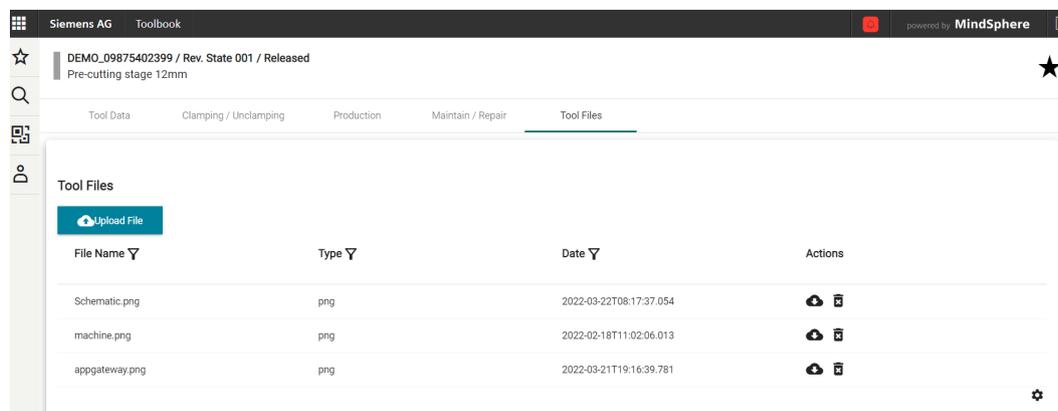


Figure 4-26 Tool Files tab

Appendix

5.1 Monitoring Guaranteed Output Quantity Calculations

Calculation of End of Use

To calculate the end of use of a tool, all manufactured material numbers of both the **Share supplier** and **Share tool** are included.

Calculation of Start Production or Start Order

Start of Production = end of use-production time

Start Order = end of use-production time-order time

Production Time: Time in months which is needed to build the tool. This time is specific to a particular tool.

Order Duration: Time in months, which is needed until the tool is ordered from the supplier. This time is a general, non tool related specification.

5.2 Monitoring Capacity Calculations

Any tool has the following key properties:

Property	Description
Max Output Capacity	Agreed Output Capacity is also called as Guaranteed Output Capacity. The only difference lies in where these values are derived from. If the tool is designed to guarantee a certain number of pieces, then it is called as Guaranteed Output Capacity. If the supplier assures that the tool can produce a little more than what it is designed, then it is called as Agreed Output Capacity
Capacity	The Tool Capacity is measured per month. It is the maximum number of pieces the tool can produce in a month.
Start Ordering Date	A date calculated depending on the projections of demands within the next 24 months and also on the number of parts produced by the tool. This date is significant to order a new tool in advance so as to have a replacement when the old tool is scrapped.

Critical Criteria

On the basis of the above properties, there are three kinds of critical criteria:

Criteria	Description
Max Output Capacity Exceeded	This indicates that the tool has already reached the maximum.
Capacity Exceeded	If the tool, for instance has a capacity of producing 10,000 units per month, but the demands in any particular month is greater than the capacity, then the number of times demands curve crosses the capacity line is calculated.
Start Ordering Date Passed	<p>This is calculated based on the following properties:</p> <ul style="list-style-type: none"> • Replenishment Time: The number of months taken to replace the tool • End of Usage: It is the month in which the tool reaches the maximum output capacity <p>If the sum of the Start Ordering Date and Replenishment time exceeds the End of Usage , then the tool is termed Critical because the tool cannot be replaced before the end of usage.</p>