

mobiVUE PMMS (Pharmaceutical Manufacturing Management System)

Ajanta Pharma Limited

The document details the summary of solution architecture and approach for the development of mobiVUE PMMS for Ajanta Pharma Limited. The document is based on the visit to the Guwahati plant of Ajanta Pharma Limited and inputs gathered, discussions held between BCI & Ajanta Pharma Limited.

This document will represent the Issuance module covering below modules

1. Cubicle Assignment
2. Cubicle Cleaning
3. Line Clearance
4. Picking
5. Pre stage
6. Dispensing
7. Stage Out
8. Reallocate Dispensed Material Bin
9. Return to Vendor
10. Destruction

*Note: This may not be a comprehensive report and needs verification and confirmation by Ajanta Pharma Limited.*

Project Scope: Issuance of material to Production department

Software Requirement Specification (SRS)

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| REVISION NO. | DATE | PREPARED BY | REVIEWED BY | COMMENT |
| 1 | 1-03-2021 | Abhishek P Palwankar | Hamir Thakur | Initial Document |

REVISION HISTORY

**Abbreviations:**

**Client: Ajanta Pharma Limited**

**Vendor:** Bar Code India, henceforth, will be referred as BCI.

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# Specification Organization

The objective of this document is to provide underlying concepts, procedures, and formats used in the design, development and installation of this software application. This specification consists of three sections organized as follows:

**Section 1: Introduction**

This section provides hardware requirements and documentation conventions.

**Section 2: User Interface**

This section depicts screen design and logic flow, and is categorized into two groups:

* Application Function Module
* Common Routine

**Section 3: System Architecture**

This section provides information of system architecture.

# Introduction

## Intended Audience and Reading Suggestions

The scope of this document is to provide the understanding of this solution to user & development teams associated with the application development & implementation.

This document major emphasizes on providing clear understanding **of mobiVUE PMMS**

This solution comprises of:

* Web Application
* Mobile Device Application
* Web Services
* SAP Interfaces

## Project Scope mobiVUE PMMS

The project scope is to develop and implement the Automation System at Warehouse, Manufacturing and Finish Goods for Ajanta Pharma Limited, the solution will facilitate user to manage the storage of inventory at warehouse and also helps in efficient allocation of Material for Sampling and Dispensing. Barcode Labels will be generated for the received Material Packaging i.e. Containers or Bags against the Gate Entry Number; the application also provides identification for Equipment, Dispensing Booths, Weighing Machine, In-process machines, Pallets, Trolleys and process/dispensing rooms.

The application will be integrated with the Weighing Machine which will help to capture weight automatically, this help as it provides control on inventory as no wrong Material or quantity can be issued.

The system will be integrated with the SAP and will control the flow of information from application to database and vice- versa. Each and every transaction will be recorded along with the time stamp which will help user to access any process related information as and when required.

This would require development of Wi-Fi enabled application for real time transactioni.e.the data will be captured in real-time, once the data has been collected, the database can then provide useful reports about status of material.

The entire solution consists of followings:

* Web Application
* Mobile Device Application
* Web Services
* SAP Interface with PI Server

# Software/Hardware Requirements

Below are the hardware and the software requirements of the application:

\*TO BE CHANGED AS PER APPLICATION REQUIREMENT

## Plant Server (Both DB and Application)

The solution would require the high performance server with minimum following:

Server will be placed as 1 for prod & 1 for DEV/QA

|  |  |
| --- | --- |
| **Descriptions** | **Qty** |
| HPE DL20 Gen10 4SFF SERVER : 1 x INTEL XEON E-2136 6C 3.3GHz Processor rail kit, 1xLP riser, HP drive cage | 1 |
| HPE 16GB 2Rx8 PC4-2666V-E STND Kit | 2 |
| HPE 1TB SATA 7.2K SFF SC DS HDD | 2 |
| HPE 500W FS Plat Hot Plug LH Power Supply Kit | 2 |
| 3years 4hour response 24x7 warranty | 1 |

## Desktop Computers

Desktop would require following specifications:-

* I3/i5 Processor with Windows 7 operating System
* 16 GB RAM
* 100GB HDD
* Dot net Framework 4.0

## Hardware Requirements

Hardware required for the application:

* Android Mobile Device
* Zebra Barcode Label Printer

# User Interface Specification Conventions

This section specifies the user interface portion of the application.

**Section Organization**

The User Interface Specification presents screen displays or “**Dialogs**”.

**Documentation Conventions**

This section incorporates illustrations of the application user interface. Each screen display “Dialog” consists of the screen display image, a process name, a paragraph documenting the processing required for the dialog, a paragraph listing the navigation options, and a table listing for each variable field on the dialog, its database source or destination, format, and any instructions required to process the field.

The following section contains a sample dialog with each area identified.

# System Log

System shall maintain internal logs for application.

## Error Logs

These logs will contain any errors encountered during runtime for faster resolution of any problem post deployment.

# Architectural Design

\*TO BE CHANGED AS PER SYSTEM REQUIREMENT

Overall System consists of:

* Web Application
* Device Application
* Web Services

## Web Services

This application will handle the device request in real time. Most of business logic on scanning will run on this module. Web Service will be hosted in IIS Services, Web Services will run on central server.

## Device Application

This application will include warehouse process modules. Application will directly communicate with user input and process the request to communication server.

## Web Application

A Web Application will be developed using which users will create the master data, download details from SAP, prints item barcode label etc. It also helps to generate and display related transaction reports to End Users in real time.

# Application Modules

## Application Login

This login module will provide access to the application modules. Here the admin/user needs to enter the login detail to enter in the application and to perform the desired actions.

**Process:** User needs to enter the User Name/ID and Password in display fields and press the Login button. Application will validate the user credential.

*User will be able to view only those screens/ modules of which he has been given access rights to.*

**Validation**

* User Name/ ID will be unique for all users.
* User Name/ ID and Password length will be set.

After successful login application menu screen will appear; this screen will have the Master and Transaction options etc.

## Warehouse Process (Issuance to Production)

### Cubicle Assignment

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used to assign cubicle for dispensing of Raw material and Packing material against the process order |

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| --- | --- |
| **Pre-Conditions** | Process Order details needs to be imported from SAP. |

|  |  |
| --- | --- |
| **Process Steps** | * 1. Process Order is created in SAP by the production department and Batch is released same will be imported in PMMS Application.   2. When batch determination is done in SAP same will be imported in PMMS Application.   3. Grouping of Process Order will be done in PMMS Application for Processing Dispensing activity.   4. **Grouping of Process Order**  1. User will login PMMS Application using valid User ID and Password in Web application on a Desktop. 2. System will validate the User ID and Password and display the Main Menu in the device. 3. User will select the "Cubicle Assignment” menu from the list. 4. "Cubicle Assignment” screen will be displayed. 5. Process Order for which batch determination is done in SAP and same is imported in PMMS Application will be displayed in the drop down box. 6. User will select the Process Order from the drop down list and system will display Product Code, Description and Batch No. 7. For adding multiple process order of same product, user will click on “**ADD**” button on the screen. 8. System will display Process order having same Product Code in drop down 9. User will select single or multiple process order from the list which is to be grouped and click on “**Group**” button. 10. Selected Process Order will be grouped.     1. **Cubicle Assignment**         1. Groups created will be display in the drop down list.        2. User will select the group and system will display material list with all the details (Material Code, Description, SAP Batch No. and Qty. to dispense.)        3. System will also display cubicle list in a drop down belonging to the sub plant mentioned against the Login User. 11. For assigning cubicle to material user will follow be process 12. Select the group form the drop down list 13. Material details will be displayed Material Code, Description, SAP Batch No. and Qty. to dispense. 14. User will select the material code from the list; multiple selection of Material codes can be done. 15. And then select the cubicle from the list; in which the material is to be assigned for dispensing. 16. To select all material from the list; user can select “**Select All**” option. 17. All the materials from the list will be selected. 18. Then click on “**Assign**” button. 19. The cubicle will be assigned to the selected materials. 20. **De-Assign**     1. For any reason if user was to change the cubicle or remove the assignment of the cubicle to specific material.     2. User will select the material from the list and click on “**De-Assign**” button.     3. System will free the cubicle and material and will be available for assignment again. |

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| **Post-Conditions** | 1. Further process of dispensing can be done like Line clearance or Picking |

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| **Validations** | 1. While creating group system will validate process order release data is imported from SAP. 2. While assigning cubicle system will validate the material is not already assigned to other cubicle. 3. System will allow cubicle to be assigned to multiple material and cubicle will be activated for dispensing particular Group/Material after confirming in Line clearance. |
| **Sample Screen Design** | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Cubicle Assignment | | | | | | | |  | |  | |  |  |  |  |  |  |  |  |  | |  | Process Order | |  |  | Add |  |  |  | |  | Product Code | |  |  |  |  |  |  | |  | Batch No. |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | Group |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | Group |  |  | |  |  |  |  | |  |  |  |  |  |  |  |  |  | | Line Item No. | Material Code | Description | Sap Batch No. | Quantity | UOM | Expiry Date | Retest Date | A.R.No. | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | Cubicle ID |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  | |  | Assign |  | De-Assign |  | Close |  |  |  | |  |  |  |  |  |  |  |  |  | |

Changes

1. Manual Group creation option has been replaced with Auto group generation whenever user clicks on “Add” after selecting Product Code, Process Order and Batch Number.

### Cubicle Cleaning

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used for Cubicle cleaning process.to log the Area usage and cleaning digitally in system. |

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| --- | --- |
| **Pre-Conditions** | 1. Cubicle status should be unclean in system. |

|  |  |
| --- | --- |
| **Process Steps** | Cubicle cleaning will be done in 3 steps.   1. **Cleaning start process**   While starting the cleaning of cubicle user will scan and update start time in system using Mobile device.  **Process Steps**   * 1. When user is going to start the cleaning.   2. User will login in PMMS device application.   3. In Menu click on “Cubicle Cleaning”   4. System will display cubicle cleaning screen   5. User will scan cubicle barcode which is applied on cubicle door.   6. Then select type of cleaning from the list (A,B,C)   7. Then click on “**Start**” button, system store as start time in database against the cubicle.  1. **Cleaning Stop**    1. After completing cubicle cleaning user will login again in the PMMS device application.    2. In Menu click on “Cubicle Cleaning”    3. System will display cubicle cleaning screen    4. Scan the Cubicle ID    5. System will display type, start time and start button will be disable and in Green Color.    6. And also display check list as per the type selected while start cleaning below.    7. User will check as “Yes” or “No” or “N.A.”, If user select “No” or “N.A.” then user will enter remark in next column.    8. If User select “No” then system will not allow verification and also allow ReCleaning.    9. After completing the check list, User will click on “**Clean**” button.    10. System will store date and time as cubicle cleaning “**Stop time**”.    11. Check list Results noted and completed here. 2. **Verification**    1. Check by user will login in the PMMS device application.    2. In Menu click on “Cubicle Cleaning”    3. System will display cubicle cleaning screen    4. User will scan the cubicle barcode    5. System will display type, start time and start button will be disable and in Green Color.    6. And also display check list with results selected while Cleaning Stop.    7. Then click on “**Checked**” button    8. System will store date and time as “**Checked By**” and login user id. |

|  |  |
| --- | --- |
| **Post-Conditions** | 1. Line clearance of cubicle against process order |
| **Validations** | 1. Sequence of cleaning will be followed as Cleaning Start, Cleaning Stop and Verification 2. Unclean cubicle can only start cleaning. 3. If cleaning is not completed at the end of the day by user, then higher authorized user needs to scan and approve to start cleaning for next day. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Cubicle Cleaning | | | | | | |  |  |  |  |  | | Scan Cubicle | |  |  |  | |  |  |  |  |  | | Area |  |  |  |  | | Type |  |  | A,B,C | Start | | Check List | |  |  |  | | List |  | Result | | Remark | | 1 |  | Yes | No| N.A. |  | | 2 |  | Yes | No| N.A. |  | | 3 |  | Yes | No| N.A. |  | |  |  |  |  |  | |  |  |  |  |  | |  | Clean |  | Close |  | |  |  |  |  |  | |

Changes

1. Cleaned Cubicle can also be used for Cubicle Cleaning again.
2. In- Progress cleaning of any cubicle will be discarded after midnight and Cleaning process need to start again next day.
3. No Authorization is required for Re-Cleaning.

### Equipment Cleaning

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used for Equipment cleaning process.to log the Area usage and cleaning digitally in system. |

|  |  |
| --- | --- |
| **Pre-Conditions** | * + - 1. Equipment status should be unclean in system. |

|  |  |
| --- | --- |
| **Process Steps** | Equipment cleaning will be done in 3 steps.   1. **Cleaning start process**   While starting the cleaning of Equipment user will scan and update start time in system using Mobile device.  **Process Steps**   * 1. When user is going to start the cleaning.   2. User will login in PMMS device application.   3. In Menu click on “Equipment Cleaning”   4. System will display Equipment cleaning screen   5. User will scan Equipment barcode which is applied on Equipment.   6. Then system will display type of equipment “**Fixed/ Portable**”.   7. **Fixed Process:**      1. Scan cubicle Barcode in which the equipment is placed.      2. System will valid from master is the cubicle and equipment is matching.      3. Then click on “**Start**” button, system store as start time in database against the equipment.   8. **Portable**      1. Scan the Cleaning Area barcode      2. Then scan the equipment barcode      3. Then click on “**Start**” button, system store as start time in database against the equipment.  1. **Cleaning Stop**    1. After completing cubicle cleaning user will login again in the PMMS device application.    2. In Menu click on “Equipment Cleaning”    3. System will display Equipment cleaning screen    4. User will scan Equipment barcode.    5. System will display type, cubicle, start time and start button will be disable and in Green Colour.    6. And also display check list below    7. User will check as “Yes” or “No”. if user select “No” then user will enter remark in next column.    8. After completing the check list, User will click on “**Save**” button.    9. System will store date and time as cubicle cleaning “**Stop time**”.    10. Check list Results noted and completed here. 2. **Verification**    1. Check by user will login in the PMMS device application.    2. In Menu click on “Equipment Cleaning”    3. System will display Equipment cleaning screen    4. User will scan Equipment barcode    5. System will display type, cubicle, start time and start button will be disable and in Green Color.    6. And also display check list with results selected while Cleaning Stop.    7. Then click on “**Checked**” button    8. System will store date and time as “**Checked By**” and login user id. |

|  |  |
| --- | --- |
| **Post-Conditions** | 1. Line clearance of cubicle against process order |

|  |  |
| --- | --- |
| **Validations** | 1. Sequence of cleaning will be followed as Cleaning Start, Cleaning Stop and Verification 2. Unclean cubicle can only start cleaning. |
| **Sample Screen Design** | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Equipment Cleaning | | | | | | | | Scan Equipment | |  |  |  | | |  |  |  |  |  | | | Area |  |  |  |  | | |  |  |  |  |  | | | Type |  |  | Fixed/ Portable | |  | | Cleaning Type |  |  | A,B,C |  | | | Scan Cubicle | |  |  |  | | | Check List | |  |  |  | | | List |  | Result |  | Remark | | | 1 |  | Yes | No |N.A |  | | | 2 |  | Yes | No |  | | | 3 |  | Yes | No |  | | |  |  |  |  |  | | |  |  |  |  |  | | |  | Clean |  | Close |  | | |  |  |  |  |  | | |

Changes

1. Cleaned Equipment can also be used for Equipment Cleaning again.

### Line Clearance

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used for Line Clearance of cubicle against process order/ Group |

|  |  |
| --- | --- |
| **Pre-Conditions** | 1. Cubicle Cleaning is completed |

|  |  |
| --- | --- |
| **Process Steps** | Line Clearance will be done in 3 steps.   1. **Line Clearance**   User will perform line clearance check list in PMMS device application   * 1. User will login in the PMMS device application.   2. In Menu click on “**Line Clearance**”   3. System will display Line Clearance screen   4. Scan the Cubicle ID   5. And also display check list below   6. User will check as “Satisfactory (S)” or “Non-Satisfactory (NS)” or “N.A”, if user select “No” then user will enter remark in next column.   7. Then select the Material /Group from the list which are assigned to the cubicle and system will lock the Material/ Group as will be processed next and no other Material/ Group will be allowed for pre stage   8. After completing the check list, User will click on “**Save**” button.   9. Line clearance will be completed here.  1. **Checking by Warehouse person**    1. Check by user will login in the PMMS device application.    2. In Menu click on “Cubicle Cleaning”    3. In Menu click on “**Line Clearance**”    4. System will display Line Clearance screen    5. Scan the Cubicle ID    6. System will display check list with results selected while line clearance.    7. Then click on “**Checked**” button    8. System will store date and time as “**Checked By**” and login user id.    9. If anything is found non satisfactory then user will click on “**Reject**” button 2. **Verification by QA**    1. Check by user will login in the PMMS device application.    2. In Menu click on “Cubicle Cleaning”    3. In Menu click on “**Line Clearance**”    4. System will display Line Clearance screen    5. Scan the Cubicle ID    6. System will display check list with results selected while line clearance.    7. Then click on “**Verify**” button    8. System will store date and time as “**Verified By**” and login user id.    9. If anything is found non satisfactory then user will click on “**Reject**” button. |

|  |  |
| --- | --- |
| **Post-Conditions** | 1. Picking of material will be done. |

|  |  |
| --- | --- |
| **Validations** | 1. Scanning of cubicle barcode will be allowed for which Cubicle cleaning completed for Line clearance. 2. Once line clearance is done then only verification can be performed. 3. If activity is not accepted by checked by or verified by then again Re-line- clearance needs to be performed. |
| **Sample Screen Design** |  |

### Picking

**Activities**

|  |  |
| --- | --- |
| **Module Description** | The Module will be used to Pick material from Location and place in Pre stage area. |

|  |  |
| --- | --- |
| **Pre-Conditions** | 1. Group needs to be created. 2. Material is allocated in location. |

|  |  |
| --- | --- |
| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Picking**” 3. System will display Picking screen. 4. Scan/Enter the Cubicle ID 5. And also display Group in drop down list which is assigned to cubicle 6. User will select the Group for which user is going to perform picking. 7. Then material from the Group will be displayed in drop down list. 8. Then user will select material code and SAP batch no. displayed in drop down list. 9. Then user will select SAP batch No. and system will display suggested Location from where user can pick the material. 10. Then user will reach to the location and Scan Location barcode to verify the location from where user will pick the material 11. System will validate the Suggested location and Scanned location are matching. 12. Then user will scan material barcode on the container. 13. System will validate Expiry Date, Retest date, Material is approved and also it is as per Material and SAP batch no selected. 14. As system validated container count and quantity will be added and displayed on screen 15. After completing the picking for that material user will click on “**Save**” and then system will allow picking for next material. |

|  |  |
| --- | --- |
| **Post-Conditions** | 1. Material will be placed in Pre Stage area. 2. Pre Stage activity will be preformed |

|  |  |
| --- | --- |
| **Validations** | 1. An alert message is displayed in case of any error / invalid activity. 2. System will validate the Suggested location and Scanned location are matching 3. System will validate Expiry Date, Retest date, Material is approved and also it is as per Material and SAP batch no selected. 4. Cubicle scanned will be validated as cubicle is assigned or not. 5. Duplicate scanning of material barcode will not be allowed. 6. Group wise saving will be done 7. System will not allow to pick less than required quantity. 8. While saving if all materials are not picked then system will not allow saving and also display which material is pending. |

|  |  |
| --- | --- |
| **Sample Screen Design** |  |

### Pre Staging

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used to validate material movement from pre staging area to Dispensing booth. |

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| --- | --- |
| **Pre-Conditions** | 1. Material Picking is completed and material is placed in Pre Stage area. 2. Line of Cubicle/Material to be completed. |

|  |  |
| --- | --- |
| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Pre Staging**” 3. System will display Pre Staging screen 4. Scan the Cubicle ID 5. System will display Group, Material and SAP Batch No. for which picking is completed. 6. Then user will scan the material barcode which is to be pre stage. 7. System will validate whether the scanned material barcode is picked for that particular cubicle or not. 8. System will updated as status as material pre staged. |

|  |  |
| --- | --- |
| **Post-Conditions** | 1. Perform Dispensing |

|  |  |
| --- | --- |
| **Validations** | 1. Duplicate scanning of material barcode will not be allowed. 2. Only picked material can be scanned in Pre Stage. 3. System will allow only multiple material at a time in staging. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Pre Stage | | | | | | |  |  |  |  |  | | Scan Cubicle | |  |  |  | |  |  |  |  |  | | Group |  |  |  |  | |  |  |  |  |  | | Material Code | |  |  |  | |  |  |  | |  | | SAP Batch No. | |  |  |  | |  |  |  |  |  | | Scan Material | |  |  |  | |  |  |  |  |  | | Container Count | |  |  |  | |  |  |  |  |  | | Quantity |  |  |  |  | |  |  |  |  |  | |  | Save |  | Close |  | |  |  |  |  |  | |  |  |  |  |  | |

### Staging

**Activities**

|  |  |
| --- | --- |
| **Module Description** | This module will be used to validate material movement from staging area to Dispensing booth. |

|  |  |
| --- | --- |
| **Pre-Conditions** | 1. Material Picking is completed and material is placed in Staging area. 2. Line of Cubicle/Material to be completed. |

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| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Staging**” 3. System will display Staging screen 4. Scan the Cubicle ID 5. System will display Group, Material and SAP Batch No. for which staging is completed. 6. Then user will scan the material barcode which is to be pre stage. 7. System will validate whether the scanned material barcode is picked for that particular cubicle or not. 8. System will updated as status as material pre staged. |

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| **Post-Conditions** | 1. Perform Dispensing |

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| **Validations** | 1. Duplicate scanning of material barcode will not be allowed. 2. Only picked material can be scanned in Pre Stage. 3. System will allow only one material at a time in Dispensing Booth. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Staging | | | | | | |  |  |  |  |  | | Scan Cubicle | |  |  |  | |  |  |  |  |  | | Group |  |  |  |  | |  |  |  |  |  | | Material Code | |  |  |  | |  |  |  | |  | | SAP Batch No. | |  |  |  | |  |  |  |  |  | | Scan Material | |  |  |  | |  |  |  |  |  | | Container Count | |  |  |  | |  |  |  |  |  | | Quantity |  |  |  |  | |  |  |  |  |  | |  | Save |  | Close |  | |  |  |  |  |  | |

### Dispensing

**Activities**

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| **Module Description** | This module will be used to Dispensed material which is to be issued to Production department |

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| **Pre-Conditions** | 1. Staging of the material is completed. |

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| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Dispensing**” 3. System will display Dispensing screen 4. Scan the RLAF Barcode. 5. System will display the process order no. from group which is to be dispensed. 6. And also system will store dispensing start time for that material when first time it is scanned. 7. User will Scan RLAF Barcode and system will display PO/Reservation, material and SAP batch no. 8. Then user will select SAP Batch No. and system will display Required quantity and balance quantity 9. Then user will scan material barcode which is to be dispensed. 10. System will validate Expiry Date, Retest date, Material is approved and also it is as per Material and SAP batch no selected. 11. User will select the UOM for dispensing and system will display Weighing Balance code belonging to that dispensing booth. 12. And also if the UOM selected is KG,MG,G then system will displayed GROSS, NET and TARE on screen to capture weight from balance and display accordingly and if the UOM is L,ML, EA, TH then system will display No of packs where user will pack quantity manually. 13. Then scan weighing balance barcode and system will capture weight from balance through LAN. 14. **Weighing Process:** 15. **Standard Weighing**     * 1. User will keep the empty poly bag on the weighing balance and then scan the barcode on the weighing balance containing Weighing ID system will capture the weight displayed on the weighing balance and store as Tare wt.       2. Then user will put the material in the poly bag and as it reach the require weight then scan the weighing balance barcode and system stores the Gross Wt. and calculate the Net wt. 16. **Gross Weighing** 17. User will keep the intact container on the weighing balance and check mark the “Gross” tab on the screen. 18. Then scan the weighing balance barcode and system stores the Gross wt. 19. Then user will enter Net wt. or Tare wt. system will calculate accordingly and display Gross, Net and Tare wt. on the screen. 20. **Packing label printing for No. of Packs Label** 21. While doing dispensing for no. of packs, system will display enter no. of packs 22. The No. of packs dispensing will be decided as per the UOM mentioned in the Process order for “issue quantity UOM” (each). 23. Then user will enter the no of packs 24. Then click on “**Print**” button then pop of User ID and Password authentication will be displayed, production person having authorization will be allowed and Dispensed label will be printed. 25. Net quantity or Issue quantity will deducted from balance quantity, system will allow multiple dispensing for the material till the balance quantity not equal to zero. 26. After completing dispensing for that material, user will click on “**Complete**” button, system will note the dispensing stop time in area and usage log. |

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| **Post-Conditions** | 1. Dispensed material will be palletized. 2. Loose container will reallocated at location. |

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| **Validations** | 1. System will validate Expiry Date, Retest date, Material is approved and also it is as per Material and SAP batch no selected. 2. Multiple scanning of same material barcode will be allowed till the material container quantity is balance. |
| **Sample Screen Design** |  |
| **Label Design** | 1. With Weight      1. With No. of packs |

Changes

1. Re-Print option provided for QA mode user.

### Stage Out

**Activities**

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| **Module Description** | This module will be used stage out the Loose Material. |

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| **Pre-Conditions** | 1. Dispensing is completed |

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| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Stage Out**” 3. System will display Stage Out screen 4. Scan the Cubicle ID 5. Then scan the loose material which is to be reallocated. 6. After completing scanning of all containers click on “**Complete**” button. |

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| **Post-Conditions** | 1. Reallocate the material to locations |

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| **Validations** | 1. Duplicate scanning of material barcode will not be allowed. 2. Only Loose material can be scan in stage out. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Stage Out | | | | | | | Scan RALF | |  |  |  | |  |  |  |  |  | | Group |  |  |  |  | |  |  |  |  |  | | Material Code | |  |  |  | |  |  |  | |  | | SAP Batch No. | |  |  |  | |  |  |  |  |  | | Scan Material | |  |  |  | |  |  |  |  |  | | Container Count | |  |  |  | |  |  |  |  |  | | Quantity |  |  |  |  | |  |  |  |  |  | |  | Complete |  | Close |  | |  |  |  |  |  | |

### Return to Vendor

**Activities**

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| **Module Description** | This module will be used return the rejected material to vendor |

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| **Pre-Conditions** | 1. Material is rejected. 2. Material document generated in SAP and transferred to PMMS application database. |

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| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Return to Vendor**” 3. System will display Return to vendor screen 4. Enter/Select the material document generated in SAP. 5. Details will be displayed on screen Material Code, Material description, SAP Batch No., A.R. No., Quantity, UOM and Vendor Name. 6. User will scan Material barcode. 7. System will validate the material is rejected or not. 8. Then after completing scanning of all material barcodes, user will click on “**Post**” to confirm SAP that return to vendor is completed. |

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| **Post-Conditions** | 1. Dispatch the material containers to vendor |

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| **Validations** | 1. Duplicate scanning of material barcode will not be allowed. 2. Only rejected material can be scan. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Return to Vendor | | | | | | |  |  |  |  |  | | Material Document | |  |  |  | |  |  |  |  |  | | Material Code | |  |  |  | |  |  |  |  |  | | SAP Batch No. | |  |  |  | |  |  |  | |  | | A. R. No. |  |  |  |  | |  |  |  |  |  | | Qty |  |  |  |  | |  |  |  |  |  | | UOM |  |  |  |  | |  |  |  |  |  | | Scan Material | |  |  |  | |  |  |  |  |  | |  | Post |  | Close |  | |  |  |  |  |  | |

### Destruction

**Activities**

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| **Module Description** | This module will be used destroy the rejected material. |

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| **Pre-Conditions** | 1. Material is rejected. |

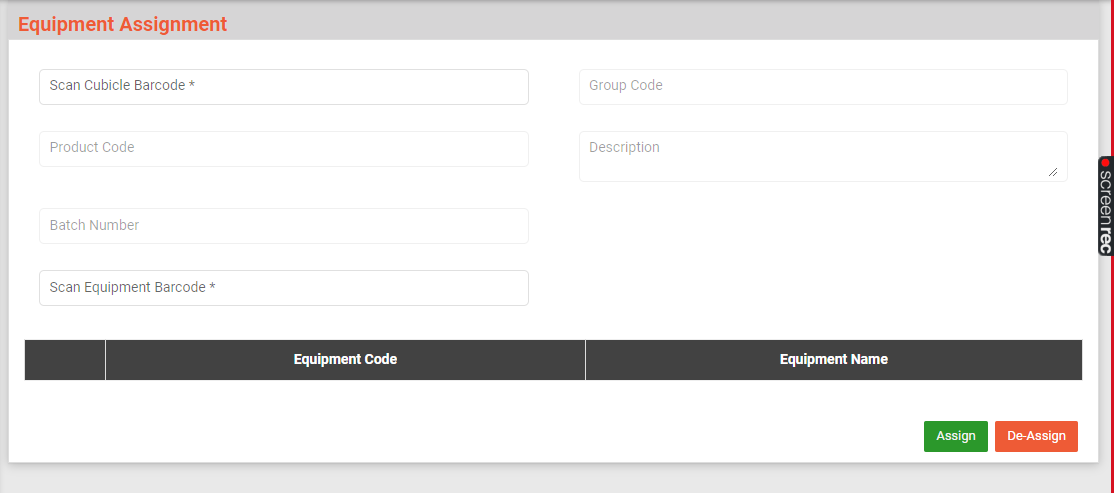
|  |  |
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| **Process Steps** | 1. User will login in the PMMS device application. 2. In Menu click on “**Destruction**” 3. System will display Destruction screen 4. Enter/Select the movement type (555/551) from the list. 5. 555- removal from rejected stock 6. 551- removal from approved stock. 7. User will scan Material barcode. 8. Details will be displayed on screen Material Code, Material description, SAP Batch No., A.R. No., Container Quantity, UOM. 9. System will validate the material is rejected or not. 10. Then after completing scanning of all material barcodes, user will click on “**Post**” to confirm SAP that Destruction is completed. |

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| **Post-Conditions** | 1. Destroy the material containers. |

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| **Validations** | 1. Duplicate scanning of material barcode will not be allowed. 2. Only rejected material can be scan. |
| **Sample Screen Design** | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Destruction | | | | | | |  |  |  |  |  | | Movement Type | |  | 555|551 |  | |  |  |  |  |  | | Scan Material | |  |  |  | |  |  |  |  |  | | Material Code | |  |  |  | |  |  |  |  |  | | SAP Batch No. | |  |  |  | |  |  |  |  |  | | A. R. No. |  |  |  |  | |  |  |  |  |  | | Qty |  |  |  |  | |  |  |  |  |  | | UOM |  |  |  |  | |  |  |  |  |  | |  | Post |  | Close |  | |  |  |  |  |  | |

Changes

## Equipment Assignment



### Reports

Reporting module will provide access to the data that will be helpful in making well-informed strategic decisions, reduces risk, and increases productivity. The reporting interface will be user-friendly, application users can easily generate, and view required data.

The application will generate customized reports based on required data fields and time interval selected / entered by users; Microsoft Crystal Reports/ RDLC Reports will be generated which can be exported into defined excel file/ PDF format as and when required.

Reports can be defined as private for restricted viewing – or made public, giving access to information based on access rights assigned to the particular user / group.

1. Cubicle Assigned Report
2. Picking Report
3. Cleaning Log (Cubicle & Equipment)
4. Line Clearance Report
5. Dispensing Report

# SRS Scope Change Process

## Before Sign Off

Any changes in SRS need to be informed in writing by Company Name. It will be incorporated / confirmed only after doing detailed feasibility study by BCI.

## After Sign Off

Any changes in proposed solution after approval of this document by Ajanta Pharma Limited are subjected to confirmation from BCI, taking feasibility constraints into account. These changes will be incorporated (if any) into the solution only after delivering proposed solution & may be charged as extra.

The changes in proposed solution before & after acceptance will be mutually agreed and duly signed and accepted by Ajanta Pharma Limited & BCI.

## SRS Acceptance

Agreed and Accepted by Ajanta Pharma Limited and Bar Code India

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Prepared by:**  **BCI** | **Name: Abhishek P Palwankar** | **Signature** |  | **Date:** |  |
| **Core Team :** | **Name:** | **Signature** |  | **Date:** |  |
| **Process Owner:** | **Name:** | **Signature** |  | **Date:** |  |
| **Approved by:**  **QA** | **Name:** | **Signature** |  | **Date:** |  |