



## Feature Scope Description

**SAP EAM, add-on for MRO 3.0 by HCL for  
SAP S/4HANA**

**May 2018**

## Document Control

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|              |   |                             |               |

## Foreword

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The following icons are used throughout this document:



*Suggestion or tip*



*Warning or caution*



*Example or illustration*



*Problem or strong caution*

SAP commands and inputs are provided in *UPPER CASE ITALICS*.

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## Overview

### Purpose

The industry solution for maintenance, repair and operations or overhaul (Add-on) Electronic Work Instructions (EWI) solution provides a customer-defined layout for online display of work instructions, supporting the execution of repair and manufacturing work orders in a single user-friendly operator portal. Information displayed is configurable, based on sets of “instructions” to represent typical electronic work instruction data from the work order (components, text, drawings, tools, inspection results etc.). As well as a user-friendly display of work instruction data in electronic form, EWI allows shop floor operator input via single-click action buttons and codes to make capture of shop floor data in a full screen terminal device as efficient and accurate as possible.

Through EWI, shop floor based and workshop mechanics, technicians and lead mechanics are able to record work performed and display work instructions. EWI is intended for one of the following two modes:

- ☑ As a configurable print-layout for job cards and SAP work instruction data, to support recording of shop floor events and input of these events by clerical assistants or production technicians and supervisors after the event, OR
- ☑ As a real-time electronic work order display and event capture tool, in the hands of or close to maintenance technicians as they perform work in the aircraft, engine, complex asset or component repair work-shops.

UI5- EWI displays work order and related information on a UI5 screen, with all relevant information available to the operator to perform shop floor work execution tasks. It is assumed that UI5- EWI is always connected to the SAP back-end system, i.e. that a robust wired or wireless network is available in the workshop environment. This tool is not intended for use by line or field maintenance technicians who are occasionally offline.

UI5-EWI include following functionalities- Order list based on variant, searching order through selection screen, order header detail display, order release, order technically completion (TECO) editing order header long text, display comment, add comment, operation list display, list of operation display, sub operations display, operation header detail display, operation long text editing, display operation comment, add operation comment, operation PRT list display, display of component list, add operation, delete operation, add component, delete component, object list table display, Header notification detail display, Notification long text editing, display notification planner comment, add notification planner comment, Notification completion (NOCO), labor clocking (including job clock on/off based on the Add-on Labor Solution<sup>1</sup>), labor clocking event table, digital signature, revoking digital signatures, digital signature log, Confirm order ,display documents, create defect, download document .

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<sup>1</sup> Refer to Labor feature scope guide for more information

## Implementation Considerations

- You have deployed and configured SAP S/4 HANA 1709 component
- You are using SAP's Plant or Service Maintenance (PM/SM) module to manage work orders and scheduling of orders.
- You have configured and created valid Personnel ID's<sup>2</sup> in SAP's Human Capital Mgt. (HCM) module

## Operators

This user guide is intended for:

|                                 |   |
|---------------------------------|---|
| <i>Shop floor personnel</i>     | to understand how to access EWI UI5, book time to orders, insert operator comments and inspection notes and results, create, change, display orders, check and update user status, insert / update and delete PRT and Documents etc.  |
| <i>Shop floor supervisors</i>   | to understand how to access EWI UI5 for the above plus split orders or transfer work, raise sub-orders (from defects or otherwise), check conformity, confirm the as-built structure, perform qualifications checks against skills/certifications and assign orders to shop floor personnel |
| <i>IT operations staff</i>      | to understand how the process runs and what system monitoring and administration is required to keep EWI UI5 running successfully   |
| <i>SAP analysts/consultants</i> | to understand how to execute the EWI UI5 App  |
| <i>SAP developers</i>           | to understand how to extend the EWI UI5 instructions to quickly build customer specific screen layouts, access custom data sources and tables and perform customer-defined actions or updates.  |

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<sup>2</sup> Personnel ID input is recommended but not required if you have separate SAP user-ids per shop floor person or user. They are required however to use the Labor Solution

## Features Summary

Fiori based Electronic Work Instruction (EWI) is part of HCL industry solution for Maintenance and Manufacturing add-on to SAP's Enterprise Resource Planning solution, Maintenance and Manufacturing Execution. EWI is a two-way interface allowing an electronic view of the work order combining all necessary operator data into a single user interface.



## Process Flow

The EWI application is designed to offer a simplified user interface to help shop floor users to execute shop floor operations on any work order. The application can be launched through SAP Fiori Launchpad or as standalone app on browser.

## Functionalities flow

### 1. User variant

Once the authentication is done on login via SAP Fiori Launchpad page or as standalone application URL, Order list will be fetched based on the default variant available in system. The application enables user to create his/her own variant, update any existing variant or simply select any variant among the list of variants (if there is any).

#### 1.1. Select user variant


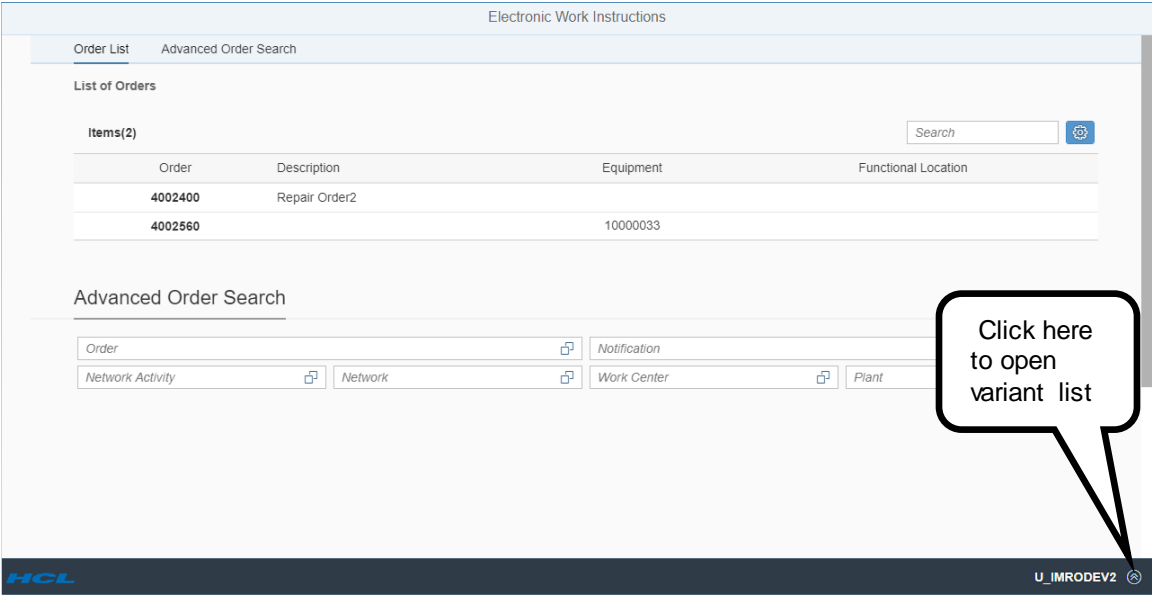
User can select any variant from the list if available, according to the required data/order saved in the variant by clicking on  button which will show a drop down list of available variants either created ab APP or by Transaction.

Figure 2: Order list screen




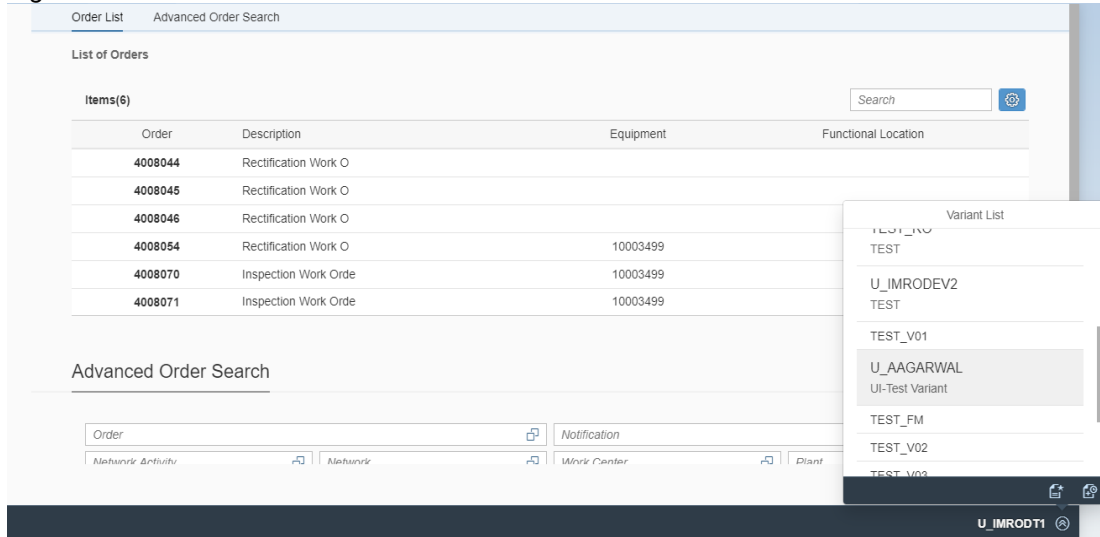
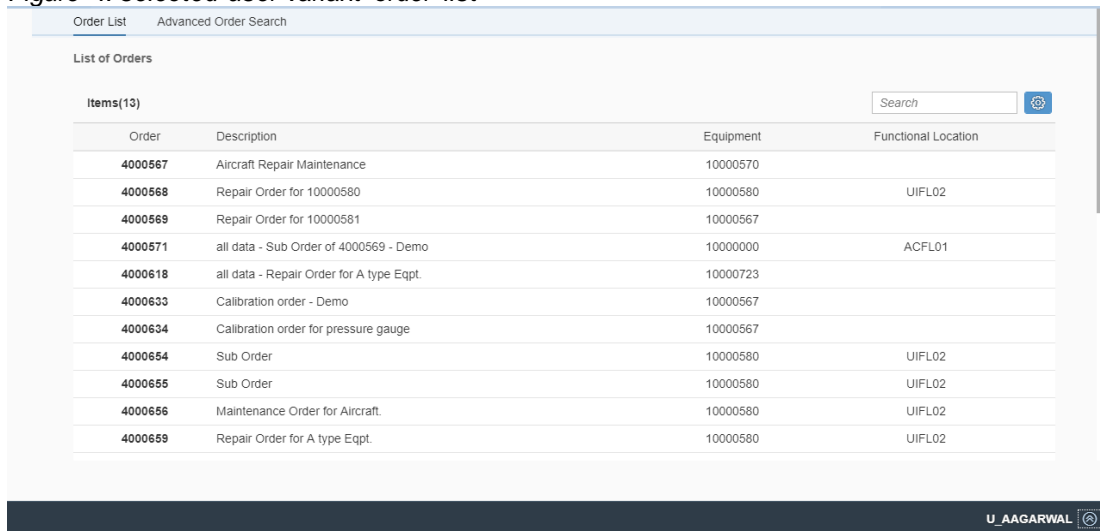
After clicking on the  button drop down list will be displayed.

Figure 3: Variant list screen



User can select any variant from the list to display the order list saved in that variant.

Figure 4: selected user variant order list



## 1.2. Create user variant

If user wants to create his/her own variant with existing or different orders/order for that this app also allows user to create new variant.


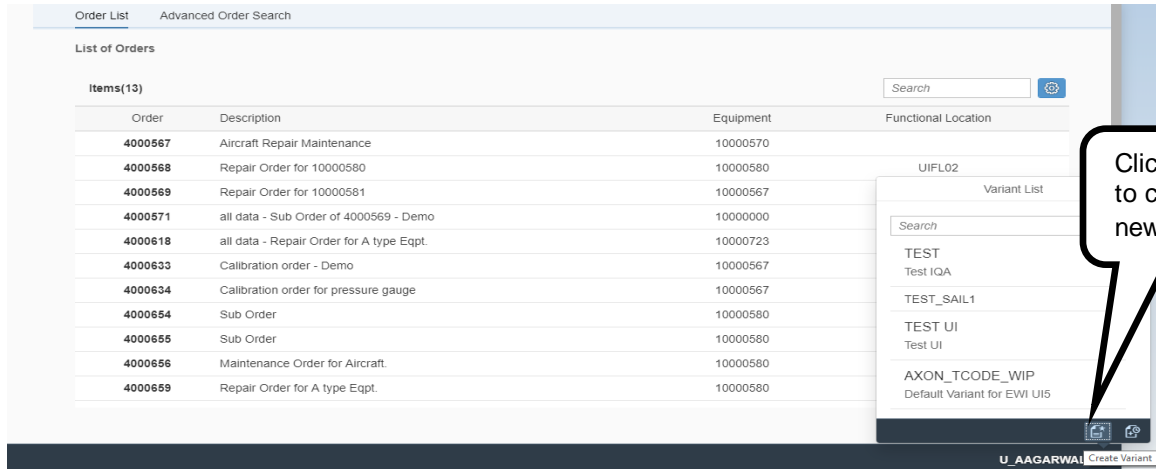
In variant drop down list user has a create variant button  by clicking on that the screen will be navigated to the create variant screen where user need to enter the required data.

Figure 5: variant list



Create variant screen has 3 section user can scroll down or click on them separately.

Figure 6: variant screen (selection for prioritization)

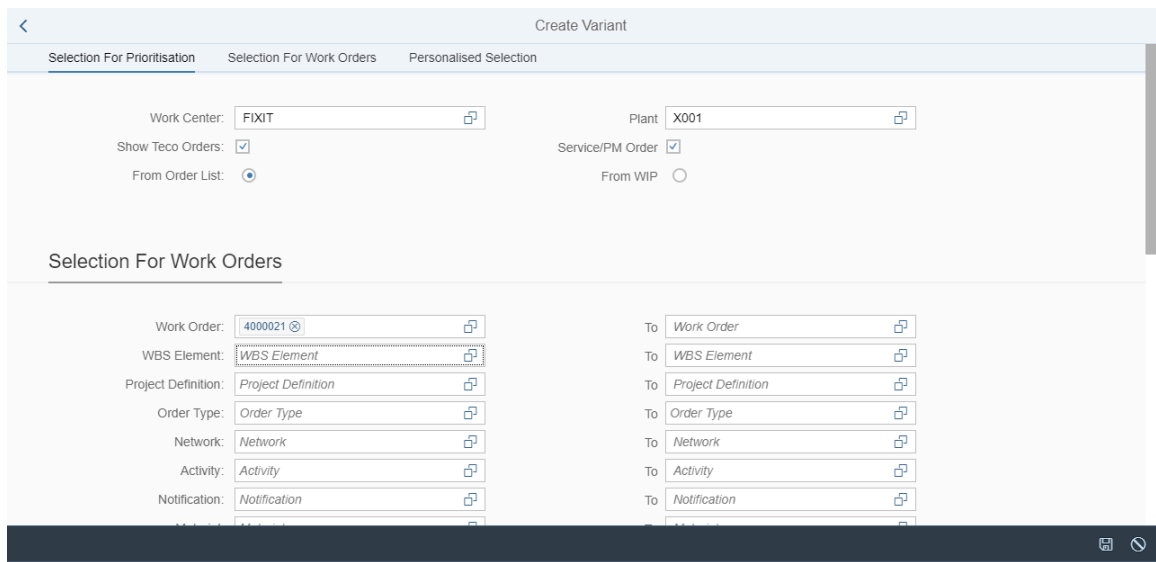


Figure 7: create variant screen (selection for work orders)

Figure 8: create variant screen (personalized selection)

Create variant screen has 3 section which separately have some key fields which user has to enter to create a new variant.

The create variant functionality is replica of Add-on transaction /AXONX/WIPD2.

After entering all the required/key fields click on the save button a success message will pop up **“Variant created successfully”**

Now user can select and work on created variant by selecting it from the available variant list.

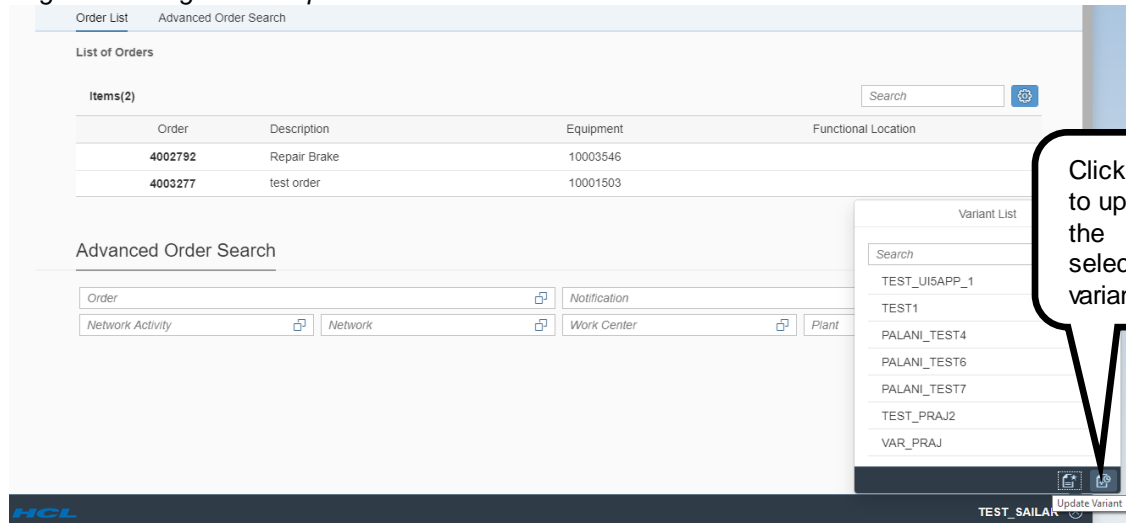
### 1.3. Update user variant

The app also enables user to make changes in any existing variant e.g. if user wants to add new orders or replace the existing orders etc.

The functionality can be reached by clicking on update variant button which is available under variant drop down list. For updating any variant user needs to select that variant

first once that particular variant is selected then user can change/update the variant.

Figure 9: Navigation to update variant screen



After clicking on the update variant button screen will be navigated to new screen which will show the existing data for that variant now user can change nay data as per his/her requirement

Update variant screen also have the sections like the create variant screen

Figure 10: update variant screen(selection for prioritization & selection for work orders)

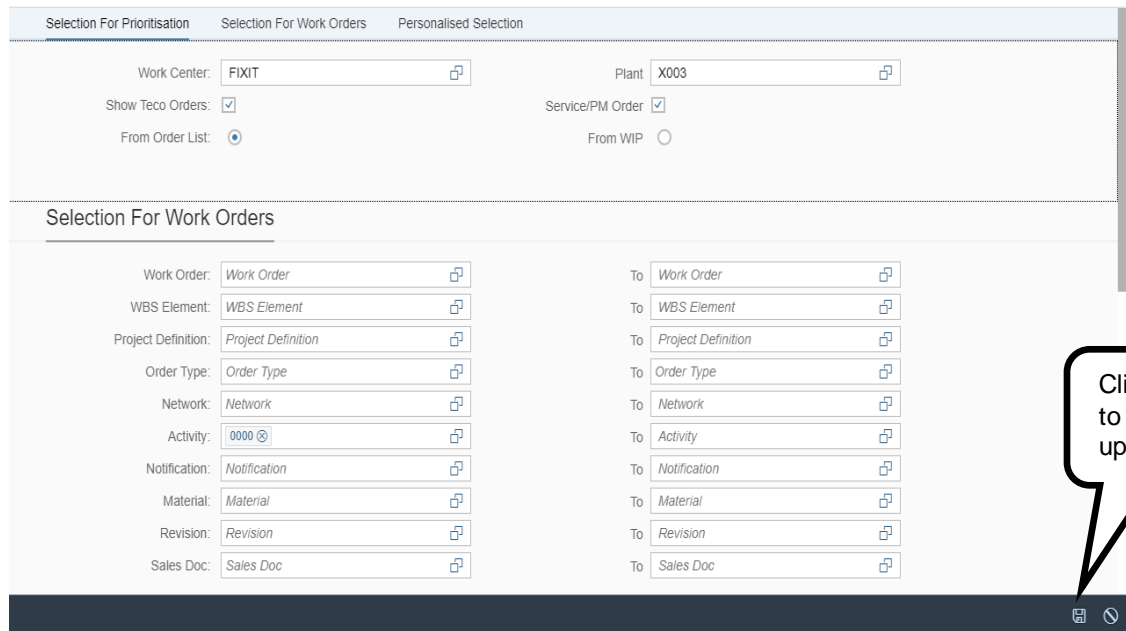


Figure 11: update variant screen(personalised section)

The screenshot shows the 'Advanced Order Search' interface with a 'List of Orders' table. The table has columns for Order, Description, Equipment, and Functional Location. A search bar is located at the top right. A success message is overlaid on the table.

| Order   | Description | Equipment | Functional Location |
|---------|-------------|-----------|---------------------|
| 4002695 |             | 10003469  |                     |
| 4002904 | test        |           |                     |
| 4002905 | test        |           |                     |
| 4003214 | test        |           |                     |
| 4003215 | test        |           |                     |
| 4003216 | test        |           |                     |
| 4003217 | test        |           |                     |
| 4003218 | test        |           |                     |
| 4003219 | test        |           |                     |
| 4003220 | test        |           |                     |
| 4003224 | test        |           |                     |
| 4003225 | repair      |           |                     |
| 4003226 | repair      |           |                     |

Variant TEST\_SAILAR updated successfully

After maintaining/changing the required data user needs to click on save button which leads user to a success message **“Update variant successful”**.

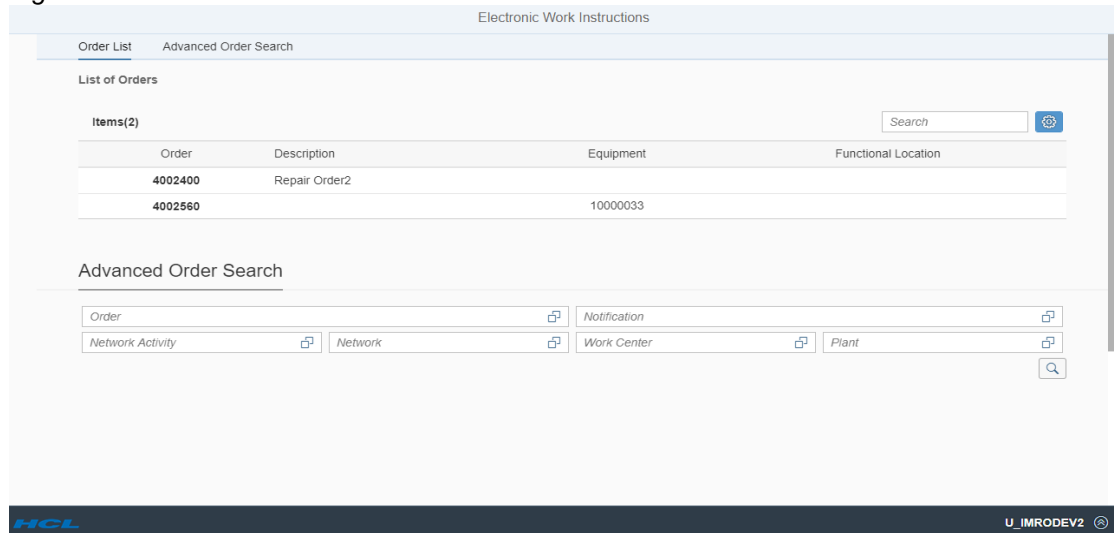


User can't change the name of any variant from the app.

## 2. Order list

Once the user login authentication done, Order list (Order category 30/40) will be fetched, based on variant saved in WIP report. Priority will be User variant (if it exists). If user variant does not exist, then system will search for system default variant. Order list based on variant, shown below in figure 12.

Figure 12: Order list screen



## 2.1. Column Selection

Initially, order list will show only 4 field's data i.e. Order number, order description, Equipment number and functional location. User can selected for fields by clicking on



column selection icon (icon shown in figure 13), and select the required fields as shown in the given below figure 14.

Figure 13: Column selection screen

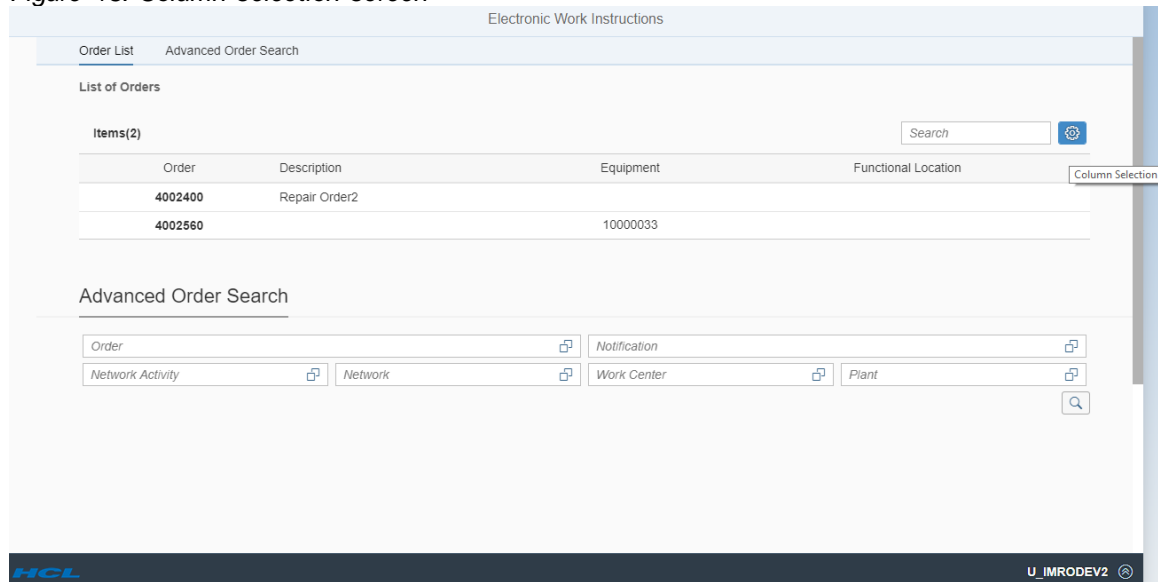
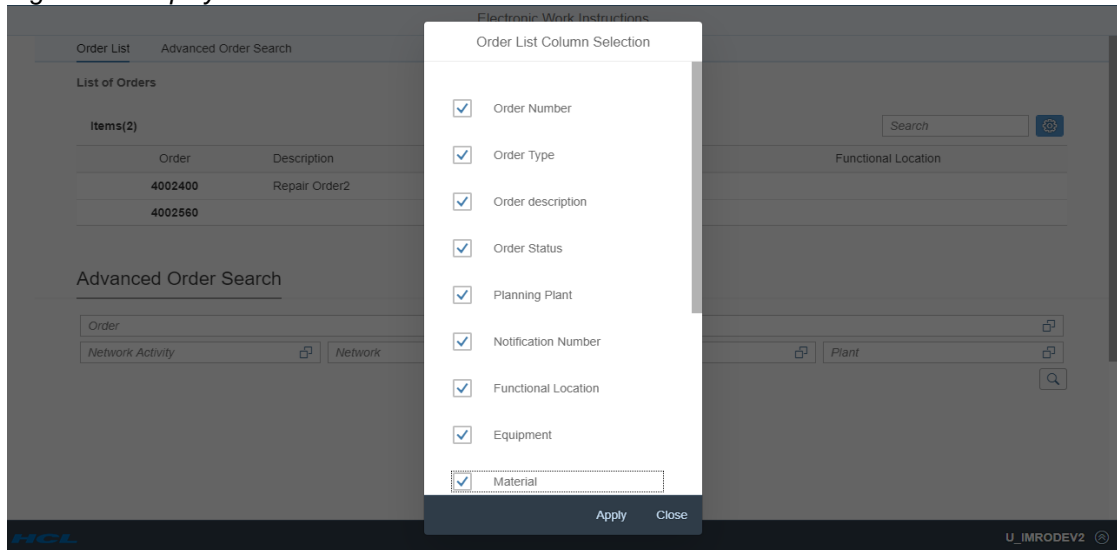
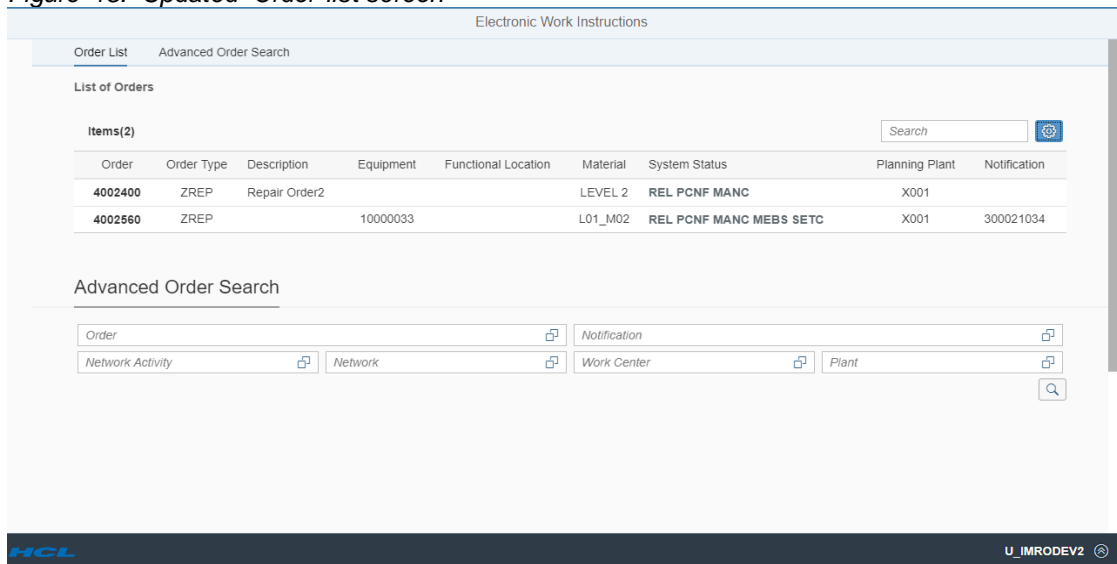


Figure 14: display column list needs to be selected



Selected fields will reflect on the list by clicking anywhere on the screen.

Figure 15: Updated Order list screen



## 2.2. Selection screen


This screen helps the user to navigate to any order which is not part of the orders list selected through the selection variant, as shown in figure 16. For opening the selection screen, click on selection button. In selection functionality, we have option to search order or orders through any one given below fields:



1. Order number
2. Notification number
3. Network and activity
4. Work center and Plant

open  
selection  
screen

Figure 16: Selection screen

On click of  button, order or order list will be displayed after entering the order details.



Either if any one fields is mandatory in selection screen i.e. if user maintain order number and notification number, both then system gives a error message as **“ Please enter only one selection criteria”**. Maintaining value of activity is mandatory for Network. Similary work center plant and work center ,both should be maintained.

There is an option to read the orders through Bar code or QR code reading also. This option is active ,when we run the APP of the application. The fields to read the code will be there just after “work center plant”.

### 2.3. Default Order List

After user authentication default order list based on default variant will be displayed to user, user can change the list by changing the variant.


Figure 17: Order list, fetched from the default variant

The screenshot displays the 'Electronic Work Instructions' application interface. At the top, there are two tabs: 'Order List' (selected) and 'Advanced Order Search'. Below the tabs, the 'List of Orders' section shows a table with two items. The table has columns for Order, Description, Equipment, and Functional Location. Below the table is an 'Advanced Order Search' section with several input fields: 'Order', 'Notification', 'Network Activity', 'Network', 'Work Center', and 'Plant'. A search icon is located at the bottom right of the search section. The HCL logo is visible in the bottom left corner, and the user ID 'U\_IMRODEV2' is in the bottom right corner.

| Order   | Description   | Equipment | Functional Location |
|---------|---------------|-----------|---------------------|
| 4002400 | Repair Order2 |           |                     |
| 4002560 |               | 10000033  |                     |

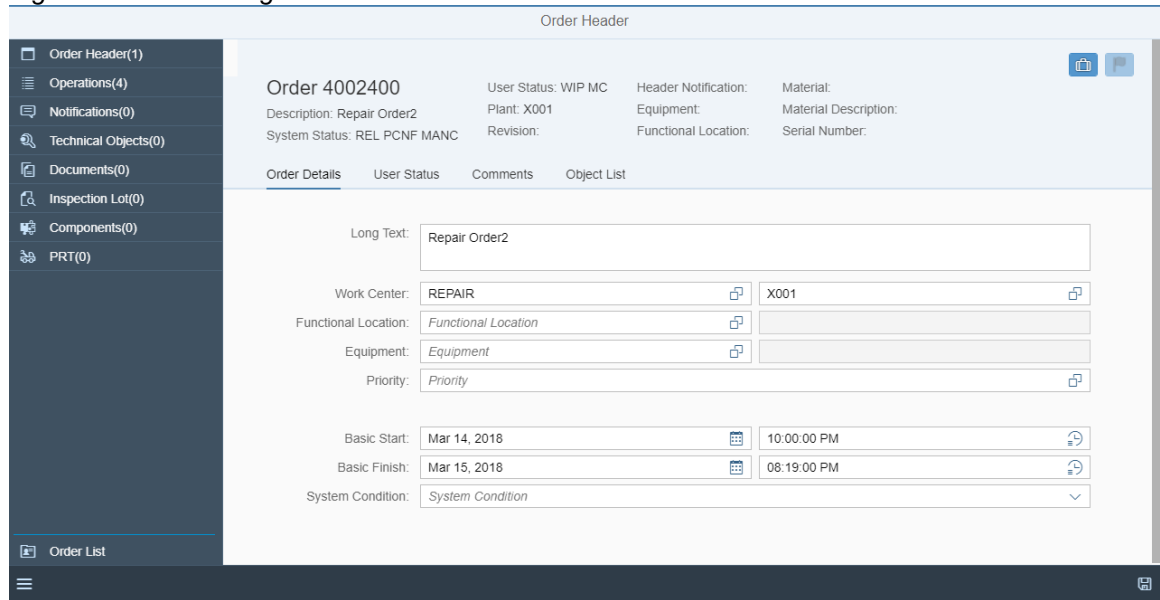
## 2.4. Navigation Pane List



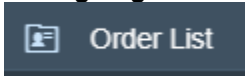
When user reaches any order then by clicking on  button user can select any of the functionality given below.

1. **Order header:** It will show the header details of the order.
2. **Operations:** This functionality will show all operations, of the order in list form and further in detail too can be seen.
3. **Notification:** This functionality will show the detail of header notification of the order.
4. **Technical Object:** This functionality will display the object list attached to the order in grid form.
5. **Documents:** Any documents attached to this order header and operation level will be shown in this functionality.
6. **Inspection lot:** this bar will navigate user to see the inspection lot generated for the inspection done and result recorded for all the MIC's attached to the order.
7. **Components:** This bar shows the components inserted in order.
8. **PRT:** this tab shows the cumulative PRT list used for all the operations in order

Figure 18: Order navigation



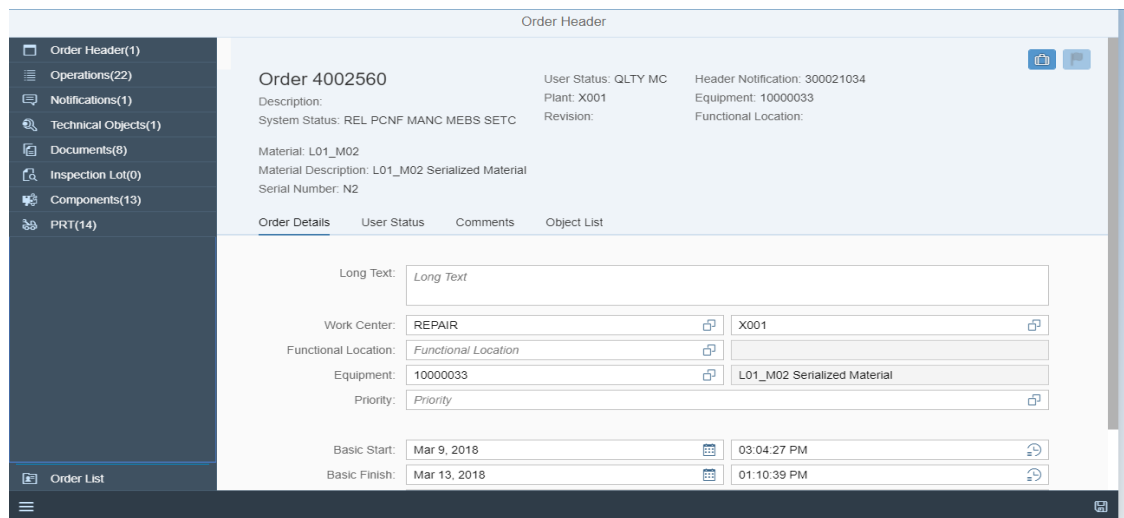
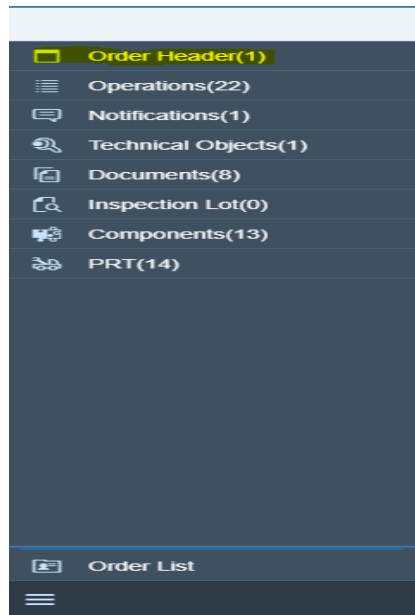
For going back to order list screen, click on  or click on Orders button



### 3. Order Header

Clicking on order header functionality, order header detail screen will open. Order header detail screen will display the all-important fields of order header. See figure 19

Figure 19: Order header detail screen



**All fields of order header detail screen will be in editable mode if order is not technically completed .**

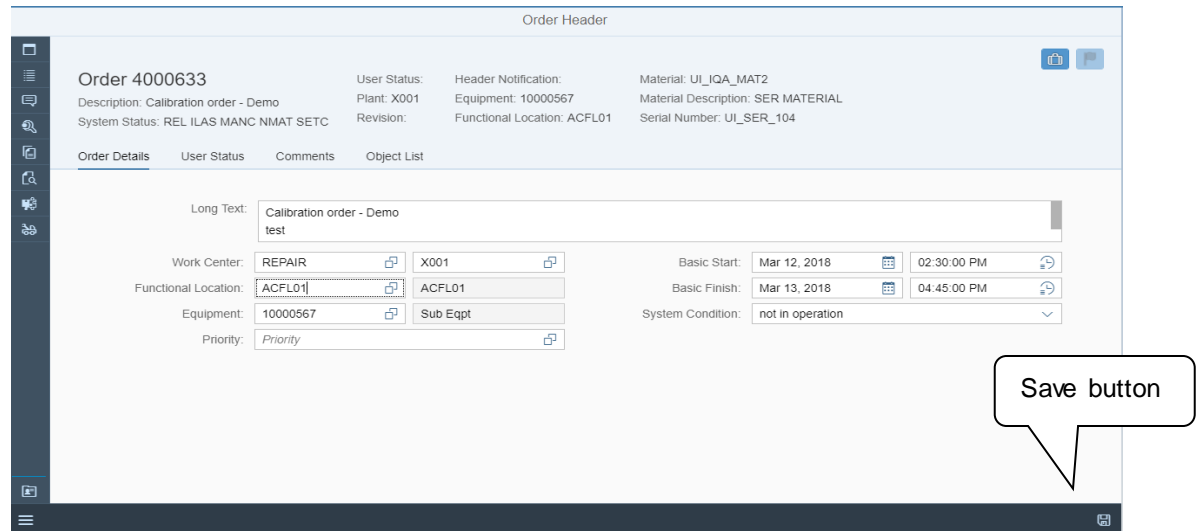
**At any point if switching to other functionality is required, that can be done by**

**clicking on  button, which will open the list of all functionalities in list form.**

### 3.1. Change/Update Order

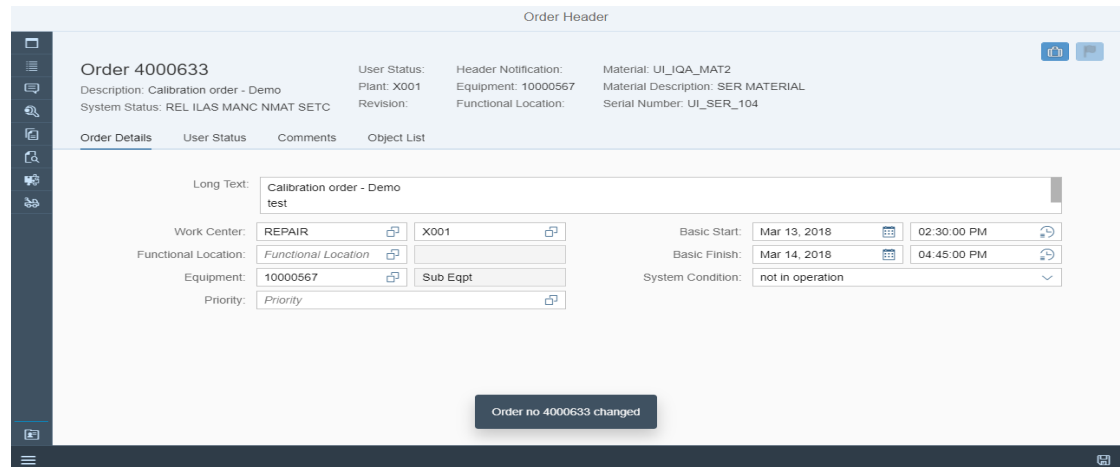
This functionality enables the user to change the Order details, if order is not technically completed then user can update the order information any time by coming to order header screen

Figure 20: Order header screen




Do the required changes and click on the save button.

Figure 21: Order changed successfully



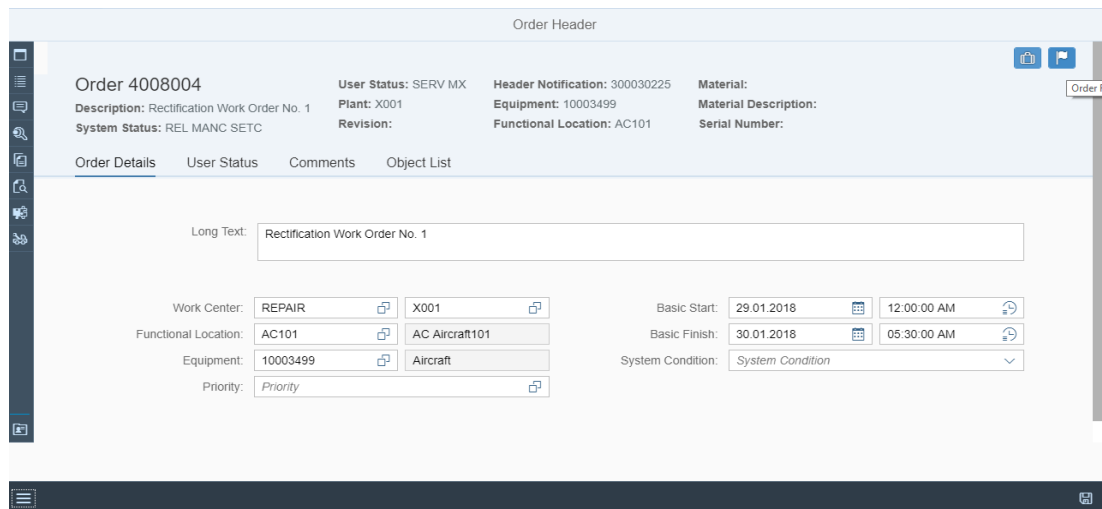
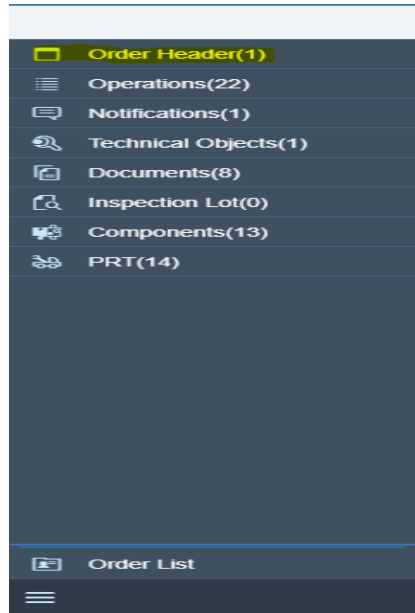
➤ For going back to order list screen, click on  or click on Orders button

 to go back to order list screen.


### 3.2. Order Release

Order with the status created (CTRD), can be released from here. A flag symbol is there to symbolize release button.

Figure 22: Release flag for order header



Initially when the order is in created status (CRTD), order release flag will be active and TECO icon will be disabled, but once we release the order release flag will be disabled and TECO icon will be active.

At any point if switching to other functionality is required, that can be done by clicking on  button, which will open the list of all functionalities in list form.

### 3.3. Display/Update Long Text (Order header)


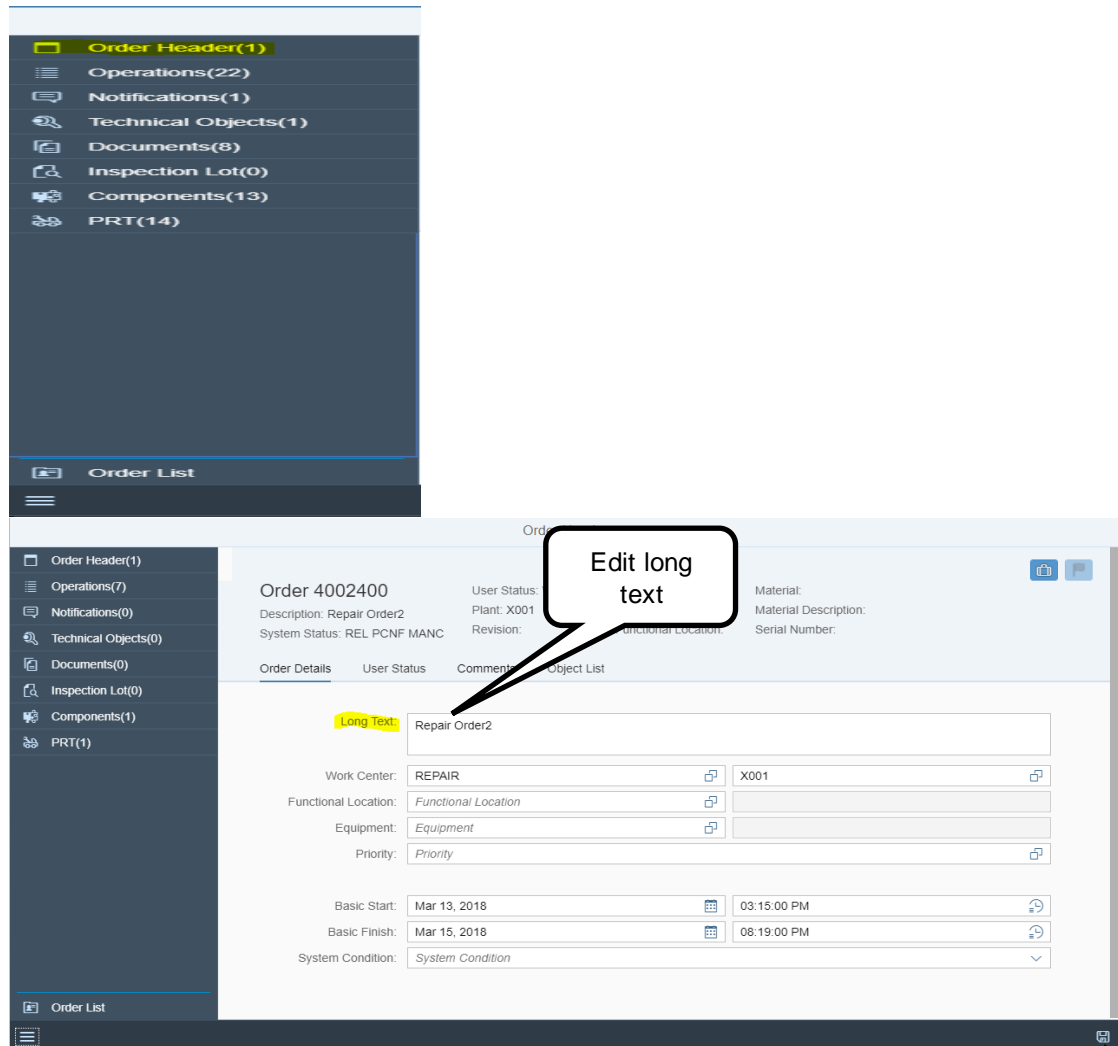
Existing order header long text display and editing is possible through long text Button , on click of the button a box will open which will contain the existing long text ( if any ), with option to edit that. See figure 23

Figure 23: Order header long text edit screen



Once the text is edited, click on save button. It will update the text with a success message

Figure 24: Order header long text edit screen

Order Header

Order 4000633

User Status: Header Notification: Material: UI\_IQA\_MAT2  
 Description: Calibration order - Demo Plant: X001 Equipment: 10000567 Material Description: SER MATERIAL  
 System Status: REL ILAS MANC NMAT SETC Revision: Functional Location: Serial Number: UI\_SER\_104


Order Details User Status Comments Object List

Long Text: Calibration order - Demo  
test

Work Center: REPAIR X001 Basic Start: Jul 18, 2017 04:30:00 PM  
 Functional Location: Functional Location Basic Finish: Jul 19, 2017 06:45:00 PM  
 Equipment: 10000567 Sub Eqpt System Condition: not in operation  
 Priority: Priority

Order saved with number 4000633



At any point if switching to other function is required, that can be done by clicking on  button, which will open the list of all functionalities in list form.

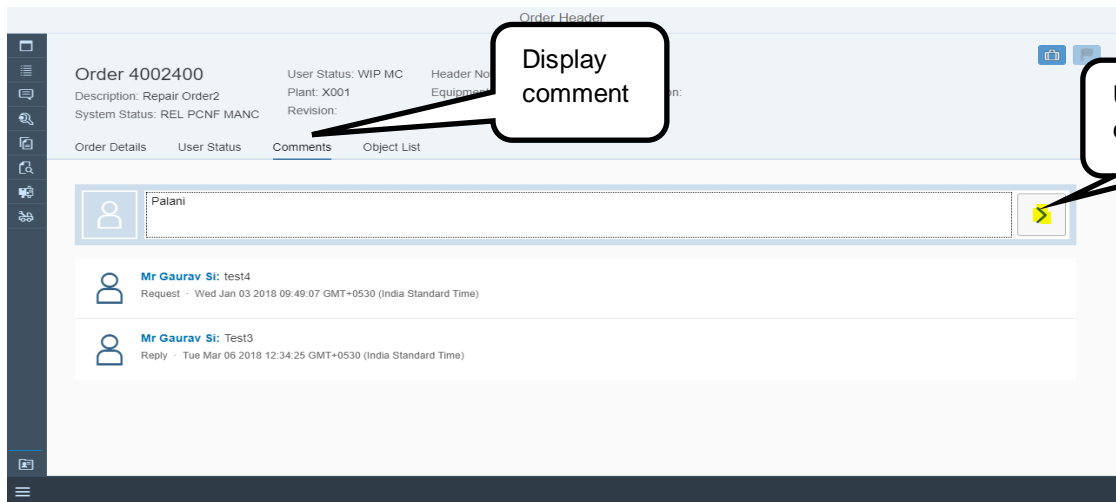
### 3.4. Display/Update Comment (Order Header)



This functionality is to display or update the existing comment of the order header. To display the existing comment, click on button.

It will open display comment box. See figure 25.

Figure 25: Display comment at order header level





- For going back to order list screen, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

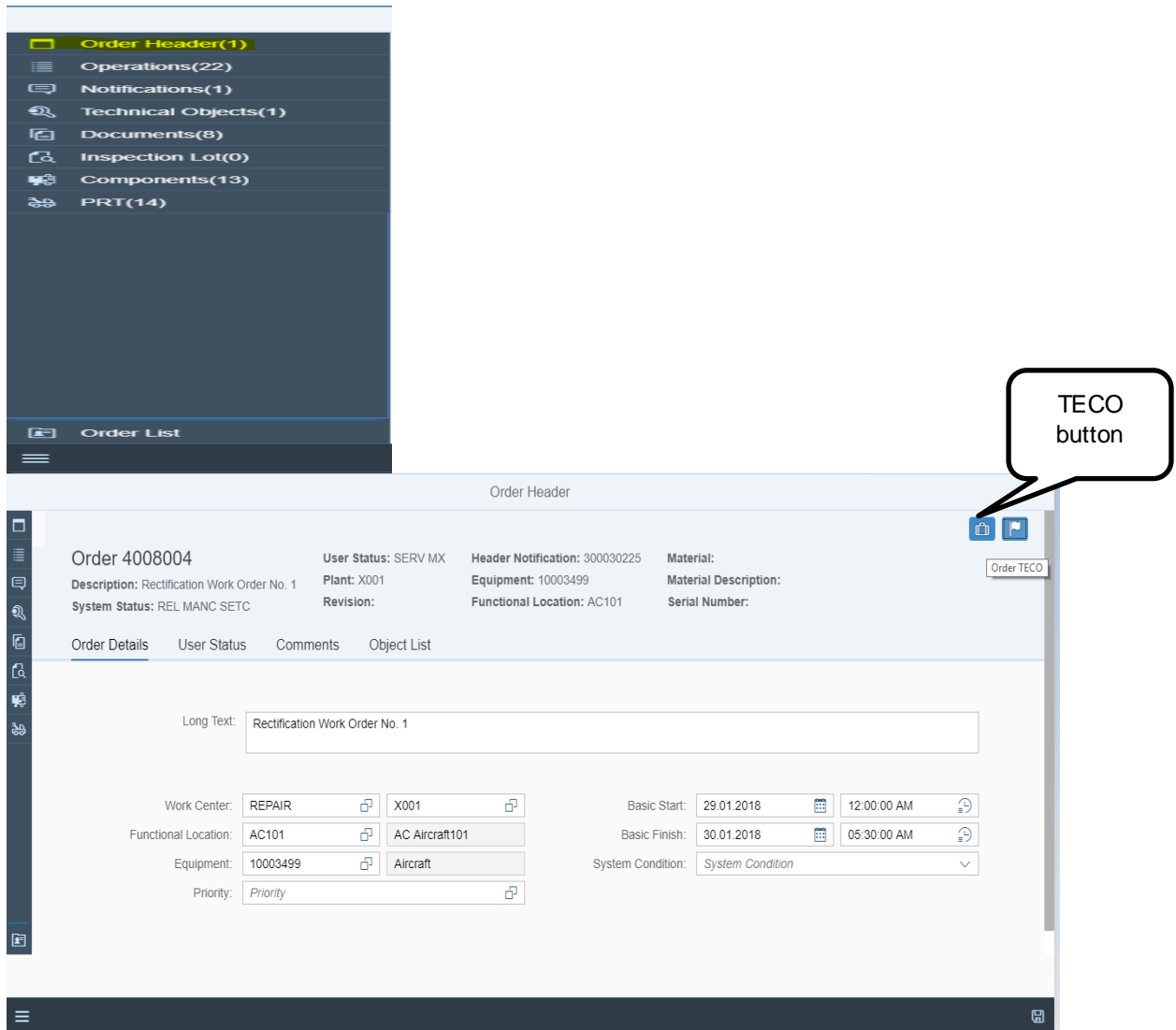
### 3.5. Order Technically Completion (Order Header)

Once the maintenance of technical object is over, order needs to be technically completed. TECO of order can also be possible through this Application, by clicking on




button. See figure 26.

Figure 26: Order TECO screen



Once the order is TECO, all order header fields will be non-editable.

- For going back to order list screen, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 3.6. User Status Read/Update

This functionality allows the user to view the user status of the order.

Click on the **User Status** to view the user status

Figure 27: User status with number(under order header screen)

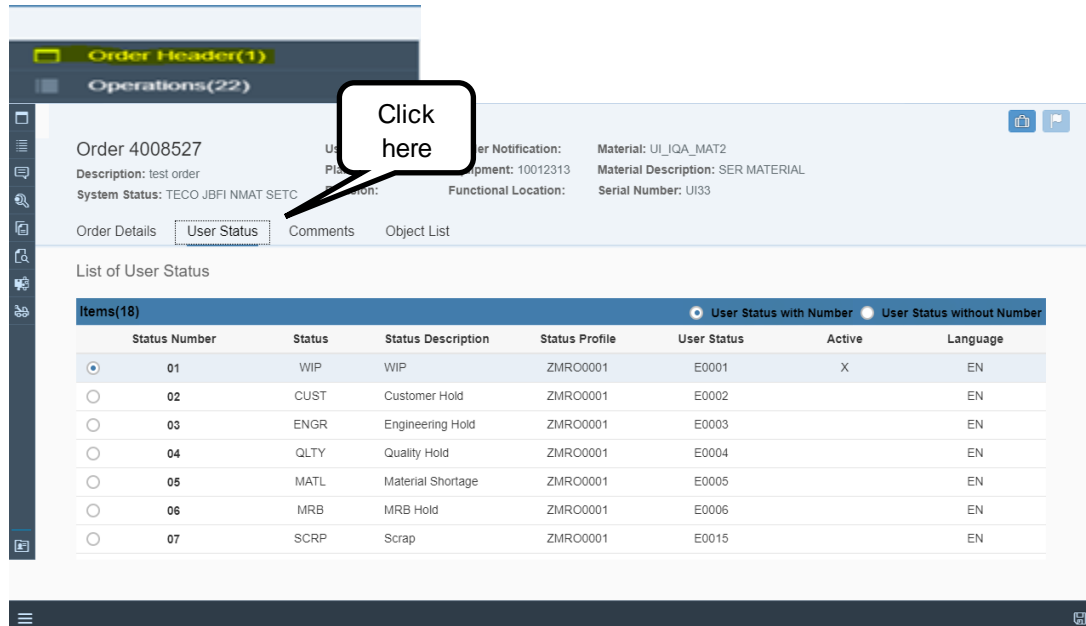
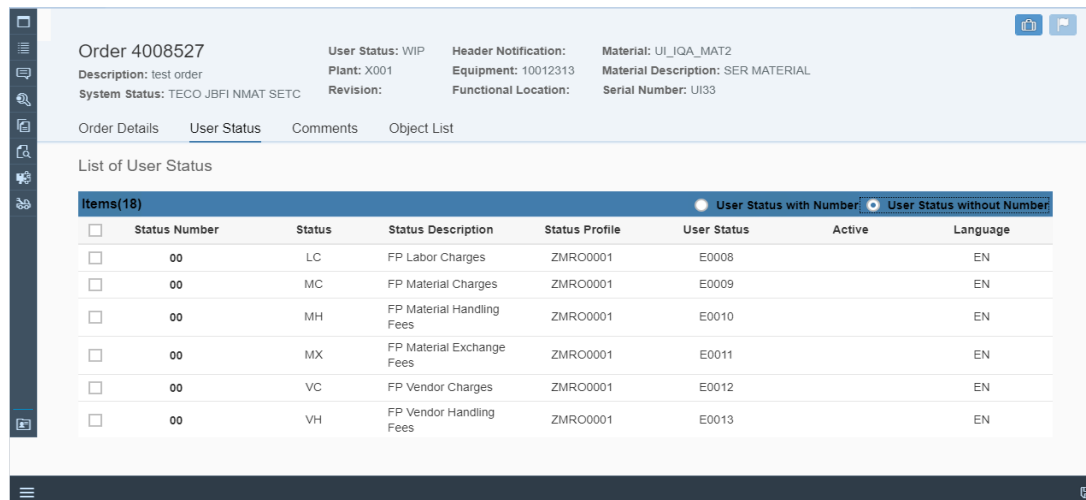


Figure 28: user status without number



User status will be displayed

If user wants to change the user status of order then by selecting any or multiple status user will click on the save button which will update the order with desired user status.

Figure 29: User status update

Order Header

System Status: REL PCNF MANC Revision: Functional Location: Serial Number:

Order Details **User Status** Comments Object List

List of User Status

Items(17)  User Status with Number  User Status without Number

| Status Number                       | Status | Status Description   | Status Profile | User Status | Active | Language |
|-------------------------------------|--------|----------------------|----------------|-------------|--------|----------|
| <input type="radio"/> 01            | WIP    | WIP                  | ZMRO0001       | E0001       |        | EN       |
| <input type="radio"/> 02            | CUST   | Customer Hold        | ZMRO0001       | E0002       | X      | EN       |
| <input checked="" type="radio"/> 03 | ENGR   | Engineering Hold     | ZMRO0001       | E0003       |        | EN       |
| <input type="radio"/> 04            | QLTY   | Quality Hold         | ZMRO0001       | E0004       |        | EN       |
| <input type="radio"/> 05            | MATL   | Material Shortage    | ZMRO0001       | E0005       |        | EN       |
| <input type="radio"/> 06            | MRB    | MRB Hold             | ZMRO0001       | E0006       |        | EN       |
| <input type="radio"/> 07            | SCRP   | Scrap                | ZMRO0001       | E0015       |        | EN       |
| <input type="radio"/> 08            | SERV   | Declared serviceable | ZMRO0001       | E0016       |        | EN       |
| <input type="radio"/> 09            | SRCN   | Serial Confirmed     | ZMRO0001       | E0017       |        | EN       |

Figure 30: Update/change user status

Order Header

System Status: REL PCNF MANC Revision: Functional Location: Serial Number:


Order Details **User Status** Comments Object List

List of User Status

Items(17)  User Status with Number  User Status without Number

| Status Number                       | Status | Status Description   | Status Profile | User Status | Active | Language |
|-------------------------------------|--------|----------------------|----------------|-------------|--------|----------|
| <input type="radio"/> 01            | WIP    | WIP                  | ZMRO0001       | E0001       |        | EN       |
| <input type="radio"/> 02            | CUST   | Customer Hold        | ZMRO0001       | E0002       |        | EN       |
| <input checked="" type="radio"/> 03 | ENGR   | Engineering Hold     | ZMRO0001       | E0003       | X      | EN       |
| <input type="radio"/> 04            | QLTY   | Quality Hold         | ZMRO0001       | E0004       |        | EN       |
| <input type="radio"/> 05            | MATL   | Material Shortage    | ZMRO0001       | E0005       |        | EN       |
| <input type="radio"/> 06            | MRB    | MRB Hold             | ZMRO0001       | E0006       |        | EN       |
| <input type="radio"/> 07            | SCRP   | Scrap                | ZMRO0001       | E0015       |        | EN       |
| <input type="radio"/> 08            | SERV   | Declared serviceable | ZMRO0001       | E0016       |        | EN       |
| <input type="radio"/> 09            | SRCN   | Serial Confirmed     | ZMRO0001       | E0017       |        | EN       |

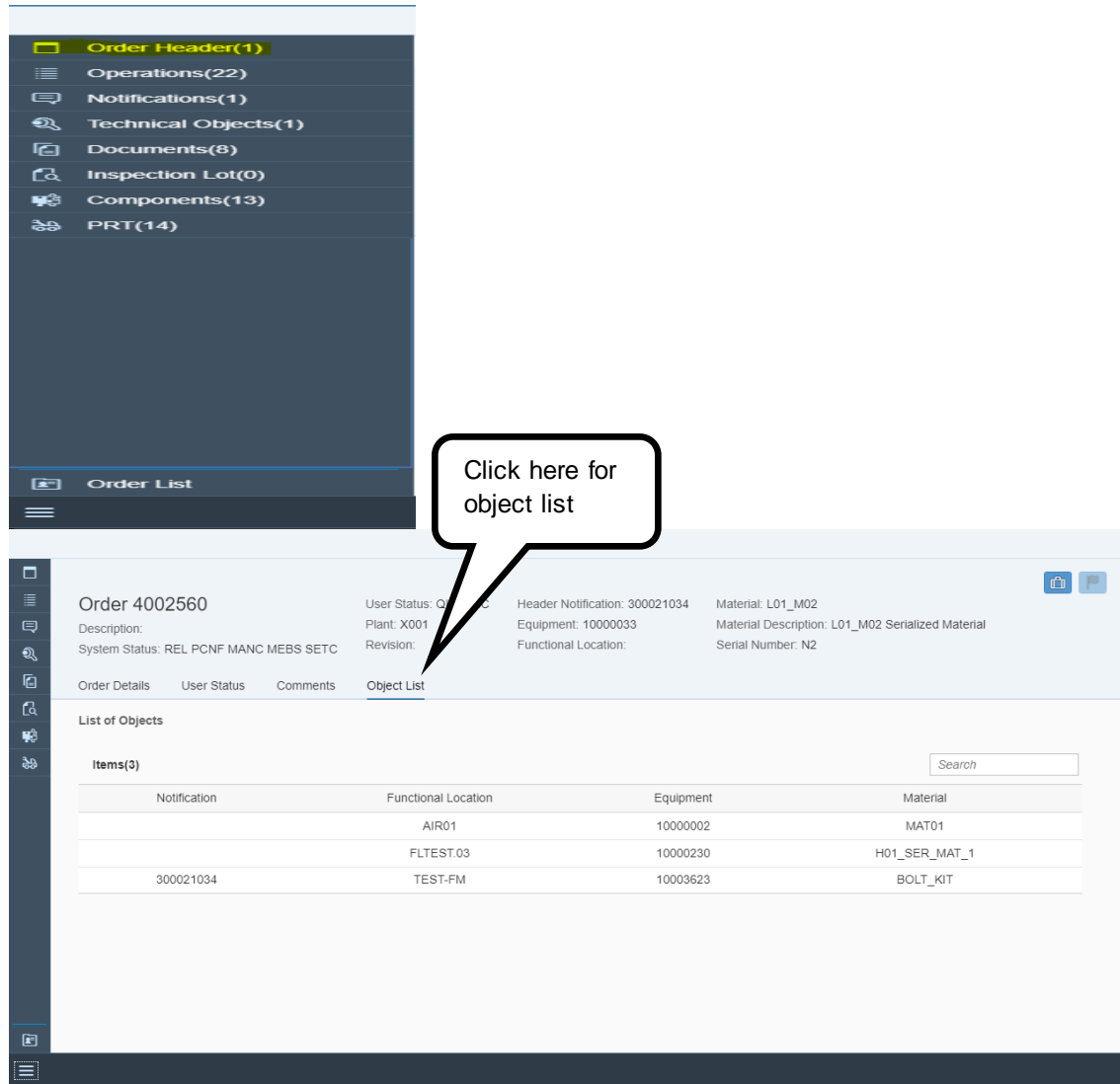
Status Updated Successfully

- For going back , click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 3.7. Object List at Order Header Levels

In the maintenance process if user want to see the object list included in order then this can be seen by clicking on the object list tab present on the order header screen.

Figure 31: Navigation to object list



### 3.8. PRT List at Order Header Level

PRT being used in an order for execution of all the operation can be displayed by clicking on the PRT list tab present in the left navigation pane.

Figure 32: Navigation to PRT list at order header level



Figure 33: PRT list at order level

Production Resource/Tool

Order 4002560  
Description: System Status: REL PCNF MANC MEBS NTUP SETC  
User Status: WIP LC MH  
Plant: X001  
Revision:  
Header Notification: 300021034  
Equipment: 10000033  
Functional Location:  
Material: L01\_M02  
Material Description: L01\_M02 Serialized Material  
Serial Number: N2

List of PRT

Items(14)

| PRT Item | PRT Category | Activity | PRT Name     | PRT Description             | Quantity | PRT Control Profile |
|----------|--------------|----------|--------------|-----------------------------|----------|---------------------|
| 0010     | M            |          | TEST PRT MAT | prt material                | 1.000    | 1                   |
| 0010     | M            |          | MATERIAL_PRT | Material PRT for UI Testing | 1.000    | 1                   |
| 0010     | O            |          | OTHER_PRT    | PRT Master (Others)         | 1.000    | 1                   |
| 0010     | D            |          | 10000000055  | Test PRT                    | 1.000    | 1                   |
| 0020     | O            |          | OTHER_PRT    | PRT Master (Others)         | 1.000    | 1                   |
| 0020     | D            |          | 10000000091  | AMM 01                      | 1.000    | 1                   |
| 0020     | M            |          | MATERIAL_PRT | Material PRT for UI Testing | 1.000    | 1                   |
| 0030     | D            |          | 10000000055  | Test PRT                    | 1.000    | 1                   |
| 0030     | D            |          | 10000000055  | Test PRT                    | 1.000    | 1                   |

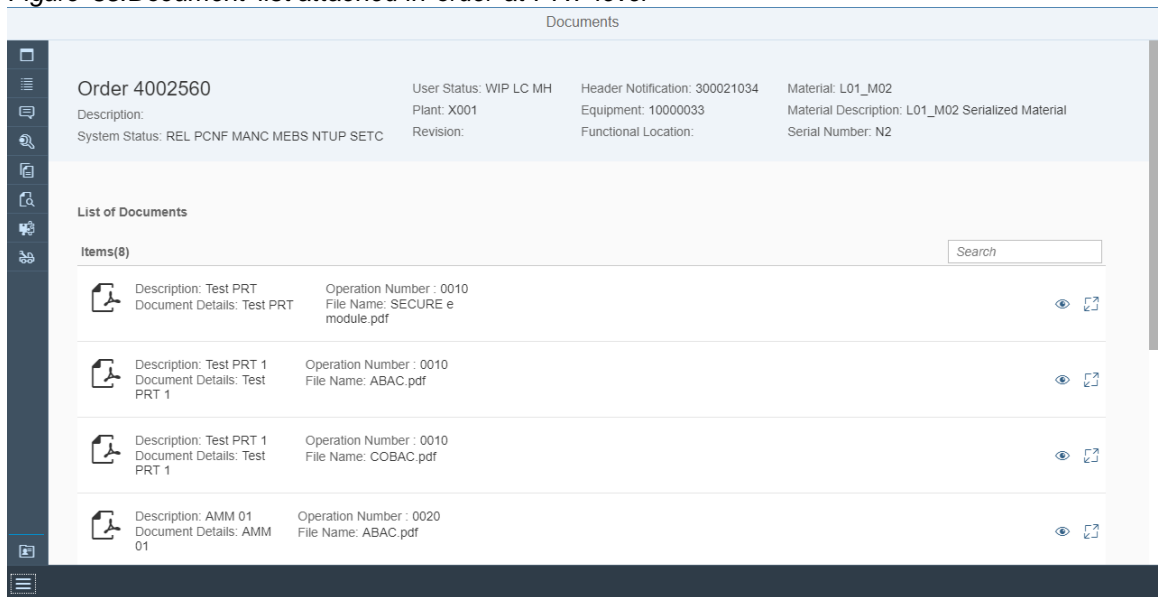
### 3.9. Document list

The list will be displayed of all the documents attached to the order at the PRT level

Figure 34: Document list



Figure 35: Document list attached in order at PRT level



The cumulative document list will be displayed assigned to all the operations of the order.

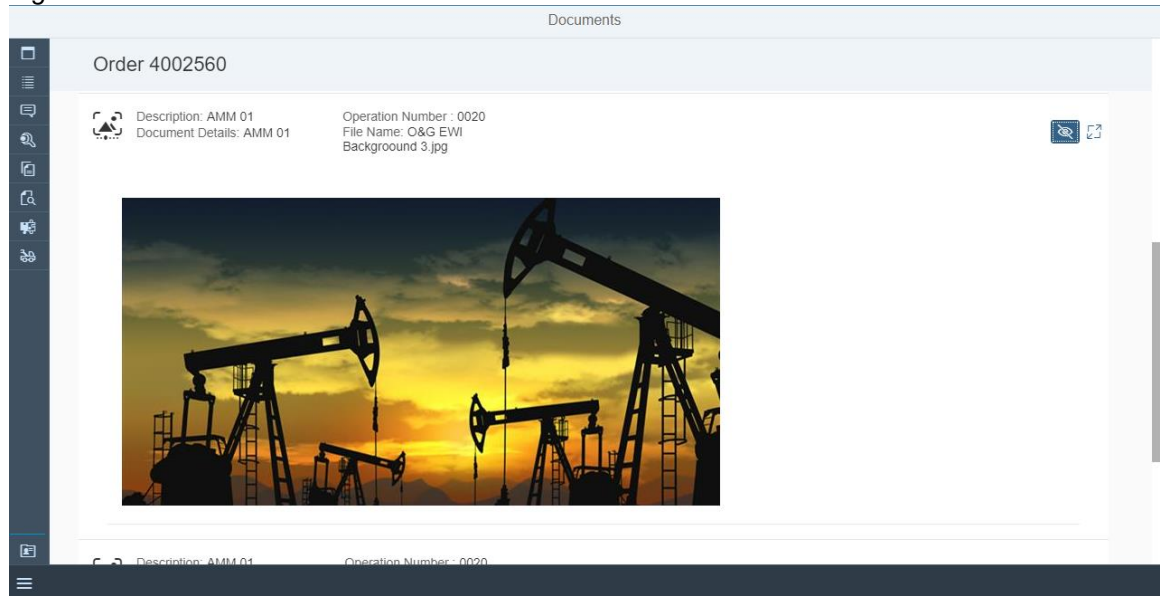
### 3.9.1 Preview document


Preview document enables user to identify or overview a document by clicking on



which is being used for the order execution.

Figure 36: Preview document



By clicking on  button user can identify that the document selected is right one or not

### 3.9.2 Open document

Once the user previewed the document and wants to read or do the analysis of the




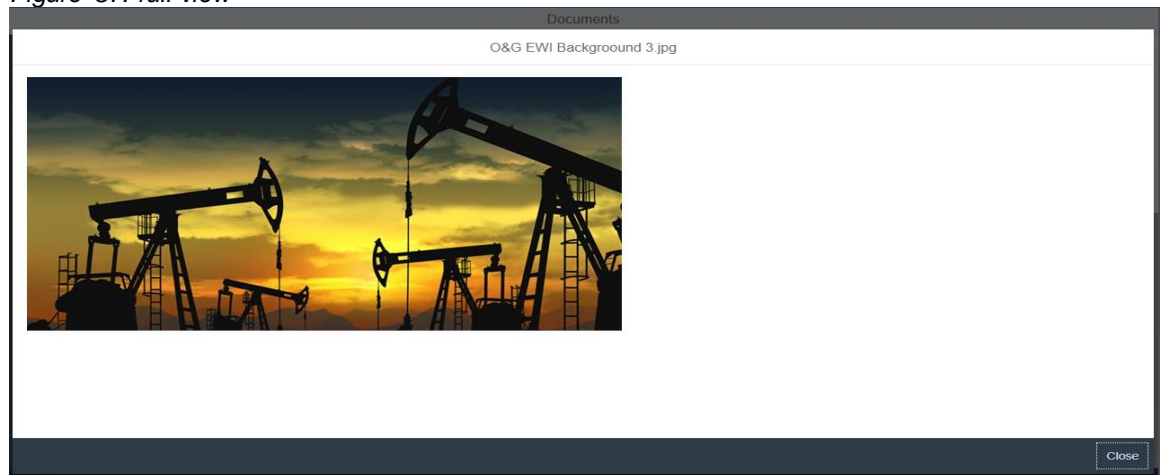


particular document user can open the document by clicking on  full view button available on the screen.

Figure 37: full view



➤ If user want to close the document then user needs to click on  button.



- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 3.10. Inspection Lot and Characteristics Result (cumulative)

Inspection characteristics to describe what is to be inspected and how the inspection is to take place. We can see this on operation level.  
Based on the characteristics requirement system will show the details

### 3.11. Technical objects (Technical Object Tile and FL)

This functionality allows the user to view details of the equipment and Functional location (if present) that is in the system.  
Click on the technical object tile



Figure 38: tech. object list at order header



Figure 39: Equipment Details

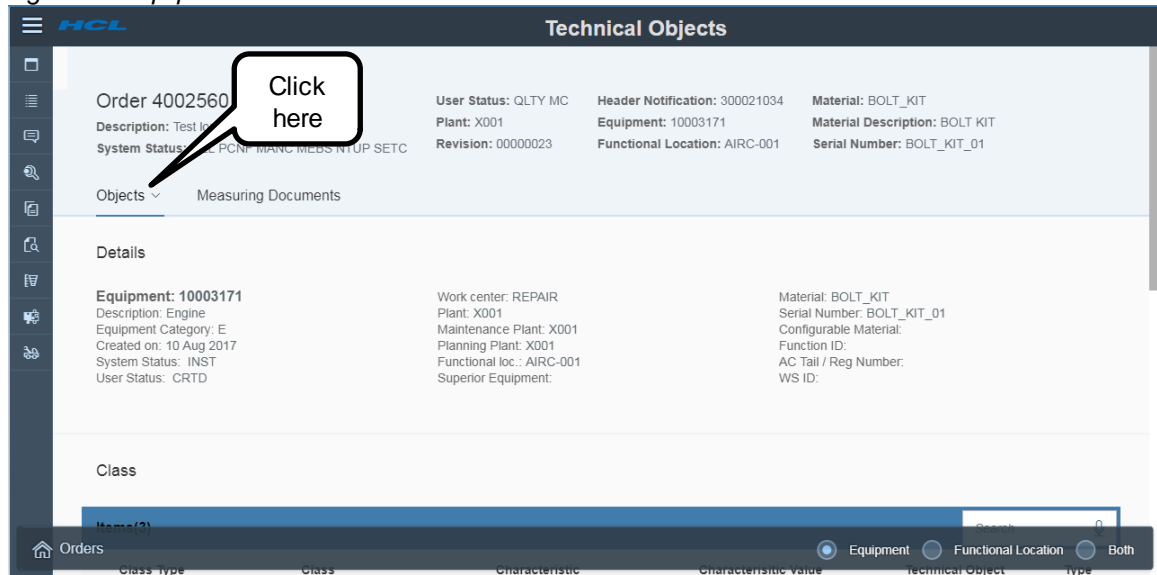
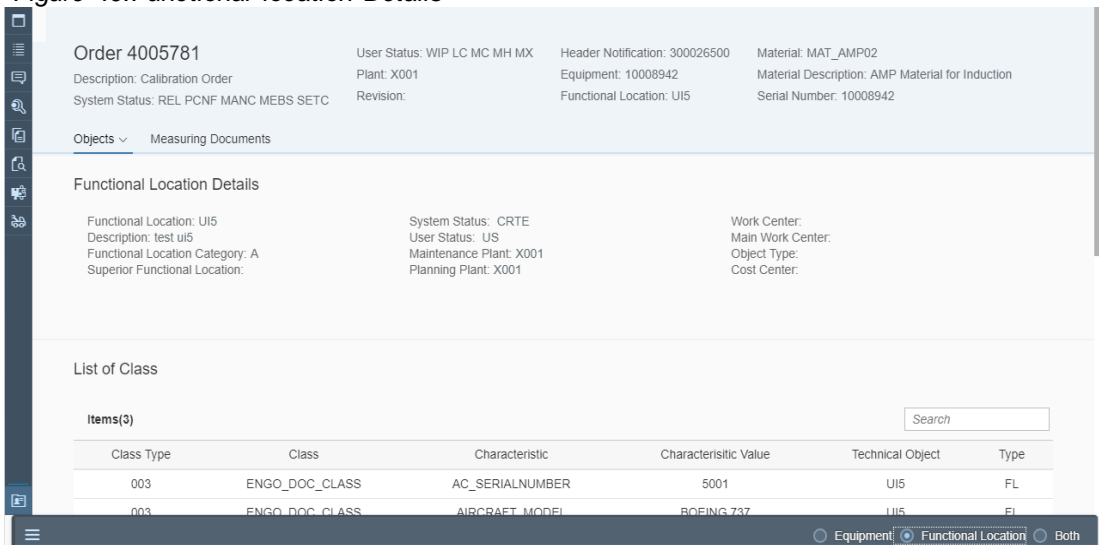
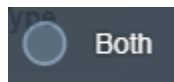


Figure 40: Functional location Details




→ user can also view the combined screen for FL and equipment both by clicking on



Radio button available on the lower right corner of the screen or separately by clicking on the equipment or FL respective radio buttons

➤ For going back, click on  to select or reach other functionalities or click on

Orders button  Order List to go back to order list screen.

### 3.12. Technical object class and partner data

Class and partner data is available just below the Detail screen of technical object as shown in above figure so user can see the class and partner data assigned to tech.object by dragging the screen downwards.

Figure 41: Tech objects details (class)

The screenshot displays the SAP Fiori app interface for Order 4005781. The top section shows the order number and a dropdown menu for 'Objects' with 'Measuring Documents' selected. Below this, there are two main sections: 'List of Class' and 'List of Partners'. Each section has a search bar and a table of data.

**List of Class**

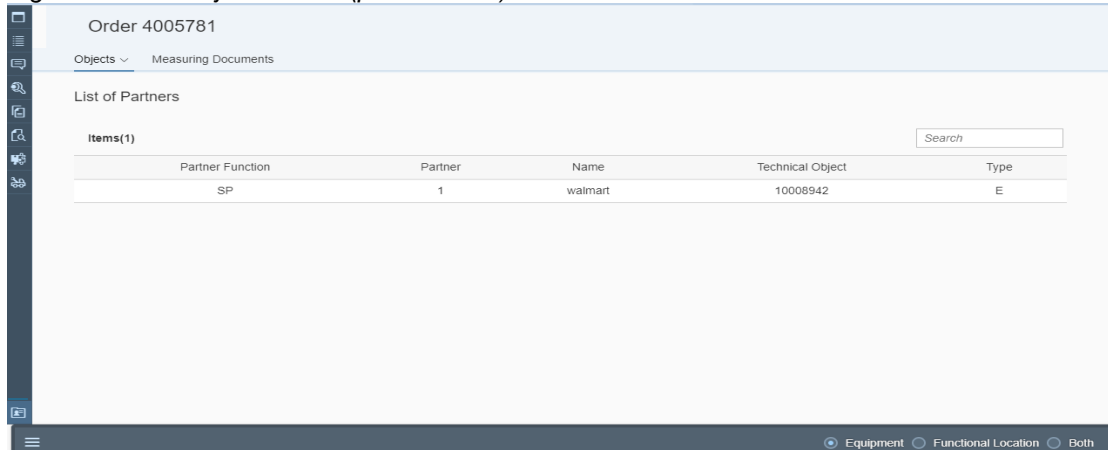
| Class Type | Class          | Characteristic    | Characteristic Value | Technical Object | Type |
|------------|----------------|-------------------|----------------------|------------------|------|
| 002        | ENGO_DOC_CLASS | EQUIPMENTMATERIAL | MAT_AMP02            | 10008942         | E    |
| 002        | ENGO_DOC_CLASS | REF_EQUIP         | 10008942             | 10008942         | E    |
| 002        | ENGO_DOC_CLASS | SER_NO            | 10008942             | 10008942         | E    |


**List of Partners**

| Partner Function | Partner | Name | Technical Object | Type |
|------------------|---------|------|------------------|------|
|                  |         |      |                  |      |

At the bottom of the screen, there are radio buttons for 'Equipment' (selected), 'Functional Location', and 'Both'.

Figure 42:tech object details (partner data)

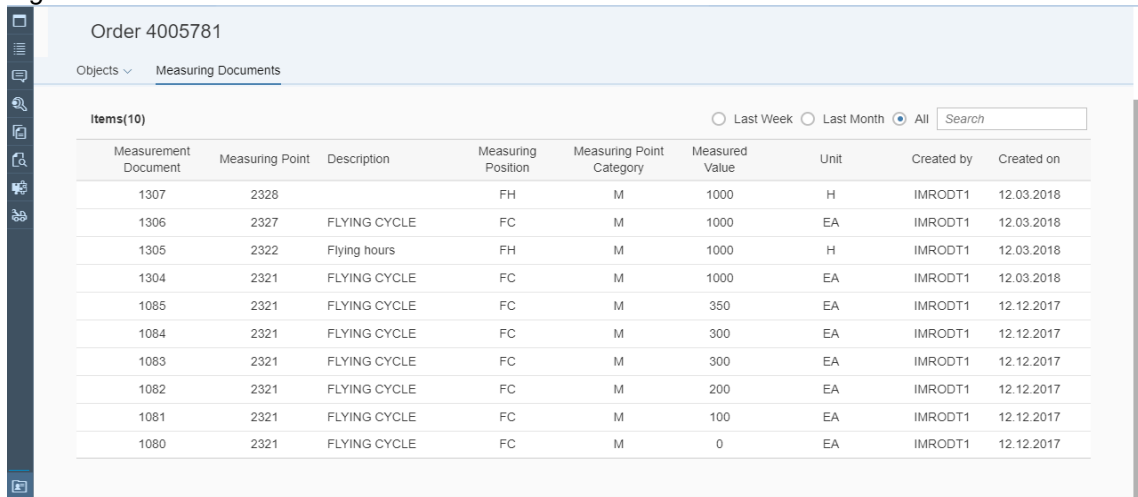


➤ For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 3.13. Measurement document table



The table shows the all the measurement document posted for the measuring point against the tech. objects.

Figure 43: measurement documents



Here user have 3 options regarding the posting time

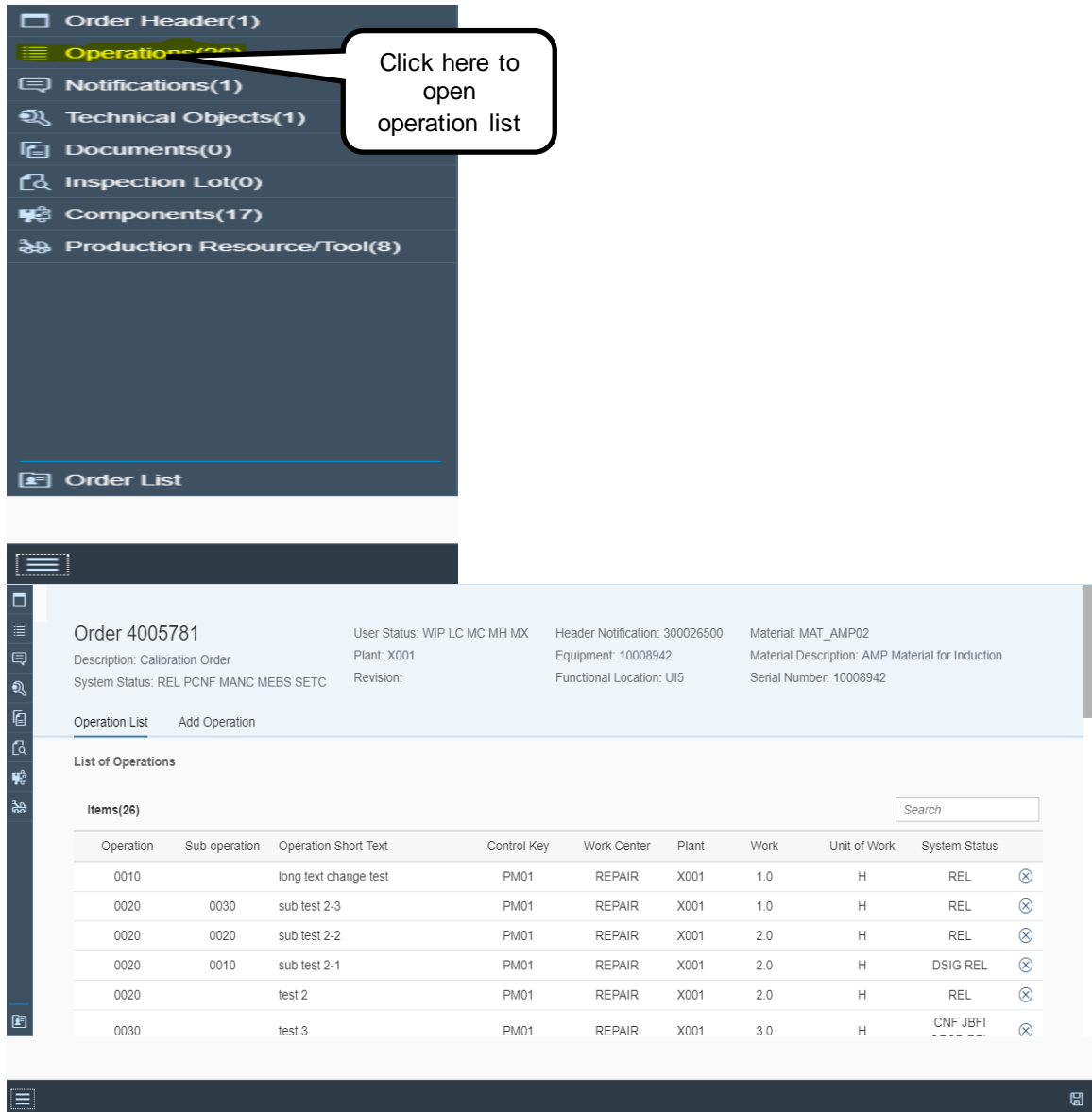
1. Last week: under this user can only see the documents posted in last week from the current date
2. Last month: under this option user can only see the measurement posted during the last month
3. All: If user selects the All radio button then it will allow user to see all the measurements posted for the tech object selected

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.



## 4. Order Operations

All operations of an order can be seen by clicking on operation functionality. See figure 44

*Figure 44: Operation functionality in functionality screen*



Operation list will be shown as given above figure

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

#### 4.1. Operation Details

User can also see the details of any operation shown in the list by clicking on the

operation row.

Figure 45: select the operation

| Operation | Sub-operation | Operation Short Text  | Control Key | Work Center | Plant | Work | Unit of Work | System Status |
|-----------|---------------|-----------------------|-------------|-------------|-------|------|--------------|---------------|
| 0010      |               | long text change test | PM01        | REPAIR      | X001  | 1.0  | H            | REL           |
| 0020      | 0030          | sub test 2-3          | PM01        | REPAIR      | X001  | 1.0  | H            | REL           |

Figure 46: Operation details

Operations Details

|  |                                       |                        |                         |
|--|---------------------------------------|------------------------|-------------------------|
| Order 4002560                          | Description:                          | User Status: WIP LC MH | Notification: 300021034 |
| Operation: 0010                        | System Status: CNF DSIG ORSP REL SPCF | Activity Type:         | Duration: 5.0 H         |
| Description: long text wrapper testing | Personnel no.: 1                      | Work: 5.0 H            | Purch. Group:           |
| Sub Operation:                         | Work Center: REPAIR / X001            | Control Key: PM01      | Purchasing org.:        |
| Material: L01_M02                      | Material Group:                       | Price:                 | Operation Qty: 1.000    |

- To go back from the current screen user needs to click on
- Or if User wants to come out on the order list screen then click on



### 4.1.1. Sub operation

User can also see the sub operation created under the main operation as shown in figure below.

Figure 47: Sub operations

Order 4005781

|  |             |                                |   |
|--|-------------|--------------------------------|---|
| Description: Calibration Order         | Plant: X001 | Header Notification: 300026500 | Material: MAT_AMP02                     |
| System Status: REL PCNF MANC MEBS SETC | Revision:   | Equipment: 10008942            | Material Description: AMP for Induction |
|  |             | Functional Location: UI5       | Serial Number: 10008942                 |

Operation List Add Operation

List of Operations

Items(26) Search

| Operation | Sub-operation | Operation Short Text  | Control Key | Work Center | Plant | Work | Unit of Work | System Status |
|-----------|---------------|-----------------------|-------------|-------------|-------|------|--------------|---------------|
| 0010      |               | long text change test | PM01        | REPAIR      | X001  | 1.0  | H            | REL           |
| 0020      | 0030          | sub test 2-3          | PM01        | REPAIR      | X001  | 1.0  | H            | REL           |
| 0020      | 0020          | sub test 2-2          | PM01        | REPAIR      | X001  | 2.0  | H            | REL           |
| 0020      | 0010          | sub test 2-1          | PM01        | REPAIR      | X001  | 2.0  | H            | DSIG REL      |
| 0020      |               | test 2                | PM01        | REPAIR      | X001  | 2.0  | H            | REL           |
| 0030      |               | test 3                | PM01        | REPAIR      | X001  | 3.0  | H            | CNF JBFI      |

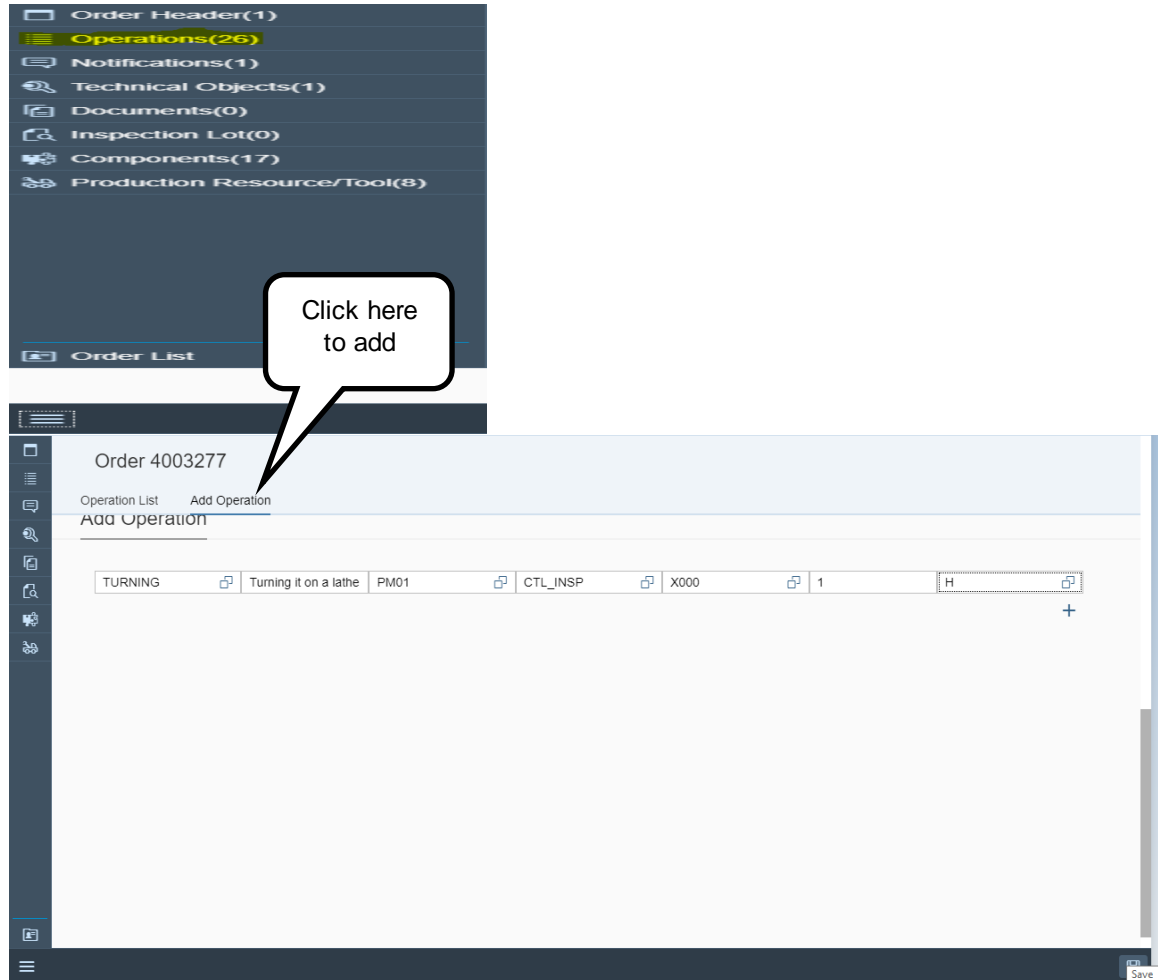
Click here for search

- For going back, click on to select or reach other functionalities or
- click on Orders button to go back to order list screen.

### 4.1.2. Add operation

If a user wants to add new internal operation to the order, it can be done directly from this application. For adding a new operation to the order, click on **Add Operation** button. A new row with option to add detail for operation will open as shown in below figure 48

Figure 48: Add operation screen



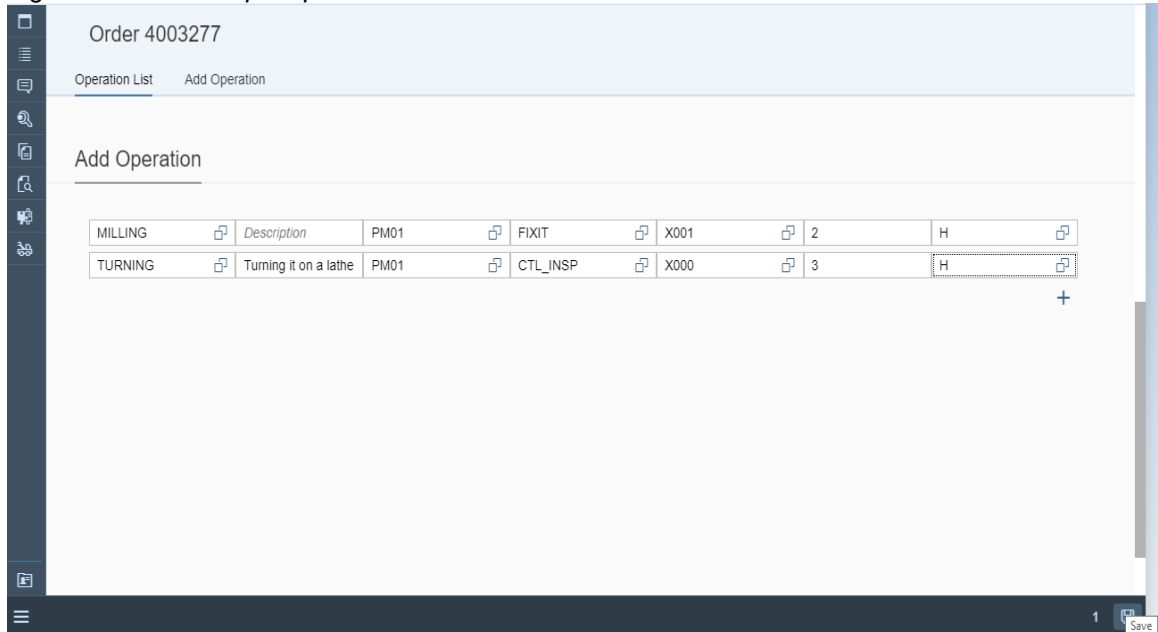
The app also allows user to add multiple operation by clicking on available under operation row as shown in above figure.



User can add single or multiple internal operations as per requirement. Adding sub operation is not supported

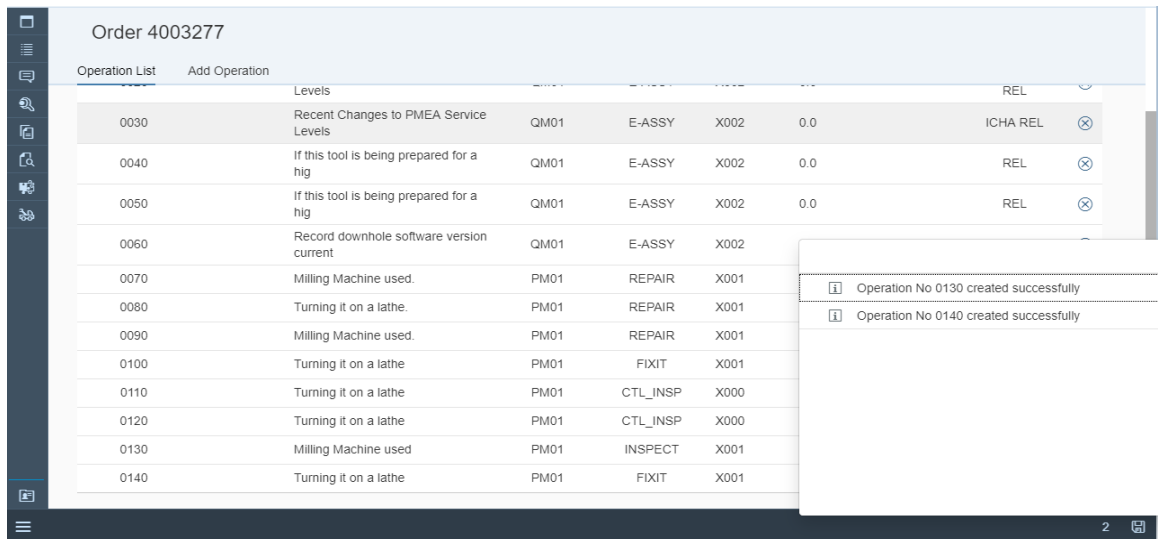


Figure 49: Add multiple operations



After giving the correct details click on save icon

Figure 50: Add operation successful




After filling value to above fields click on save button to add operations. List will get updated with new operation with as Alert.




**Predefined Standard text key option is there, user can select the key and if required can change the operation description as per requirement**



At any point if switching to other functionality is required, that can be done by clicking on  button, which will open the list of all functionalities in list form.

### 4.1.3. Delete operation

For deleting any operation from the order, click on  button after selecting the operation which is to be deleted.

Once we select the operation, it will get highlighted as shown in figure 51

Figure 51:delete operation screen

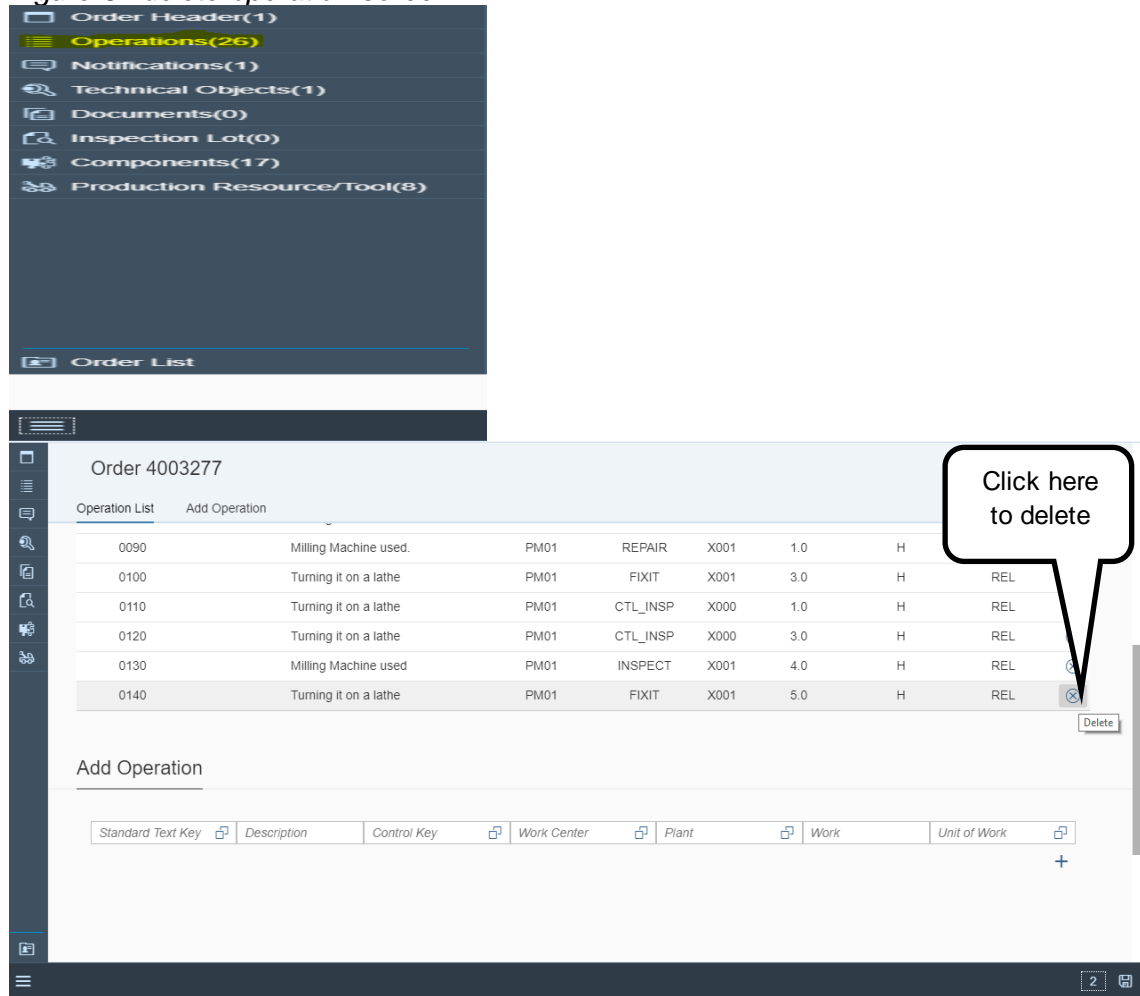
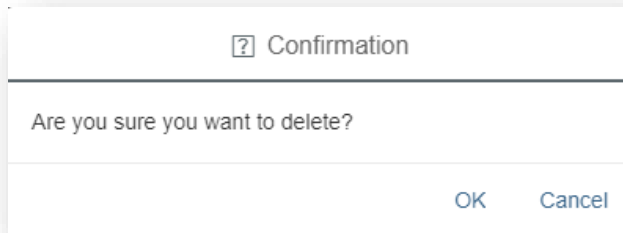
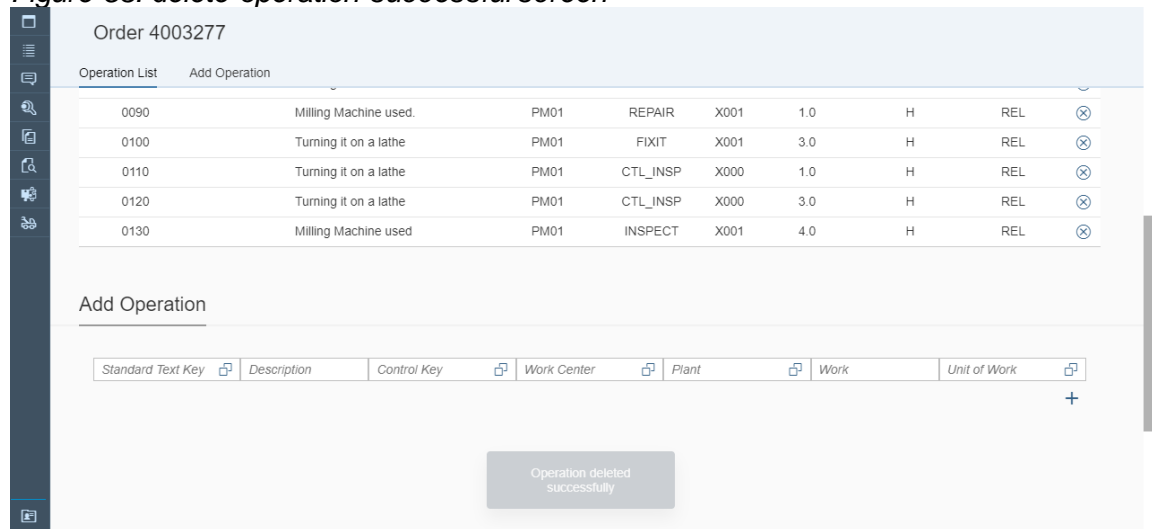


Figure 52: delete operation screen confirmation pop up



After clicking OK operation shall be deleted

Figure 53: delete operation successful screen

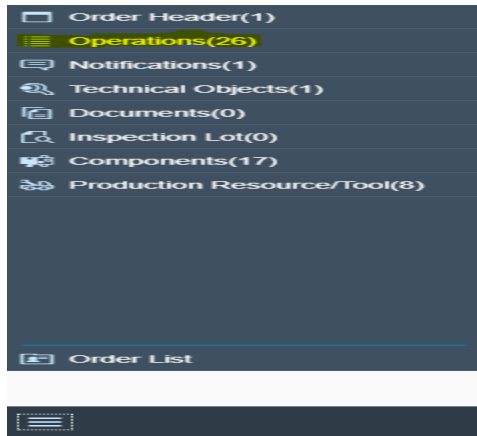


At any point if switching to other functionality is required, that can be done by clicking on button, which will open the list of all functionalities in list form.

#### 4.1.4. Long text read/update(Operation)

Existing operation long text can be displayed in editable mode by clicking on operation row and then on long text button. On click of button, box will open displaying long text in editable mode. See figure 54

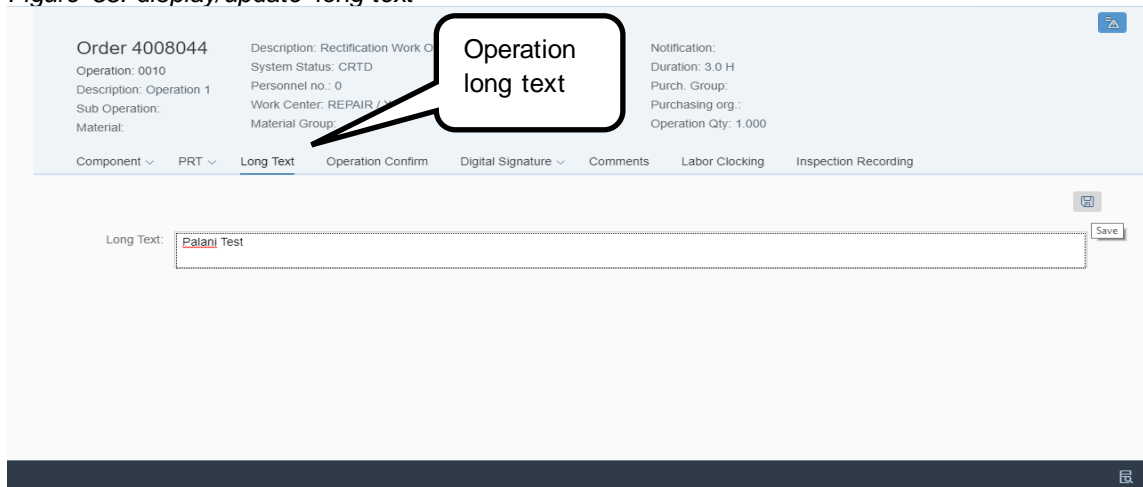
Figure 54: Operation long text screen



| Operation | Sub-operation | Operation Short Text  | Control Key | Work Center | Plant | Work | Unit of Work | System Status |   |
|-----------|---------------|-----------------------|-------------|-------------|-------|------|--------------|---------------|---|
| 0010      |               | long text change test | PM01        | REPAIR      | X001  | 1.0  | H            | REL           | ⊗ |
| 0020      | 0030          | sub test 2-3          | PM01        | REPAIR      | X001  | 1.0  | H            | REL           | ⊗ |

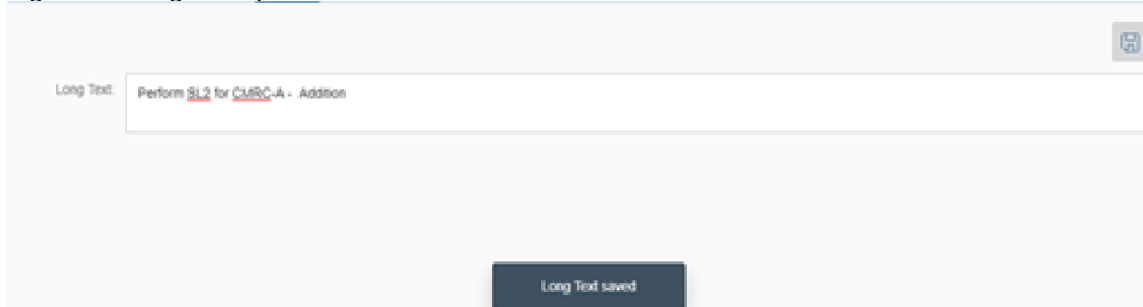
By selecting desired operation row user will reach to the long text screen



Figure 55: display/update long text



Text can be edited and on click on save button, text will get updated for the operation with a success message

Figure 56: long text updated



- For going back, click on  to select or reach other functionalities or click on Orders button  Order List to go back to order list screen.

#### 4.1.5. Operation comment read/update


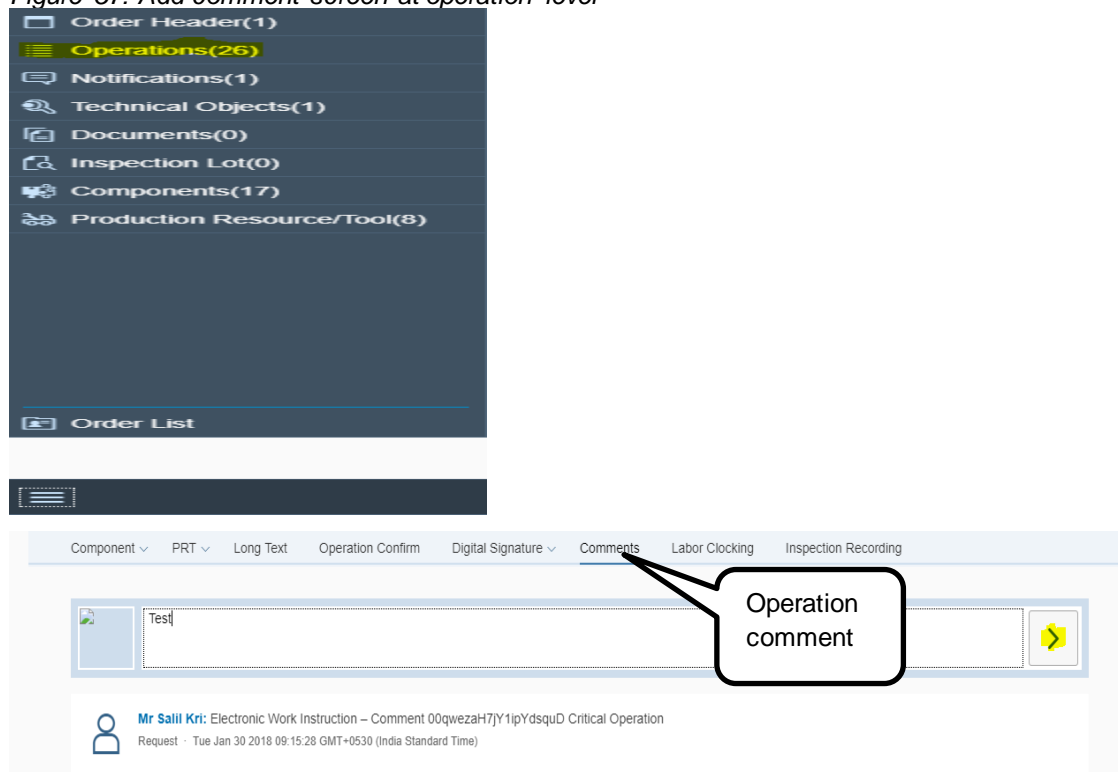

Operation comment is a functionality to add shift comments at operation level. For adding 'Operation Comment' through this application click on the  button under operation details.

Figure 57: Add comment screen at operation level



After maintaining comments in add comment box click on  button.

The comment will be saved and displayed with all the other comment as shown in figure below

Figure 58: Display/save comment

Order 4008054    Description: Rectification Work Order No. 1    User Status:    Notification:   

Operation: 0010    System Status: ICHA QMDA REL    Activity Type:    Duration: 0.0

Description: Operation 1    Personnel no.: 0    Work: 0.0    Purch. Group:

Sub Operation:    Work Center: REPAIR / X001    Control Key: PM01    Purchasing org.:

Material:    Material Group:    Price:    Operation Qty: 0.000

Component ▾    PRT ▾    Long Text    Operation Confirm    Digital Signature ▾    **Comments**    Labor Clocking    Inspection Recording

Comment Here

**Mr Sallil Kri:** Electronic Work Instruction – Comment 00qwezaH7Y1pYdsquD Critical Operation  
Request · Tue Jan 30 2018 09:15:28 GMT+0530 (India Standard Time)

**Sallil Krishn:** Electronic Work Instruction – Comment Test  
Reply · Tue Mar 13 2018 07:05:22 GMT+0530 (India Standard Time)

**Comment Updated Successfully**

All the existing comments will be displayed under comment box



**At any point if switching to other functionality is required, that can be done by clicking on button, which will open the list of all functionalities in list form.**

#### 4.2. Operation PRT list

PRTs attached to the operation, of selected operation can be seen in this functionality. For displaying PRT list, select the operation, go into operation details by pressing that operation row is and click on button.

Figure 59: Navigation to display PRT list

The screenshot shows a navigation menu on the left with the following items: Order Header(1), Operations(26), Notifications(1), Technical Objects(1), Documents(0), Inspection Lot(0), Components(17), and Production Resource/Tool(8). Below the menu is a table with the following data:

| Operation | Sub-operation | Operation Short Text  | Control Key | Work Center | Plant | Work | Unit of Work | System Status |   |
|-----------|---------------|-----------------------|-------------|-------------|-------|------|--------------|---------------|---|
| 0010      |               | long text change test | PM01        | REPAIR      | X001  | 1.0  | H            | REL           | ⊗ |
| 0020      | 0030          | sub test 2-3          | PM01        | REPAIR      | X001  | 1.0  | H            | REL           | ⊗ |

Figure 60: PRT list

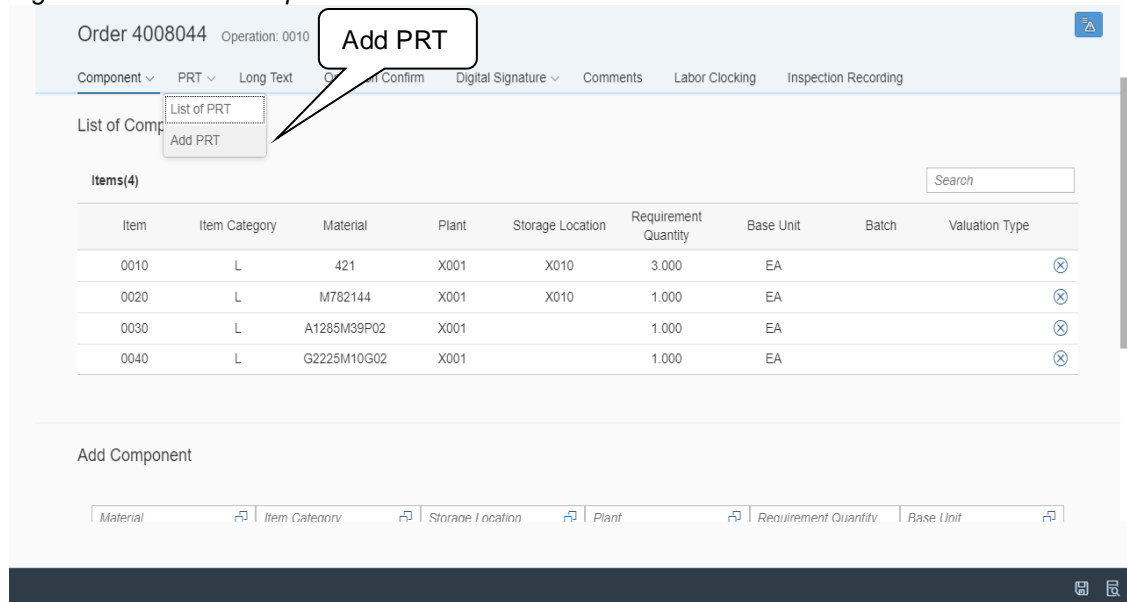
The screenshot shows the Fiori app interface for Order 4008071, Operation: 0010. The navigation bar includes: Component, PRT, Long Text, Operation Confirm, Digital Signature, Comments, Labor Clocking, and Inspection Recording. Below the navigation bar is a section titled "List of PRT" with a search box and a table with the following data:

| PRT Item | PRT Category | PRT Name | PRT Description    | Quantity | PRT Control Profile |   |
|----------|--------------|----------|--------------------|----------|---------------------|---|
| 0010     | D            | MANUAL   | Maintenance Manual | 1.000    | 1                   | ⊗ |

#### 4.2.1. Add material PRT

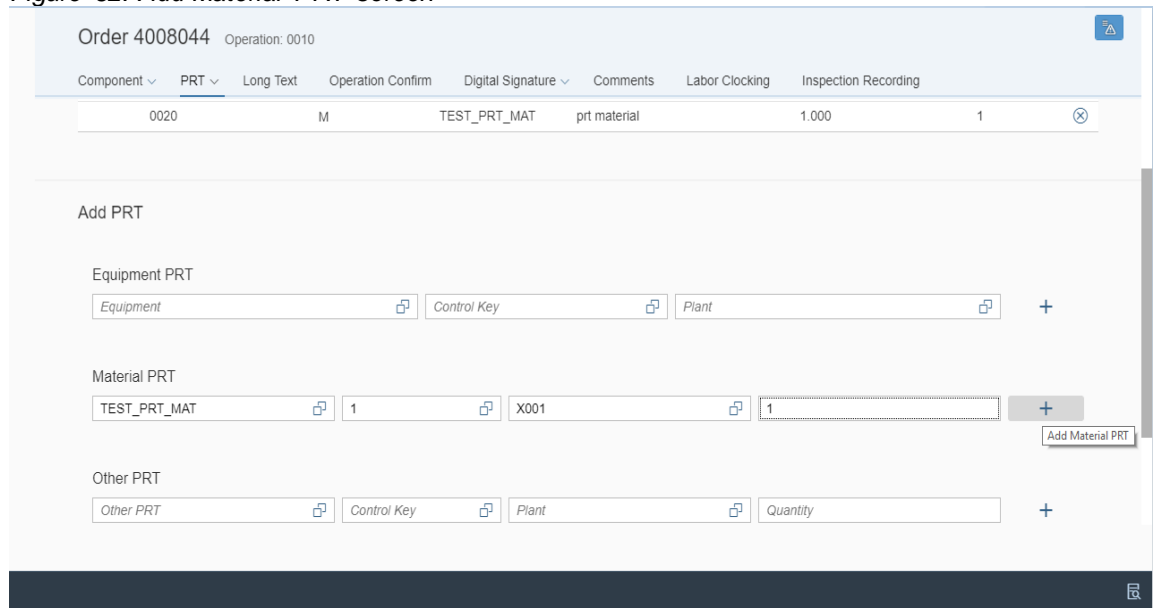
Through this functionality, we can add material PRT to an operation. For adding any type of PRT, click on button, which will show list of PRT types we can add to an operation. See figure 61 for insert PRT options

Figure 61: Insert PRT options



For adding material PRT, click on Material PRT option.

Figure 62: Add Material PRT screen




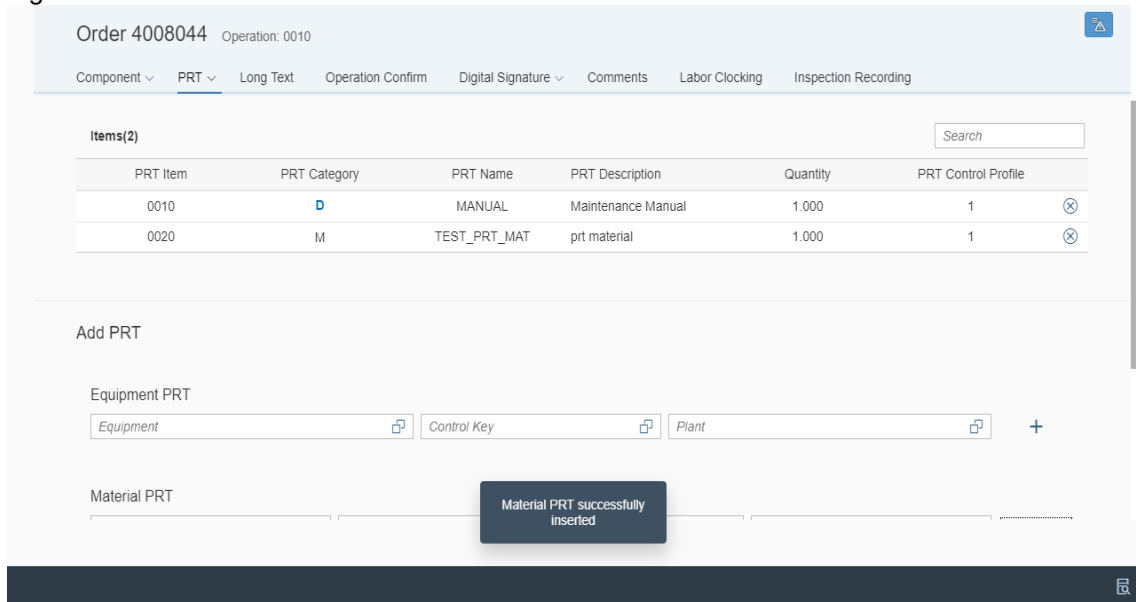


After entering the required details, click on the  button and PRT will be added



Figure 63: material added screen



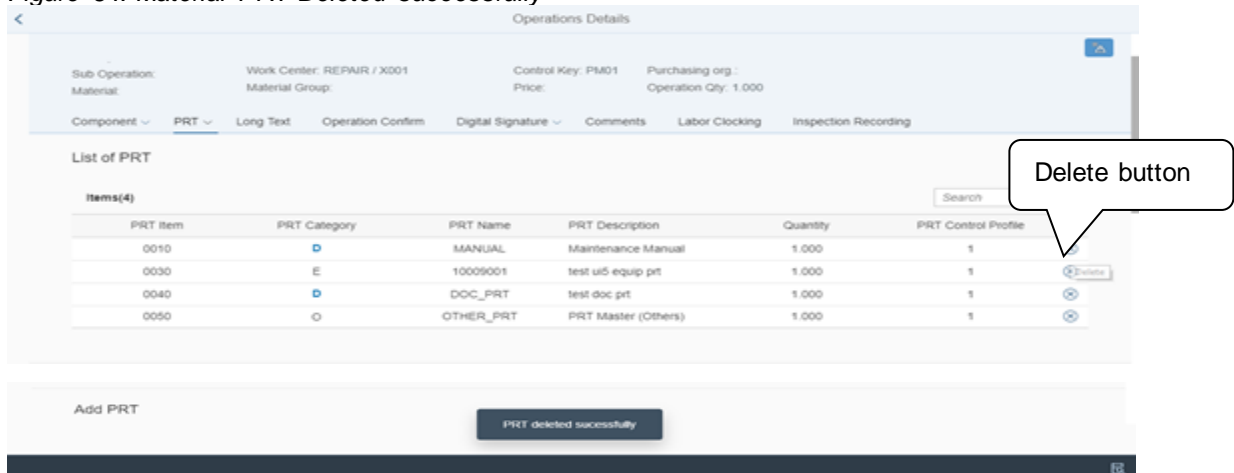
To display the added PRT user needs to click on PRT list


- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .


### 4.2.2. Delete material PRT

This functionality enables user to delete the material PRT assigned to the operation of an order. You can delete the PRT by clicking the delete button on the right top.

Figure 64: Material PRT Deleted successfully



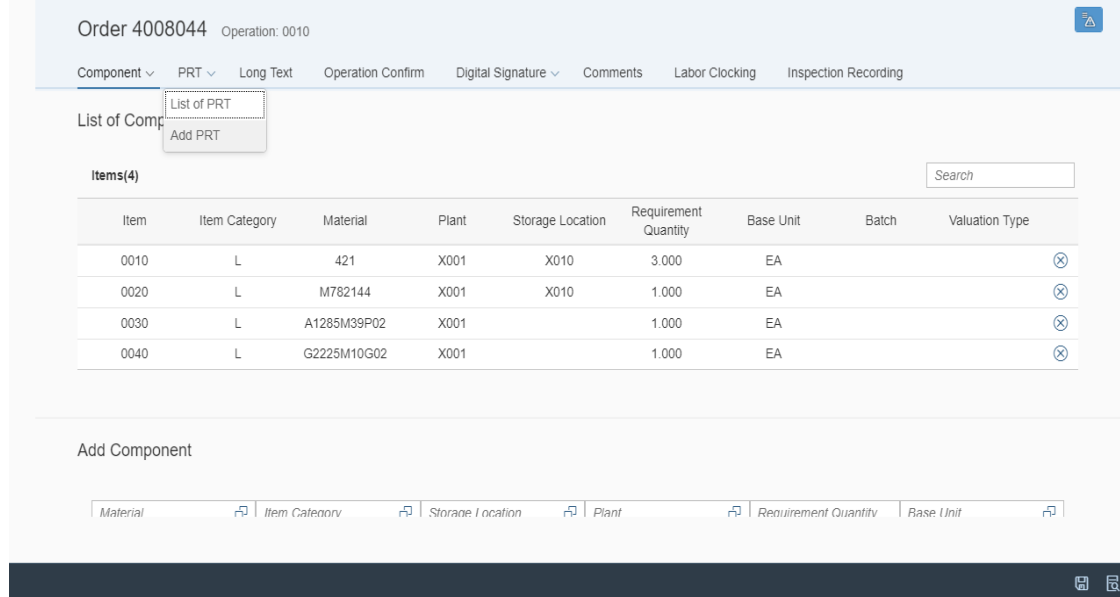
- To go back from the current screen user needs to click on .

- Or if User wants to come out on the order list screen then click on 

### 4.2.3. Add equipment PRT

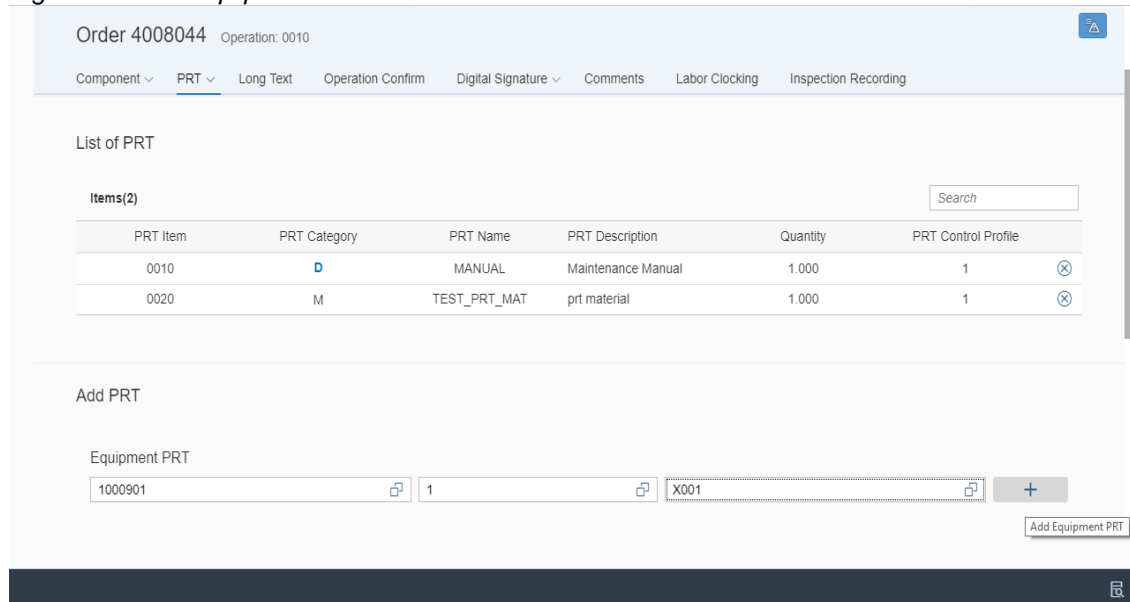
Like material PRT, we can add equipment PRT, to the operation. For adding equipment PRT, similarly like material PRT, we have to select option from the drop down list.

Figure 65: Insert PRT option screen



For adding Equipment PRT, fill the Equipment PRT details.

Figure 66: Add Equipment PRT screen




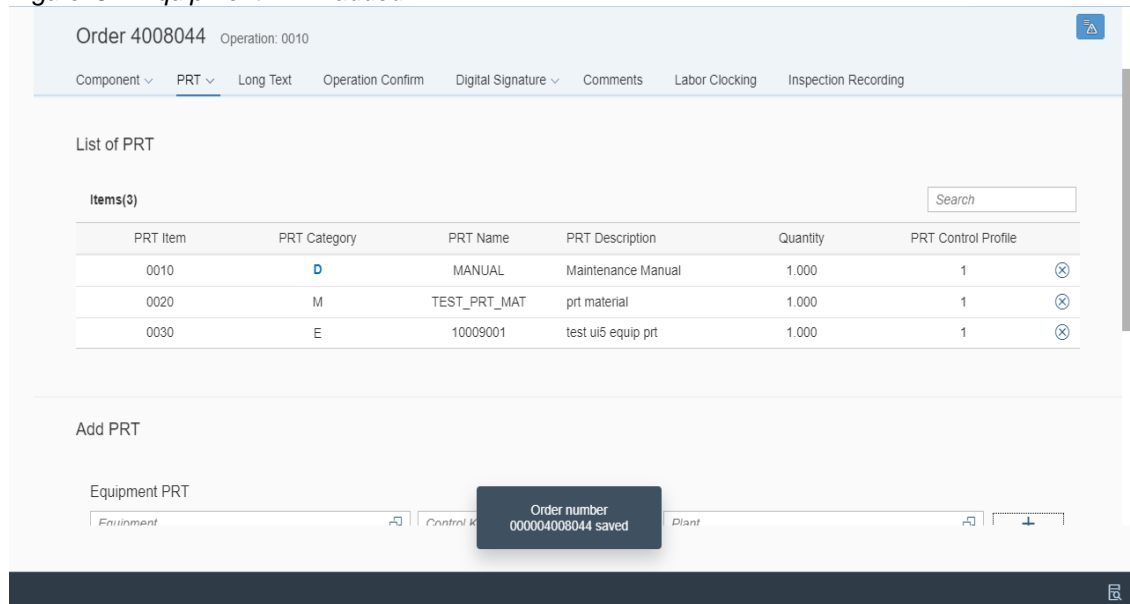


After entering the required details, click on the  button and PRT will be added

Figure 67: Equipment PRT added



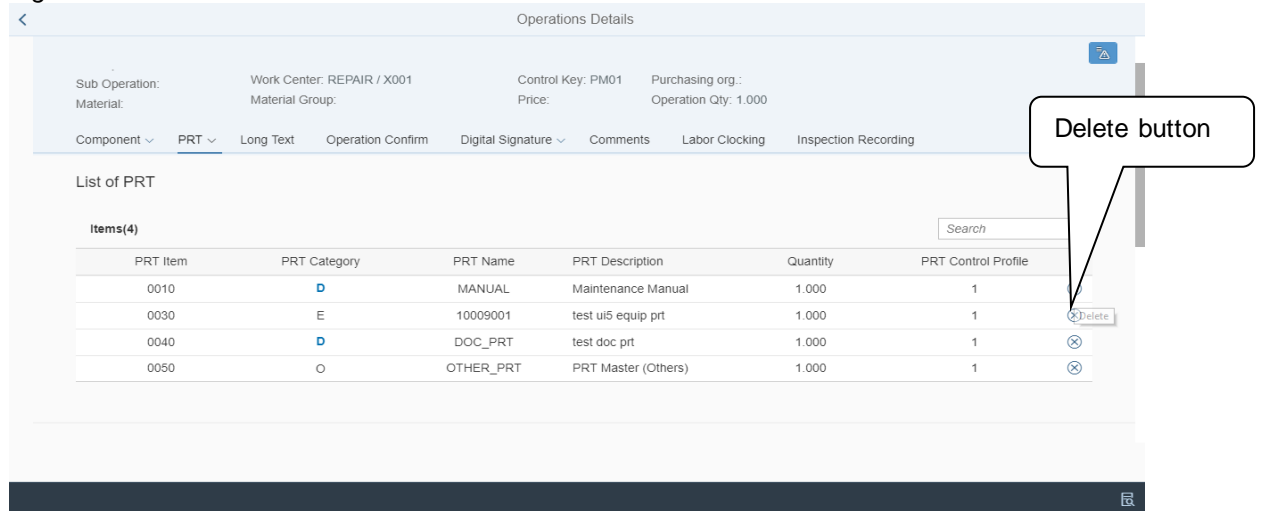
- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

### 4.2.4. Delete equipment PRT

This functionality enables user to delete the Equipment PRT assigned to the operation of an order

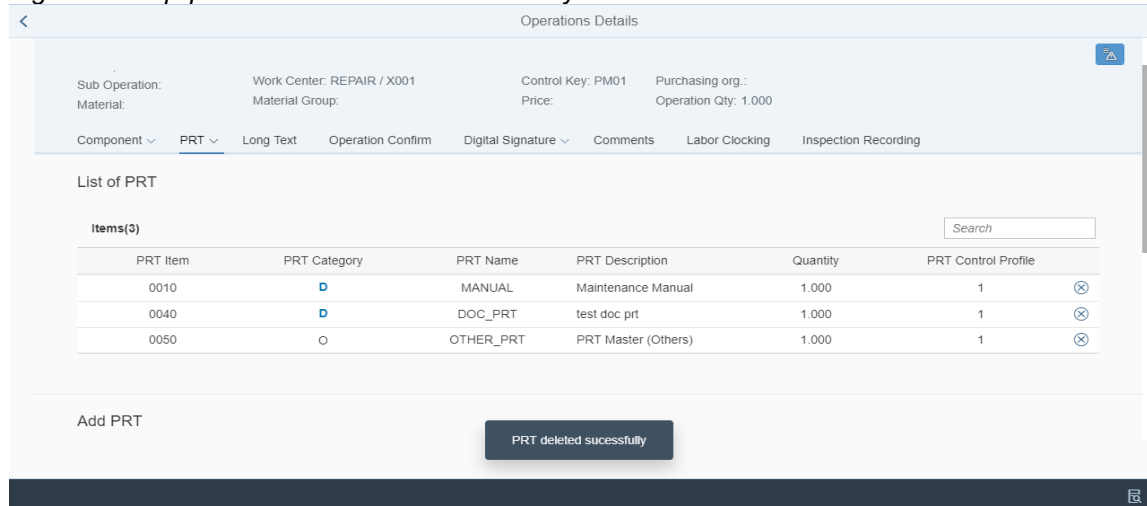
Input: Select the line i.e. Equipment PRT and click on the delete button on the top right


Figure 68: Delete button



Equipment PRT deleted successfully

Figure 69: Equipment PRT Deleted successfully



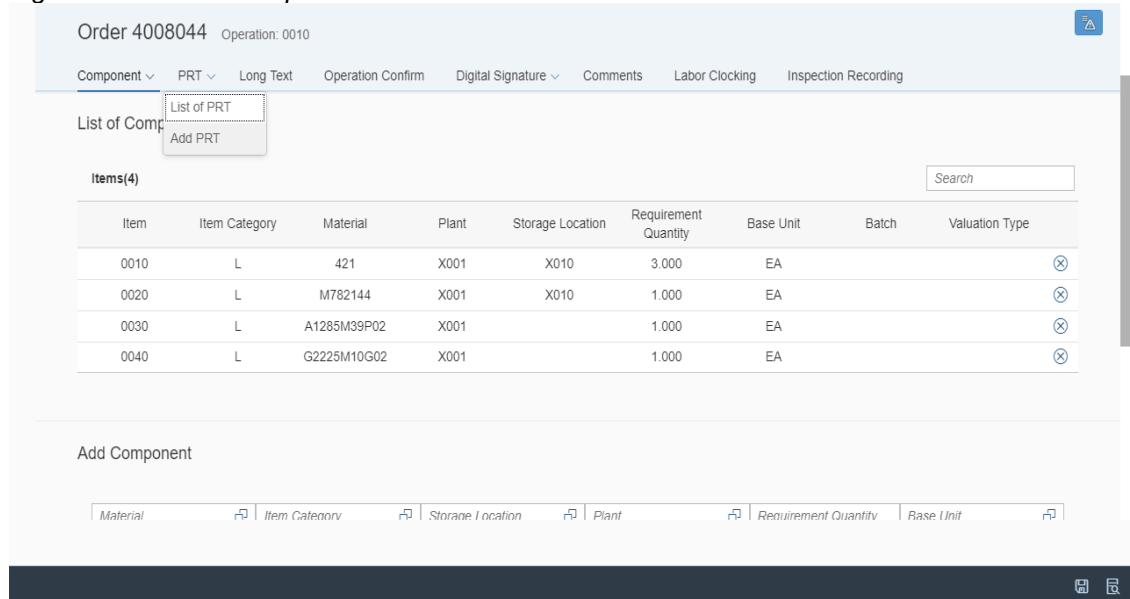
➤ To go back from the current screen user needs to click on  .

➤ Or if User wants to come out on the order list screen then click on  Order List .

### 4.2.5. Add document PRT

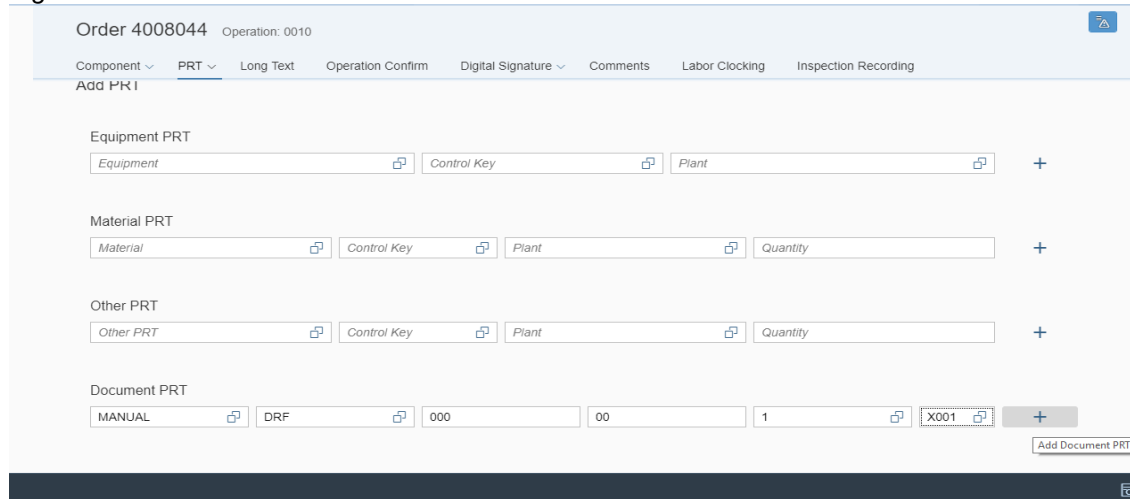
We have option to add document as PRT too. Similar like other PRTs, Insert document PRT option is there in drop down list. On selecting document PRT column.

Figure 70: Insert PRT option screen



For adding Document PRT, enter the Document PRT details.

Figure 71: Add Document PRT screen




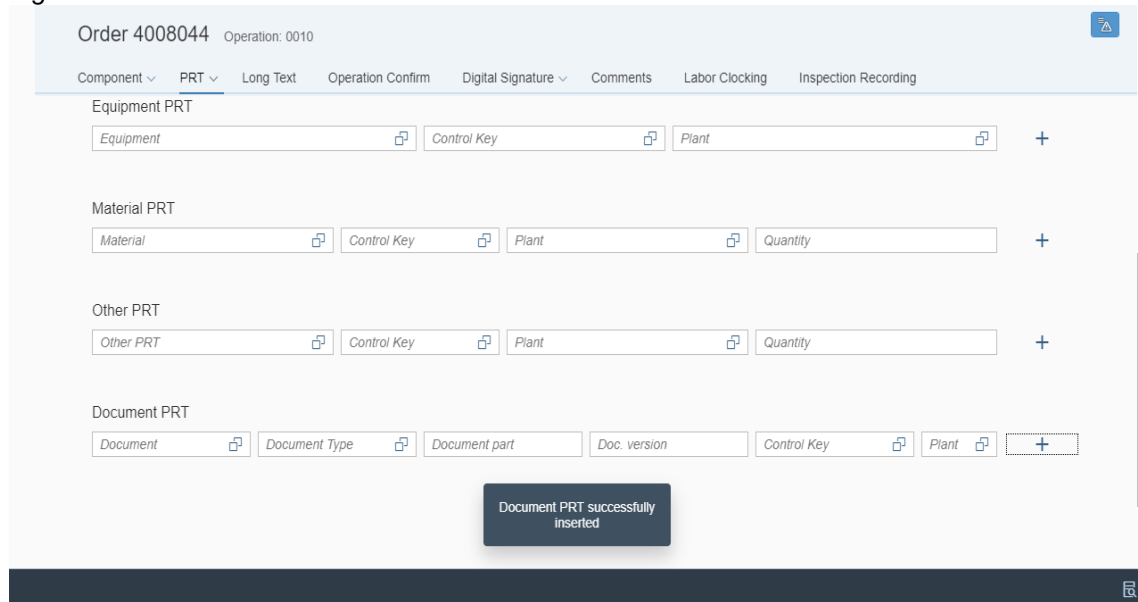
After entering the required details, click on the  button and PRT will be added

Figure 72: Document PRT added



➤ To go back from the current screen user needs to click on .

➤ Or if User wants to come out on the order list screen then click on Order List .

#### 4.2.6. Delete document PRT

This functionality enables user to delete the Document PRT assigned to the operation of an order

Select the line i.e. Document PRT and click on the delete button on the top right

Figure 73: Delete button

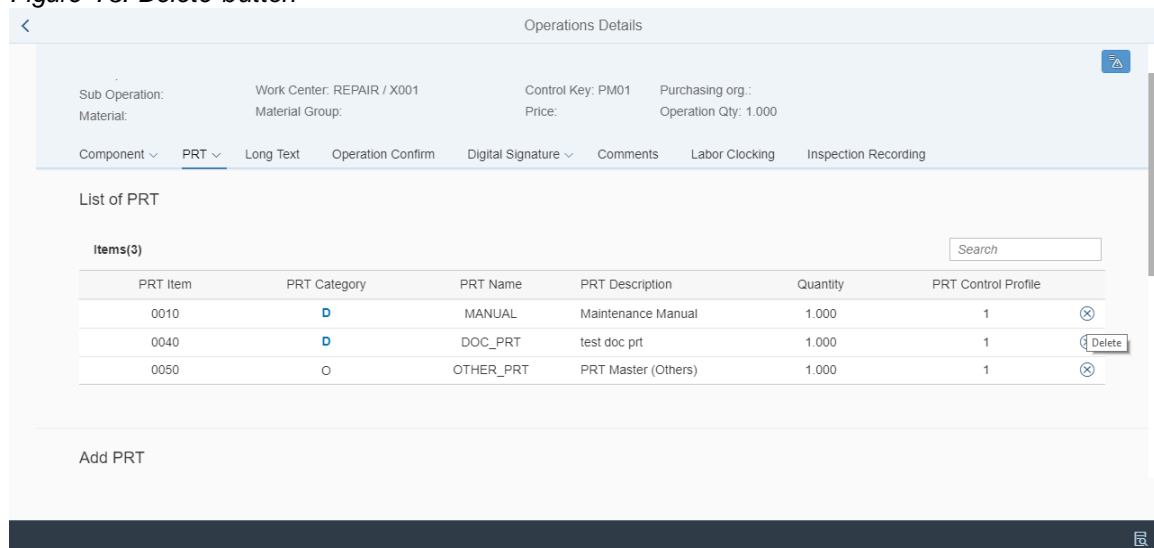
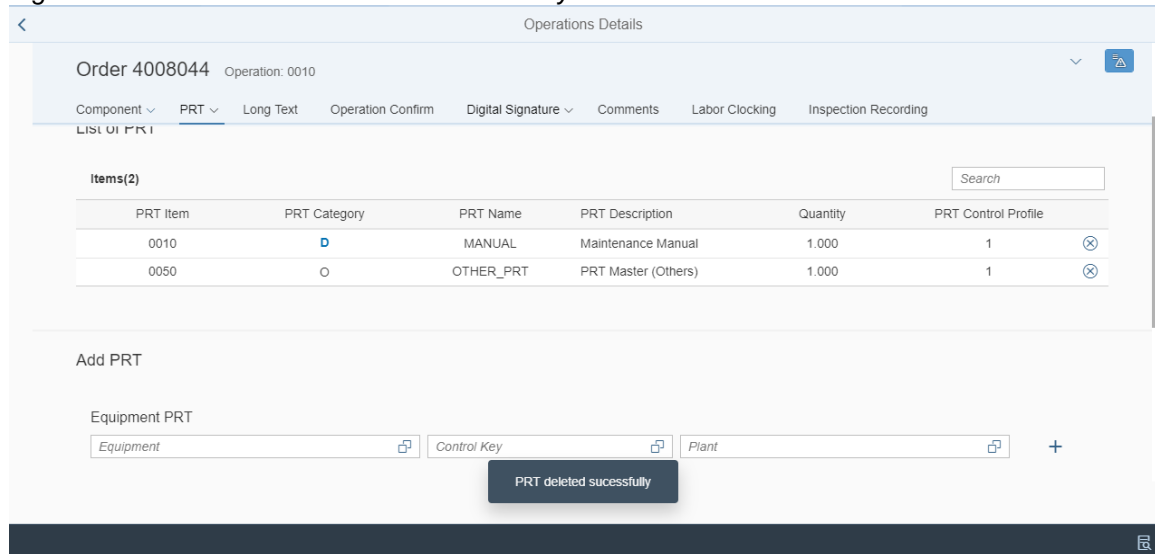




Figure 74: Document PRT Deleted successfully

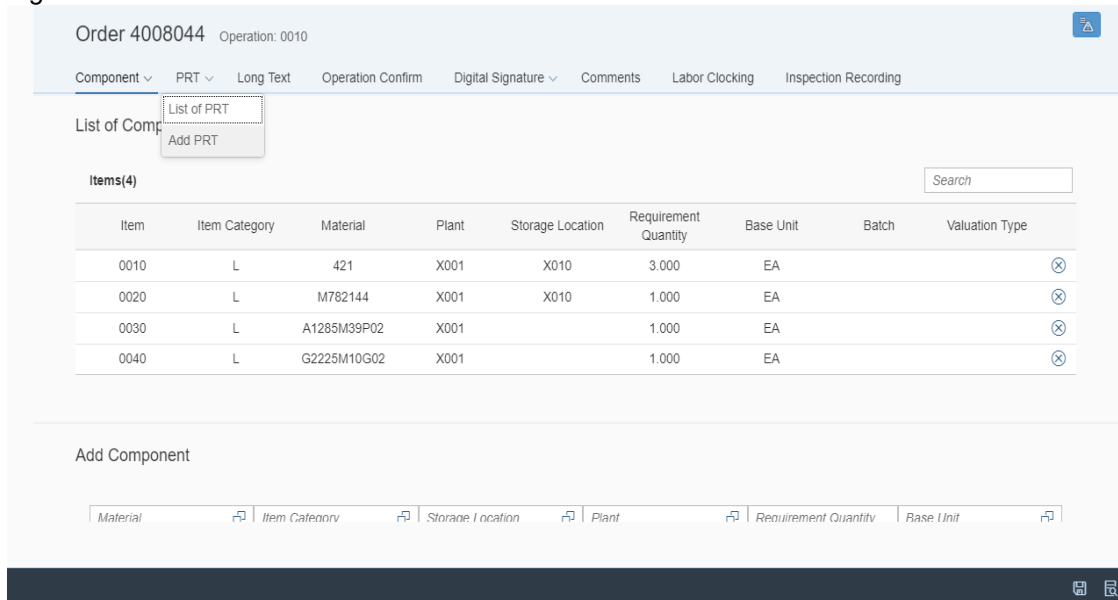


- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

#### 4.2.7. Add other PRT

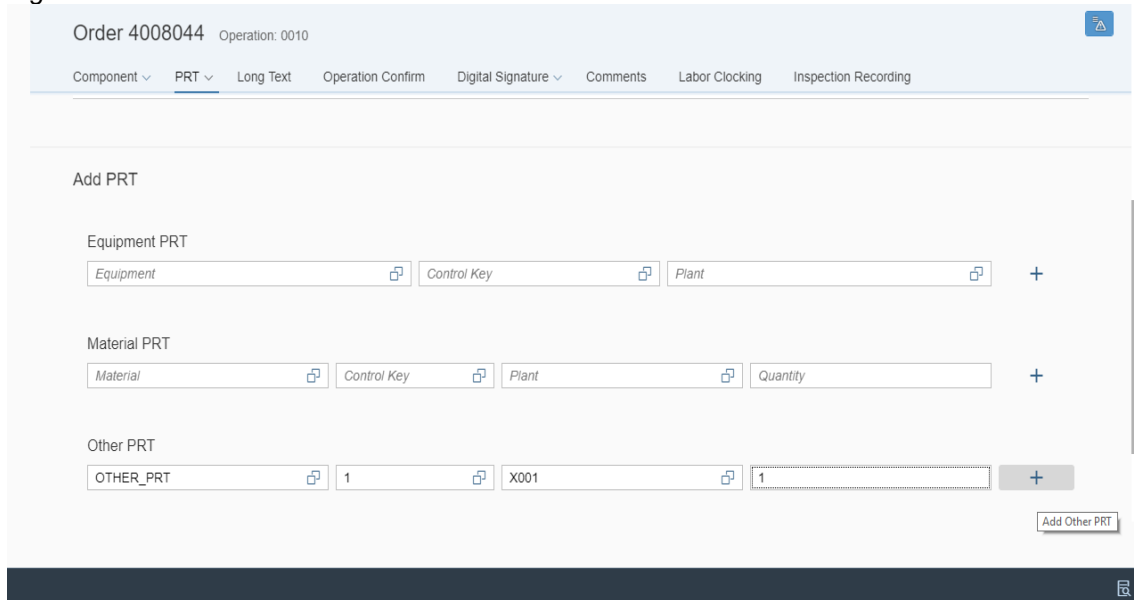
We have one more option of PRT, i.e. other PRT. Here we can insert other type of PRTs (except material, equipment and document), required to the operation. Input screen of other PRT, is given below.

Figure 75: Insert other PRT screen



For adding Other PRT, fill the Other PRT data.

Figure 76: Add Other PRT screen






After entering the required details, click on the  button and PRT will be added



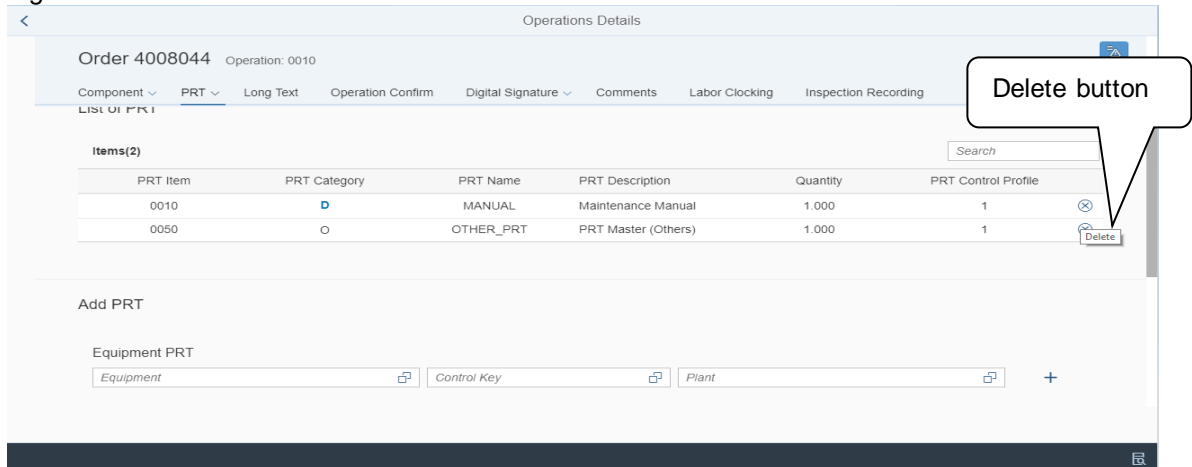
Figure 77: Other PRT added

- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

#### 4.2.8. Delete other PRT

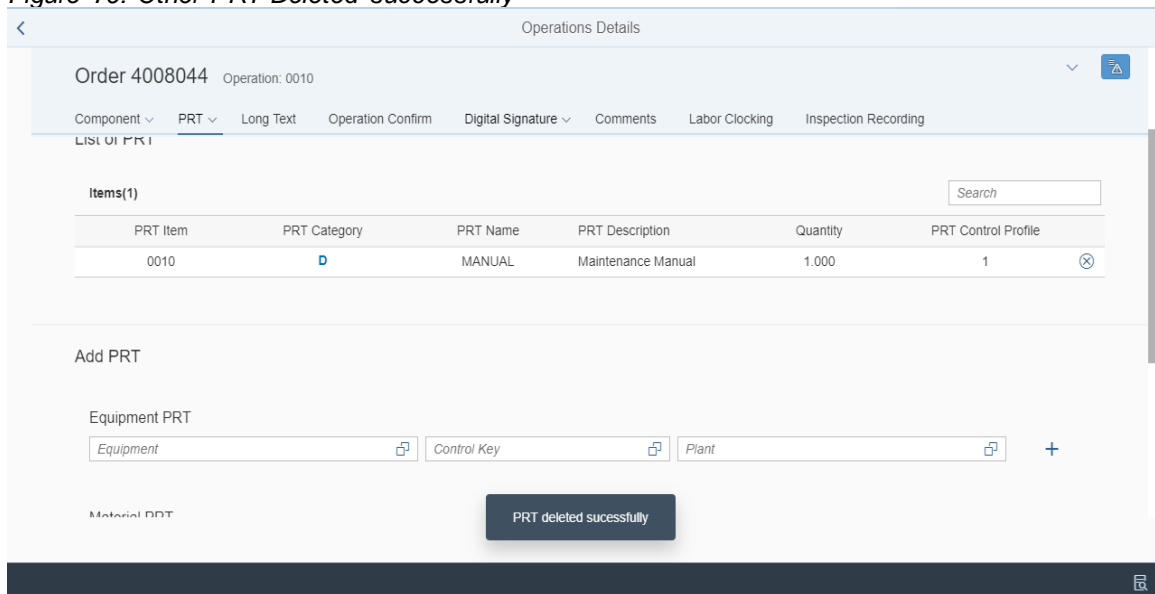
This functionality enables user to delete the Other PRT assigned to the operation of a order. Select the line i.e. Other PRT and click on the delete button on the top right.

Figure 78: Delete button



Other PRT deleted successfully

Figure 79: Other PRT Deleted successfully



- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on Order List .

### 4.3. Characteristic Results and Recording

This functionality enables user to record results for multiple MIC's assigned to an operation fro multiple inspection works at a single time. Saved characteristics results Shall also be displayed.

Figure 80: Char results button on operation detail screen



Sub Operation: Material: Work Center: E-ASSY / XU02 Material Group: Control Key: QM01 Price: Purchasing org.: Operation Qty: 0.000

Component ▾ PRT ▾ Long Text Operation Confirm Digital Signature ▾ Comments Labor Clocking **Inspection Recording**

List of Inspection Recording

Items(4)

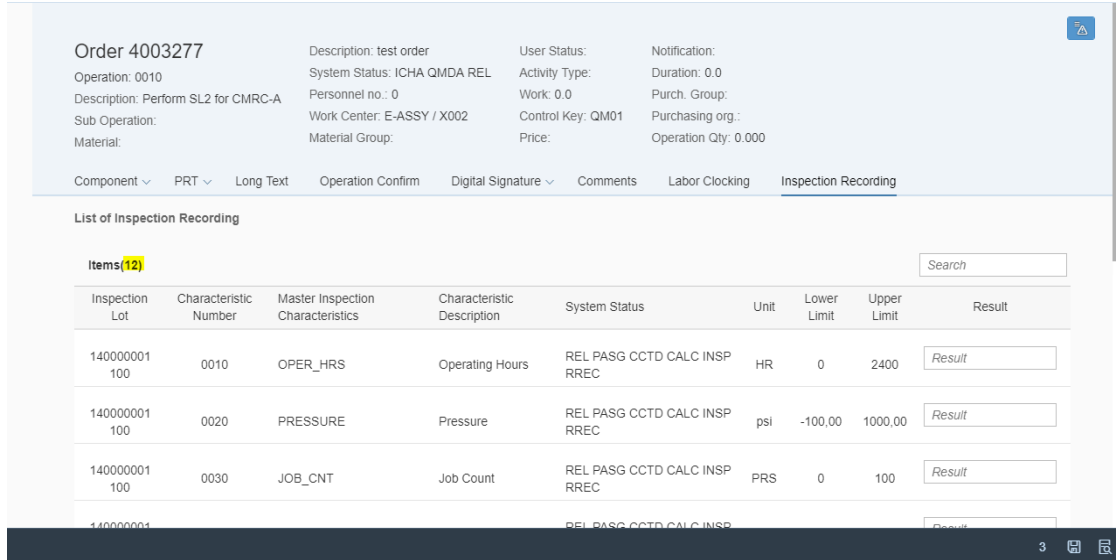
| Inspection Lot   | Characteristic Number | Master Inspection Characteristics | Characteristic Description | System Status                | Unit | Lower Limit | Upper Limit | Result                              |
|------------------|-----------------------|-----------------------------------|----------------------------|------------------------------|------|-------------|-------------|-------------------------------------|
| 140000001<br>100 | 0010                  | OPER_HRS                          | Operating Hours            | REL PASG CCTD CALC INSP RREC | HR   | 0           | 2400        | <input type="text" value="Result"/> |
| 140000001<br>100 | 0020                  | PRESSURE                          | Pressure                   | REL PASG CCTD CALC INSP RREC | psi  | -100.00     | 1000.00     | <input type="text" value="Result"/> |
| 140000001<br>100 | 0030                  | JOB_CNT                           | Job Count                  | REL PASG CCTD CALC INSP RREC | PRS  | 0           | 100         | <input type="text" value="Result"/> |
| 140000001<br>100 | 0040                  | TEMP                              | Temperature                | REL PASG CCTD CALC INSP RREC | °F   | -100.00     | 5000.00     | <input type="text" value="Result"/> |

Order 4003277 Operation: 0010

Component ▾ PRT ▾ Long Text Operation Confirm Digital Signature ▾ Comments Labor Clocking **Inspection Recording**

|                  |      |          |                 |                              |     |         |         |                                     |
|------------------|------|----------|-----------------|------------------------------|-----|---------|---------|-------------------------------------|
| 140000001<br>100 | 0020 | OPER_HRS | Operating Hours | REL PASG CCTD CALC INSP RREC | HR  | 0       | 2400    | <input type="text" value="Result"/> |
| 140000001<br>100 | 0030 | JOB_CNT  | Job Count       | REL PASG CCTD CALC INSP RREC | PRS | 0       | 100     | <input type="text" value="Result"/> |
| 140000001<br>100 | 0040 | TEMP     | Temperature     | REL PASG CCTD CALC INSP RREC | °F  | -100.00 | 5000.00 | <input type="text" value="Result"/> |
| 140000001<br>100 | 0010 | TEMP     | Temperature     | REL PASG CCTD CALC INSP RREC | °F  | -100.00 | 5000.00 | <input type="text" value="10.10"/>  |

Figure 81: Char results of an operation



The functionality also supports the batch messages for multiple recorded results which displays the information messages for each result recorded.

- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on Order List .

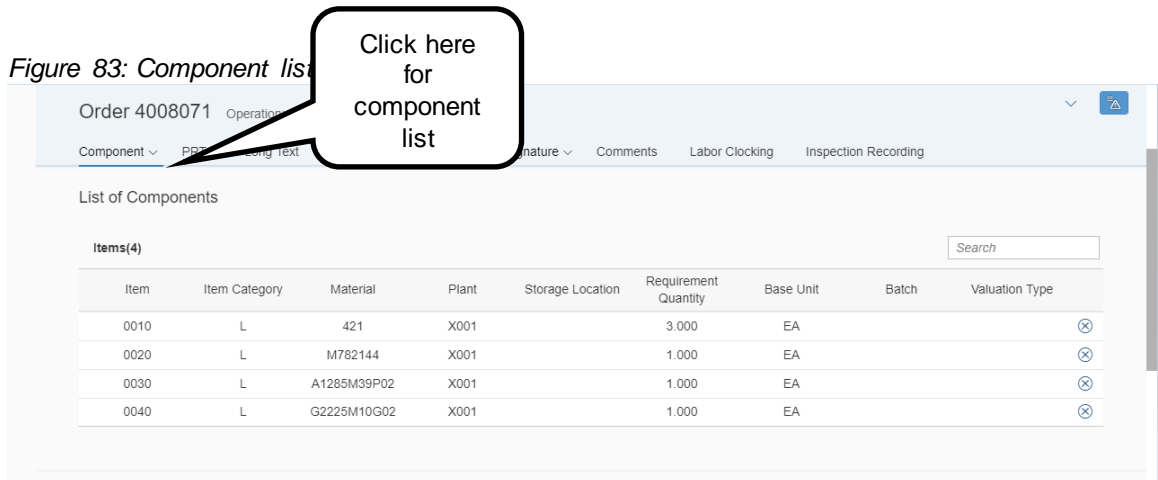
#### 4.4. Component list

List of components required for an operation can be displayed by going to the operation details and then clicking on button it will show the drag down option, select component list among the options.



Figure 82: Navigation to component list



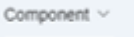

Figure 83: Component list



Component list will be shown as figure above.

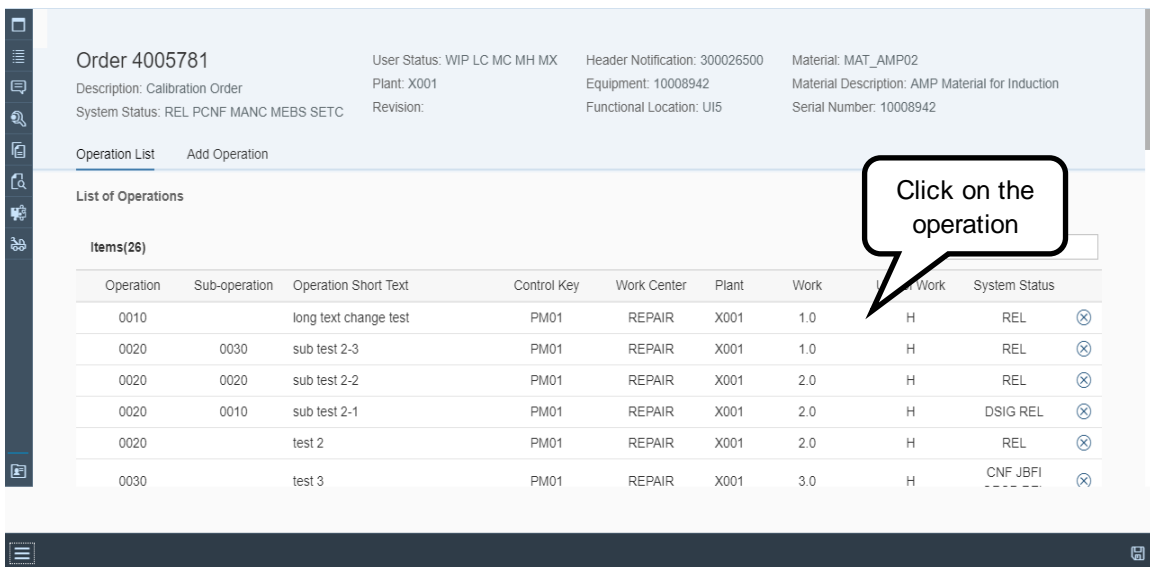
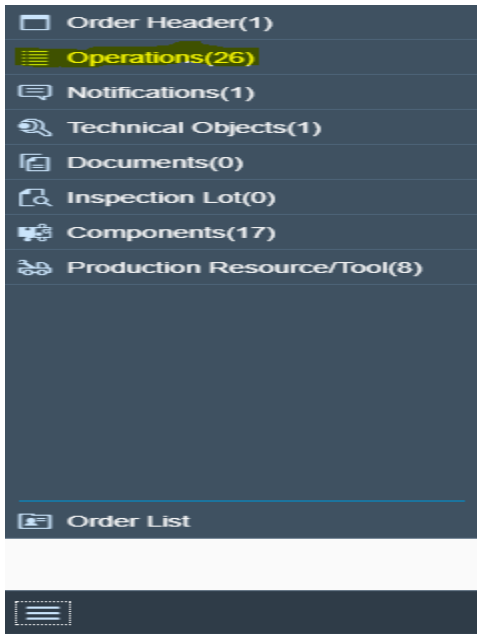
- To go back from the current screen user needs to click on  .
- Or if User wants to come out on the order list screen then click on  Order List .

#### 4.4.1. Add component

Add component can be done from operation header screen only. To add a “component” clicks on  button. It shall show us a drop down then user needs to select  button under that drop down list.

A blank row will open with mandatory fields to be maintained by user.

Figure 84: operation header



After clicking on the operation user shall have the operation header with the various functionalities option

Figure 85: operation header

**Order 4003277**    Description: test order    User Status:    Notification:   

Operation: 0100    System Status: REL    Activity Type:    Duration: 3.0 H

Description: Turning it on a lathe    Personnel no.: 0    Work: 3.0 H    Purch. Group:

Sub Operation:    Work Center: FIXIT / X001    Control Key: PM01    Purchasing org.:

Material:    Material Group:    Price:    Operation Qty: 1.000

Component ▾   PRT ▾   Long Text   Operation Confirm   Digital Signature ▾   Comments   Labor Clocking   Inspection Recording

### List of Components

Items(1)

| Item | Item Category | Material         | Plant | Storage Location | Requirement Quantity | Base Unit | Batch | Valuation Type |
|------|---------------|------------------|-------|------------------|----------------------|-----------|-------|----------------|
| 0010 | 2             | C19_SER_MAT<br>1 | X001  | X010             | 1.000                | EA        |       |                |

### Add Component

|              |  |   |  |      |  |      |  |   |    |  |
|--------------|--|---|--|------|--|------|--|---|----|--|
| C19_SER_MAT1 |  | 2 |  | X010 |  | X001 |  | 1 | EA |  |
|--------------|--|---|--|------|--|------|--|---|----|--|

**Click here to add**

**Order 4003277**    Operation: 0100   

Component ▾   PRT ▾   Long Text   Operation Confirm   Digital Signature ▾   Comments   Labor Clocking   Inspection Recording

### List of Components

Items(1)

| Item | Item Category | Material         | Plant | Storage Location | Requirement Quantity | Base Unit | Batch | Valuation Type |
|------|---------------|------------------|-------|------------------|----------------------|-----------|-------|----------------|
| 0010 | 2             | C19_SER_MAT<br>1 | X001  | X010             | 1.000                | EA        |       |                |

### Add Component

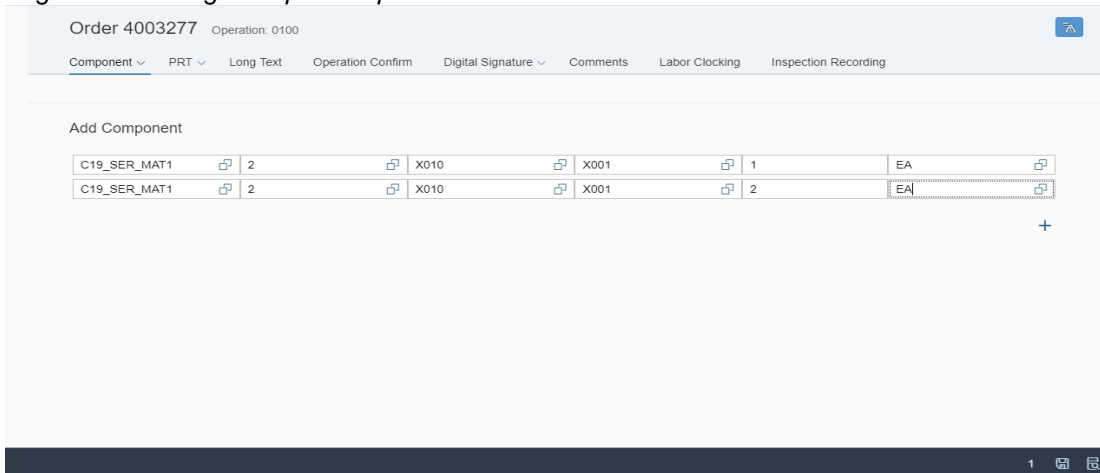
|                 |  |                      |  |                         |  |              |  |           |
|-----------------|--|----------------------|--|-------------------------|--|--------------|--|-----------|
| <i>Material</i> |  | <i>Item Category</i> |  | <i>Storage Location</i> |  | <i>Plant</i> |  | <i>Re</i> |
|-----------------|--|----------------------|--|-------------------------|--|--------------|--|-----------|

Order saved with number 4003277

Order saved with number 4003277

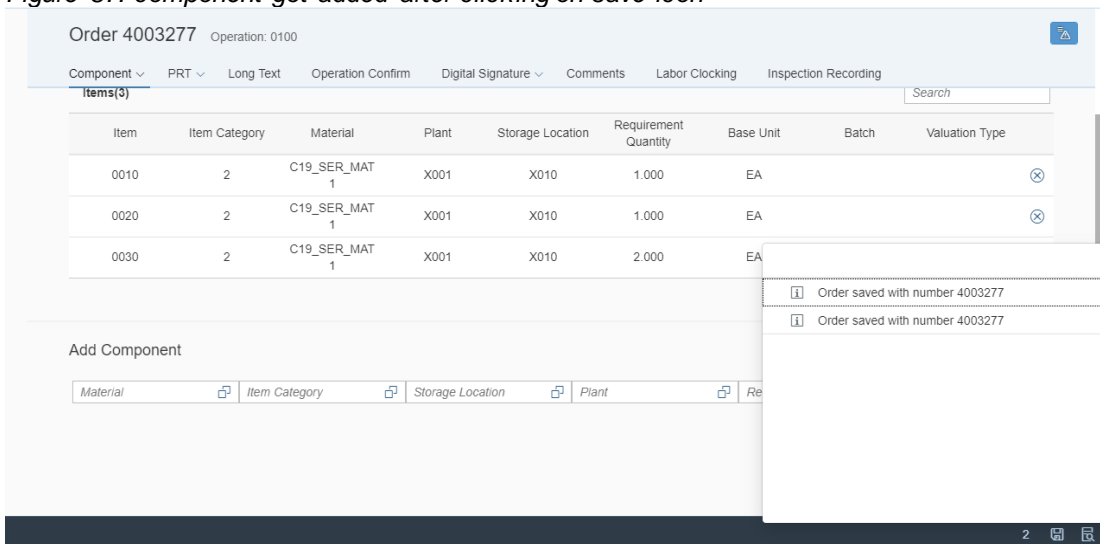
1

Figure 86: adding multiple components



If user wants to add more component at the same time then click on button it shall give the more rows to fill the entries for adding more components  
 After maintaining data click on add button. New component will be added to the list with a success message

Figure 87: component got added after clicking on save icon



The success message shall pop up as shown in above figure after clicking on save button in the right below corner of the screen.

➤ To go back from the current screen user needs to click on .

➤ Or if User wants to come out on the order list screen then click on Order List.



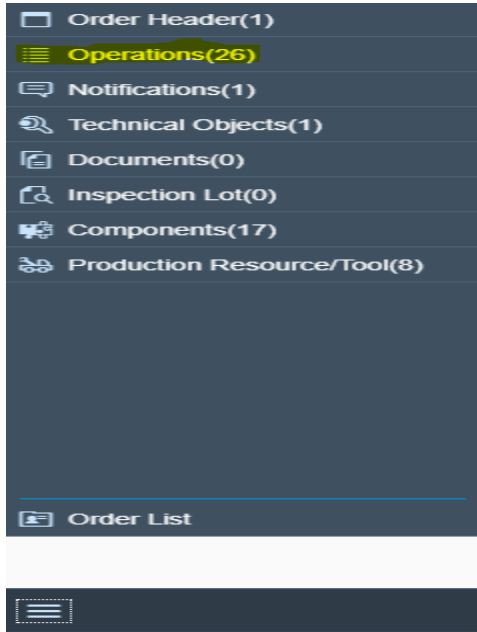
**Only stock items can be added and displayed in components. Supports non batch managed components (Batch field is not available for input)**



### 4.4.2. Delete component

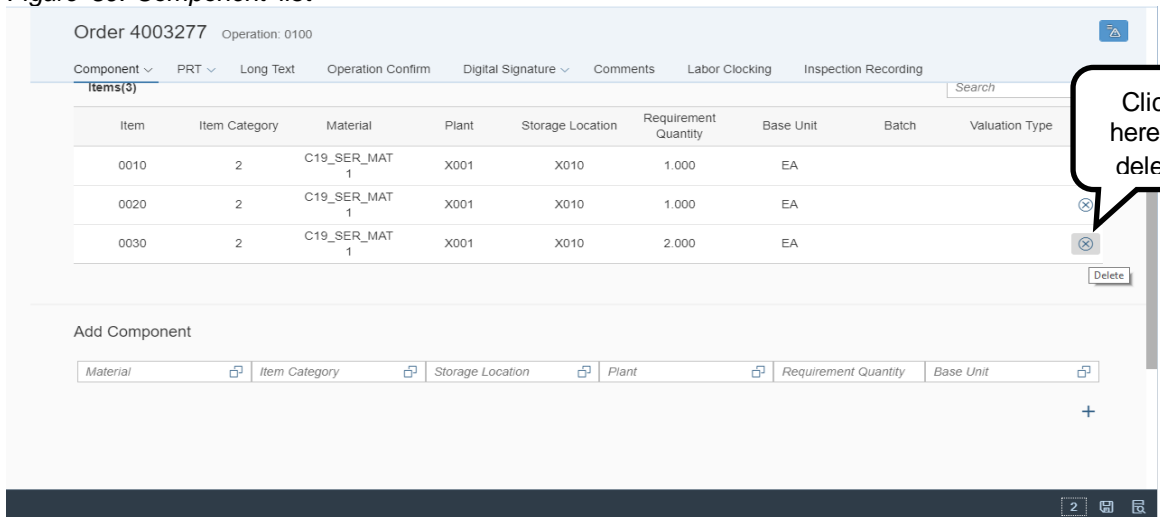
Deletion of component from component list can be done by selecting the component and clicking on delete button.

Figure 88: Navigation delete to component



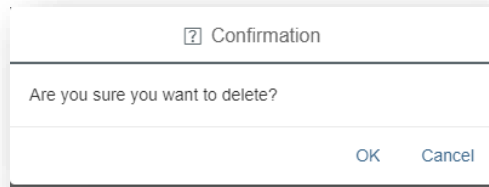
On selecting the operations from the above shown navigation pane click on the operation from which user wants to delete the component then select the component list.

Figure 89: Component list



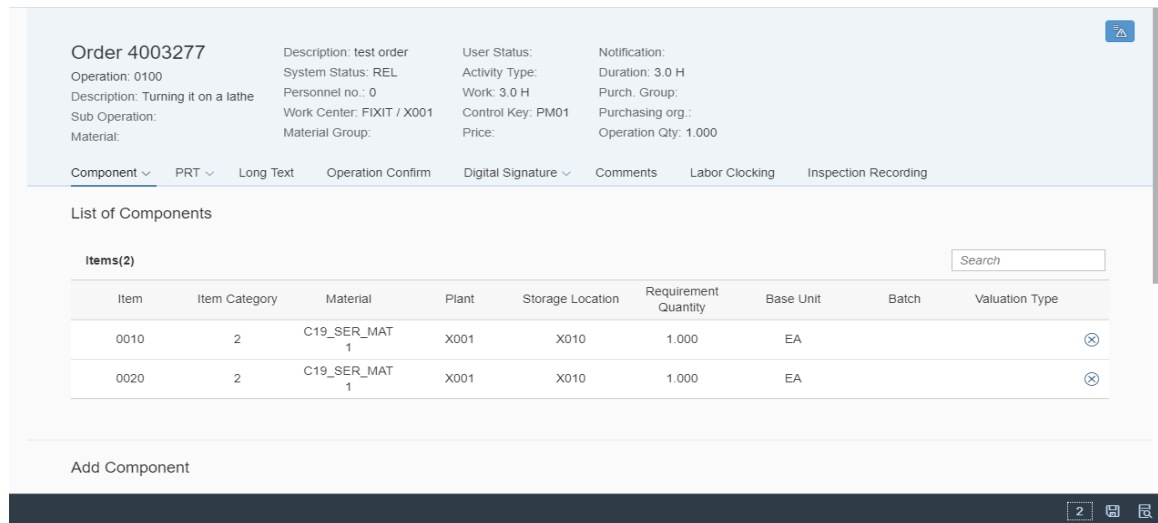
Now user needs to click on button for any component to which user wants to delete the action will give a confirmation screen at which user needs to select **OK**.

Figure 90: confirmation



After selecting the OK, a success message will populate.

Figure 91: message



➤ To go back from the current screen user needs to click on

➤ Or if User wants to come out on the order list screen then click on

#### 4.5. Labor clocking

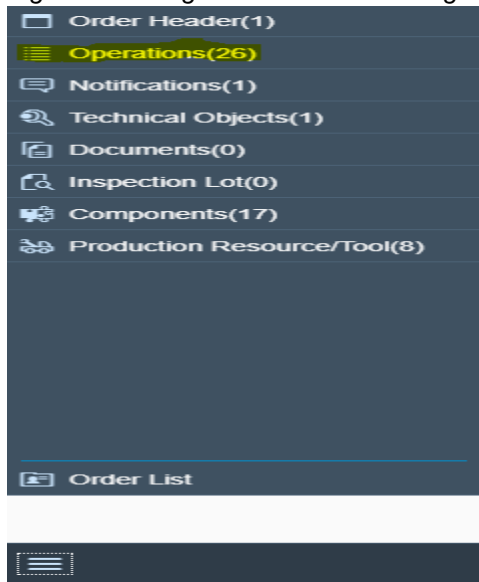
Labor clocking functionality allows user to clock ON and Clock OFF on any operation of selected order.

By reaching the operation header user can select the labor clocking tab as.

Now user have all the event which are clocked on and off before if any, now if user want to clock on or clock off (in case user already clocked off) the operation the user needs to click

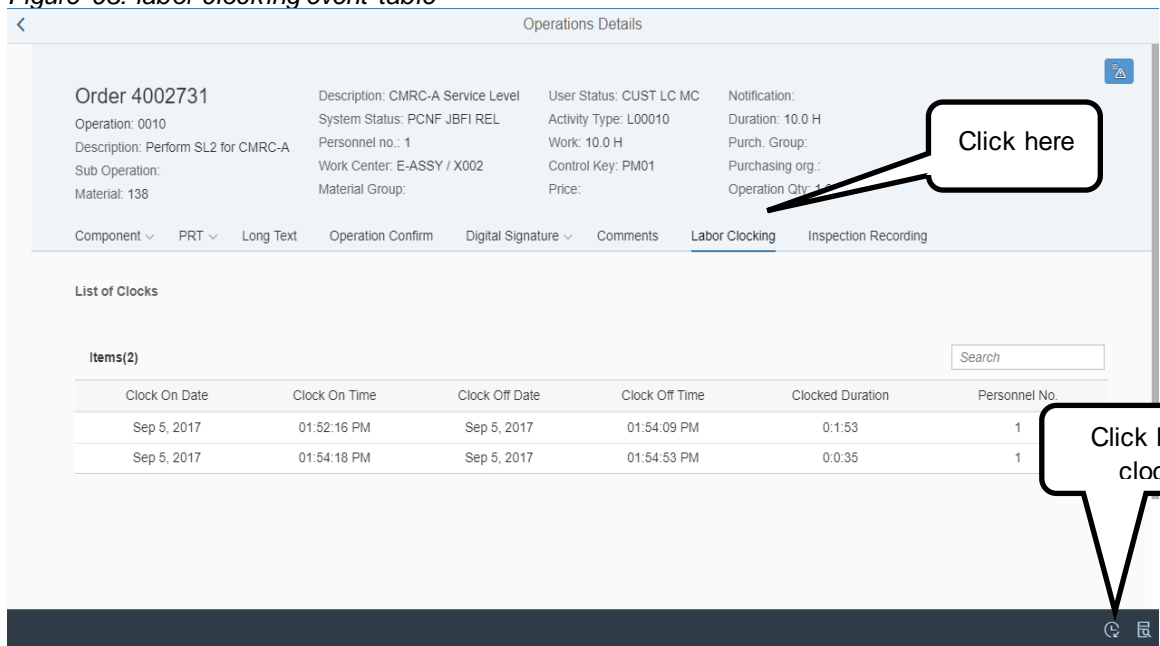
on

Go to the operation details for which clocking to be done and click on labor clocking button  
*Figure 92: navigation to labor clocking screen*



After selecting the particular operation user needs to click on labour clocking tab

*Figure 93: labor clocking event table*




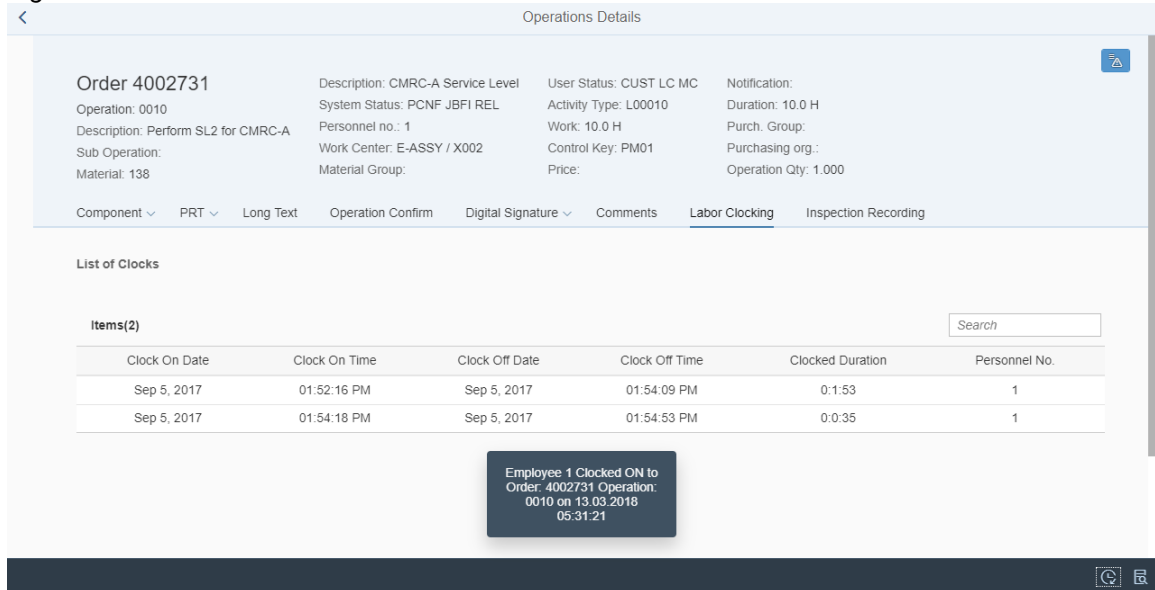
Then click on  button. Screen for labor clocking will be as shown in figure 93

Figure 94: Clock on screen




User has clocked on to the operation now if the user wants to clock off for the same operation then user has to again click on  button. Clock will get off for that particular operation with a confirmation screen which enables user to confirm operation finally or not as shown in below figure 95

Figure 95: Clocked screen

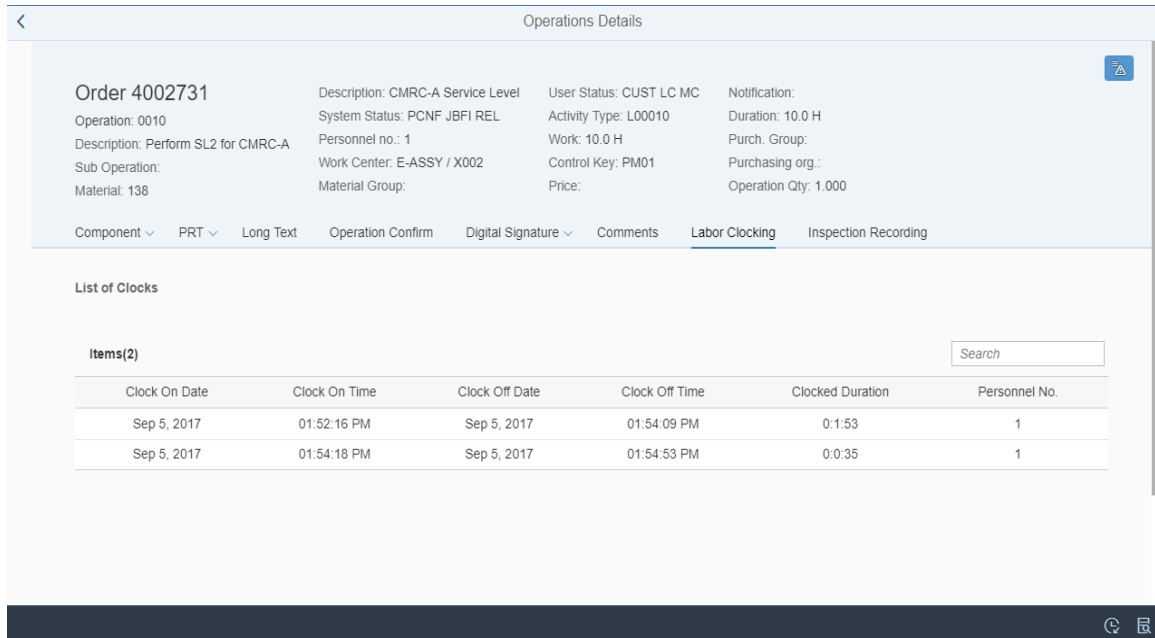
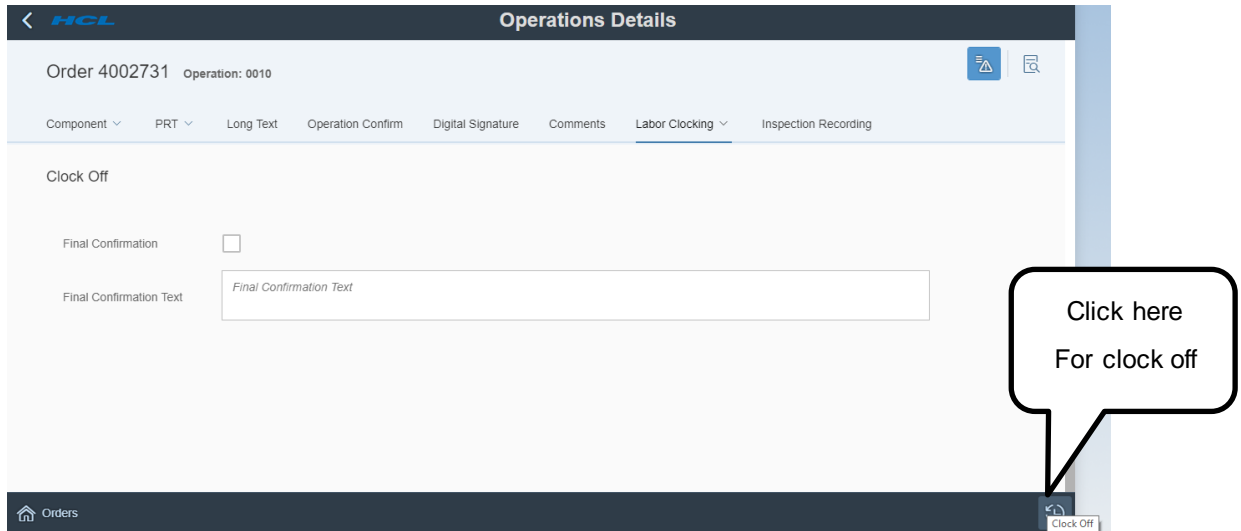
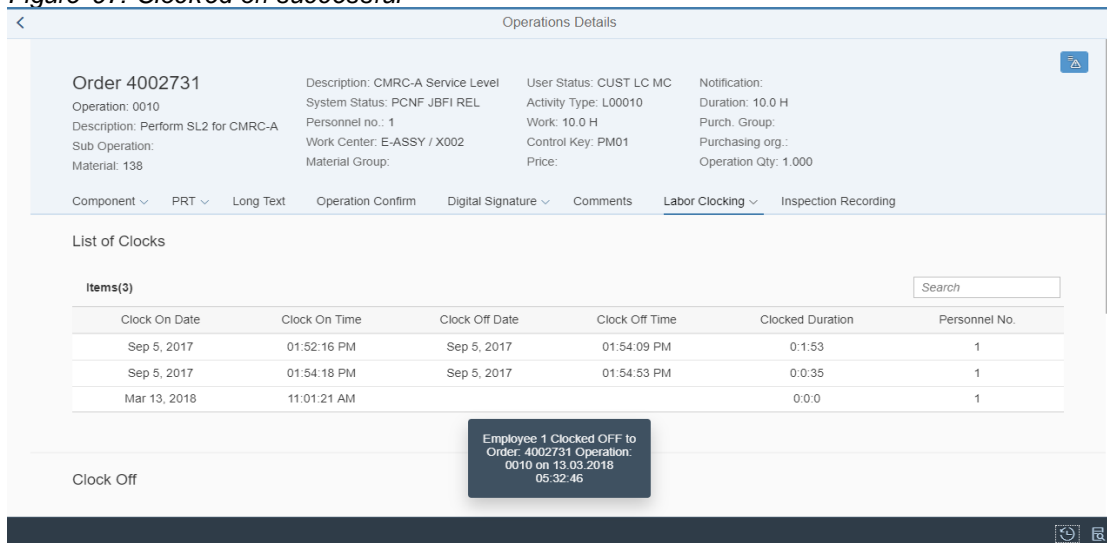


Figure 96: Clock off screen





If user want to confirm the operation finally then user has a option to click the final confirmation checkbox if not the operation will not be confirmed and user can again clock on for the same operation.

Figure 97: Clocked off successful



**Labor clocking functionality will work if only current status of personal number is "Clock in". Without clocking in, if user tries to clock on then an error message to clock in will pop up.**

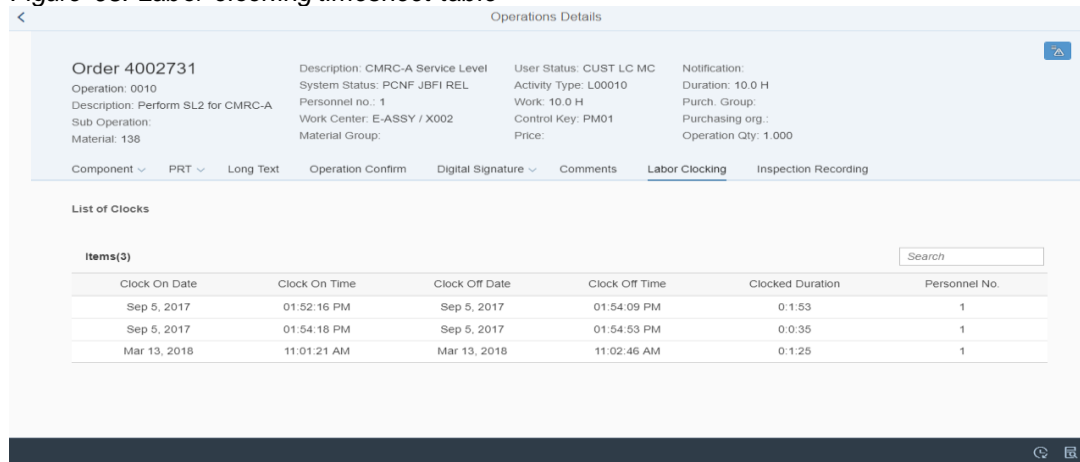
- To go back from the current screen user needs to click on  .
- Or if User wants to come out on the order list screen then click on  .

### 4.5.1. Labor clocking event table



Labor clocking table displays the “clock on” and “clock off” details of an operation with duration and personal number.

This table can be displayed on the same screen, where option to clock on and off is there as shown below figure 98

Figure 98: Labor clocking timesheet table



| Clock On Date | Clock On Time | Clock Off Date | Clock Off Time | Clocked Duration | Personnel No. |
|---------------|---------------|----------------|----------------|------------------|---------------|
| Sep 5, 2017   | 01:52:16 PM   | Sep 5, 2017    | 01:54:09 PM    | 0:1:53           | 1             |
| Sep 5, 2017   | 01:54:18 PM   | Sep 5, 2017    | 01:54:53 PM    | 0:0:35           | 1             |
| Mar 13, 2018  | 11:01:21 AM   | Mar 13, 2018   | 11:02:46 AM    | 0:1:25           | 1             |

- To go back from the current screen user needs to click on  .
- Or if User wants to come out on the order list screen then click on  .

### 4.6. Qualification check

This functionality enables user to check that the person assigned for the operation is qualified to perform the operation as per the required qualification or not.

To check the required qualification user has to click on operation row at which he/she wants to perform the qualification check as shown in below figure.

Figure 99: Navigation to qualification check



Order 4008044

Description: Rectification Work Order No. 2  
System Status: CRTD MANC

User Status: WIP  
Plant: X001  
Revision:

Header Notification:  
Equipment:  
Functional Location:

Material:  
Material Description:  
Serial Number:

Operation List    Add Operation

List of Operations

Items(5)

| Operation | Sub-operation | Operation Short Text | Control Key | Work Center | Plant | Work | Unit of Work | System Status |
|-----------|---------------|----------------------|-------------|-------------|-------|------|--------------|---------------|
| 0010      |               | Operation 1          | PM01        | REPAIR      | X001  | 3.0  | H            | CRTD          |
| 0020      |               | Operation 2          | PM01        | REPAIR      | X001  | 1.0  | H            | CRTD          |
| 0030      |               | Operation 3          | PM01        | REPAIR      | X001  | 4.0  | H            | CRTD          |
| 0040      |               | Operation 4          | PM01        | REPAIR      | X001  | 1.0  | H            | CRTD          |
| 0050      |               | Operation 5          | PM01        | REPAIR      | X001  | 1.0  | H            | CRTD          |

Add Operation

User shall be navigated to the qualification check screen after clicking on the operation r

Figure 100: Qualification check

Operations Details

Order 4008044

Operation: 0010  
Description: Palani Test  
Sub Operation:  
Material:

Description: Rectification Work Order No. 2  
System Status: REL  
Personnel no.: 0  
Work Center: REPAIR / X001  
Material Group:

User Status: WIP  
Activity Type:  
Work: 3.0 H  
Control Key: PM01  
Price:

Notification:  
Duration: 3.0 H  
Purch. Group:  
Purchasing org.:  
Operation Qty: 1.000

Component    PRT    Long Text    Operation Confirm    Digital Signature    Comments    Labor Clocking    Inspection Recording

List of Components

Items(4)

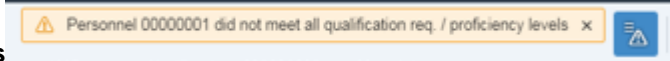
| Item | Item Category | Material     | Plant | Storage Location | Requirement Quantity | Base Unit | Batch | Valuation Type |
|------|---------------|--------------|-------|------------------|----------------------|-----------|-------|----------------|
| 0010 | L             | 421          | X001  | X010             | 3.000                | EA        |       |                |
| 0020 | L             | M782144      | X001  | X010             | 1.000                | EA        |       |                |
| 0030 | L             | A1285M39P02  | X001  |                  | 1.000                | EA        |       |                |
| 0040 | L             | G2225M110G02 | X001  |                  | 1.000                | EA        |       |                |

Click here to check the qualification

Figure 101: message

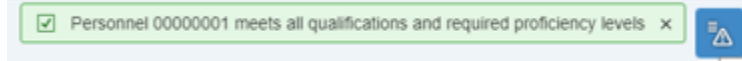
Personnel 00000001 meets all qualifications and required proficiency levels

- The functionality works on qualification and required proficiency if user is qualified as required in requirement profile but the proficiency level is not upto the required



level then the pop shall be as

- If the person fulfilling all the requirement as per the requirement profile assigned to operation the message shall be as



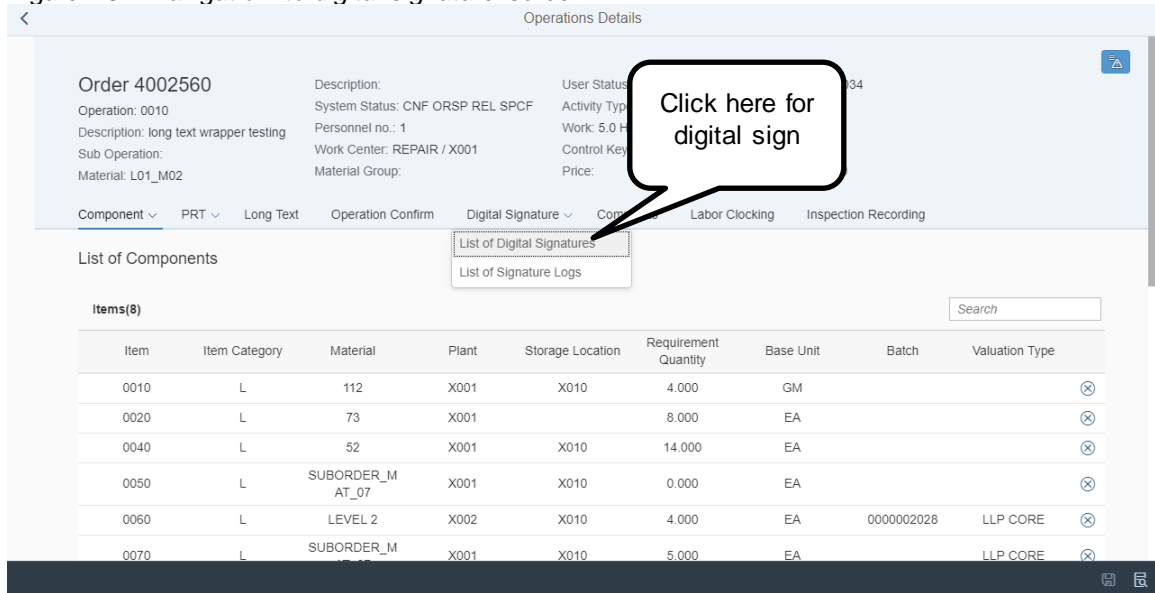
- To go back from the current screen user needs to click on

- Or if User wants to come out on the order list screen then click on

### 4.7. Digital signature

Digital signature is a functionality which allows electronic signature of user on an operation. To do digital signature, go to the operation details on which sign to be done and click on button.

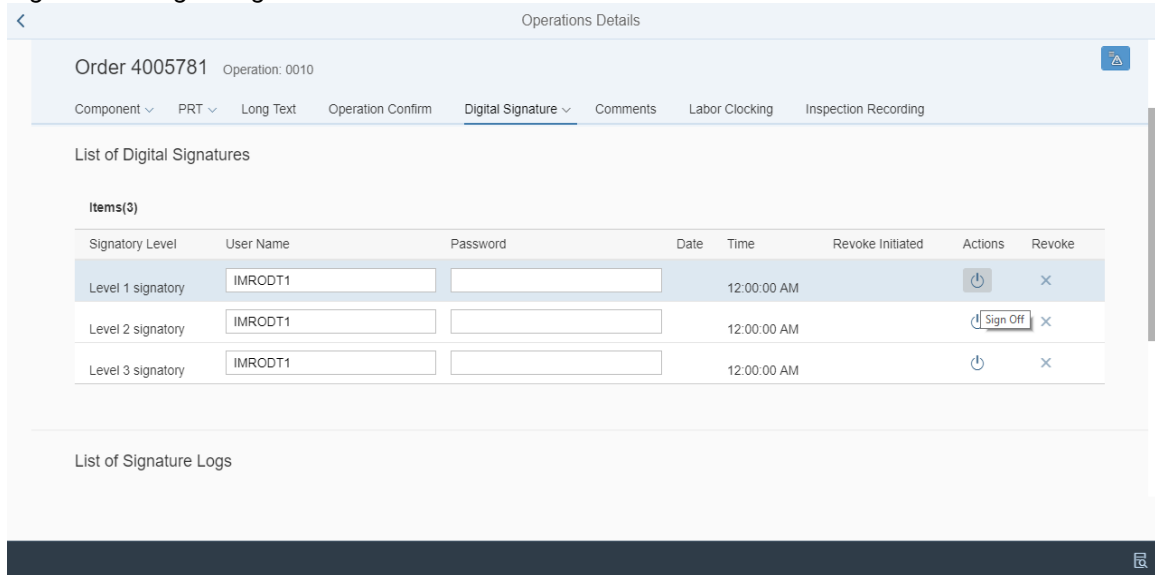
Figure 102: Navigation to digital signature screen






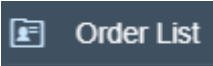
Based on signature strategy assigned, individual signature levels will be displayed in screen. With the level name of the user who has login will also be displayed in "USER NAME" field. See figure 103







Figure 103: Digital signature screen



User has to maintain his password and click on signoff button.

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.
- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

#### 4.7.1. Digital signature levels

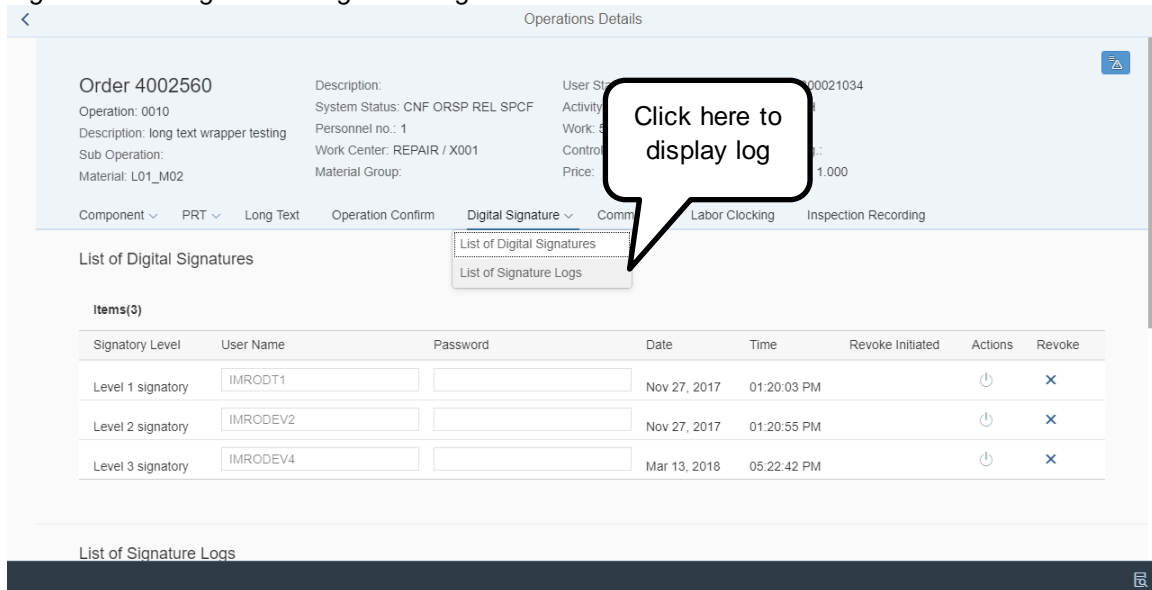
- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.
- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

#### 4.7.2. Digital signature log

Signature log is the list of all level signatures and revoke actions done on particular operation.

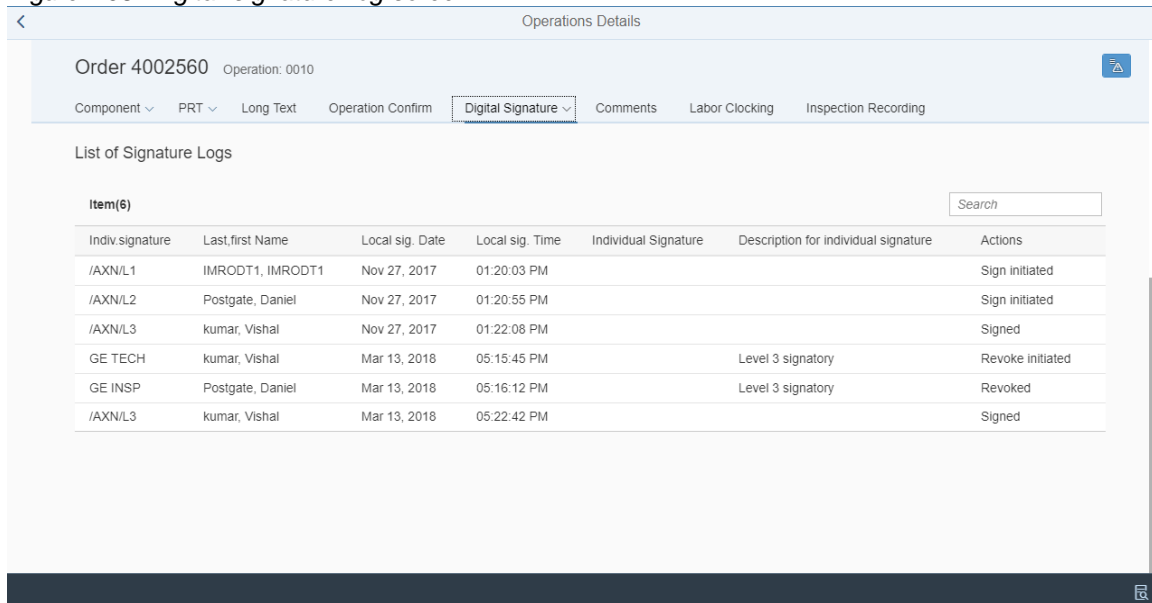
Signature log can be seen by clicking on signature log button in digital signature screen.

Figure 104: Navigation to Signature log



Signature log screen will be as shown in figure 104

Figure 105: Digital signature log screen



- For going back, click on to select or reach other functionalities or click on Orders button to go back to order list screen.
- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

### 4.7.3. Revoke digital signatures

Digital signature process can be cancelled, once the level 1 sign is done. This can be done by input as username and password in next level and click on revoke button.

Figure 106: Screen for revoke the digital signature

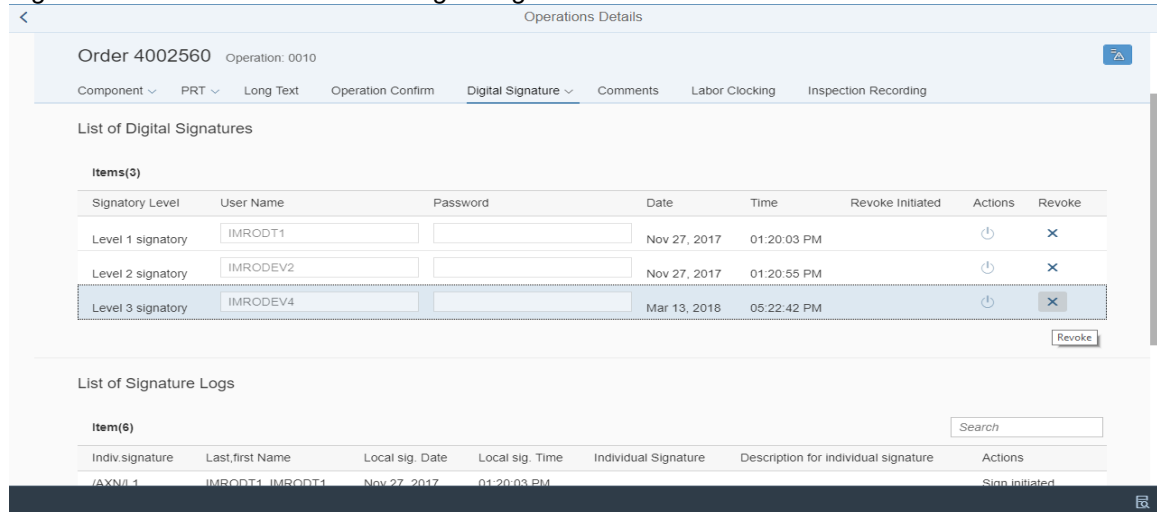


Figure 107: screen before signature revoke

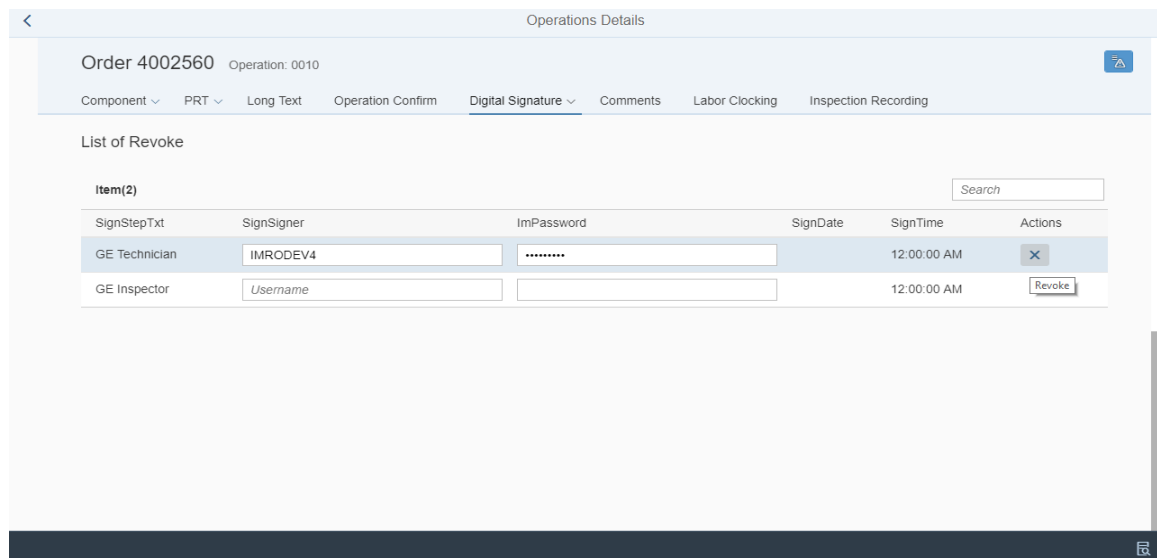
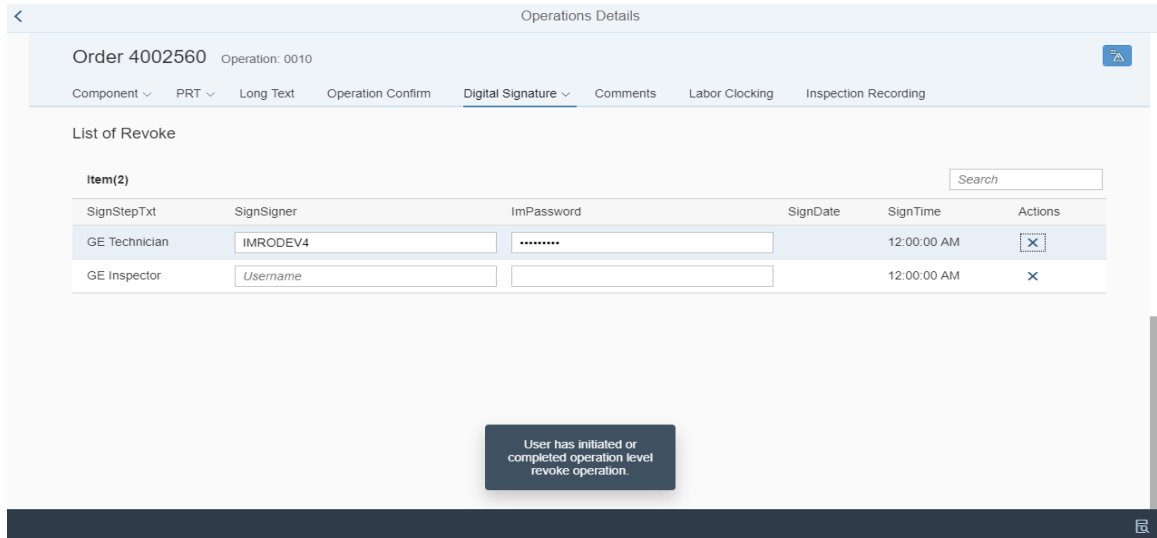


Figure 108: screen after signature revoke



#### 4.7.4. Digital Signature Revoke Levels

#### 4.8. Operation confirmation

Order operation confirmation functionality here is same as standard SAP functionality. It is the replica of Transaction 'IW41', in standard SAP Plant Maintenance Module.

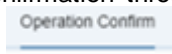
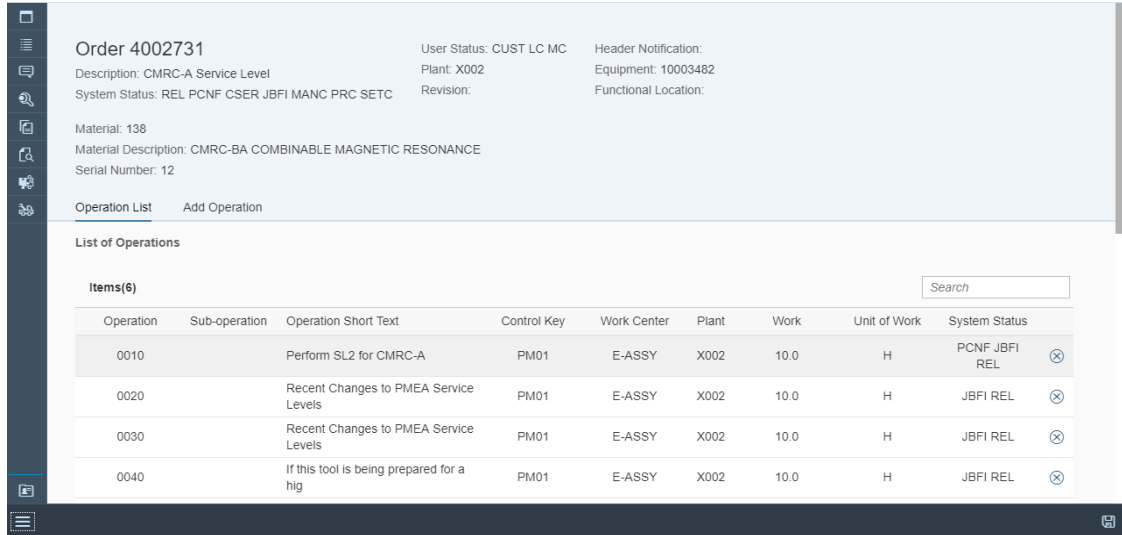
Performing order confirmation through this application is done by going to the operation details and click on 

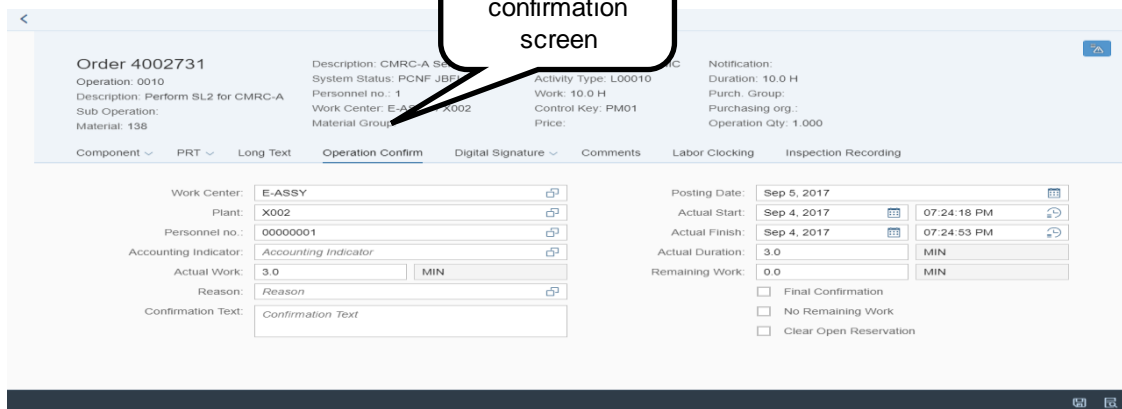
Figure 109: Navigation to order confirmation screen





Order confirmation screen will be as shown in figure

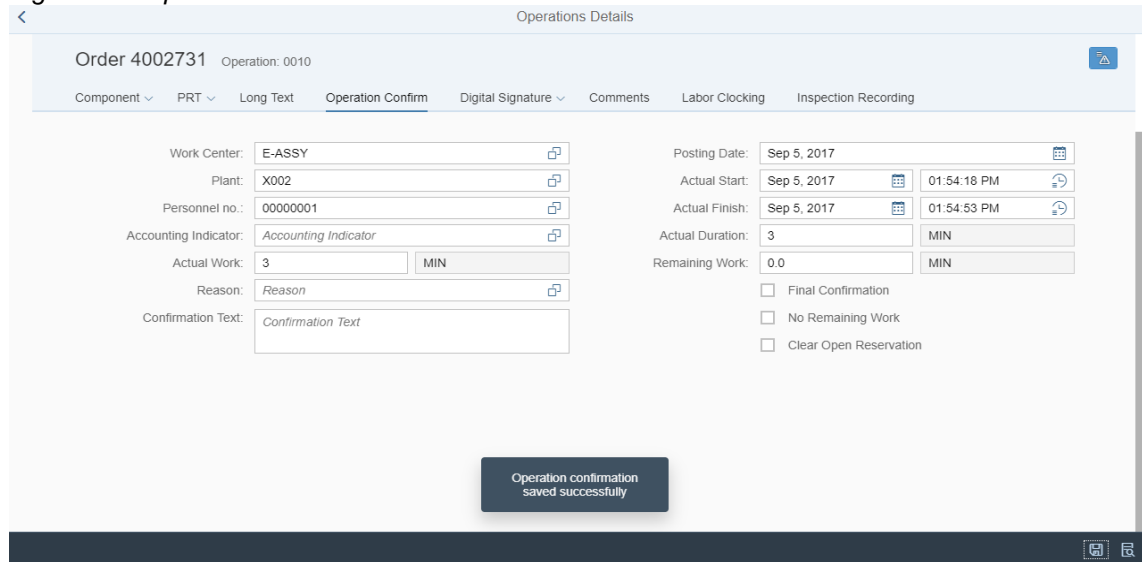
Figure110: Order confirmation screen




All fields will be in editable mode data like work center, plant; unit will be from default value based on configuration and order.

After maintaining all required data click on save button.

Figure111: Operation confirmed



➤ To go back from the current screen user needs to click on  .

➤ Or if User wants to come out on the order list screen then click on  Order List .

### 5. Header Notification

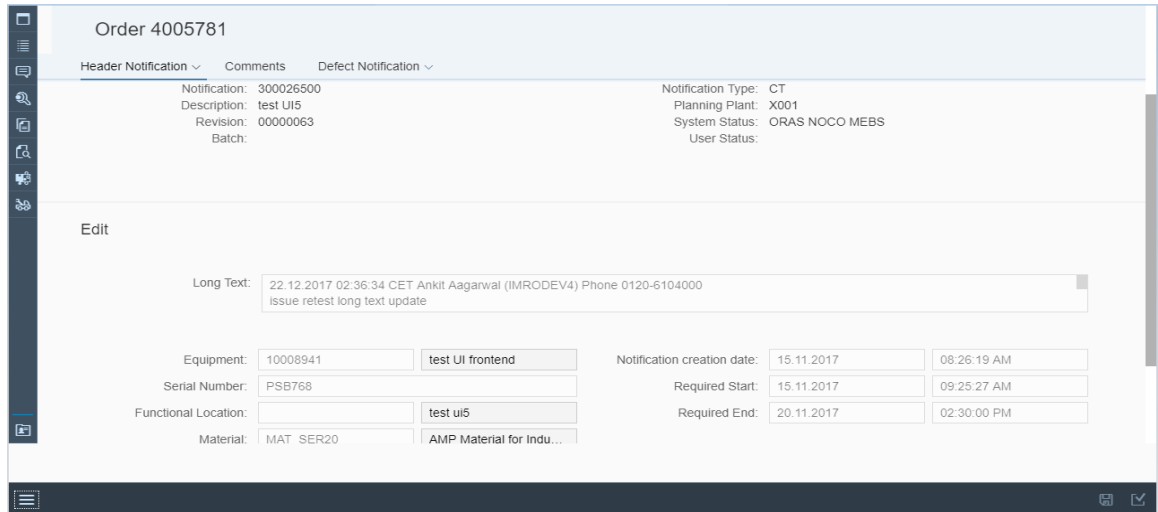
Header notification detail contains all important fields of the header notification. It can be seen by clicking notification functionality in Left navigation screen.


Figure112: Header notification functionality in functionality screen



Header notification screen will be as shown in figure 113

Figure113: Notification header detail screen



- At any point if switching to other functionality is required, that can be done by clicking on  button, which will open the list of all functionalities in list form.

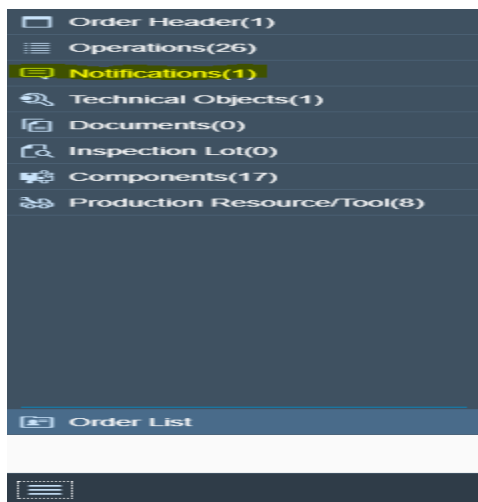
### 5.1. Change/update notifications

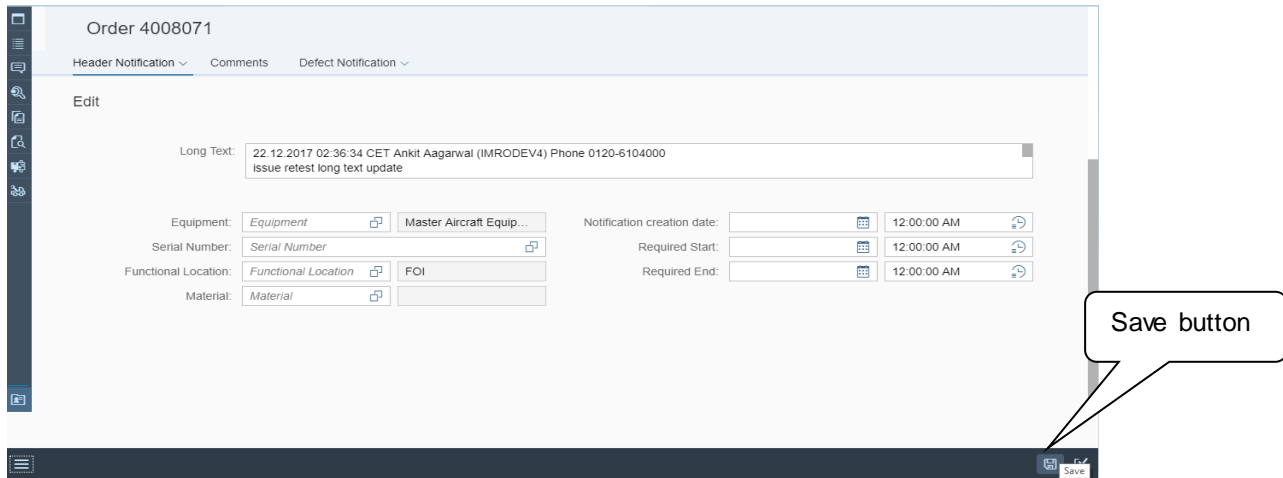
This functionality enables the user to change the header notification details

Open the notification and enter the values which user wants to change on the edit screen.

After entering all the details user will click on the save button which will update the changed details of notification.

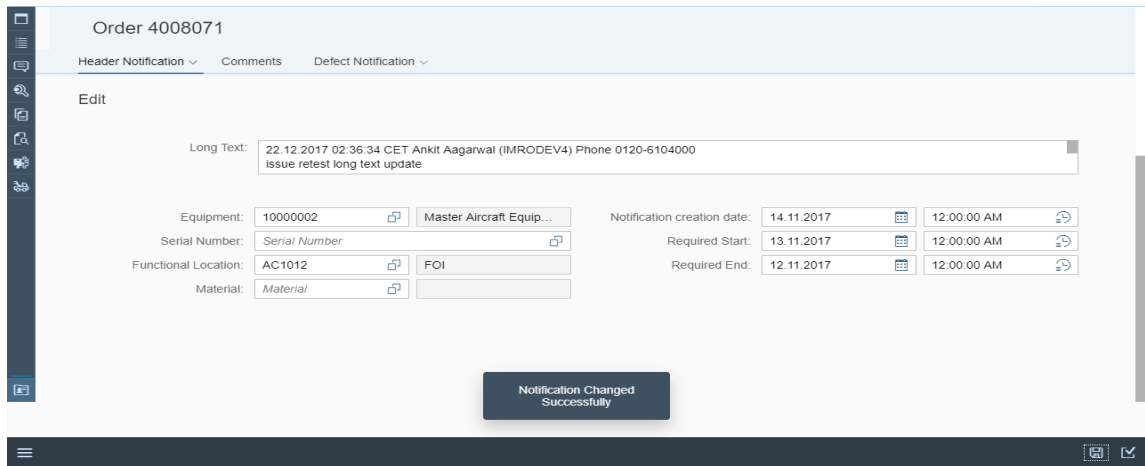
Figure 114: Navigation to notification details update and save button







Do the required changes and click on the save button on the right top

Figure 115: Notification changed successfully



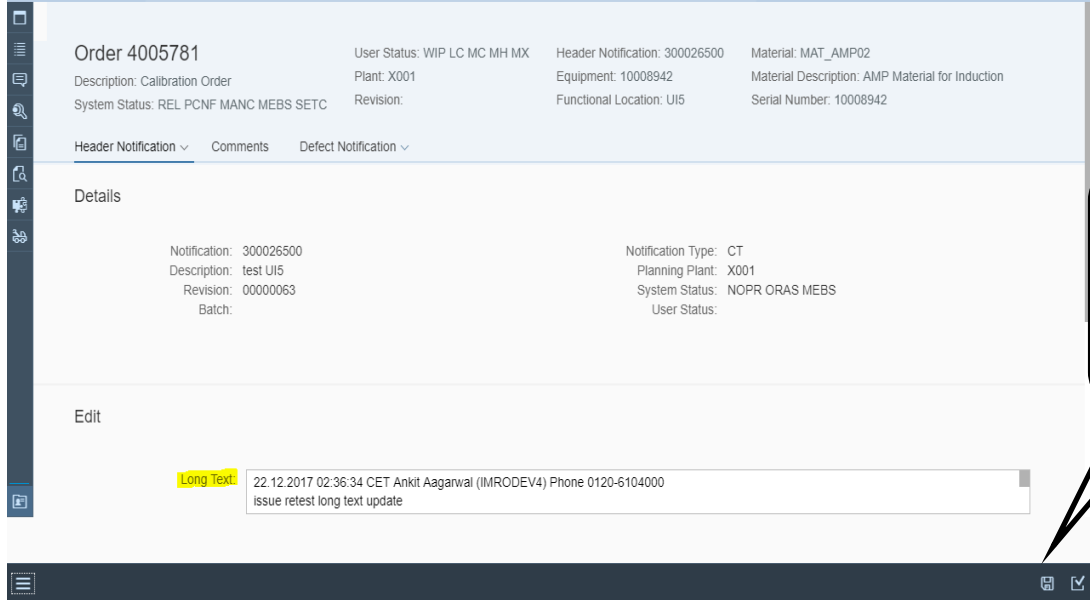
- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

## 5.2. Notification long text display/update



Notification long text can only be displayed and edited on the notification header screen. Existing long text will open in a box in editable mode as shown in figure 116.

Figure 116: Notification long text screen





For updating long text, click on save button after editing long text.

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 5.3. Notification planner comment read/update

Notification planner comments are the shift comments which we input at notification level.

On click on Notification tab in navigation pane user can reach to notification header screen. See figure 117.

Figure 117: Notification header screen

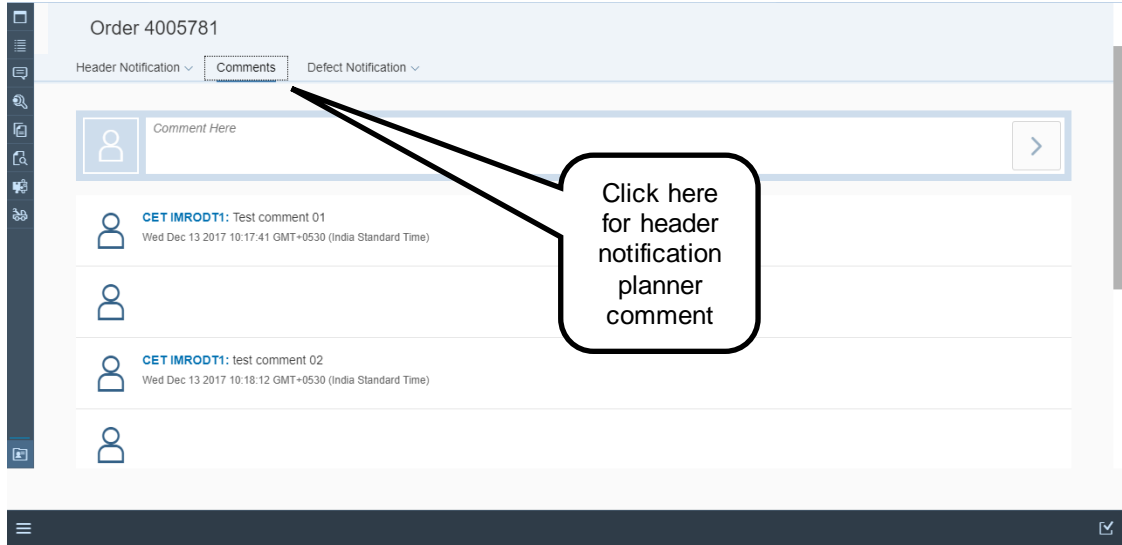


Figure 118: Add notification planner comment screen

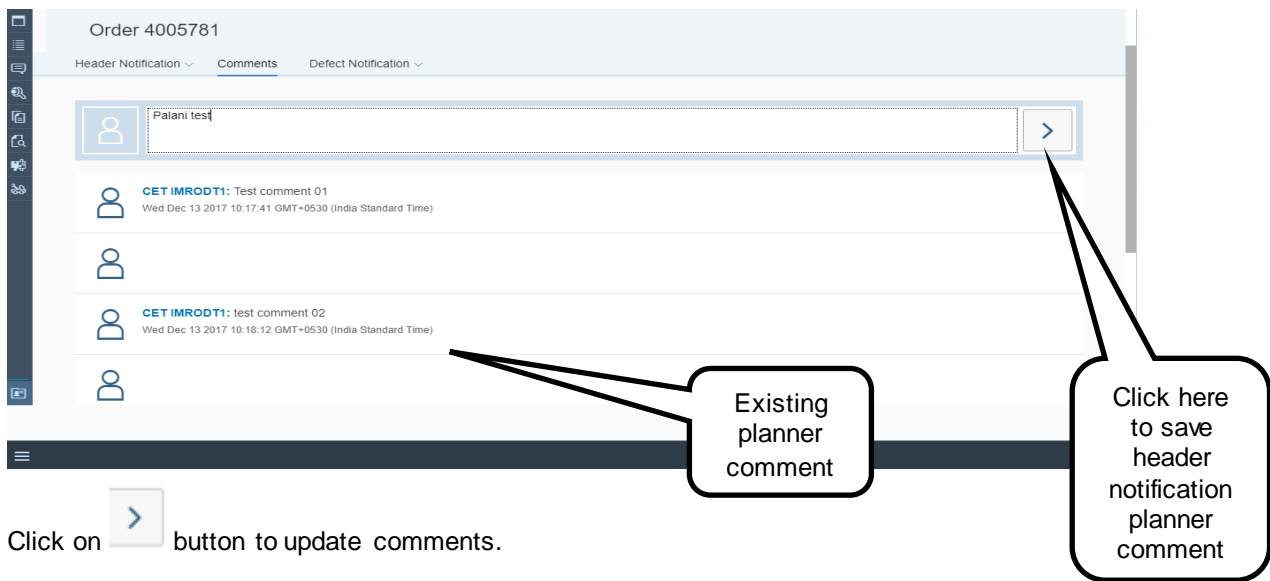
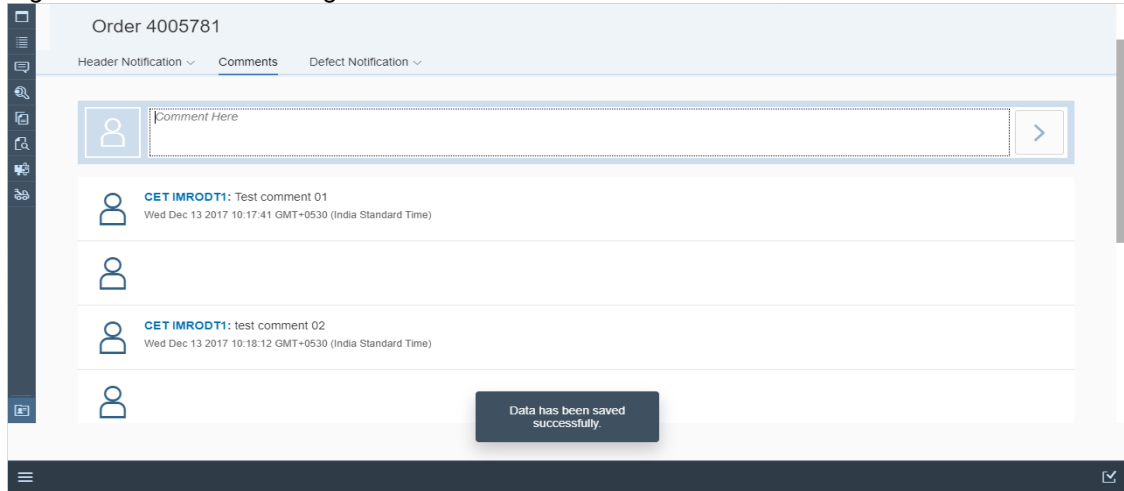




Figure 119: success message screen after submitted comment



Saved comment saved.

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

### 5.4. Notification Complete

Once all work is over on notification, it needs to be technically completed.


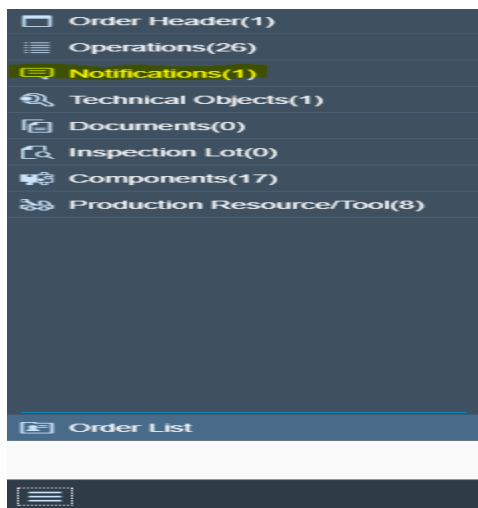
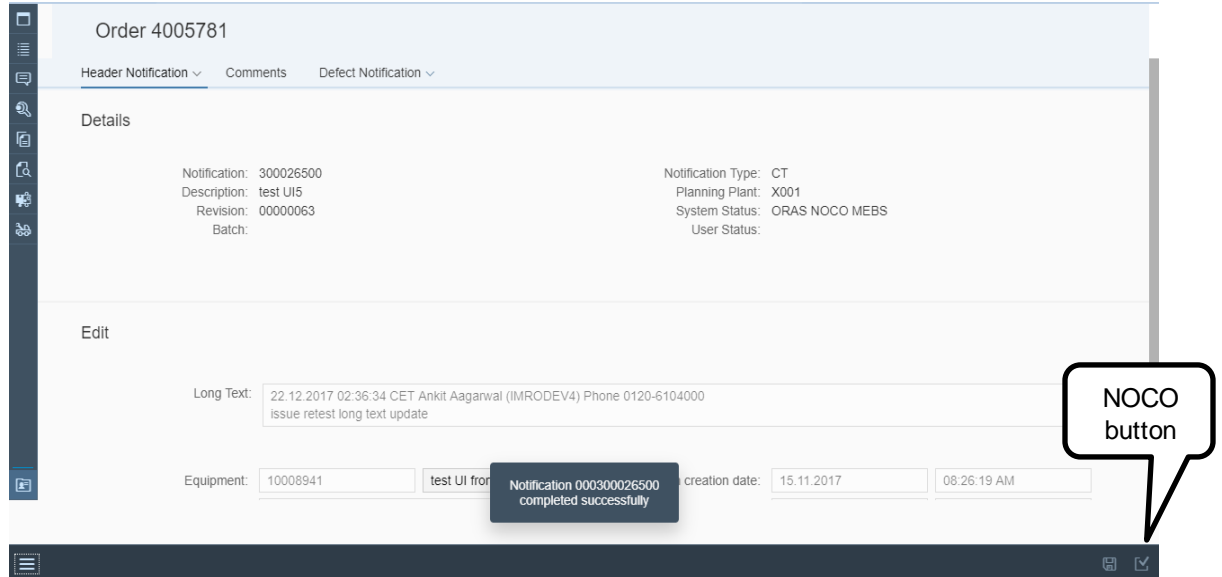


For completing the notification, click on button  which is present on lower right corner of the header notification detail screen.

Figure 120: Navigation to NOCO notification





After clicking on the NOCO button App will show a success message if all the tasks are completed.

- For going back, click on  to select or reach other functionalities or click on Orders button  to go back to order list screen.

## 5.5. Defect notification

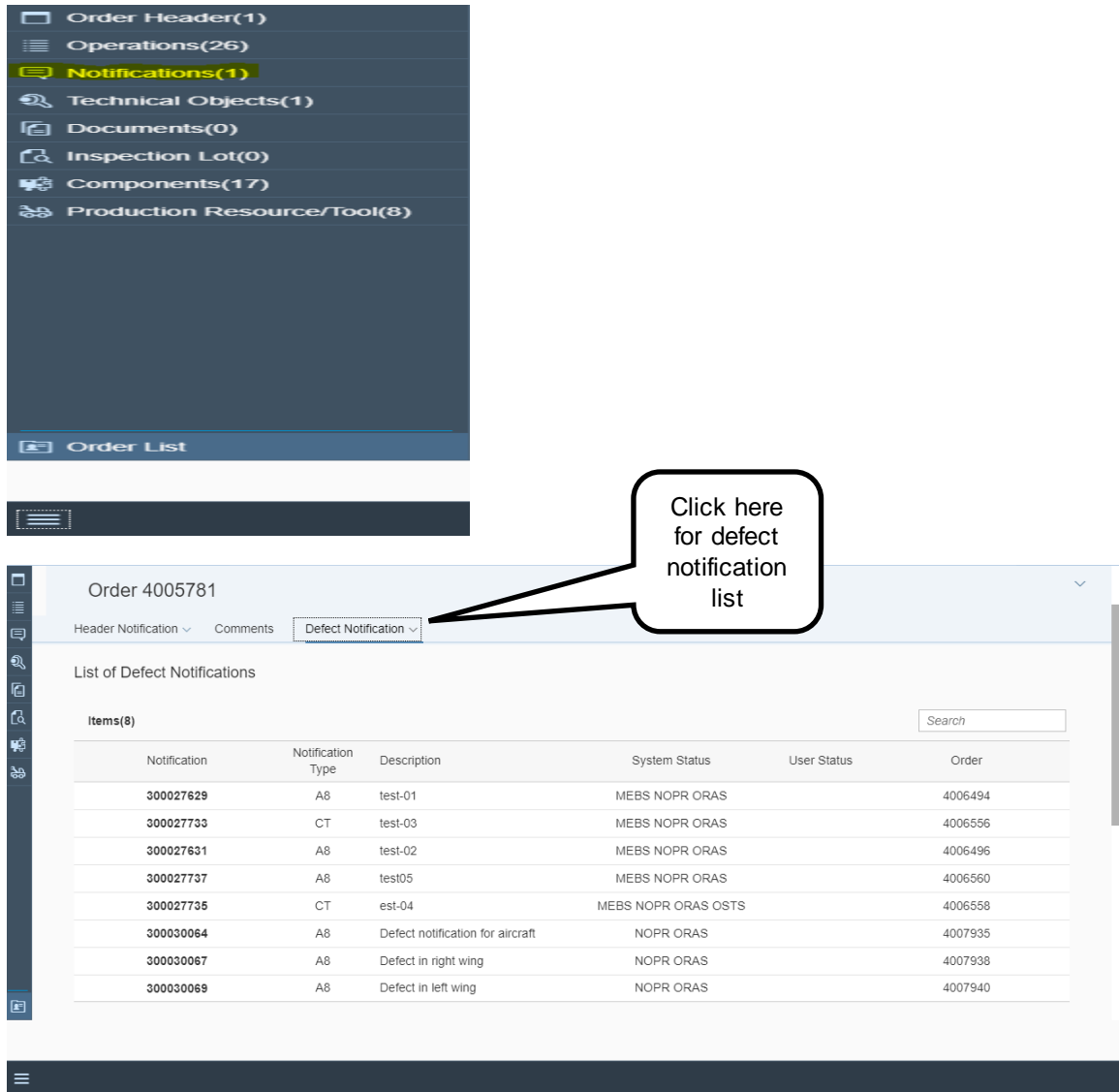
Defect notifications attached to the order will be displayed in grid form with display of necessary fields.

User can see the **List** and **details** of any defect among the list.

The app has the defect notification functionality on the header notification screen once user click on defect notification tab then he/she will be navigated to the defect notification screen as shown in below figures.

Clicking on defect notification tab will open a drop down list as shown in below figure.

*Figure 121: Defect notification tab in header notification screen*



As shown in above figure the list will be opened (if there is any) after the followed navigation Now if user wants to see the details of any defect notification then user has to click on any defect notification row.

Figure 122: Defect notification details navigation

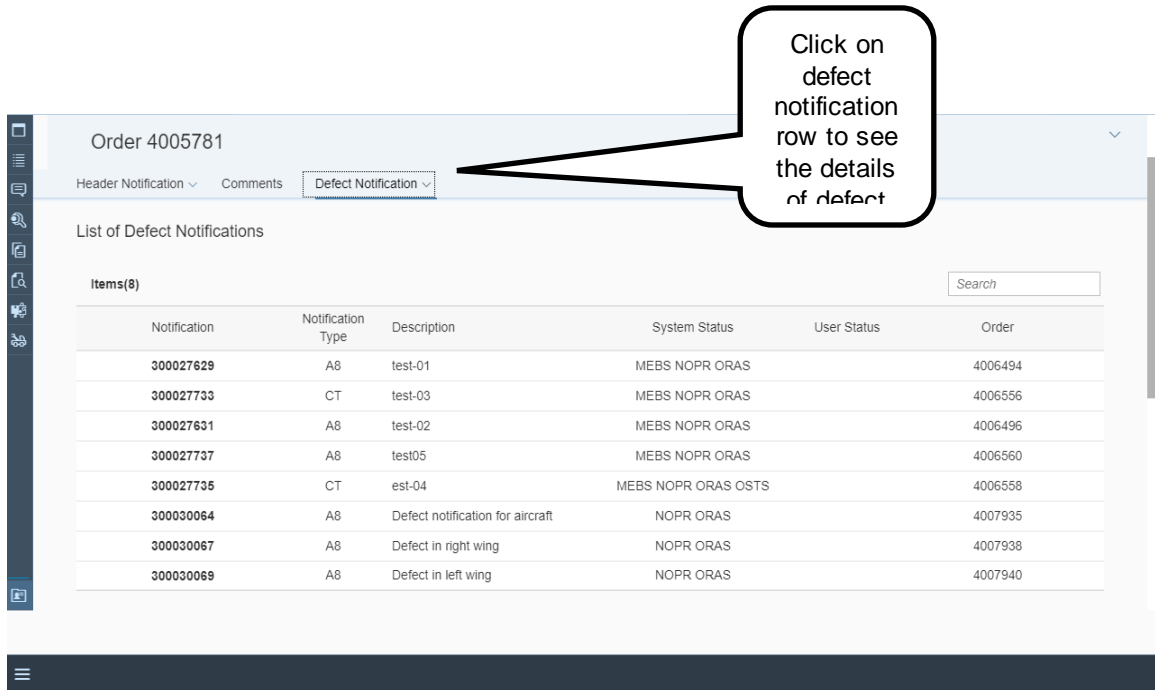
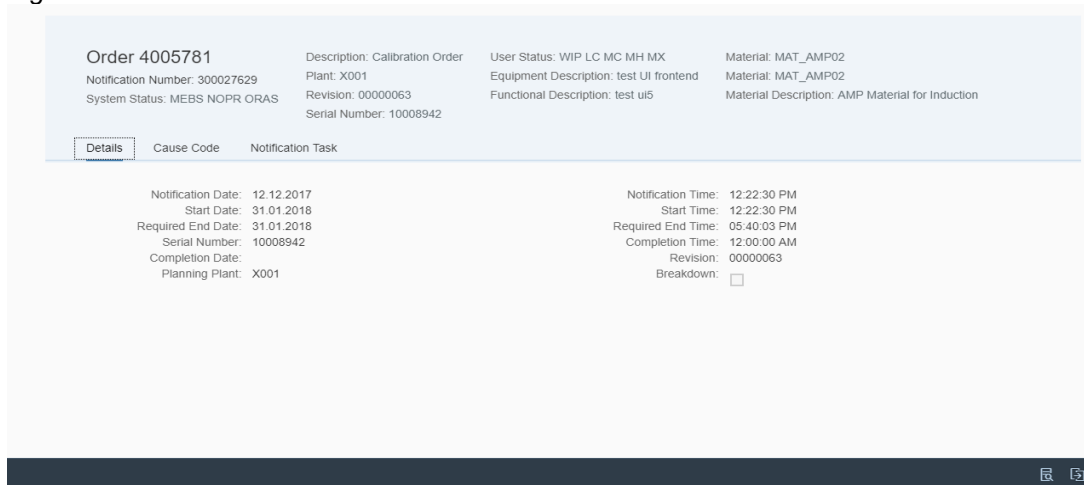


Figure 123: Defect notification details



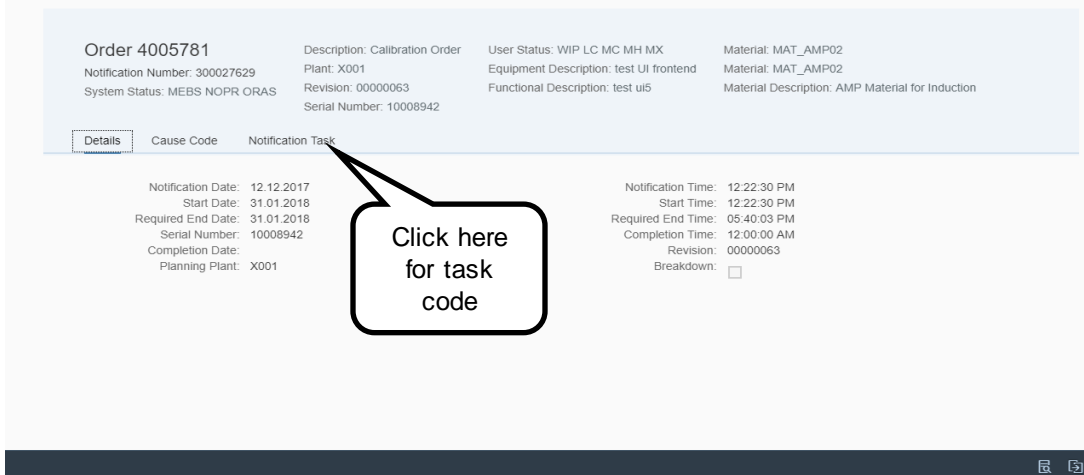
- To go back from the current screen user needs to click on .
- Or if User wants to come out on the order list screen then click on .

## 5.6. Defect notification task code

Notification task code table screen will display all tasks assigned to the defect notifications

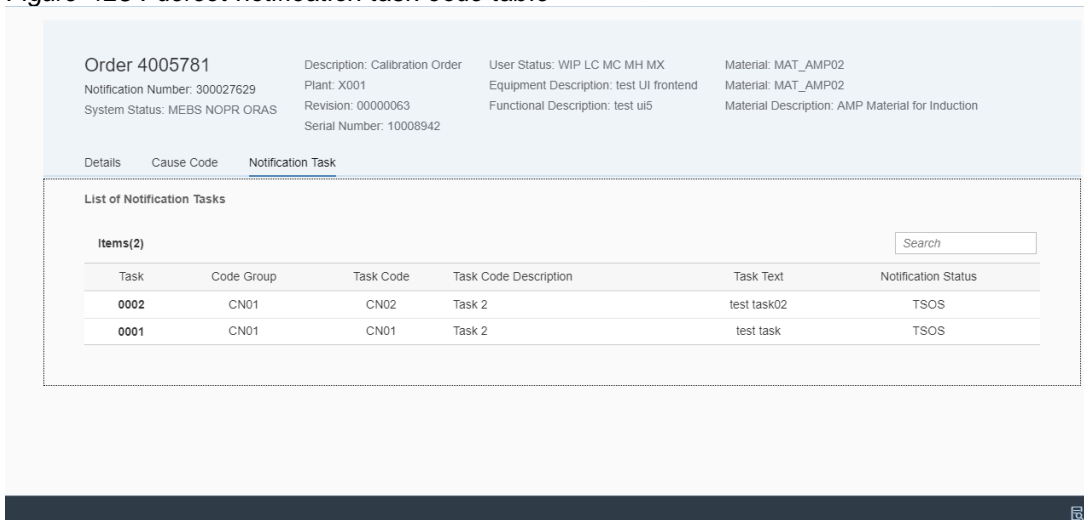
by going into the defect notification details by clicking on

Figure 124: Navigation to task code table screen



Click on any defect notification to open the defect notification detail page where user needs to click **Notification Task** button to see all the tasks assigned in defect notification.

Figure 125 : defect notification task code table



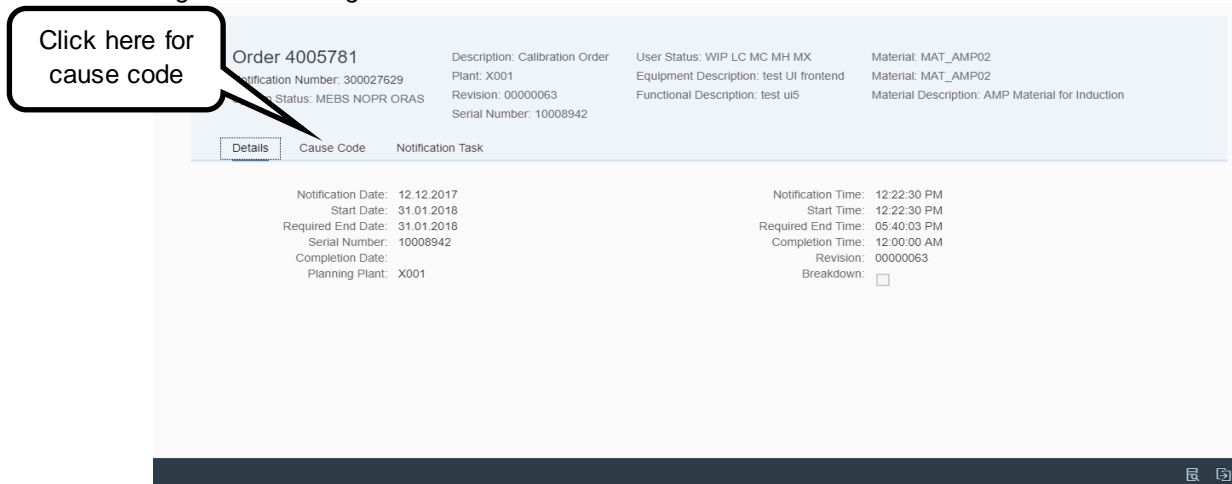
- To go back from the current screen user needs to click on
- Or if User wants to come out on the order list screen then click on

### 5.7. Defect notification cause code

Notification cause code table display the list of all causes, due to which defect notification is created.

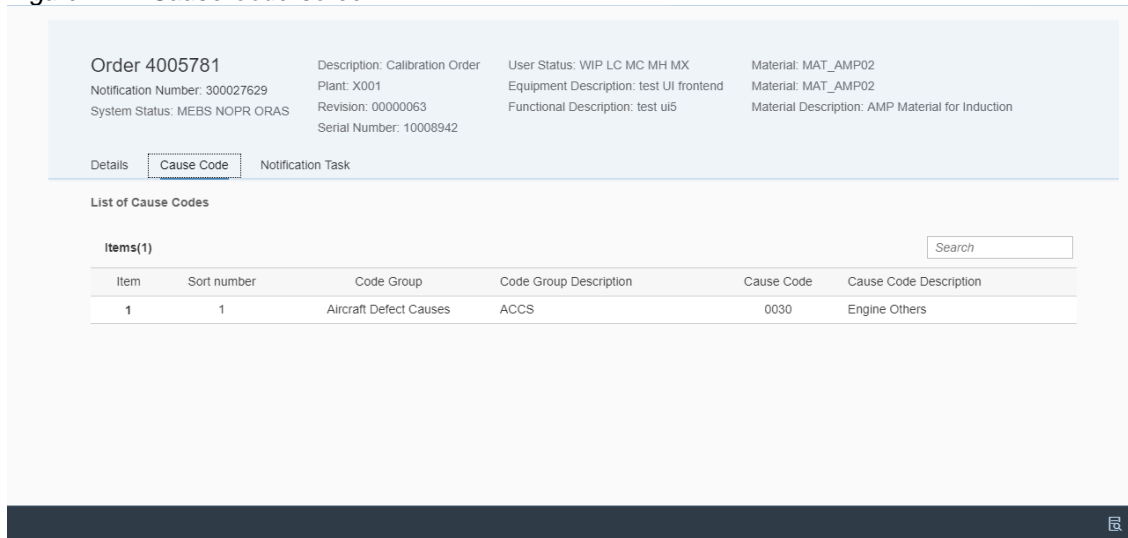
For displaying the cause code table, select the defect notification from the list which will open the defect notification details screen now click on **“cause code”** button as shown in below figure.

Figure 126: Navigation to cause code



After following the above explained navigation user can get the cause code.

Figure 127: Cause code screen



- To go back from the current screen user needs to click on
- Or if User wants to come out on the order list screen then click on

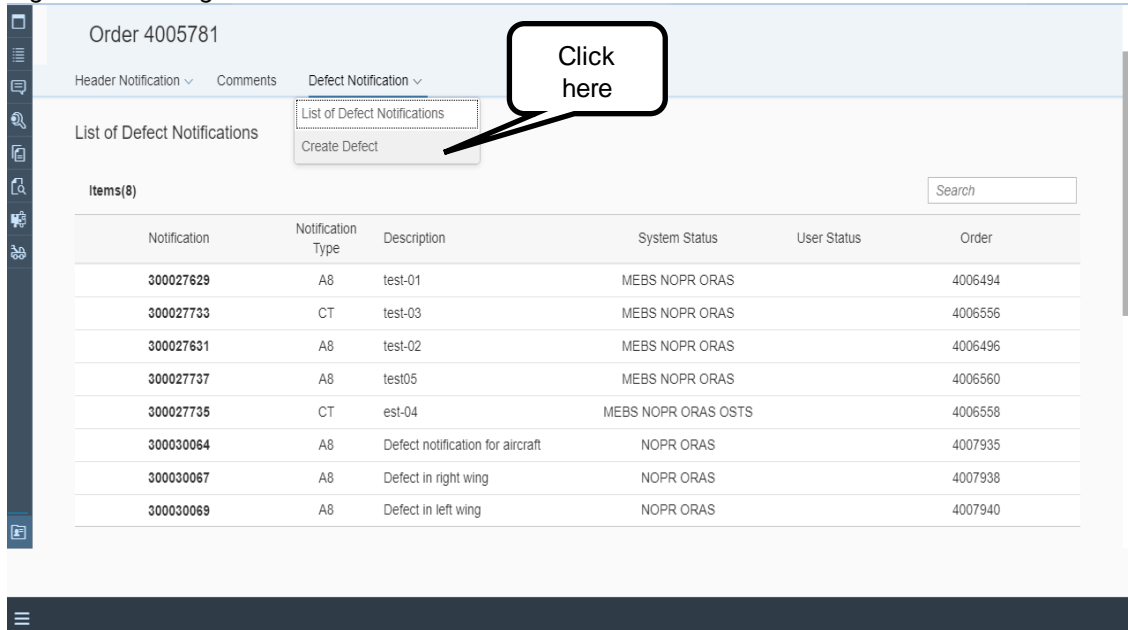
### 5.8. Defect notification creation

Through this functionality, we can create defect notification and order, found during execution of operation.

On the header notification screen user need to click on defect notification tab which will show a drop down, under that drop down user will have tab of create defect. After clicking on create defect the screen will get opened where user need to maintain the required data as shown in figure.

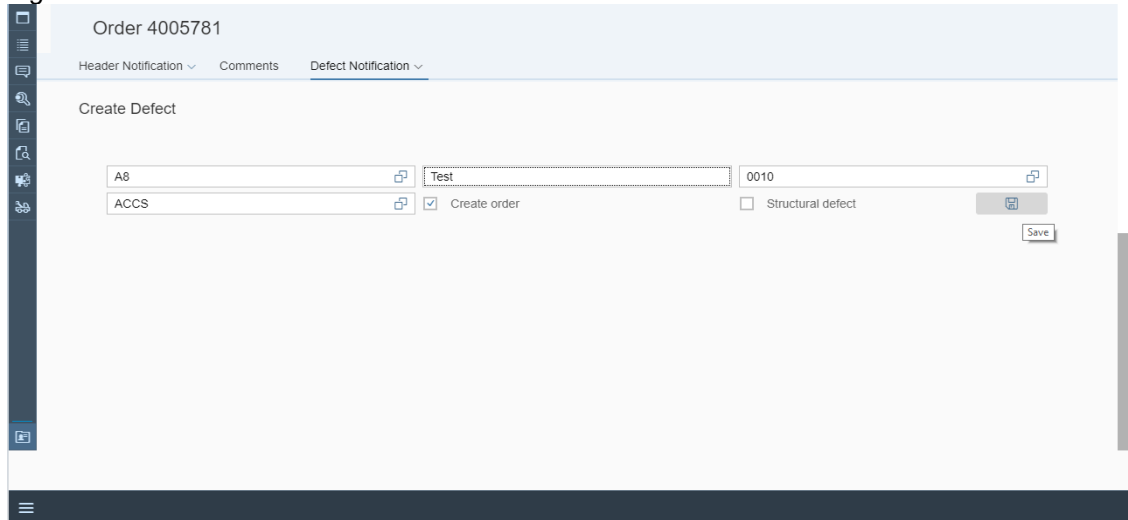


Figure 128: Navigation to create defect screen



On click of create defect button, given below screen will open.

Figure 129: Create defect screen




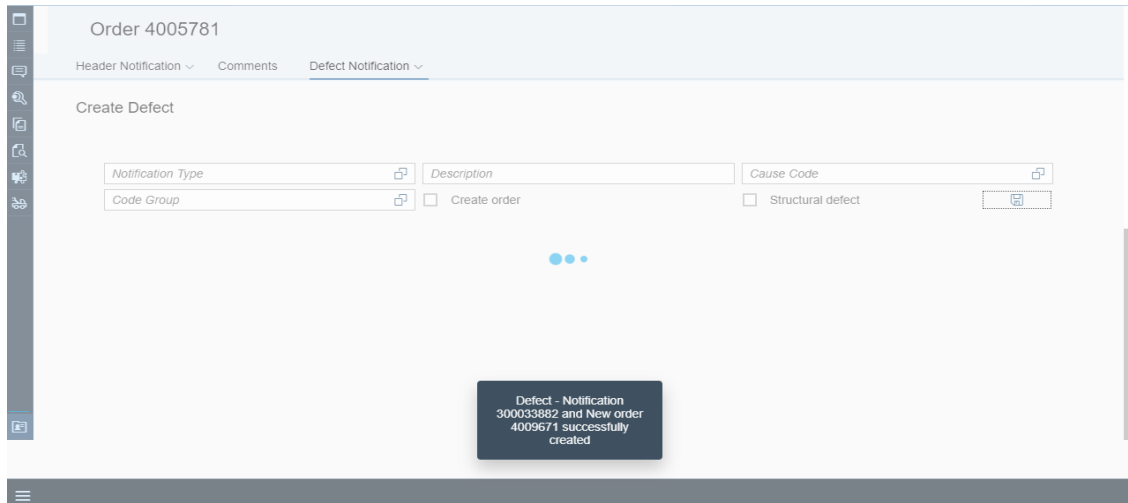
On click of  button, new defect notification will be updated in the list.

Figure 130: Defect notification added with success message



In defect notification creation user have an option whether he/she wants to create order or not. If user wants to create defect order the user needs to click on the  Create order check box.

➤ For going back to order list screen, click on  or click on Orders button



**During defect notification/order creation, multiple task assignment feature is not supported**

## 6. EWI Wrappers List

| Wrapper Name | Functionality   | Wrapper Technical Name       |
|--------------|---|------------------------------|
| Clocking     | To retrieve the data like the latest event, labor clocking data | /AXONUIBC/EWI_CLOCKING_READ  |
| Clocking     | Setting the on/off data for labor clocking                      | /AXONUIBC/EWI_CLOCKING_GET   |
| Clocking     | Update Labor Clocking Events Table                              | /AXONUIBC/EWI_CLOCKING_SET   |
| Comment      | To read the comment of operation and header                     | /AXONUIBC/EWI_ORDER_COMM_GET |

|                  |   |                                |
|------------------|---|--------------------------------|
| Comment          | To update the comment of operation and header                     | /AXONUIBC/EWI_ORDER_COMM_UPD   |
| Component Delete | Delete component for order operation                              | /AXONUIBC/EWI_COMP_DELETE      |
| Component List   | To provide the list of all the components of an order             | /AXONUIBC/EWI_COMP_LIST        |
| Component Read   | To read the single Component of an order                          | /AXONUIBC/EWI_COMP_READ_SINGLE |
| Document         | To read the details of DMS Document                               | /AXONUIBC/EWI_DOC_DETAILS      |
| Document         | To open the pdf or word document in the DMS                       | /AXONUIBC/EWI_FILE_OPEN        |
| Notification     | To complete the Notification                                      | /AXONUIBC/EWI_NOTIF_COMPLETE   |
| Notification     | To read the notification long text                                | /AXONUIBC/EWI_NOTIF_LTEXT_READ |
| Notification     | To update the notification long text                              | /AXONUIBC/EWI_NOTIF_LTEXT_UPD  |
| Notification     | To read the notification details                                  | /AXONUIBC/EWI_NOTIF_READ       |
| Notification     | To display the list of defect notifications on the basis of order | /AXONUIBC/EWI_NOTIF_DEFECTLIST |
| Notification     | To display the defect notification detail                         | /AXONUIBC/EWI_NOTIF_DEFECT_DET |
| Notification     | To display the notification                                       | /AXONUIBC/EWI_NOTIF_CAUSE      |

## 7. List of APIs delivered

| API name                       | Supporting Functionality Description |
|--------------------------------|--------------------------------------|
| /AXONXAPP/UI_ENAB_SEL_ORD_LIST | Order List Selection Screen          |
| /AXONXAPP/UI_ENAB_SCR_DET_READ | Order Navigation                     |
| /AXONXAPP/UI_ENAB_ORDER_LIST   | Display Orders                       |

|                                |                                       |
|--------------------------------|---------------------------------------|
| /AXONXAPP/PRT_OTHER_INS        | Add Other PRT                         |
| /AXONXAPP/PRT_MAT_INS          | Add Material PRT                      |
| /AXONXAPP/PRT_LIST             | Display Operation PRT List            |
| /AXONXAPP/PRT_EQ_INS           | Add Equipment PRT                     |
| /AXONXAPP/PRT_DOC_INS          | Add Document PRT                      |
| /AXONXAPP/PRT_DEL              | Delete Material PRT                   |
| /AXONXAPP/ORDER_TECO           | Order TECO                            |
| /AXONXAPP/ORDER_REL            | Order Release                         |
| /AXONXAPP/ORDER_REVISION       | Display Order Header                  |
| /AXONXAPP/ORDER_HEADER_DETAILS |                                       |
| /AXONXAPP/ORDER_HDR_LTEXT_UPD  | Update Order Header Long Text         |
| /AXONXAPP/ORDER_HDR_LTEXT_GET  | Display Order Header Long Text        |
| /AXONXAPP/ORDER_CONFIRM        | Confirm Operation                     |
| /AXONXAPP/ORDER_CHANGE         | Update Order Details                  |
| /AXONXAPP/OPER_READ_SINGLE     | Display Operation Header Details      |
| /AXONXAPP/OPER_LTEXT_UPD       | Update Operation Long Text            |
| /AXONXAPP/OPER_LTEXT_GET       | Display Operation Long Text           |
| /AXONXAPP/OPER_LIST            | Display List of Operations            |
| /AXONXAPP/OPER_INSERT          | Add Multiple Operations               |
| /AXONXAPP/OPER_DELETE          | Delete Operation                      |
| /AXONXAPP/OPER_CHECK_QUALS     | Qualification Check                   |
| /AXONXAPP/NOTIF_LTEXT_UPD      | Create Notification Long Text         |
| /AXONXAPP/NOTIF_LTEXT_READ     | Display Notification Long Text        |
| /AXONXAPP/NOTIF_READ           | Display Notification Details          |
| /AXONXAPP/NOTIF_DETAIL         |                                       |
| /AXONXAPP/NOTIF_DEFECT_LIST    | Display Defect Notification List      |
| /AXONXAPP/NOTIF_DEFECT_DETAIL  | Display Defect Notification Details   |
| /AXONXAPP/NOTIF_DEFECT_CREATE  | Create Defect                         |
| /AXONXAPP/NOTIF_COMPLETE       | Notification NOCO                     |
| /AXONXAPP/NOTIF_CHANGE         | Update Notification Details           |
| /AXONXAPP/NOTIF_CAUSE          | Display Notification Cause Code Table |
| /AXONXAPP/DSIG_SIGN            | Digital Signature Sign Off            |
| /AXONXAPP/DSIG_REVOKE          | Revoke Digital Signature              |
| /AXONXAPP/DSIG_LEVEL_DET       | Read Digital Signature Levels         |
| /AXONXAPP/DSIG_DSAL_LOG        | Display Digital Signatures Log        |
| /AXONXAPP/WORKCENTER_DETAIL    | Search help for Work Center           |
| /AXONXAPP/VARIANT_CHANGE       | Update User Variant                   |
| /AXONXAPP/VARIANT_REP_SELSCR   | Select User Variant                   |
| /AXONXAPP/VAIRANT_CONTENTS     |                                       |

|                                |  |
|--------------------------------|--|
| /AXONXAPP/USERSTATUS_UPDATE    | Update Order User Status Table   |
| /AXONXAPP/USERSTATUS_READ      | Display Order User Status Table  |
| /AXONXAPP/TECH_OBJ_PARTNER     | Display Equipment Details  |
| /AXONXAPP/TECH_OBJ_CHAR_READ   | Display Equipment Details with Class                                   |
| /AXONXAPP/TECH_OBJ             | Display Equipment Details with Partner                                 |
| /AXONXAPP/INSTALL_CONFRM       | Install  |
| /AXONXAPP/DISPOSITION          | Dismantle  |
| /AXONXAPP/DISP_HIER_DATA       | Display Technical Hierarchy  |
| /AXONXAPP/TASK_CODE            | Display Notification Task Code Table                                   |
| /AXONXAPP/OBJECTLIST_DETAIL    | Display Object List  |
| /AXONXAPP/MDOC_READ            | Display Measurement Documents Table with Technical Objects             |
| /AXONXAPP/INSPECTION_LOT       | Characteristics Read   |
| /AXONXAPP/FILE_OPEN            | Open Document  |
| /AXONXAPP/DOCUMENT_DETAILS     | Display Documents List   |
| /AXONXAPP/CREATE_USER_VARIANT  | Create User Variant  |
| /AXONXAPP/CONFIRM_SERIAL       | Confirm Serial Number  |
| /AXONXAPP/COMPONENT_READ_SINGL | Display Component List (Order Header Level)                            |
| /AXONXAPP/COMPONENT_LIST       | Display Component List   |
| /AXONXAPP/COMPONENT_INSERT     | Add Multiple Components  |
| /AXONXAPP/COMPONENT_DELETE     | Delete Component   |
| /AXONXAPP/CLOCKING_SET         | Labor Clocking ON/OFF  |
| /AXONXAPP/CLOCKING_GET         | Display Labor Clocking Events Table                                    |
| /AXONXAPP/CHAR_RESULT_API      | Display Inspection Lot and Characteristics Result (Order Header Level) |
| /AXONXAPP/CHAR_REQ_API/        |  |
| /AXONXAPP/COMPONENT_LIST_ORD   | Component List based on Order  |
| /AXONXAPP/NOTIF_PLAN_COMMENTS  | Display Notification Comment   |
| /AXONXAPP/NOTIF_PLAN_COMMENTS  | Create Notification Comment  |
| /AXONXAPP/DSIG_REVOKE_LVL      | Read Digital Signature Levels for Revoke                               |
| /AXONXAPP/COMMENT_UPDATE       | Create Order Header Comment  |
| /AXONXAPP/COMMENT_UPDATE       | Create Operation Comment   |
| /AXONXAPP/COMMENT_READ         | Display Order Header Comment   |
| /AXONXAPP/COMMENT_READ         | Display Operation Comment  |

## 8. Search helps

| Field Name            | Type                   | Search Help  |
|-----------------------|------------------------|--|
| Accounting Indicator  | Custom F4              | /AXONUIBC/EWI_F4_ACC_INDI                                |
| Activity              | Standard OData Service | PS_NTWKACTY_OVW_SRV/I_NetworkActivityValueHelp           |
| Base Unit             | Standard OData Service | MMIM_MULTIPLE_MATERIAL_SRV/VL_SH_H_MMIM_UOM_GEN          |
| Cause Code            | Custom F4              | /AXONUIBC/EWI_F4_NOTIF_CAUSE                             |
| Code Group            | Custom F4              | /AXONUIBC/EWI_F4_NOTIF_CAUSE                             |
| Control Key           | Standard OData Service | EAM_OBJPG_MAINTORDANDOPER_SRV/I_OperationControlProfile  |
| Control Key Document  | Standard F4            | H_TCF10  |
| Control Key Equipment | Standard F4            | H_TCF10  |
| Control Key Material  | Standard F4            | H_TCF10  |
| Control Key Other     | Standard F4            | H_TCF10  |
| Document              | Standard OData Service | CV_DOCUMENT_MANAGEMENT/I_DocInfoRecdDocumentPart         |
| Document Type         | Standard OData Service | CV_DOCUMENT_MANAGEMENT/I_DocInfoRecdDocumentType         |
| Equipment             | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/C_TechnicalObjectLabelVH |
| Equipment PRT         | Standard OData Service | EAM_OBJPG_TECHNICALOBJECT_SRV/C_ObjPgTechnicalObject     |
| Functional Location   | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/C_TechnicalObjectLabelVH |
| Item Category         | Standard F4            | H_T418   |
| Material              | Standard OData Service | MMIM_MULTIPLE_MATERIAL_SRV/VL_SH_MAT1W                   |
| Material PRT          | Standard OData Service | MMIM_MULTIPLE_MATERIAL_SRV/VL_SH_MAT1T                   |
| Network               | Standard OData Service | PS_NTWKACTY_OVW_SRV/I_ProjectNtwkValueHelp               |
| Network Activity      | Standard OData Service | PS_NTWKACTY_OVW_SRV/I_NetworkActivityValueHelp           |

|                    |                        |   |
|--------------------|------------------------|---|
| Notification       | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_Mainten<br>anceNotification |
| Notification Type  | Custom F4              | /AXONUIBC/EWI_F4_DEF_NOTIF                                    |
| Order              | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_Mainten<br>anceOrder        |
| Order Type         | Standard               | EAM_OBJPG_MAINTORDANDOPER_SRV/C_MaintOrd<br>erTypeVH          |
| Other PRT          | Custom F4              | /AXONUIBC/F4_OTHR_PRT   |
| Personal Number    | Custom F4              | /AXONUIBC/EWI_F4_PERS_NO                                      |
| Plant              | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_Plant                       |
| Priority           | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_PMNotific<br>ationPriority  |
| Project Definition | Standard OData Service | PS_NTWKACTY_OVW_SRV/I_ProjectValueHelp                        |
| Reason             | Custom F4              | /AXONUIBC/EWI_F4_REASON_VAR                                   |
| Revision           | Custom F4              | /AXONUIBC/F4_REVISION   |
| Sales Doc          | Custom F4              | /AXONUIBC/F4_SALES_DOCUMENT                                   |
| Serial No.         | Custom                 | EAM_OBJPG_MAINTORDANDOPER_SRV/I_Mainten<br>anceOrder          |
| Short Text key     | Standard F4            | H_T435  |
| Storage Location   | Standard OData Service | MMIM_MULTIPLE_MATERIAL_SRV/VL_SH_H_T001L_<br>OLD              |
| Unit of Work       | Standard F4            | H_T006  |
| WBS Element        | Standard OData Service | PS_NTWKACTY_OVW_SRV/I_WBSElementValueHelp                     |
| Work Center        | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_WorkCent<br>erBySemanticKey |
| Work Order         | Standard OData Service | EAM_OBJPG_MAINTNOTIFICATION_SRV/I_Mainten<br>anceOrder        |