Synergi Plant Training

Inspection planning

Inspection Management Flow Chart

Inspection Management Flow Chart

- **Create Inspection Plan**

  Time based Inspection

  Condition based Inspection / RBI Inspection

- **Generate Inspection**

  Creates Inspection Activities based on Inspection Plan both Time based and Condition based, Rbi Inspection.

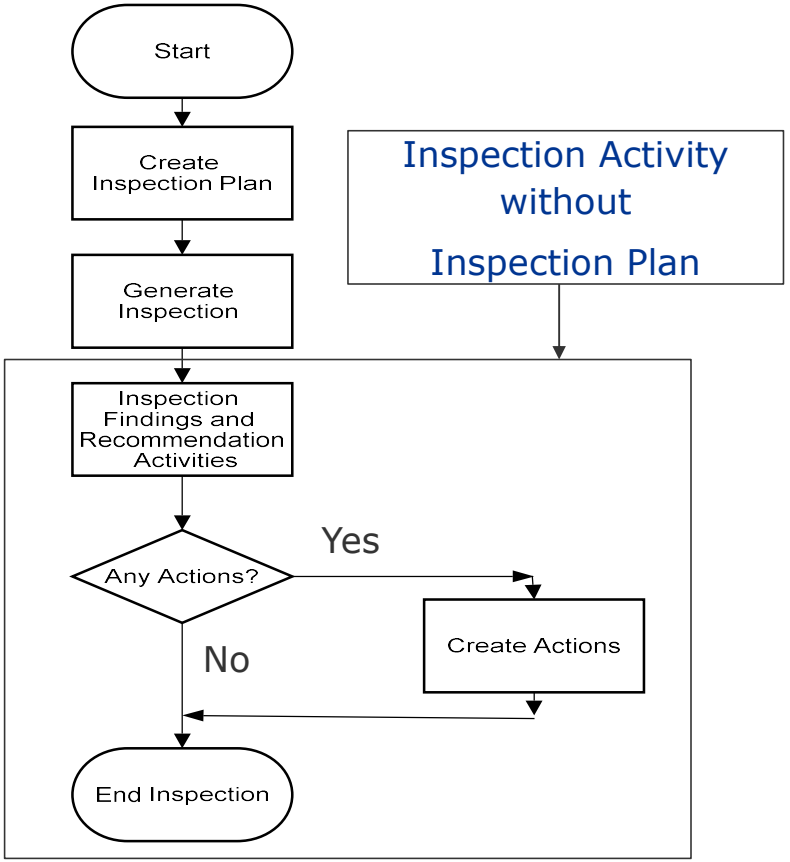
- **Inspection Activity**

  Enter Inspection Findings and

  Recommendation details

  Any Actions? required or not check.

- **Create Action and enter details**



Inspection Plan

- Inspection Plan is to create different Maintenance schedules either Condition based, or Time based

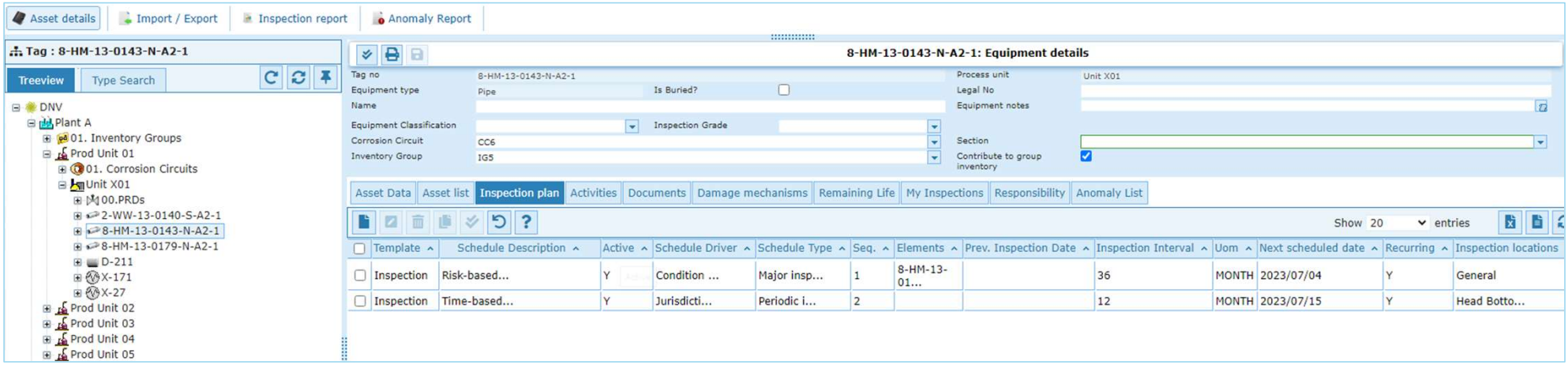
- **Condition Based Inspection Schedules**

  - Condition based Inspection Planning is based on RBI assessment recommendation
  - Inspection Plans are generated based on RBI assessment risk calculation results

- **Time Based Inspection Schedules**

  - Time based Inspection Schedules are routine Inspections
  - Daily, Weekly, Monthly, Quarterly, Half Yearly, Yearly or ADHOC are some example of Time based Inspection schedules

Inspection Plan



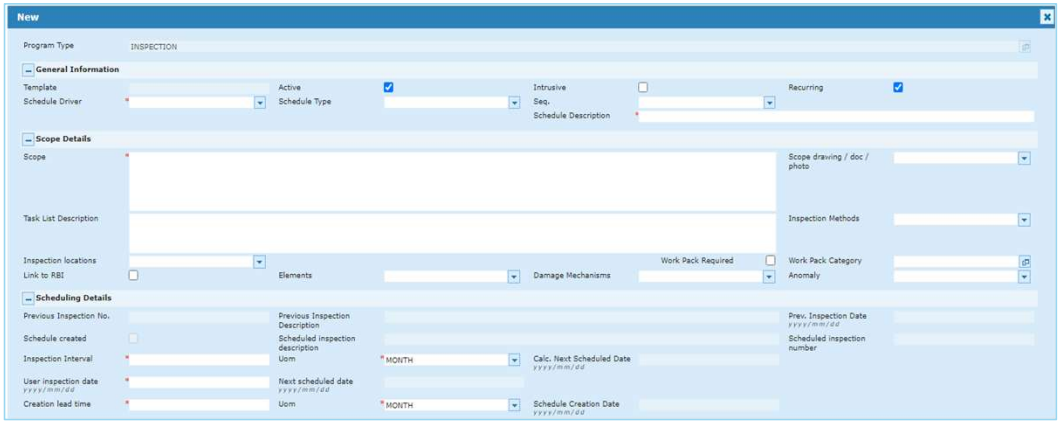
Select Asset Details menu and Tag from Facility Tree to create Inspection Plan

Select Inspection Plan page

Inspection Plan can create and maintain using four options in the Inspection Plan Screen

- New – To create New Inspection Plan,
- Modify – Make changes in the selected, existing Inspection Plan
- Delete - Delete selected Inspection Plan
- Copy – Copy selected Inspection Plan to same or other Tags in the same Process Unit

Create Inspection Plan



➢ **Inspection Plan Creation**

Click Inspection Plan, New button

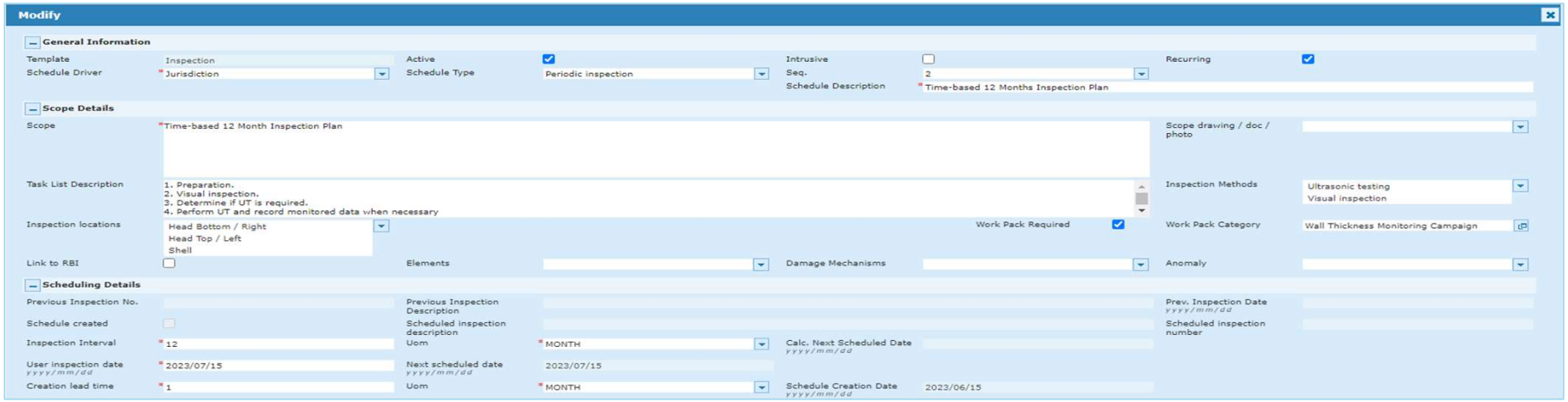
New Inspection Plan page opened

Enter Mandatory values Schedule Driver, Schedule Description, Scope, Inspection Interval and UOM, Creation Lead Time and UOM and Click Save

All Inspection Plan property details are listed in the table

SNo.	Property Name	Details
1	Program Type	Default Value: INSPECTION. New Program Type will be added as per requirement.
General Information		
2	Schedule Driver	Mandatory column, Jurisdiction, Condition Assessment, Corrosion
3	Schedule Type	Major inspection or Periodic inspection
4	Intrusive	Yes / No, Check Box
5	Seq.	Sorting order in the inspection plan list
6	Schedule Description	Description representing this plan shown in the inspection plan list
7	Recurring	Yes / No, Check Box
Scope Details		
8	Scope	Mandatory column, Entry Field, Long Text
9	Task List Description	Entry Field, Long Text
10	Scope Drawing/Doc/Photo	Document list to be selected
11	Inspection Locations	Selectable location identifiers
12	Link to RBI	Yes/No, Check Box, if this plan is collecting RBI recommended plan
13	Elements	Selectable elements to collect RBI recommended plan
14	Damage Mechanisms	Selectable damage mechanisms to collect RBI recommended plan
15	Scope drawing/doc/photo	Selectable asset docuements
16	Inspection Methods	Refer Inspection Plan.xlsx for lookup values
17	Work Pack Required	Yes / No, Check Box
18	Work Pack Category	Work pack category such as Wall Thickness Campaign
19	Anomaly	Selectable asset anomaly if defined
Scheduling Details		
20	Inspection Interval	Mandatory column, Entry
21	Inspection Interval UOM	Mandatory column, lookup selection, (Day, Month, Year)
22	User Inspection Date	New Next Inspection Date user entry
23	Creation Lead Time	Mandatory column, Entry
24	Creation Lead Time UOM	Mandatory column, lookup selection, (Day, Month, Year)

Modify Inspection Plan



➢ **Modify Inspection Plan**

Open Inspection Plan and Click Modify

Modify Inspection Plan page displayed

Enter all required values and click Save

Next Schedule Date = User Inspection Date

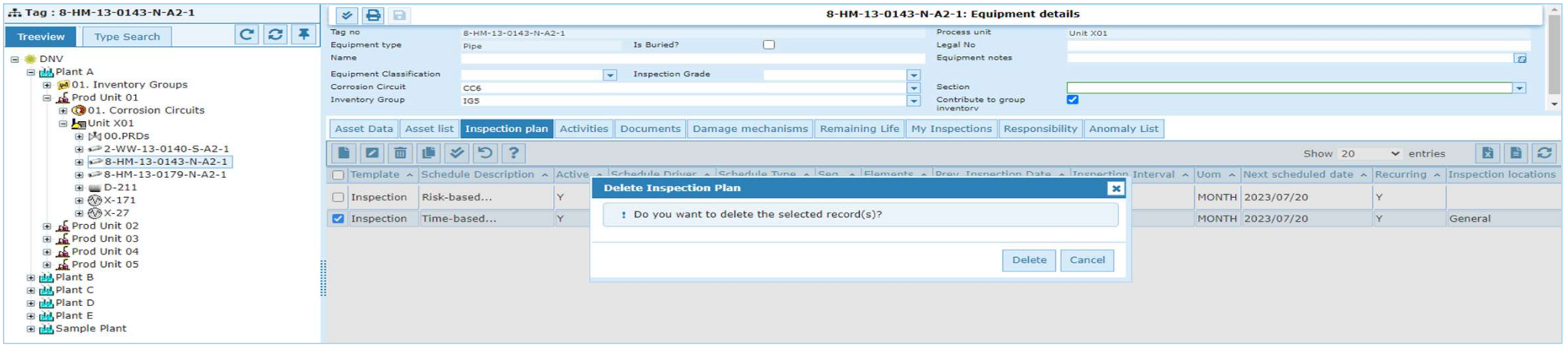
Schedule Creation Date

= User Inspection Date – Inspection Interval

➢ **Time-based Sample Task List Description**

1. Preparation.
2. Visual inspection.
3. Determine if UT is required.
4. Perform UT and record monitored data when necessary
5. Record findings and recommendations

Delete Inspection Plan



- **Delete Inspection Plan**

Open Inspection Plan Page

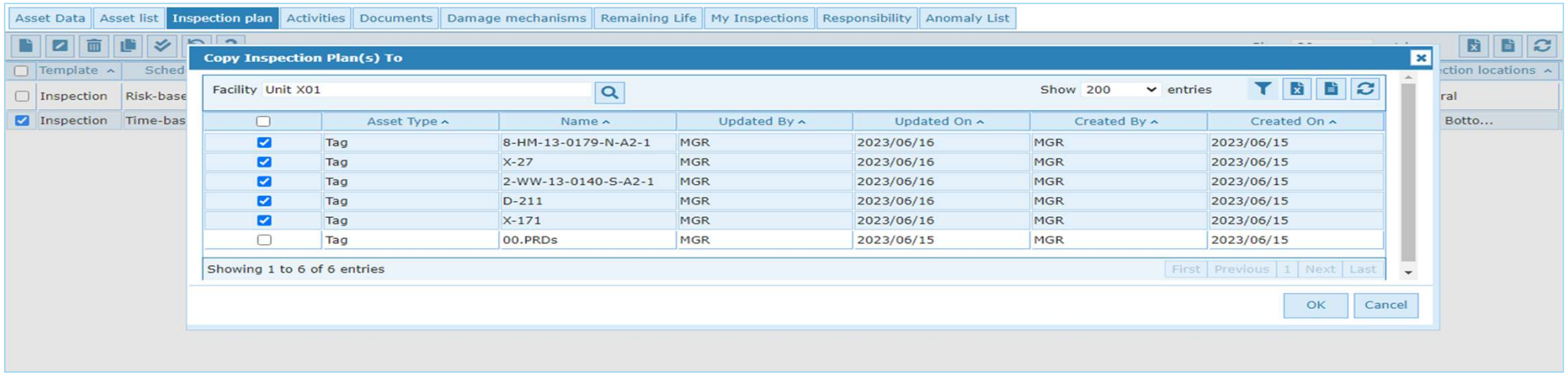
Select Inspection Plan to be deleted

Click Delete button

Do you want to delete the selected records? , Click Delete

Inspection Plan deleted successfully

Copy Inspection Plant to another Tag



- **Copy Inspection Plan to Tag**

Open Inspection Plan and Click Copy button

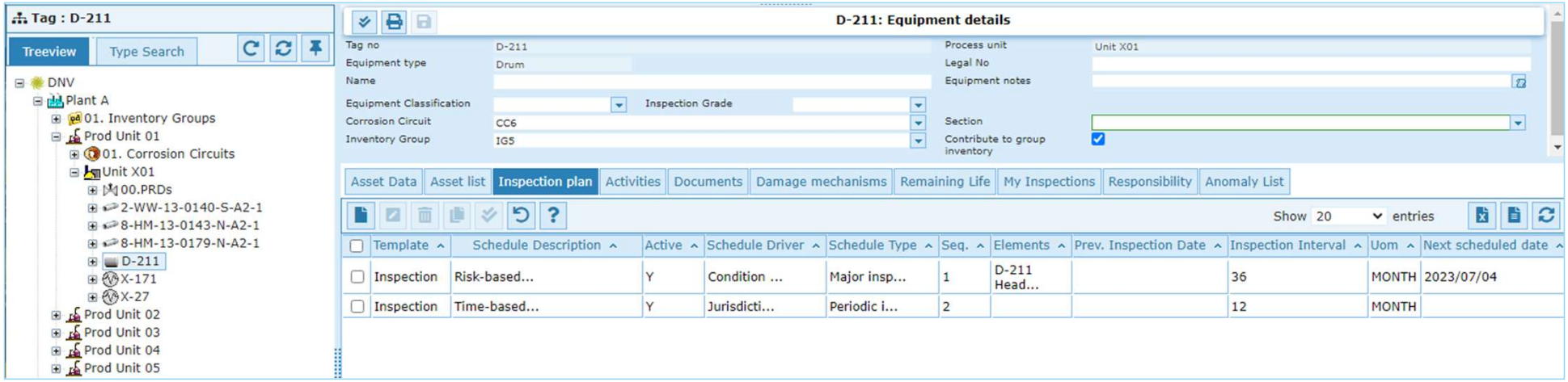
Copy Screen displayed

Can Copy Inspection Plan to One tag or Multiple tags in the Process Unit

Can Copy to all Tags in the Process Unit

Can Copy Inspection Plan to same Tag

Create Risk-based and Time-based Inspection Plans



➢ **Create Risk-based Inspection Plan**

Schedule Driver = Condition Assessment

Schedule Type = Major Inspection

Link to RBI = Yes

Elements = Select all elements

Damage Mechanisms = Select all damages

Use RBI Inspection Task Descriptions = Yes

➢ **Create Time-based Inspection Plan**

Schedule Driver = Jurisdiction

Schedule Type = Period Inspection

Link to RBI = No

Elements = Empty

Damage Mechanisms = Empty

Use RBI Inspection Task Descriptions = No

Inspection Interval = Fixed Interval

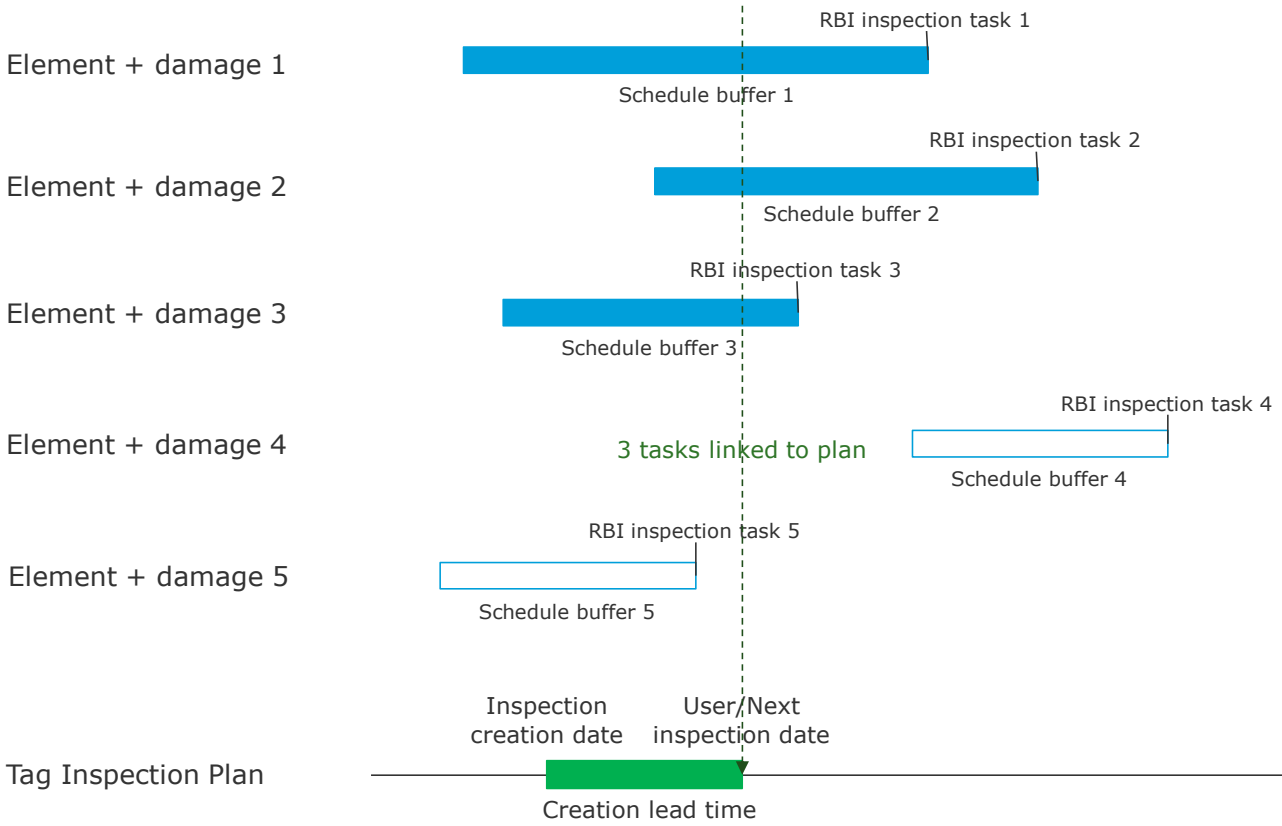
User Inspection Date = First or Revised date

Creation Lead Time = Job Preparation time

Sample Task List Description

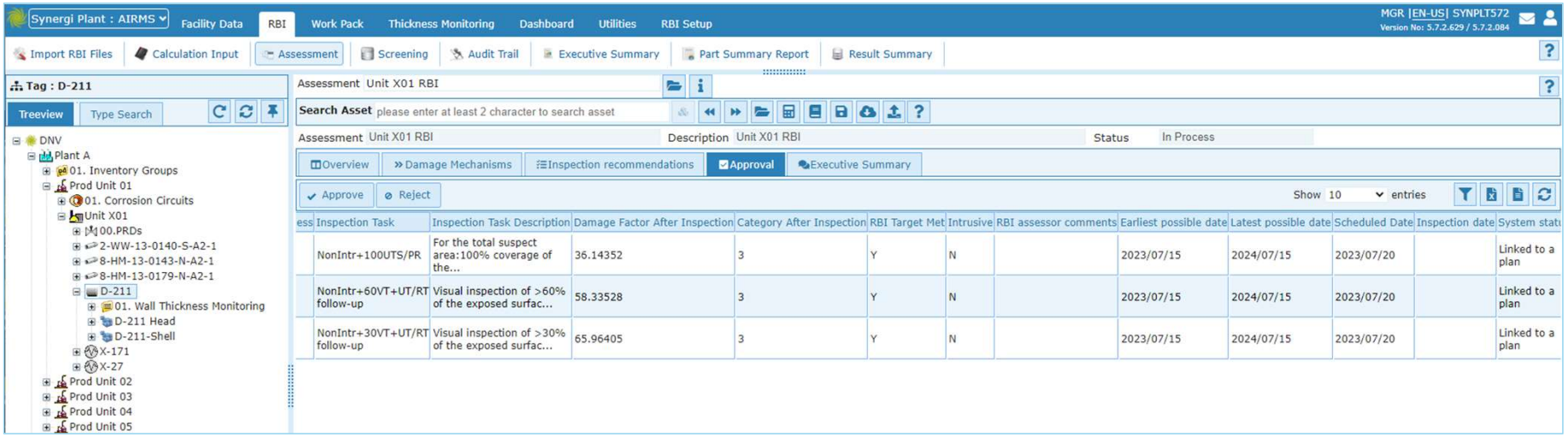
1. Preparation.
2. Visual inspection.
3. Determine if UT is required.
4. Perform UT and record monitored data when necessary
5. Record findings and recommendations

Linking RBI Recommended Inspections to Tag Inspection Plan



- Sample RBI data
  - RBI Recom. Date: 2024/07/15
  - Schedule Buffer: 12 Months
  - Scheduled Date: 2023/07/15
- Sample Plan data
  - Plan User Date: 2023/07/20
  - Plan Lead Time: 1 Month
  - Plan Creation Date: 2023/06/20

Automatic synchronize RBI approved inspections to inspection plan



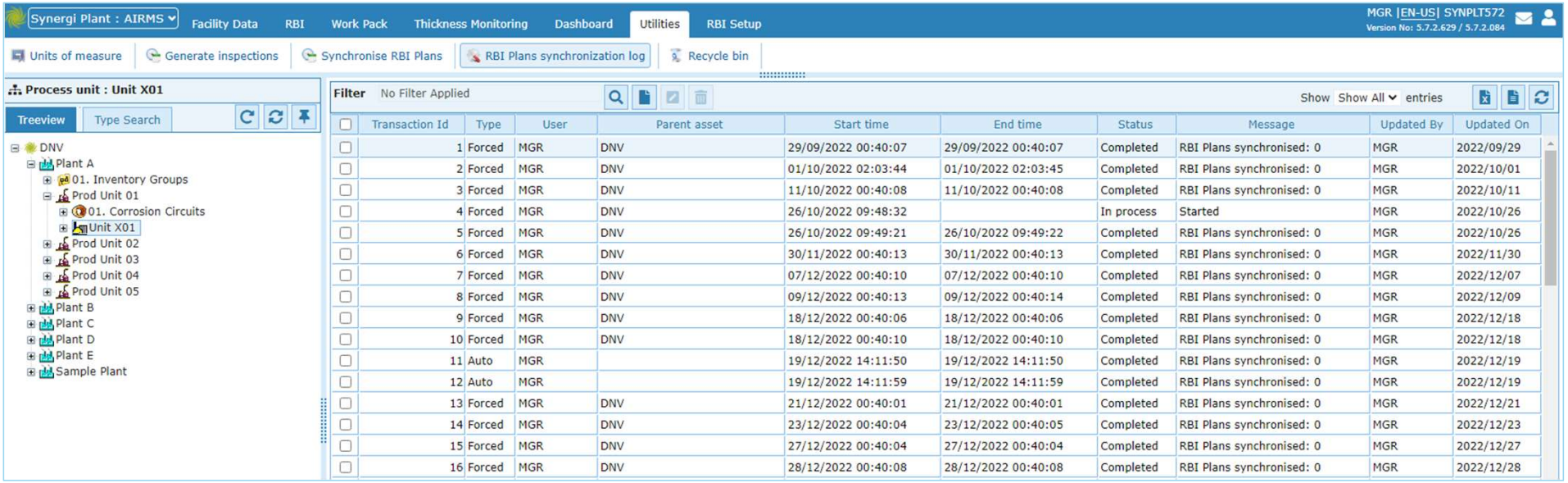
Automatic synchronization will happen if

Inspection plan is created on Tag and Link to RBI is checked

RBI recommended inspections are approved or rejected

After synchronization the approved inspections will has its system status as ‘Linked to a plan’

Synchronization from RBI approved dates to inspection plan on Tag



Transaction Id	Type	User	Parent asset	Start time	End time	Status	Message	Updated By	Updated On
1	Forced	MGR	DNV	29/09/2022 00:40:07	29/09/2022 00:40:07	Completed	RBI Plans synchronised: 0	MGR	2022/09/29
2	Forced	MGR	DNV	01/10/2022 02:03:44	01/10/2022 02:03:45	Completed	RBI Plans synchronised: 0	MGR	2022/10/01
3	Forced	MGR	DNV	11/10/2022 00:40:08	11/10/2022 00:40:08	Completed	RBI Plans synchronised: 0	MGR	2022/10/11
4	Forced	MGR	DNV	26/10/2022 09:48:32		In process	Started	MGR	2022/10/26
5	Forced	MGR	DNV	26/10/2022 09:49:21	26/10/2022 09:49:22	Completed	RBI Plans synchronised: 0	MGR	2022/10/26
6	Forced	MGR	DNV	30/11/2022 00:40:13	30/11/2022 00:40:13	Completed	RBI Plans synchronised: 0	MGR	2022/11/30
7	Forced	MGR	DNV	07/12/2022 00:40:10	07/12/2022 00:40:10	Completed	RBI Plans synchronised: 0	MGR	2022/12/07
8	Forced	MGR	DNV	09/12/2022 00:40:13	09/12/2022 00:40:14	Completed	RBI Plans synchronised: 0	MGR	2022/12/09
9	Forced	MGR	DNV	18/12/2022 00:40:06	18/12/2022 00:40:06	Completed	RBI Plans synchronised: 0	MGR	2022/12/18
10	Forced	MGR	DNV	18/12/2022 00:40:10	18/12/2022 00:40:10	Completed	RBI Plans synchronised: 0	MGR	2022/12/18
11	Auto	MGR		19/12/2022 14:11:50	19/12/2022 14:11:50	Completed	RBI Plans synchronised: 0	MGR	2022/12/19
12	Auto	MGR		19/12/2022 14:11:59	19/12/2022 14:11:59	Completed	RBI Plans synchronised: 0	MGR	2022/12/19
13	Forced	MGR	DNV	21/12/2022 00:40:01	21/12/2022 00:40:01	Completed	RBI Plans synchronised: 0	MGR	2022/12/21
14	Forced	MGR	DNV	23/12/2022 00:40:04	23/12/2022 00:40:05	Completed	RBI Plans synchronised: 0	MGR	2022/12/23
15	Forced	MGR	DNV	27/12/2022 00:40:04	27/12/2022 00:40:04	Completed	RBI Plans synchronised: 0	MGR	2022/12/27
16	Forced	MGR	DNV	28/12/2022 00:40:08	28/12/2022 00:40:08	Completed	RBI Plans synchronised: 0	MGR	2022/12/28

- **RBI to Tag Inspection Plan Synchronization**

Automatic synchronization when RBI recommended inspection dates are approved or rejected (Auto)

Manual synchronization can be triggered when asset inspection plan is created after RBI approval (Forced)

Database job synchronization can be setup daily (Forced)

Synergi Plant Training

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