Critical manufacturing
an ASM PT company

Tutorial: Scan, Create and Attach Raw Material

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Tutorial: Scan, Create and Attach Raw Material

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Estimated time to read: 2 minutes

Objective

Learn how to scan, create, and attach raw materials using barcode labels, both at:

- Resource level (flexible mode)
- Step level (BOM-driven production mode)

Step 0: Validate Preconditions

Before starting, ensure the following configurations are in place:

- `/SMT/ManageRawMaterials/IsEnabled = True`
- `/SMT/ManageRawMaterials/BarcodeRegExp` is defined
  - Example:
    - `^(?<productName>[^\/]+)\/(?<quantity>[^\/]+)\/(?<materialName>[^\/]+)$`
  - This configuration ensures the system can extract:
    - Product Name
    - Quantity
    - Material Name

Scenario A: Resource-Based Mode (Resource Details)

When to use

- Preparing materials before production
- Loading feeders manually

- No BOM validation required

Step 1: Open Resource

- Select and open a **Resource**
- Click **Create & Attach**

Step 2: Scan Material Labels and Finish

- Scan the barcode of each material
- Confirm that the system extracts:
  - Material Name
  - Product Name
  - Quantity
- Repeat for all required materials
- Click **Finish**

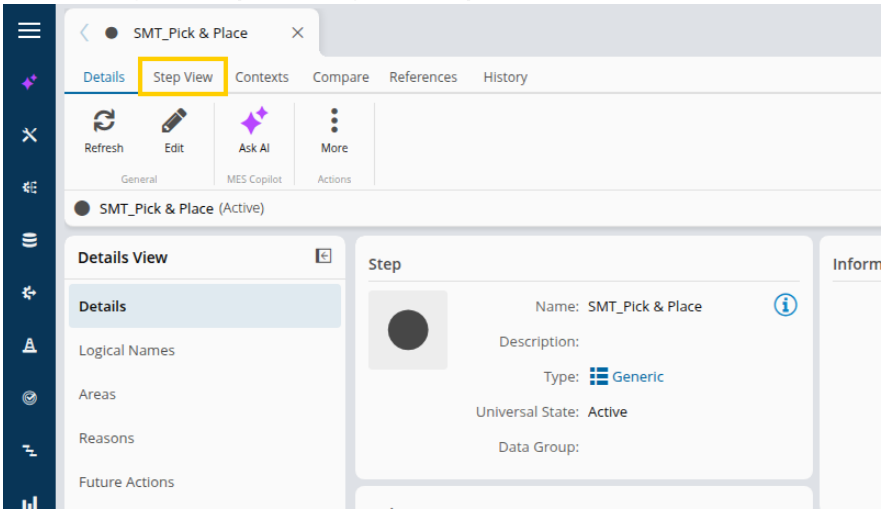
Scenario B: Production-Based Mode (Step View)

When to use

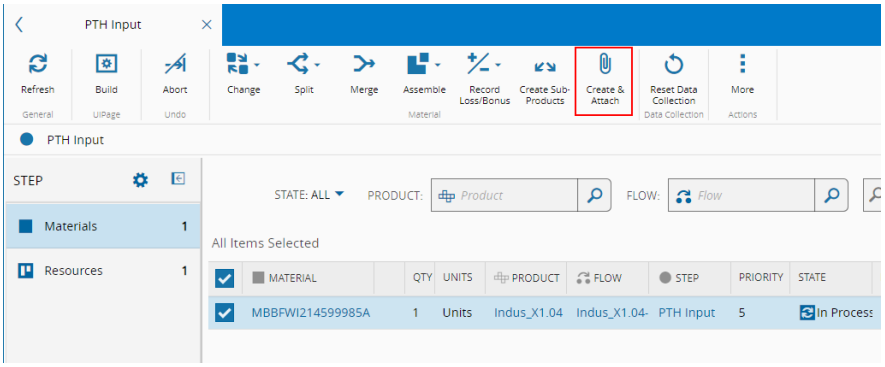
- During production
- When materials must match the BOM
- For controlled assembly execution

Step 1: Prepare Production Context and Open Create & Attach

- Select and open a **Step** and navigate to **Step View**



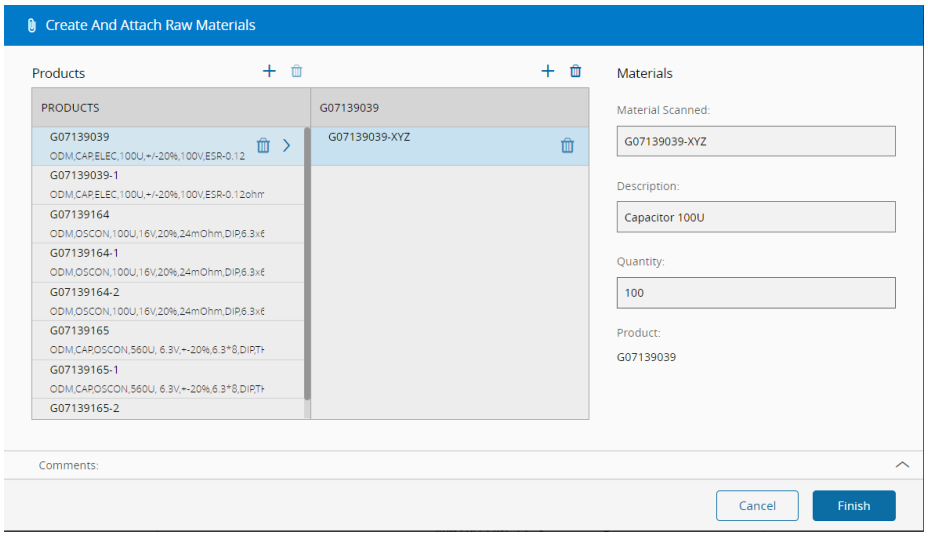
- Select a Material in the following conditions:
  - System State must be **In Process**
  - A **Current BOM Instance** is available
- Click **Create & Attach**



Step 2: Select BOM Product

- The wizard displays required **BOM materials**
- Select one product
- Scan the label
- Verify extracted data:

- Material Scanned
- Description
- Quantity



Step 3: Repeat for All Materials

- Repeat scanning for all required BOM products
- Click **Finish**

Expected Result

- Materials are created from scanned labels
- Materials are validated against the BOM
- Materials are attached to the production step
- Assemble is now ready to be performed

Frequent Configuration Questions

Why is the barcode not being recognized?

Validate that the `/SMT/ManageRawMaterials/BarcodeRegExp` configuration is correctly defined and matches the structure of the scanned barcode.

Why can't I proceed with the assembly process?

Ensure that all materials required by the Bill of Materials (BOM) have been provided and successfully identified.

Why are materials not being created?

Confirm that the feature is enabled by verifying the `IsEnabled` setting.

Why are the extracted values (such as name or quantity) incorrect?

Review the barcode structure and verify that the RegExp mapping is correctly configured to extract the expected information.

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